

**A STRATEGIC THINKING APPROACH TO
THE DELIVERY OF A CREATIVE AND
ADAPTIVE STRATEGY**

by

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Abstract

South African organisations face ever changing internal and external business dynamics and are impacted by several challenges unique to South Africa. The pace of change and unremitting uncertainty has explicitly refocused the need for a creative and adaptive strategy articulated in a simple, compelling manner to ensure competitive success and sustainability.

Strategy-making has traditionally utilised strategic management, underpinned by rational strategic planning, to craft and implement strategic moves. However, rapidly changing environmental dynamics have created a business environment contrary to the traditional paradigm of predictability, linearity and controllability expected by the rational strategic planning approach to strategy-making. In addition, long-standing criticism alludes to rational strategy-making being incomplete and outdated in the new competitive environment, requiring a re-examination of traditional paradigms.

An alternative, a strategic thinking approach, is suggested, in order to synthesise available intelligence into an articulated strategic intent. Strategic thinking has, at its heart, a focus on the synthesis of information, involving intuition and creativity. However, while several strategic thinking approaches, with corresponding process models, have been articulated over the past 15 years, few detail a holistic, implementable strategic thinking framework.

The aim of this study was therefore to develop a conceptual strategic thinking framework for the delivery of strategy in this kind of business environment.

To achieve this purpose, this study investigated and proved that a strategic thinking approach exists as an alternative to rational strategic planning. The study identified that strategic thinking is not commonly used by organisations – predominantly due to a lack of awareness – but found that the construct had merit; if a credible and known process is designed.

To support the design of a strategic thinking framework; the study identified the most commonly used best practice tools and elements, of both strategic thinking and rational strategic planning, including several alternative mechanisms to assist with

the development of a creative and adaptive approach to strategy-making. Thereby it strengthened the foundations of the strategic thinking construct and developed a conceptual strategic thinking framework, which uses its inventive and proactive nature to enable organisations to create new perspectives and unique combinations; define achievable strategic intent and generate future value for organisational stakeholders to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment.

Key Terms

Business Strategy, Competitive Strategy, Creative and Adaptive Strategy, First Principles, Rational Strategic Planning, Strategy-making, Strategic Intelligence, Strategic Management, Strategic Thinking.

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Finally, in remembrance to Thor, who was always supportive and loving. I will miss you.

“There is no real ending. It’s just the place where you stop the story.”

— *Frank Herbert*

Statement of Originality

Student Number: 112-669-38

I declare that “A *STRATEGIC THINKING APPROACH TO THE DELIVERY OF A CREATIVE AND ADAPTIVE STRATEGY*” is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Jean-Pierre Kruger

Date

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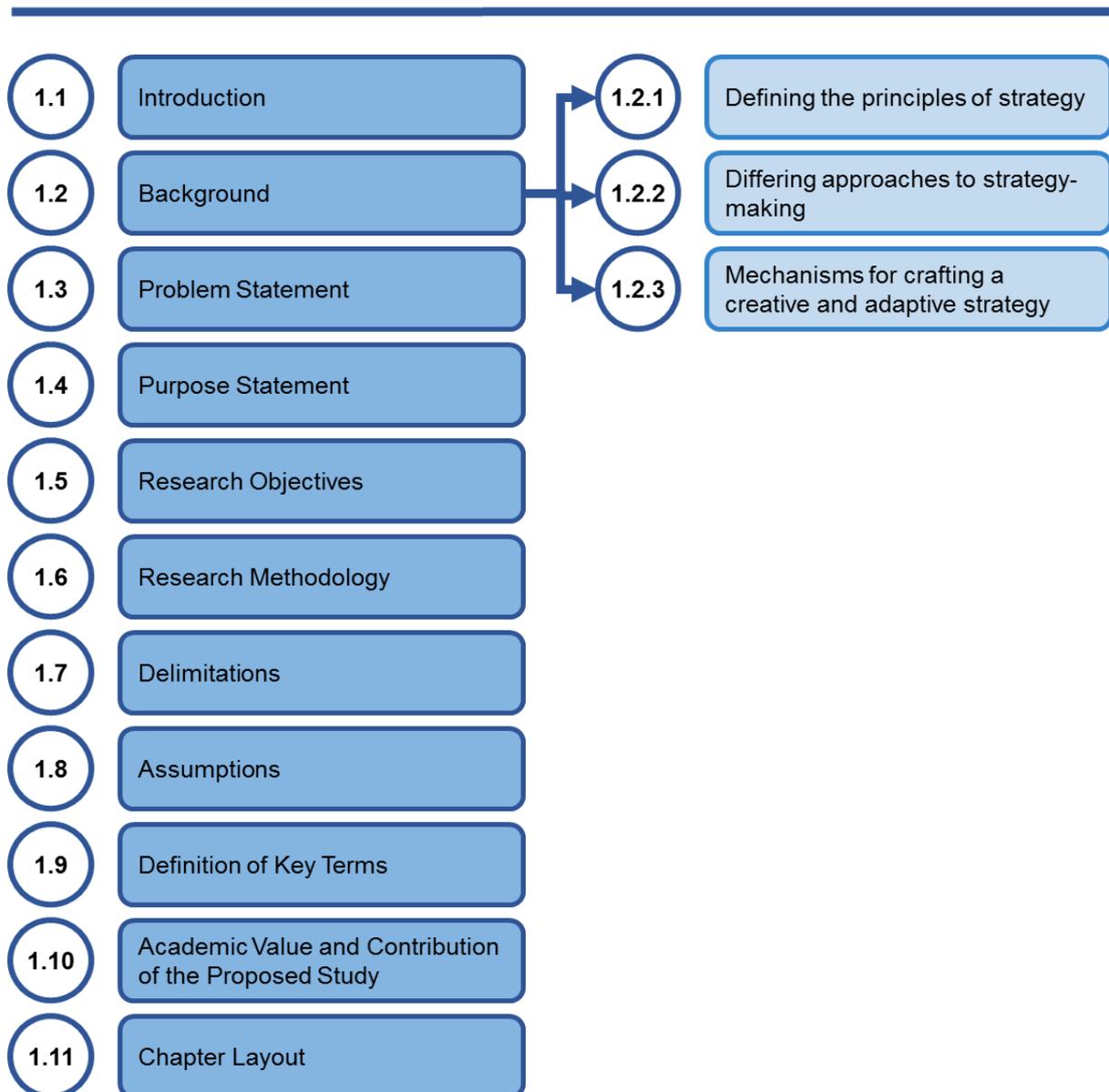
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Chapter 1

Introduction

Chapter 1 Introduction



“The real challenge in crafting strategy lies in detecting subtle discontinuities that may undermine a business in the future. And for that there is no technique, no program, just a sharp mind in touch with the situation.”

– *Henry Mintzberg*

1.1 Introduction

The pace of change within the business environment has increased significantly over the past 30 years, increasing in complexity and uncertainty (Dwyer, 2009:70-73; Finkelstein, 2005:19-28; Marren, 2010:59; Perrott, 2008:21; Reeves, 2009; Simons, 2010:100). In addition, the dynamics of an uncertain internal organisational environment have significantly increased complexity (Dandira, 2012:130; Lenz and Lyles, 1981:73; O'Shannassy, 1999:15; Roxburgh, 2003:26-39; Speculand, 2011:3).

To guide strategy-making, organisations have traditionally utilised strategic management, underpinned by rational strategic planning, to craft strategic moves and support the implementation thereof (Grant, 2013:13).

Within literature, rational strategic planning is referred to as a programmatic, analytical thought process. Such planning involves a formal planning procedure following systematic guidelines to enable the development of a corporate strategy. While planning of this type has been successful in developing articulate plans, managers confuse vision with the manipulation of figures, resulting in formalised strategic programming that articulates and elaborates on strategies and visions which already exist (Mintzberg, 1994:107).

In addition, internal organisational and external environmental dynamics have created a business environment in contradiction to the traditional view of the predictability, linearity, and controllability of the rational strategic planning approach to strategy-making (Boulton and Allen, 2007:215). Maritz (2010:51) suggests that the assumptions embedded in rational strategy-making approaches are incomplete and outdated, requiring a re-examination of traditional paradigms. Previously, Graetz (2002:457) posited that if the process of strategy-making is to be truly effective, a rigid set of predetermined routines should not be followed, but instead a dynamic, opportunistic, flexible and adaptive approach must be used to guide strategy-making.

A paradigm-shift is required to enable organisations to compete in the radically changing and complex business environment. In this new setting, organisations should not only be creative, but also be adaptable to changing conditions by being agile and quick to spot and exploit emerging business opportunities inside and outside of their historical boundaries. They should also be able to absorb changes in their external environments and be flexible in their ability to adjust to changing market conditions (Amsteus, 2011:64; Sull, 2009:80; Mintzberg, 1994:107).

Based on the above, strategy must be aligned to creativity so as to enable an innovative base for rethinking strategic outcomes within and beyond the organisation (Bilton and Cummings, 2010:37). The crafting of strategy must focus on learning, discovering and inventing. The said strategy needs to encompass sources of strategic invention and innovation with a focus on understanding the current situation and assisting in creatively positioning the organisation into an adaptive future (Pugh and Bourgeois, 2011:178).

As an alternative to rational strategic planning, a strategic thinking approach, involving sense-making, synthesis, intuition, creativity and foresight has been framed for the crafting of a creative and adaptive strategy (Amsteus, 2011:64; Mintzberg, 1994:107).

Strategic thinking challenges the way in which we currently think about the future of the organisation, moving beyond patterned responses and habitual thinking, to a more creative, divergent thought process (Conway, 2014:9).

The notion of strategic thinking is important in the strategic reality of the organisation. Cravens, Piercy and Baldauf (2009:31-49) ascertains that strategic thinking should connect the past, the present and the future, utilising both organisational memory and historical context, employing data, information, knowledge and insight generated and collected over the course of the organisation's existence. In addition, organisations should include relevant inputs on the current business environment and insight for the forecasting of deeper, more integrated perspectives on future direction (Cravens et al., 2009:31-49; Mintzberg, 1994:108; Mintzberg, Ahlstrand and Lampel, 2009:78).

While several scholars have outlined their interpretation of a strategic thinking construct with clearly identifiable characteristics to steer the conceptual thought process, these have lacked a well-defined guide to be followed by organisations (Bonn, 2005:338; Cravens et al., 2009:31-49; Liedtka, 2005:73-76; O'Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116). In several instances, tools, elements (essential or characteristic parts of existing frameworks or methods) and mechanisms (an established process, framework or method comprised of several elements working together) must still be identified and detailed for crafting a creative and adaptive strategy (Cravens et al., 2009:31-49; Liedtka, 1998:30-35; Zand, 2010:23-28).

This study will seek to investigate whether a strategic thinking approach exists as an alternative to rational strategic planning, the extent to which strategic thinking is used by organisations, and identify the most commonly used tools and elements, of both strategic thinking and rational strategic planning in order to develop a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy (Cravens et al., 2009:31-49; Liedtka, 1998:30-35; Zand, 2010:23-28).

1.2 Background

1.2.1 Defining the principles of strategy

Several thousand years of military history indicate that the primary focus of strategy has been on winning (Cummings, 1993:133; Heracleous, 2003:3; Jackson, 2007:31; Tovstiga, 2010:4). Since its inception in the corporate environment, strategy has primarily been concerned with the search for a competitive advantage (Cravens et al., 2009:31-49; Liedtka, 2005:76; Porter, 1980; Ohmae, 1982; Hoskisson, Hitt, Ireland and Harrison, 2008; Jones and Hill, 2010).

In one of his original definitions of strategy, Porter (1996:60) focused on an organisation's unique nature by stating "competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value". Mintzberg et al. (2009:16-19) expands on Porter's view by suggesting that strategy could be a plan followed, or a pattern of consistent behaviour, over time. Strategy could be a position or a perspective or a ploy by acting as a specific manoeuvre intended to outwit a competitor. In summation, strategy should provide

consistency in setting direction, focusing effort and defining the organisation (Mintzberg et al., 2009:16-19).

While research has been prone to focus on an either-or stance towards using a deliberate or emergent approach (Maritz, 2010:47), Reeves, Deimler, Morieux and Nicol (2009:2) argue that the levels of adaptability, creativity and influence required by organisations demand alternative strategies or styles for making strategy based on environmental predictability and the organisation's power to change its environment. Mintzberg et al. (2009:12) concur that flexibility should be established, arguing that strategy is rarely purely deliberate and few are purely emergent: all real world strategies contain a mix of control and fostered learning.

1.2.2 Differing approaches to strategy-making

Strategy-making includes the creating and operationalising, or putting into practice, of a strategy or strategies using a linear or non-linear, formal or informal process (Pretorius and Maritz, 2011:25).

Strategic management emerged as a successor to the corporate planning of the 1950s and 1960s, functioning as a guide to strategy-making and focused on crafting strategic moves and the implementation of these (Carpenter and Sanders, 2009:32; Duhaime, Stimpert and Chesley, 2011:1; Grant, 2013:13; Nag, Hambrick and Chen, 2007:935). While it has been well identified in management textbooks as an integrated process consisting of three interrelated steps: formulation, implementation and control (Nienaber, 2010:14), Nag et al. (2007:944) consider that "The field of strategic management deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilization of resources, to enhance the performance of firms in their external environments."

In essence, the focus of strategic management has been on closing the gaps between external demands and internal capabilities, thereby ensuring alignment between the organisation, the business environment and its past, present and future intent. Ensuring this alignment proved necessary for increasing stability, efficiency and enabling high performance (Liedtka, 2005:76; Cravens et al., 2009:31-49).

However, the pace of change within the business environment has increased significantly over the past 30 years, increasing complexity and uncertainty (Ghezzi, 2013:1326; Marren, 2010:59; Reeves, 2009). The marketplace has grown in complexity and challenge: increased competition; erratic economic cycles; market fragmentation; demanding customers; regulation/deregulation; increasing costs of employment; labour disputes and technological enhancements as well as evolving consumer attitudes and tastes all require special attention by organisational management (Perrott, 2008:21; Reeves, 2009). Products become obsolete, customers' tastes change, and technology will render the latest business model uncompetitive (Simons, 2010:100).

In addition, greater demands of an uncertain organisational environment; increased importance of organisational culture and the threat of internal politics derailing effective strategy development and implementation have significantly increased complexity (O'Shannassy, 1999:15). Furthermore, Roxburgh (2003:26-39) on the one hand suggests that while the theory of strategy is well defined and senior executives competently trained in its principles, there are hidden flaws in strategy as a result of human behavioural economics (Roxburgh, 2003:26-39). Dandira (2012:130) on the other hand argues that strategy is in crisis as a result of a knowledge vacuum, where, very often, strategy remains the preserve of a single elite group of practitioners.

These internal organisational and external environmental dynamics have created a business environment contrary to the traditional paradigm of predictability, linearity and controllability expected by the rational strategic planning approach to strategy-making (Boulton and Allen, 2007:215).

While the contribution of rational strategic planning is fundamental to strategy-making, it is argued that its contribution should be limited to the supply of formal analysis and hard data to broaden the information base required to develop creative new strategies and visions (Mintzberg, 1994:108; Mintzberg et al., 2009:78). Mintzberg (1994:109) argues that nowhere, within the well-known rational strategic planning process diagrams, which consist of a number of interconnected boxes and which supposedly lead to the development of strategies, can one find an explanation of the creative act of synthesising experiences and knowledge into a truly novel

strategy. Maritz (2010:51), supported by several seminal works (Heracleous, 2003:17; Mintzberg, 1994:108-110; Tovstiga, 2010:9; Wilson and Eilertsen, 2010:13), concludes that many of the assumptions embedded in the rational strategy-making approaches are incomplete and outdated in the new competitive environment, requiring a re-examination of traditional paradigms.

A paradigm-shift is clearly necessary to compete in the radically mutable and complex business environment (Amsteus, 2011:64; Mintzberg, 1994:107). A strategic thinking approach, involving intuition, creativity and foresight is required in order to synthesise available intelligence, comprising transformed data and information, to develop an integrated perspective, thereby enabling a less precise, yet articulated vision of the organisation's future direction (Amsteus, 2011:64; Mintzberg, 1994:107).

Strategic thinking should connect the past, the present and the future, utilising both organisational memory and historical context, and also include relevant inputs on the current business environment and insight for the forecasting of future direction (Cravens et al., 2009:31-49). Strategic thinking focuses on altering the way in which we think about the future of the organisation, moving beyond patterned responses and habitual thinking, which are not conducive to developing creative solutions to the challenges of an environment of uncertainty (Conway, 2014:9).

Strategic thinking enables sense making through synthesis, intuition and creativity. Mintzberg (1994:108) argues that synthesis encourages informal learning through internalisation and comprehension, resulting in new perspectives and unique combinations. The outcome of this synthesis is an integrated perspective on an organisation, with the articulation of a vision of its future direction (Mintzberg, 1994:108; Mintzberg et al., 2009:78).

1.2.3 Mechanisms for crafting a creative and adaptive strategy

Rigid, process driven routines have constrained the fluidity required to craft strategy in the continually shifting business environment. Arguably, a transition has occurred, whereby strategy has altered from strategy as a plan to strategy as a direction (Amsteus, 2011:64; Boulton and Allen, 2007:215; Conway, 2014:9; Cravens et al., 2009:31-49; Liedtka, 2005:76; Mintzberg, 1994:107). Strategy is regarded as a

guide, providing coherence to individual and organisational decision making, integrating the pools of different individual knowledge. It acts as a coordinator, communicating the identity, goals and positioning of an organisation as its strategic intent and is, crucially, concerned with the future (Grant, 2013:16-17; Pugh and Bourgeois, 2011:178; Reeves and Deimler, 2009; Sull, 2009:80).

Strategy is about learning, discovering, and inventing, all of which require sources of strategic invention and innovation (Pugh and Bourgeois, 2011:178). Approaches, tasked with guiding the crafting of strategy at their core, should focus on understanding the current situation and assist in creatively positioning the organisation towards achieving an adaptive future (Pugh and Bourgeois, 2011:178).

Strategy and its rational strategy-making approaches, have, however, failed to employ greater creativity in the past (Toma, Bratu, and Burcea, 2013:149).

The alignment of strategy to creativity provides an innovative base for orientation, animation and integration outcomes, which results in transformation and rethinking within and beyond the organisation (Bilton and Cummings, 2010:37). Creativity enables organisations to challenge assumptions, guide the recognition of patterns, view the world in new ways, create connections, allow for risk-taking, and provide the organisation with the ability to seize appropriate chances (McCauley, 2012:4). Creativity constitutes a key element for the strategy of an organisation (Toma, Bratu, and Burcea, 2013:151).

To thrive in the business environment, organisations should not only utilise creativity, but they should also be adaptable to changing conditions by employing agility to quickly spot and exploit emerging business opportunities, or absorb the changes where the organisation has the strength and stamina to weather the market shifts (Sull, 2009:80). To succeed under these difficult conditions, organisations need to be able to predict and adjust to critical strategic shifts (Reeves and Deimler, 2009).

An organisation which embraces readiness, responsiveness and resilience is envisaged as being able to achieve superior and sustainable outcomes in turbulent environments (Reeves et al., 2009). Resilience and evolutionary innovation allow organisations to be both adaptive and creative (Reeves and Deimler, 2009). An “adaptive imperative”, the result of sweeping changes in the business environment,

is identified as a new method of acknowledging and unlocking the dynamic qualities of competition. An “adaptive advantage”, which embraces reflection and experimentation, should stimulate creative strategy development (Reeves, 2009).

Combined, creativity and adaptability provide the means for an organisational strategy to look outside of its historical boundaries and identify adjacent worlds, with the ability to undertake immediate movement into new categories, geographies, channels and products by remaining agile and developing an absorptive buffer.

In supporting the crafting of creative and adaptive strategy, a holistic strategic thinking approach must be identified as a mechanism to challenge conventional wisdom (Cravens et al., 2009:31-49; Liedtka, 1998:30-35; Zand, 2010:23-28).

In supporting this objective, the integral theory has been identified as a method to develop a balanced and integrated whole as regards the organisation. This theory synthesises, integrates and provides multiple perspectives in contrast to traditional theories, while remaining inclusive by providing a map to guide the organisation within a complex reality to enable it to achieve competitive advantage (Cacioppe and Edwards, 2005; Edwards, 2005; Landrum and Gardner, 2012; Robledo, 2013).

In addition, as input to the generation of alternative strategic options, strategic intelligence and its underlying strategy analysis have the ability to contribute powerful insights to the strategic thinking approach (Liebowitz, 2006).

Organisations need to be collectively open to recognising that worldviews and assumptions can never be defined as correct or incorrect; instead, the former need to embrace thinking and debating about future possibilities rather than focusing on the present as core to the organisation’s strategy (Conway, 2014:24).

Strategy, as a way of thinking, stimulates thought and dialogue, which could lead to the creative and adaptive creation of future direction, thereby providing competitive advantage to the organisation (Bradley, Hirt and Smit, 2011:1). Crafting strategy using creative methods allows for critical reflection due to their exploratory, synthetic orientation, leading to the shifting of mind-sets from the traditional hard analysis so often undertaken. Insight generated as part of the strategy-making process provides a clear or deep perception of a situation, and an understanding of complex issues

and how these issues fit into the bigger strategic picture (Heracleous and Jacobs, 2008:322).

The selection, evaluation and validation of appropriate organisational strategic objectives requires strategic thinking about the effects, impacts and consequences of strategic decisions and the support they will offer the organisation towards achieving sustainable success. It is imperative that the strategy developed be tested for validity and be found to be actionable (Berman, Davidson, Longworth and Blitz, 2009:13-22; Bradley et al., 2011:1; Jackson, 2011:61-63). A failure to ensure these outcomes will result in a strategy not being implemented or executed successfully (Bradley et al., 2011:1).

By embracing the notion of a strategic thinking approach, alternative mechanisms identified for crafting a creative and adaptive strategy can be integrated into a single approach to allow organisational stakeholders to open their minds to new ways of using such strategy to create value, to ensure adaptive, creative and resilient strategies resulting in success in rapidly evolving environments.

1.3 Problem Statement

Scholarly literature provides evidence of comprehensively developed and tested frameworks for the formulation of organisational strategy. The literature on strategic management, underpinned by rational strategic planning, is well developed (Mintzberg, Ahlstrand and Lampel, 2009). This approach in literature is delimited by sequential outlines, methods of analysis and strategic management, from the planning and development of a mission and vision statement, to environmental and strategy analysis, to the implementation and monitoring of the strategy (David, 2013; Feurer and Chaharbaghi, 1997; Gates, 2010; Jones and Hill, 2010; Mintzberg et al., 2009; Nienaber, 2010; Pearce and Robinson, 2007; Pitt and Koufopoulos, 2012; Schraeder, 2002; Volberda, Morgan, Reinmoeller, Hitt, Ireland and Hoskisson, 2011).

Traditional strategy-making approaches have focused on rational strategic planning and exhibit limitations in that they assume fixed boundaries within which organisations operate in order to simplify decision-making. Historically critical for developing an organisation's strategy, rational strategic planning of this type does

not lend itself to the development of a creative and adaptive strategy in the current business environment, which as mentioned is characterised by radical change and uncertainty (Mintzberg, 1994:107-108; Reeves, 2009; Wilson and Eilertsen, 2010:12).

Some authors believe that the strategy-making approach undertaken by organisations should follow a more holistic, creative strategic thinking approach, which is more adaptive to current environmental realities (Amsteus, 2011:64; Dwyer, 2009:70-73; Finkelstein, 2005:19-28; Marren, 2010:59-61; Mintzberg, 1994:107-114; Perrott, 2008:21-30; Wilson and Eilertsen, 2010:5-14).

While strategic thinking is not a new concept within academic literature (Bonn, 2005:338; Cravens, Piercy and Baldauf, 2009:31-49; Liedtka, 2005:73-76; O'Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116) a creative and adaptive approach to strategy-making, using the concepts provided for within the strategic thinking sphere, has not been comprehensively documented nor integrated into standard organisational processes. As a result, organisations focus on constructing strategies that follow a more analytical thought and linear pattern rather than a creative process (David, 2013:46; Heracleous, 2003:17; Maritz, 2010:51; Mintzberg, 1994:108; Pitt and Koufopoulos, 2012:23; Wilson and Eilertsen, 2010:5-14). Consequently, organisational strategy is often limited in scope; uncreative; focused on the achievements of direct competitors; lacking corporate buy-in, or not feasible within the current business environment, which leads to poor organisational performance or even failure (Dwyer, 2009:70-73; Finkelstein, 2005:19-28; Marren, 2010:59-61; Perrott, 2008:21-30; Reeves, 2009).

This study, therefore, investigated whether a strategic thinking approach exists as an alternative to rational strategic planning and the extent to which strategic thinking is used by organisations. It furthermore considered whether the most commonly used tools and elements, of both strategic thinking and rational strategic planning, could be identified to assist in the development of a conceptual strategic thinking approach for the delivery of creative and adaptive approach to strategy-making.

Based on this view, the following broad questions were explored:

- What are the key principles underpinning the concept of strategy?

- Do strategy-making approaches, underpinned by rational strategic planning, allow organisations to easily adapt to a radically changing and uncertain global environment, or have these approaches become outdated and unsuitable to the new reality?
- Is the rational strategic planning approach to strategy-making still the optimal approach to follow for strategy-making, or can it be replaced or supplemented by a strategic thinking strategy-making approach?
- If a rational strategic planning approach is no longer optimal, do commonly used tools and elements exist which should be embedded into a revised conceptual strategic thinking strategy-making approach?
- Do alternative mechanisms for crafting a creative and adaptive strategy exist, and can they be embedded into a revised conceptual strategic thinking strategy-making approach?

1.4 Purpose Statement

The purpose of this study was to investigate the extent to which strategic thinking is used by organisations in order to determine commonly used tools, elements (essential or characteristic part of existing frameworks or methods) and mechanisms (an established process, framework or method comprised of several elements working together) as inputs into the conceptualisation of a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy. In addition, this study attempted to identify the extent to which internal and external organisational dynamics impact the development and execution of strategy in order to strengthen the robustness of a strategy-making approach.

The following were explored in an attempt to address the aforementioned questions:

- Literature on the current state of research within the focus areas of strategy, and the alternative formulation approaches of strategic planning and strategic thinking
- Literature which defines approaches or mechanisms that are similar in nature, and which will lead to the development of a conceptual approach to the creative and adaptive development of organisational strategy
- Organisational dynamics which influence organisational strategy developed

using traditional strategy-making approaches and

- Organisational and expert opinion as inputs to the conceptualisation of a strategic thinking approach for the development of creative and adaptive strategy.

1.5 Research Objectives

Based on the above research purpose, the following primary objective was identified:

- To develop a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment.

This was supported by a number of secondary objectives:

- To determine the use of strategic thinking within South African organisations
- To determine the organisational dynamics which impact on development and execution of organisational strategy
- To investigate the best practice elements of strategic thinking and rational strategic planning
- To investigate alternative mechanisms for the crafting of a creative and adaptive organisational strategy and
- To determine the extent to which South African organisations' strategies are creative and adaptive rather than developed to fit the changing business environment.

1.6 Research Methodology

This study's main aim was defined above.

To deliver on this aim, a pragmatic philosophy guided the research to allow for the integration of different perspectives. A sequential explanatory mixed methods research design was followed, using both qualitative and quantitative methods to answer the research questions and objectives. This pragmatic approach enabled the consideration of multiple realities, using numerous exploratory and descriptive sequential explanatory mixed method approaches for a more accurate reflection of

the current and future state of the subject matter. This approach enabled the researcher to gather new data from diverse sources to afford an understanding of the current situation as well as to provide new insights with which to develop a well-defined framework.

To this extent the research comprised the following:

- An extensive literature study, undertaken to acquire a detailed theoretical foundation of the concepts that constitute the primary research subject matter
- A survey, conducted using an in-depth questionnaire specially developed for this study
- A semi-structured, qualitative-type interview, designed to gain a detailed understanding of the subject matter and identify common perceptions and experiences in order to develop high-level, overarching themes.

The target population under study includes all South African organisations, but with a particular focus on JSE listed organisations, as it was expected that they would make use of a long-term strategy and utilise a formalised method of developing such a strategy. However, strategy is not confined to this class of organisation alone, with unlisted and state-owned enterprises also making use of strategies and thus were included to increase the size of the population from which to draw a sample.

Due to the nature of this study, a non-probability purposive/judgemental sample was used to facilitate the selection of individuals who would possess the insight to answer the research questions and thereby meet the research objectives (Saunders et al., 2009: 237).

Two subsets of individuals were identified as data sources or sampling units from which to obtain data. The first grouping of individuals comprised employees of the organisations, including CEOs or strategically positioned senior managers and employees directly involved in the development of organisational strategy. The second grouping included subject-matter experts in the form of academics or strategists. The selection of the first grouping provided a first-hand view on how organisations develop strategy, while the second grouping provided a view on how organisations should be creating strategy within the changing environment.

The survey sample size for this study was determined in consultation with a statistician from the University of Pretoria, based on the number of questions developed within the survey instrument and the data analysis techniques that could be followed. By targeting both listed and unlisted organisations, in total 716 organisations were approached; these consisted of 324 JSE listed organisations; 74 small, medium and micro organisations; 39 large organisations (reached through personal contacts) and 279 unlisted, public sector and NGO organisations. In addition to the survey, 6 semi-structured interviews were conducted.

As discussed previously, the two phases, the quantitative and qualitative, were comprised of a survey questionnaire and the semi-structured interviews. The data collected from these are analysed and the findings are interpreted and explained in sequential order to weave a narrative of conclusions in a theme-by-theme or construct-by-construct basis, as the outcomes of this study in relation to the research objectives.

1.7 Delimitations

The focus of this study was described above.

The study investigated the use of a strategic thinking approach to the development of organisational strategy by employees and organisational leaders concerned with this development and did not involve employees in other roles. The research engaged South African, JSE-listed and unlisted organisations and was not limited by the type of industry.

The study identified the extent to which strategic thinking and its elements identified in the literature review were used within South African organisations. Theoretical perspectives, obtained from literature and scholars within the field, guided the development of a conceptual framework. This study did not test the said framework through a case study or in a live environment.

1.8 Assumptions

The following assumptions underpin the research conducted:

- Research respondents were assumed to have an interest in and a willingness

to actively take part in the research process. Individuals investigated were in a position to influence strategy development within their organisation. Those people researched had a thorough understanding of organisational strategy. Should these assumptions not have been met, this would have affected the data and consistency of answers.

- The study presumed that elements of strategic management are present in all organisations and that a strategic planning or thinking process is undertaken. Should this assumption not have been true, research responses would have had no value.
- While elements of strategic management should be present in all organisations, the industry specific use of strategy will be different in terms of its form and effectiveness. However, the underlying model should remain consistent, regardless of the particular industry.
- The research assumed that although research respondents will present subjective answers, they will be honest in the content of these answers. Should a subject have provided false answers and/or exaggerated, the value of the answers would have been degraded.
- The researcher was consistent throughout the research interview process and ensured the accuracy and thoroughness of interview note taking. He scrupulously captured and analysed data consolidated from interviews and questionnaires and did not distort figures. Should this not have been the case, the data would have been compromised.
- The final assumption was that the elements identified and studied allowed for the creation of a conceptual framework that influenced the delivery of the proposed type of strategy.

1.9 Definition of Key Terms

This study involved a number of key terms for which the definitions, for use in this study, are set out below:

Strategy:

In one of his original definitions of strategy, Porter (1996:60) focused on an organisation's unique nature by stating "Competitive strategy is about being different."

It means deliberately choosing a different set of activities to deliver a unique mix of value".

More recently, Mintzberg (2007:3) defined strategy as "a pattern in a stream of decisions", while Olsen and Gray (2011:3) delineate it as "the art of winning by purposely matching ends, ways, and means", with Johnson, Whittington and Scholes (2010:3) simply stating that strategy comprises "the long-term direction of an organisation".

Strategy is about winning (Tovstiga, 2010:4; Olsen and Gray, 2011:3). It is also about shaping the future (McKeown, 2013:1).

Strategy-making:

"Strategy-making includes the creating and operationalising, or putting into practice, of a strategy or strategies using a linear or non-linear, formal or informal process" (Pretorius and Maritz, 2011:25).

Strategic management:

Nag, Hambrick and Chen (2007:944) define strategic management in the following manner: "The field of strategic management deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilization of resources, to enhance the performance of firms in their external environments."

Rational strategic planning:

Gates (2010:3) describes strategic planning as "the process for defining an organisation's plans for achieving its mission."

Strategic thinking:

Liedtka (2005:73-76) defines strategic thinking as "a particular way of thinking", comprising five attributes: a systems perspective; intent-focused; intelligent opportunism; thinking in time and hypothesis-driven.

For Mintzberg (1994:108) strategic thinking: "...is about synthesis. It involves intuition and creativity. The outcome of strategic thinking is an integrated perspective

of the enterprise, a not-too-precisely articulated vision of direction... strategies... must be free to appear at any time and at any place in the organisation, typically through messy processes of informal learning that must necessarily be carried out by people at various levels who are deeply involved with the specific issues at hand.”

Waters (2011:115) identifies the definition of strategic thinking as “the ability to make a creative and holistic synthesis of key factors affecting an organisation and its environment in order to obtain sustainable competitive advantage and long-term success.”

1.10 Academic Value and Contribution of the Proposed Study

Previous studies have focused on the exploration of individual aspects of strategy-making using strategic thinking. This study undertook to integrate the viewpoints of both academics and corporate stakeholders in order to advance the development of the proposed conceptual framework and its applicability to the current corporate environment. This approach will provide strategic practitioners with guidelines on how to develop creative and adaptive strategy in the South African business environment, so as to influence the ability of South African organisations to compete in the changing global business environment.

1.11 Chapter Layout

The research study consists of the following chapters:

- **Chapter 1.** Introduction
Chapter 1 provides a brief overview of the research study and includes an introduction and background to the study, including an overview of the research conducted.
- **Chapter 2.** Defining the Principles of Strategy
Chapter 2 includes a comprehensive discussion describing strategy, its nature and the first principles of strategy.
- **Chapter 3.** Differing Approaches to Strategy-making
Chapter 3 contains an overview of strategic management and the formulation of the approaches of strategic planning and strategic thinking.

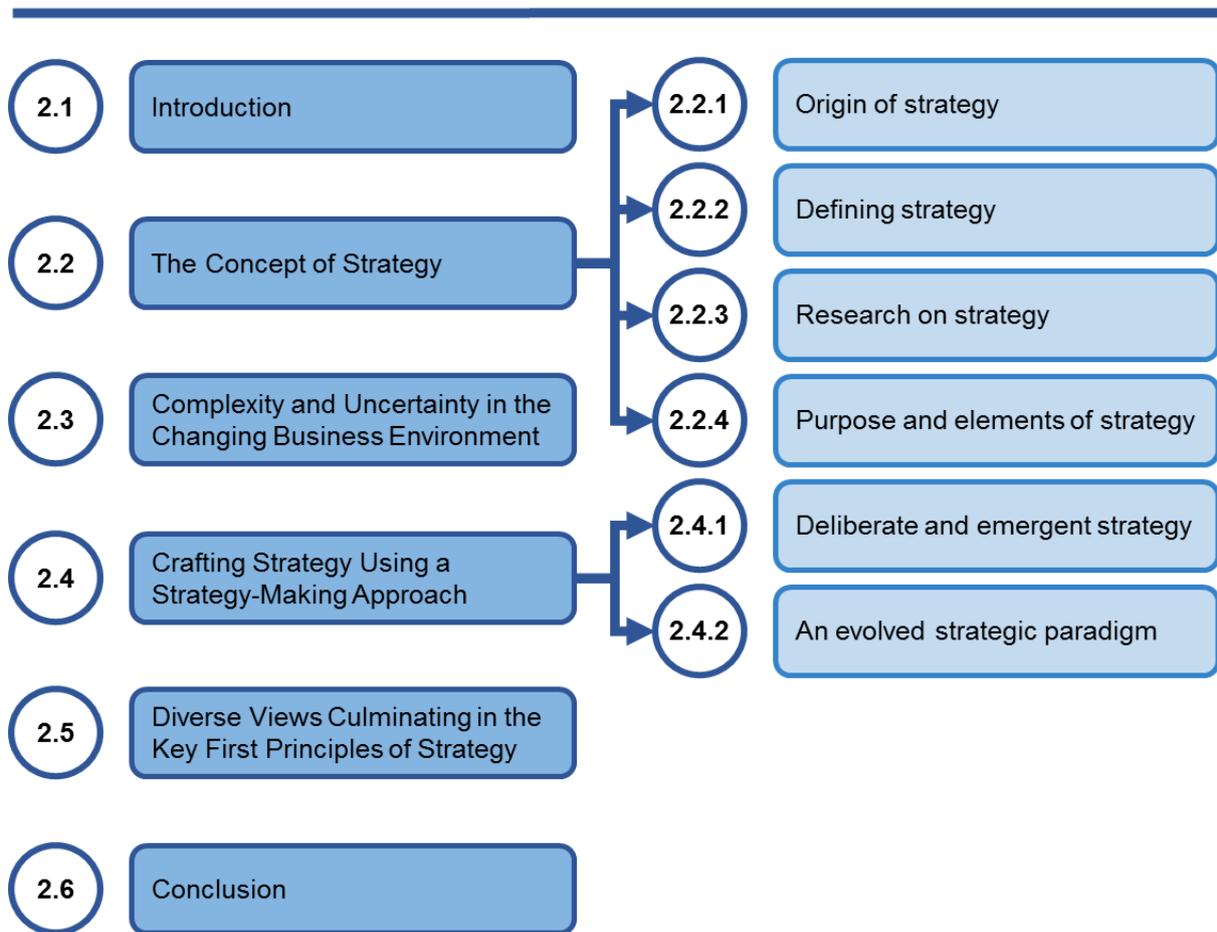
- **Chapter 4. Mechanisms for Crafting a Creative and Adaptive Strategy**
Chapter 4 outlines mechanisms for crafting a creative and adaptive strategy within a strategic thinking approach.
- **Chapter 5. Research Design and Methodology**
Chapter 5 delineates the research methodology used during this study, and provides specific information regarding the research paradigm/philosophy and design, the population and sample, and the data collection and analysis methods.
- **Chapter 6. Analysis of the Research Results**
Chapter 6 provides a discussion of the quantitative and qualitative findings of the study based on the output provided by the two research instruments – the survey questionnaire and the qualitative interview schedule.
- **Chapter 7. Conclusion**
Chapter 7 comprises empirical research findings based on the research results, final summary and key findings, suggestions for future research and recommendations, with a final conclusion including the contributions made by this research.

Chapter 2

Defining the Principles of Strategy

Chapter 2

Defining the Principles of Strategy



“It is important to remember that no one has ever seen a strategy or touched one; every strategy is an invention, a figment of someone’s imagination...”

– *Henry Mintzberg*

2.1 Introduction

There is very seldom certainty in life; however, three things are certain: death, taxes and the reality that the corporate strategy defined today, will no longer be valid tomorrow (Simons, 2010:100). Constantly changing competitive landscapes and internal organisational complexities increase the challenge of articulating a corporate strategy in a simple, compelling way (Tovstiga, 2010: x).

As a result, it is thought that business strategy is unable to remain effective for long periods, as competitors continuously react and render the strategies void (Markides, 2004:11; Marren, 2010:60; McGrath, 2013: xi-xviii). Strategies of today will often be the foundation for survival tomorrow, requiring winning organisations to continuously change their current and future game plans (Marren, 2010:60; Reeves, Love and Tillmans, 2012:2).

The pace of change and unremitting uncertainty has not negated the need to define organisational strategy, but instead has explicitly refocused the need for a creative and adaptive strategy articulated in a simple, compelling manner to ensure competitive success and sustainability.

The purpose of this chapter is to review literature on the concept “strategy”. The broader review incorporated seminal works that created the base for research on the topic over the last 60 years, with an extension to more recent works.

The chapter begins with an introduction to the concept of strategy, its origins in a political and military context in several areas around the world, followed by its interpretation in modern warfare of the 20th century and ultimately in the realm of business. The said concept has been defined and redefined by numerous authors over the past 60 years; within this chapter a number of the definitions are consolidated to provide a view of the purpose and elements behind the construct.

The chapter then provides an overview of the three strategy constructs through

which research strategy has been themed: process research focused on strategy formulation and implementation (Whittington, 2007:1576); content research concerned with the types of strategy (Whittington, 2007:1576) and the relatively new academic field of strategy-as-practice – interested in how strategy is organised: who does it, what they do, how they do it, what they use, and what implications this has for the shaping of strategy as a whole (Jarzabkowski and Spee, 2008:69).

The chapter subsequently expands its focus to provide insight into the intricacy and uncertainty of the changing business environment, thereby affording an understanding of business realities.

An overview of the deliberate and emergent strategy-making approaches is provided, followed by an articulation of the evolved strategic paradigm, concluding with a consolidation of views for crafting a creative and adaptive strategy focused upon the first principles of strategy.

The importance of this review is for the researcher to gain a thorough understanding of the concept in order to provide guidance and provide the appropriate framing towards process and practice-oriented research, in order to evaluate strategy-making processes in the subsequent chapter.

2.2 The Concept of Strategy

2.2.1 Origin of strategy

From its inception, strategy has primarily been concerned with searching for competitive advantage (Liedtka, 2005:76, Cravens et al., 2009:31-49). Several thousand years of military history indicate that the primary focus of strategy has been on winning (Tovstiga, 2010:4). To ensure a thorough understanding of strategy, it is therefore essential to reflect on the origins of the concept at hand.

The concept of strategy is thought to derive from a socio-political structure coined during the political reforms of Kleisthenes in ancient Athens (508-7 BCE). Several tribal divisions, acting both politically and militarily, were created in the district of Athens, with the head of each tribe elected as a *strategos*. *Strategos* is compounded from the word *stratos*, defined as an encamped army which is spread over an area, and *agein*, meaning to lead. Increased military complexity, and the co-ordination of

many land and naval units, increased the necessity for co-ordination and synergy, resulting in the practicing of strategy in arguably its purest form (Cummings, 1993:133).

Early authors, including Aenias Tacticus, Pericles and Xenophon, included several qualities of effective *strategoï*: employing resources, limiting of risk, staying true to points and principles, but most critically, knowing the business which is to be carried out (Cummings, 1993:133; Heracleous, 2003:3).

During a similar timeframe, in Asia, Sun Tzu (544-496 BCE) authored an extremely influential ancient Chinese book on military strategy, *Art of War*. The opus outlined several critical points of consideration for the development of military strategy: meticulous planning, vanquishing of the enemy indirectly without the need to fight, qualities of effective generals and management of troops as well as principles and tactics for engaging the enemy (Heracleous, 2003:3).

Strategic planning was further demonstrated in the campaigns of Alexander the Great, Hannibal, Julius Caesar, Qin Shi Huang and Machiavelli. However, military strategy only gained significant importance as a subject during the eighteenth century, as articulated by the works of Frederick the Great, Napoleon, and Carl von Clausewitz, all of which focused on superior manoeuvrability to obtain victory (Jackson, 2007:31).

Several wars in the 20th century strengthened the influence of military strategy, building upon the principles of earlier strategists. Current doctrine is constructed based on previous practice and lessons learned from intensive study of battles, both successful and unsuccessful, leading to future innovations and best practice (Jackson, 2007:31). British Defence Doctrines, similar to those of NATO and the US Army, outline 10 principles of war (Jackson, 2007:33): selection and maintenance of a clearly defined overall aim; maintenance of resource morale; offensive action; security in defence of high value assets; surprise involving secrecy, concealment, deception, originality, audacity and speed; concentration of force; economy of effort; flexibility; co-operation and sustainability. Parallels can be drawn between the principles of war and organisations engaged in competitive environments (Jackson, 2007:34).

While it may be said that strategy originated from military roots, however, since the 1920s it has been embraced by the business environment with Chester Barnard of AT&T (1938) and Alfred Sloan of General Motors (implemented in 1921, but documented in 1963) identifying the need for strategy to guide the business context (Heracleous, 2003:3). However, the period 1950-1973 is identified as the 'golden years' for the development of strategy (Koch, 2011:7). Alfred Chandler, in *Strategy and Structure* (1962) identified the need for strategy before the organisational structure is defined while Peter Drucker, in *Concepts of the Corporation* (1946), pronounced that the purpose of a business is to create and satisfy customer needs. Theodore Levitt published *Marketing Myopia* (1960), identifying a need for a radical and broad perspective on corporate strategy, followed in 1965 by what is arguably the bible of strategic planning, H. Igor Ansoff's *Corporate Strategy*, a blueprint for the outlining of an organisation's objectives, expansion, product-market position and resource allocation (Heracleous, 2003:4-5; Koch, 2011:7). Further increasing the development of strategy was the founding of the Boston Consulting Group (1963) by Bruce Henderson with his formulation of the experience curve and the growth/share matrix, two important tools in the historical context of strategy (Koch, 2011:8).

Later development in the area of strategy saw several authors gain significant attention through their individualised contributions: Henry Mintzberg, Michael Porter, and Kenichi Ohmae, all focusing on the creation of models for the development of business strategy. At this time Porter strongly argued that profitability informed a relative competitive position and structural characteristics of the organisation's industry, after which he focused on the development of his five forces framework, value chain and generic strategies (Heracleous, 2003:9; Koch, 2011:8). Several further contributions by Gary Hamel and C.K. Prahalad have added to the context of strategy, focusing on the positions of organisations to change the rules of their industry and advancing the use of core competencies as central to the organisational strategy; John Kay elaborated on this with his seminal work on the resource-based view of strategy (Koch, 2011:9).

Goold, Campbell and Alexander (1994) further argued for the need of a corporate centre acting as a parent to operating companies (Koch, 2011:9). Many authors have since debated the form of strategy, with a focus on the competitive advantage

achieved through best practice, business process re-engineering, quality, strategic change, information and technology and innovation (Heracleous, 2003:15).

Owing to the proliferation of publishing on cutting-edge management thinking, the popularity of strategy within the business media and business schools and the overarching importance of it in guiding organisational direction, it is clear that strategy is no longer the exclusive domain of just an enlightened inner circle but should, as a concept, be well-defined and clearly articulated. Hence, the following review of the literature will clearly articulate the on-going discourse and evolving nature of the concept (Farjoun, 2007; Tovstiga, 2010:2).

2.2.2 Defining strategy

The concept of strategy is affected by semantic problems as a result of the many variations in the meaning of its use stemming from differences in perspective, focus and context, both in the business world and in academia. Ambiguity and confusion are prevalent due to the lack of a consensual definition. The result is the emergence of a broad term used to mean anything (Ronda-Pupo and Guerras-Martin, 2012:163; Nag et al., 2007:935).

Context, provided by the origins of strategy, related the concept to its use within the military establishment. Transition to the business environment was driven, although from an economic perspective, by Von Neumann and Morgenstern (1947), and promptly expanded upon into the field of management by Drucker (1954), leading to the seminal work of Chandler (1962).

Chandler (1962:13) introduced strategy as "the determination of the long-run goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals", while Ansoff (1965:106) advanced strategy "as the common thread among a firm's activities." New definitions flowed in abundance during the period 1960 to 1980 (see Table 1 below), with the construction of "strategy" leading to greater diversity based on each author's appreciation of the concept.

Table 1 – Chronology of Strategy Definitions – Expanded post 1980 from the base provided by Bracker (1980:220)

Date	Contributor	Definition
1947	Von Neumann and Morgenstern, <i>Theory of Games and Economic Behavior</i> [pp. 79-84]	Strategy is a series of actions by a firm that are decided on according to the particular situation.
1954	Drucker, <i>The Practice of Management</i> [p. 17]	Strategy is analysing the present situation and changing it if necessary. Incorporated in this is finding out what one's resources are or what they should be.
1962	Chandler, <i>Strategy and Structure: Chapters in the History of American Industrial Enterprise</i> [p. 13]	Strategy is the determinant of the basic long-term goals of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.
1965	Ansoff, <i>Corporate Strategy: An Analytic Approach to Growth and Expansion</i> [pp.118-121]	Strategy is a rule for making decisions determined by product/market scope, growth vector, competitive advantage and synergy.
1968	Cannon, <i>Business Strategy and Policy</i> [p. 9]	Strategies are the directional action decisions which are required competitively to achieve the company's purpose.
1969	Learned, Christensen, Andrews, and Guth, <i>Business Policy: Text and Cases</i> [p. 15]	Strategy is the pattern of objectives, purposes or goals and major policies and plans for achieving these goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is not to be.
1971	Newman and Logan, <i>Strategy, Policy, and Central Management</i> [p. 70]	Strategies are forward-looking plans that anticipate change and initiate action to take advantage of opportunities that are integrated into the concepts or mission of the company.
1972	Schendel and Hatten, <i>Business Policy or Strategic Management, Academy of Management Proceedings</i> [p. 4]	Strategy is defined as the basic goals and objectives of the organisation, the major programmes of action chosen to reach these goals and objectives and the major pattern of resource allocation used to relate the organisation to its environment.
1973	Uyterhoeven, Ackerman, and Rosenblum, <i>Strategy and Organization: Text and Cases in General Management</i> [pp. 9-10]	Strategy provides both direction and cohesion to the enterprise and is composed of several steps: strategic profile, strategic forecast, resource audit, strategic alternatives explored, tests for consistency and finally, strategic choice.
1974	Ackoff, <i>Redesigning the Future</i> [p. 29]	Strategy is concerned with long-range objectives and ways of pursuing them that affect the system as a whole.

- 1975 Paine and Naumes, *Strategy and Policy Formation: An Integrative Approach* [p. 7] Strategies are specific major actions or patterns of actions for the attainment of the firm's objectives.
- 1975 McCarthy, Minichiello, and Curran, *Business Policy and Strategy: Concepts and Readings* [p. 19] Strategy is an analysis of the environment and selection of economic alternatives that will match the corporate resources and objectives at a risk commensurate with the profit and viability which the alternatives offer.
- 1976 Glueck, *Business Policy: Strategy Formation and Management Action, 2nd ed.* [p. 3] Strategy is a unified, comprehensive, and integrated plan designed to assure that the basic objectives of the enterprise are achieved.
- 1977 McNichols, *Policy Making and Executive Action, 5th ed.* [p. 9] Strategy is embedded in policy formulation: it comprises a series of decisions reflecting the determination of basic business objectives and the utilisation of skills and resources to attain these goals.
- 1977 Steiner and Miner, *Management Policy and Strategy: Text, Readings, and Cases* [p. 19] Strategy is the forging of company missions, setting objectives for the organisation in light of external and internal forces, formulating specific policies and strategies to achieve objectives and ensuring their proper implementation so that the basic purposes and objectives of the organisation will be achieved.
- 1978 Hofer and Schendel, *Strategy Formulation: Analytical Concepts* [p. 25] The fundamental pattern of present and planned resource deployments and environmental interactions that indicate how the organisation will achieve its objectives.
- 1979 Mintzberg, *The Structuring of Organizations* [p. 25] Strategy is a mediating force between the organisation and its environment: consistent patterns in streams of organisational decisions to deal with the environment.
- 1979 Schendel and Hofer, *Strategic Management: A New View of Business Policy and Planning* [p. 516] Strategy provides directional cues to the organisation that permit it to achieve its objectives, while responding to the opportunities and threats in its environment.
- 1980 Porter, *Competitive Strategy* [p.xvi] Strategy is a broad based formula for how business is going to compete, what its goals should be and what policies will be needed to carry out those goals. The essence of formulating competitive strategy is the action of relating a company to its environment.

- 1982 Ohmae, *The Mind of a Strategist* [p. 36] What business strategy is all about is, in a word, competitive advantage...the sole purpose of strategic planning is to enable a company to gain, as efficiently as possible, a sustainable edge over its competitors.
- 1991 Grant, *The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation* [p.114] Strategy can be defined as the match an organisation makes between its internal resources and skills...and the opportunities and risks created by its external environment.
- 1994 Rumelt, Schendel and Teece, *Fundamental Issues in Strategy* [p.426] Strategy is the act of aligning a company and its environment. That environment is subject to change, as are the firm's own capabilities. Thus, the task of strategy is to maintain a dynamic, not static, balance.
- 1997 Robson, *Strategic Management and Information Systems* [p.5] Strategy is the pattern of resource allocation decisions made throughout an organisation. These encapsulate both desired goals and beliefs about what are acceptable and, most critically, unacceptable means for achieving them.
- 1999 Eisenhardt. *Strategy as strategic decision making* [p.65] Strategy is "strategic decision making, especially in rapidly changing markets"
- 2001 Hambrick and Fredrickson, *Are you sure you have a strategy?, The Academy of Management Executive* [p.507] Strategy is "the central integrated, externally oriented concept of how we will achieve our objectives."
- 2001 Oliver. *Real-time Strategy: What is Strategy, Anyway?* [p.7] Strategy is understanding an industry structure and dynamics, determining the organisation's relative position in that industry, and taking action to either change the industry's structure or the organisation's position to improve organisational results.
- 2004 Jarzabkowski. *Strategy as Practice: recursiveness, adaptation, and practices-in-use.* [p.529] 'Strategy' is "a situated, socially accomplished activity". Strategy is something people do.
- 2007 Mintzberg. *Tracking Strategy: Toward a General Theory.* [p.3] Strategy is "a pattern in a stream of decisions".

- 2007 Nag, Hambrick and Chen. *What is Strategic Management, Really?: Inductive Derivation of a Consensus Definition of the Field.* [p.944] For these writers: "The field of strategic management deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilisation of resources, to enhance the performance of firms in their external environments."
- 2010 Johnson, Whittington and Scholes. *Exploring Strategy.* [p.3] Strategy comprises "the long-term direction of an organisation".
- 2011 Olsen and Gray. *The Practice of Strategy: From Alexander the Great to the Present.* [p.3] Strategy is "the art of winning by purposely matching ends, ways, and means".
- 2013 McKeown. *The Strategy Book: How to Think and Act Strategically to Deliver Outstanding Results.* [p.1] Strategy is about shaping the future.

Several authors focused their definitions on the selection of long-term goals and the plans for achieving them (Learned, Christensen, Andrews, and Guth, 1969; Ackoff, 1974; Paine and Naumes, 1975) by articulating the proper allocation of resources (Chandler, 1962; Schendel and Hatten, 1972, Grant, 1991; Robson, 1997). Substantial attention was allocated to the attainment of objectives through the use of actions, plans, policies, programmes and orientations (Glueck, 1976; McNichols, 1977; Hofer and Schendel, 1978; Hambrick and Fredrickson, 2001). Others related strategy to the linking of the environment to the organisation (McCarthy, Minichiello, and Curran, 1975; Hofer and Schendel, 1978; Mintzberg, 1979; Schendel and Hofer, 1979; Rumelt, Schendel and Teece, 1994; Oliver, 2001). Some conceived strategy as a rational technique for enhanced decision making (Ansoff, 1965; Cannon, 1968; Eisenhardt, 1999) while strongly highlighting a process orientation to meeting organisational objectives (Uyterhoeven, Ackerman, and Rosenblum, 1973; Steiner and Miner, 1977). Further areas identified in strategy definitions include change (Newman and Logan, 1971), competitive advantage and company performance (Porter, 1980; Ohmae, 1982), activities undertaken by people (Jarzabkowski, 2004), and shaping the future (McKeown, 2013).

Interpretation of the numerous seminal definitions of strategy has identified seven core attributes (Weigl, 2008:16-17):

- Strategy is viewed as explicit
- It is often consciously developed with a particular purpose in mind
- It is created prior to the decisions to which it is aligned
- It is the result of several inter-connected decisions
- It is viewed as hierarchical
- It articulates an organisation's positioning
- Strategy describes an organisation's resource allocation.

In one of his original definitions of strategy, Porter (1996:60) focused on an organisation's unique nature by stating "Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value".

More recently, Mintzberg (2007:3) suggested strategy is "a pattern in a stream of decisions", while Olsen and Gray (2011:3) define strategy as "the art of winning by purposely matching ends, ways, and means", with Johnson, Whittington and Scholes (2010:3) simply stating that strategy comprises "the long-term direction of an organisation". Clarity is provided by these additional definitions in restating the need for deliberate or emergent patterns of strategy combined with long-term direction including difference, competition, cooperation and imitation (Johnson, Whittington and Scholes, 2010:3).

To increase the complexity of understanding the concept of 'strategy', a new phase introduced eclectic ideas and perspectives which have proliferated over the past decade, drawing insights from other disciplines, including institutional theory; revised military strategy; location and spatial dynamics; economics; complexity theory; psychology; sociology; game theory and biology (Jenkins, Ambrosini and Collier, 2007).

Mintzberg et al. (2009:9) concede that it is human nature to seek definitions for all concepts, but argue that a simple definition for the concept of strategy is not available so that it instead requires a number of definitions. The authors outline that strategy could be a plan followed, or a pattern of consistent behaviour over time. Strategy could be deliberate or emergent where a pattern is realised but not expressly intended; alternatively, it can be a position, a perspective and a ploy by

acting as a specific manoeuvre intended to outwit a competitor. However, the importance of strategy is that it sets direction, focuses effort, defines the organisation and provides consistency (Mintzberg et al., 2009:16-19).

2.2.3 Research on strategy

During the burgeoning of research into the concept of strategy during the 1960s and 70s, two research constructs emerged, facilitating research progress in the field. Strategy research was characterised by the formal distinction between the process of creating strategy and the content of strategy (Whittington, 2007:1576).

Seminal works by Chandler (1962), Ansoff (1965) and Andrews (1971) were among the first studies to propose the separation, while several authors subsequently extended reviews on trends across the two distinctions (Fahey and Christensen, 1986; Huff and Reger, 1987; Hutzschenreuter and Kleindienst, 2006).

Process research uncovered the actions leading to and supporting a choice of strategy; focusing on providing prescriptive and descriptive guidance on planning methods, sequence of behaviours and decision making; guiding alternative means for generating and implementing strategy based on individual and group characteristics and structure (Hutzschenreuter and Kleindienst, 2006:673; Huff and Reger, 1987:212).

In comparison, content research focused on the domain of the strategic decision – linking specific decisions and broader economic structures to performance outcomes. Content research concentrated on relationships amongst environmental conditions, strategic decisions and performance results as well as on decisions about the goals, scope, diversification, strategic groups, market share, competitive strategy taxonomies and stages of market evolution and competitive strategies of the organisation and its business units (Fahey and Christensen, 1986:167-183; Huff and Reger, 1987:212).

Subsequently, several authors suggested the distinction proved an impediment to furthering research, creating an artificial boundary between the two streams, which if removed, would lead to superior strategy processes articulated for different strategic issues and environments (Hutzschenreuter and Kleindienst, 2006:697; Huff and

Reger, 1987:211).

In summary, the process stream was focused on strategy formulation and implementation, while the content stream was concerned with the types of strategy (Whittington, 2007:1576). The conclusion was that strategy forms part of the property of an organisation, something an organisation possesses in one form or another (Whittington, 2006:613).

Recent work proposes a third research construct – the notion that strategy is a practice – something that people do, a human activity or a social practice (Whittington, 2006:613). This view invites us to delve deep into organisations to understand the activities individuals undertake in intimate detail, while aggregating all activities that collectively produce strategies that shape our world (Whittington, 2006:613).

Strategy-as-practice, developed in the past decade, is a research theme interested in how strategy is carried out: who does it, what they do, how they do it, what they use and what implications this has for the shaping of strategy as a whole (Jarzabkowski and Spee, 2008:69). From a strategy-as-practice viewpoint, strategy is a situated, socially accomplished activity, while the art of strategising involves the actions, interactions and negotiations of multiple actors at multiple layers, as well as the practices from which they draw to accomplish these activities (Jarzabkowski, Balogun and Seidl, 2007:8; Jarzabkowski and Spee, 2008:70).

Strategy-as-practice has evolved through the development of a conceptual framework, as articulated by Whittington (2006), by defining the reciprocal relationships, which span the micro and macro levels of organisations between the three core elements of praxis, practices and practitioners. As such, Whittington (2006) concludes that a practice perspective on strategy must incorporate consideration of how strategy “practitioners” utilise institutionalised strategic “practices” in creative ways within their strategy “praxis” to generate strategy, potentially creating new strategy “practices” (in Fenton and Langley, 2008:4).

Strategy practitioners are those individuals who undertake the work of making, shaping and executing strategies (Whittington, 2006:619). They are the actors who draw upon the different practices to act. Practices identify the actors’ way of

behaving, thinking, emoting, knowing and acting in ways prevalent within their society. This allows the actors to combine, coordinate and adapt the practices to their organisations' needs in order to ensure they act and influence their society (Jarzabkowski et al., 2007:10). Strategy practitioners are not just senior executives who have strategy as the core of their work, but also those countless others who carry out strategy work, as part of a larger function. These include strategy planners, who still assume a large function in strategy formulation, middle managers who engage in and implement the strategies, and strategy advisors, such as strategy consultants from consulting firms and bankers, lawyers and business school gurus (Whittington, 2006:619).

Strategy practitioners engage in strategy praxis – the various and numerous activities involved in the formulation and implementation of strategy (Whittington, 2006:619). Praxis is the labour of strategy-making outlining the flow of activities through which strategy is accomplished (Whittington, 2007:1578). Strategy praxis includes the intra-organisational work that is required for the development and execution of strategy. While this work is diverse, it often includes formal and ad-hoc meetings, board meetings, management retreats, consulting interventions, team briefings, presentations, projects, simple talk and actions and behaviours that influence the formulation and implementation of the organisation's strategy (Whittington, 2006:619; Fenton & Langley, 2008:4). The domain of strategy praxis is extensive and includes activities which are routine and non-routine, formal and informal, internal to the organisation and found at the organisational periphery (Whittington, 2006:619).

Strategy practices include those routines, procedures, norms and culture employed by strategy practitioners to carry out strategy work (Whittington, 2006:620; Whittington, 2007:1579). They are diverse and variable and are utilised, altered and combined, based on specific uses altering the flow of activity of which they form part (Jarzabkowski et al., 2007:10). Practices include stand-alone items such as forming strategy project teams or strategy away-days and implicit items such as bodily actions, forms of mental activities, background knowledge, expertise, states of emotion, motivational knowledge and the various tools of strategy (Jarzabkowski et al., 2007:9; Whittington, 2007:1579). Tools include analytical techniques such as

SWOT analyses (Strengths, Weaknesses, Opportunities and Threats), environmental scanning and other industry recipes or else technologies and equipment such as flipcharts, computers and software, Gantt charts, white boards or even post-it notes (Jarzabkowski et al., 2007:10; Whittington, 2007:1579). Strategy practices might inform those of whole societies and social practices, which include the strategic scale, scope or structure across nations or the world as well as types of discourse which inform the right ways of doing strategy including strategy techniques, for instance Porterian analysis (Whittington, 2006:620).

Studies undertaking a strategy-as-practice approach need not combine all three elements at the same time. The elements allow for an interconnectedness, providing a means for understanding how to recommend an approach that is able to associate different subsets of the three core elements, based on the assignment at hand, while acknowledging their relationship to the integrated whole (Whittington, 2006:620).

2.2.4 Purpose and elements of strategy

Broadly, strategy can be regarded as a means to achieving objectives (Grant, 2013:15; Hambrick and Fredrickson, 2001:507). It can be perceived as a tool used by organisations to guide them in ensuring successful performance as well as their survival and growth in the long-term (Nienaber, 2010:14). Management textbooks frequently outline strategy as an integrated process of three interrelated steps: formulation, implementation and control (Nienaber, 2010:14), focusing narrowly on planning (Grant, 2013:15).

Mintzberg et al.'s (2009:9) clarification articulates that no single, simple definition of strategy exists; however, several areas of general agreement, different from the classical definition, have been constructed to outline the nature of strategy (Weigl, 2008:19):

- Strategy focuses on both the organisation and the environment
- The substance of strategy is often complex
- Strategy affects the overall welfare of an organisation
- It involves both content and process
- It is not solely nor purely deliberate

- It is articulated at different levels
- It involves a variety of thought processes.

The evaluation of a strategy requires several elements to be present: clarity, motivational impact, consistency, environmental compatibility, resource appropriateness, degree of risk, personal values of the organisation, time horizon and workability. Examples from historical business and context, however, infer the following minimum elements should exist: well-defined, decisive objectives, maintaining the initiative, concentration, flexibility, coordinated and committed leadership, surprise and security (Mintzberg, Quinn and Ghoshal, 1998:12).

However, a transition has taken place, whereby, as noted earlier, the understanding of strategy has shifted from plan to direction. Strategy is perceived as a theme providing coherence to individual and organisational decision making, integrating and guiding the collective of different individual knowledge. It acts as a coordinating device, communicating the identity, goals and positioning of an organisation as its strategic intent and is, crucially, concerned with the future (Grant, 2013:16-17; Maritz, 2010:47; Mintzberg et al., 2009:12).

Strategy can be disruptive, innovative, combine co-operation and competition, introduce value creation and value capture, focus on performance, but importantly, always remains provisional (Koch, 2011:16-17).

2.3 Complexity and Uncertainty in the Changing Business Environment

Catastrophic world events have changed the business and social environment, reducing the prevalent hope for stability. Several global revolutions thrust challenge and opportunity upon organisations: population growth (growth, aging, migration, urbanisation), resource management (food, water, energy, climate), technology (robotics, biotechnology, nanotechnology), information (big data, privacy, education), economics (integration, competition, debt, poverty, inequality), security (new social dynamics, health, cyber) and governance (civil society, social unrest, non-profits, future outlook) (Center for Strategic and International Studies, 2012).

The pace of change within the business environment has speeded up significantly (Ghezzi, 2013:1326; Marren, 2010:59; Reeves, 2009). The marketplace has

increased in complexity and challenge: greater competition, erratic economic cycles, market fragmentation, demanding customers, regulation/deregulation, increasing costs of employment, labour disputes, technological enhancements and consumer attitudes and tastes all require special attention by organisational management (Perrott, 2008:21; Reeves, 2009). Products will become obsolete, customers' tastes will change and technology will render the latest business model uncompetitive (Simons, 2010:100).

Finkelstein (2005:19-28) argues that strategies are not created equal. He contends that simply knowing who, what and how one will compete and what one will not do, is often not enough to provide value to customers or differentiate one's business to increase the difficulty of replication by competitors. In summary, Finkelstein (2005:19-28) posits that disrespect, hatred or arrogance towards one's competitors is not viable to a competitive environment. In addition, wrong ideas, unattainable strategies, incorrect stewardship and immediate inclusion of the latest management fad into organisational structures, without understanding the whole, often lead to desperation management (Finkelstein, 2005:19-28).

Moreover, it is suggested that naive planning, misreading markets, developing the incorrect product lines, basing decisions on gut feel, guess work or only on hard facts while ignoring the competitive environment and valuable insight from employees working on the floor and in far flung areas, lead to organisational failure (Cravens, Piercy and Baldauf, 2009:31-49; Dwyer, 2009:70-73).

Internally, organisations have been found to encounter several internal behavioural problems during the development of strategy; compounded by the pace of a dynamic and ever changing external environment (Lenz and Lyles, 1981:73):

- Inability to achieve goal consensus during deliberation on broad strategic goals
- Communication breakdowns through the failure to preserve open dialogue
- Ambiguity of sub-unit roles and responsibilities
- Obtaining of commitment to the plan or strategy
- Form versus substance of the strategy
- Lack of strategic thinking

- Individual perception of the reward structure not encouraging the development or execution of strategy
- Line-staff conflicts as a result of conflicting priorities
- Personal fears around uncertainty during planning
- Difficulty in obtaining individual commitment to the strategy development process.

In addition, Roxburgh (2003:26-39) suggests that while the theory of strategy is well defined and senior executives well trained in its principles, there are hidden flaws in strategy as a result of managerial human behavioural economics (Roxburgh, 2003:26-39):

- Overconfidence in formulating and judging strategy
- Mental accounting or the categorisation and treating of money differently dependent upon its origin and how it is spent (e.g.: strategic investments)
- Anchoring to past success or historical perspectives
- The 'sunk cost effect', limiting the ability to exit flawed strategic options
- Herding instinct
- Misestimating future hedonic states
- False consensus.

As a result, the greater demands of an uncertain organisational environment; increased importance of organisational culture; lack of support and consensus from the entire organisation and the threat of internal politics derailing effective strategy, significantly increase complexity (O'Shannassy, 1999:15; Speculand, 2011:3-4).

Dandira (2012:130) continues to argue that strategy is in crisis as a result of a knowledge vacuum, where, very often, strategy remains the preserve of a single elite group of practitioners. The belief is factored around their misguided assumption of their advanced knowledge of the concept and their need to maintain their powerbase. In practice, for strategy to be successful, all organisational stakeholders must be involved in the strategy development (Dandira, 2012:130).

As intimated, environmental turbulence has increased and strategic issues clearly challenge the way in which organisations have traditionally planned, requiring a

greater focus on monitoring environmental turbulence levels and forming appropriate and dynamic responses (Perrott, 2008:21).

Camillus (2008:100) argues that strategy issues are often not just “tough or persistent”, but rather “wicked” and crop up when organisations face unprecedented or constant change. Wicked problems can be identified through several attributes: they have innumerable causes, are tough to describe and often unique with no precedent; emerge as [a] symptom/s of another problem and often do not have a right answer. To stay effective, organisations must proactively monitor their environment for changes, rather than conducting occasional analyses of their business landscape (Camillus, 2008:100).

Organisations slow at managing change ignore trends that, although peripheral and not obvious, lead to the changing of consumers’ attitudes, aspirations and behaviours. Organisations need to be aware of these changes and infuse certain aspects of the trends to augment traditional offerings and to produce radical offerings that transcend the traditional category and counteract any negative effects of the trends by developing products and services that reaffirm the company’s values (Ofek and Wathieu, 2010:127).

In competitive markets, there are major unknowns and organisations should have the ability to focus on alternative strategies, depending on how the uncertainties are resolved, thereby focusing on managing uncertainty rather than on achieving results (Raynor, 2007).

2.4 Crafting Strategy Using a Strategy-Making Approach

2.4.1 Deliberate and emergent strategy

In contrast to 30 years ago, the notion that the global business environment is complex, uncertain and fast-changing, is readily acceptable today. This revised worldview stands in contradistinction to the traditional view of predictability, linearity, and controllability, which underpinned the mechanical view of traditional strategy development (Boulton and Allen, 2007:215).

While the essence of strategy remains in constant flux as conversations mature, allowing the practice to remain relevant and significant, the challenge of strategy-

making must be shaped by the environmental realities, already mentioned, of complexity and uncertainty (Brews and Hunt, 1999:889–913; Mintzberg et al., 2009:12; Maritz, 2010:47).

Strategy-making, the task of creating and operationalising strategy, has been shrouded in debate over the past two decades, with the literature not making a clear distinction between the views at either end of the strategy-making continuum (Maritz, 2010:47). The two extreme views include a purely rational, deliberate approach at one end and an emergent, adaptive approach on the other end, positioned as alternative approaches (Maritz, 2010:47). The continuum outlines three broad outcomes (Maritz, 2010:48):

- Intended strategies, which are often planned but not always realised
- Deliberate or realised strategies, which are intended and have been realised
- Emergent strategies, where the pattern realised was not necessarily or expressly intended.

The deliberate approach is associated with a formal planning and implementation process, which views the organisational environment as predominantly objective, open to analysis and predictable, prescribing specific strategies available to organisations and the contexts in which they seem to function best. The emergent approach does not follow a process as definite as the deliberate approach, believing in a more creative adaptation to environmental challenges. Within this view, the lack of environmental certainty and increased pace of change requires a substantial creativity and intuition in order to design an all-inclusive strategy for an organisation, followed by continuous learning through gaining experience (Maritz, 2010:48-51).

Mintzberg et al. (2009:12) argue that intended, or deliberate, strategy inhibits learning, while emergent strategy fosters action which is the driver of strategic thinking. However, the authors add that strategy is rarely purely deliberate and few are purely emergent: all real world strategies contain a mix of control and fostered learning. Mintzberg et al. (2009:12) note that the development of an umbrella strategy, containing broad outlines which are deliberate, complemented by details which emerge enroute, will reflect predictable conditions at hand, while allowing the flexibility to react to unexpected events (Mintzberg et al., 2009:12).

Maritz (2010:51) concludes that many of the assumptions embedded in the traditional strategy models are incomplete and outdated in the new competitive environment, requiring a re-examination of traditional paradigms.

2.4.2 An evolved strategic paradigm

Following the focus on deliberate versus emergent strategy, a revised focus has been placed on the style of strategy which should be crafted. Organisations in industries which act in predictable ways often utilise their unique capabilities and resources to create their market space and defend their position. In these stable environments, the focus is different from organisations in dynamic, innovative markets where competitive advantage is gained from responding to signals faster than competitors (Reeves et al., 2012:2). Focusing on an industry's predictability, Reeves et al. (2012:2) argue that the levels of adaptability, creativity and influence required by organisations demand alternative styles of strategy.

Reeves et al. (2012:4) created a systematic framework, articulating four divergent strategic styles to guide the selection of an organisation's strategic style, aligned to the conditions found within its industry, business function or geographic market. Their research indicates that while many industry factors guide the strategy that is developed, two critical factors, predictability (accuracy and confidence of future forecasts of performance, competitive dynamics, and market expectations) and malleability (ability of the organisation, or its competitors, to influence market factors), influence the strategic direction and in turn, the style of the organisation.

Following the variables, four styles emerge, each associated with a distinct planning practice suited to a particular environment. Reeves et al. (2012:4) contend that historically, organisations have focused on two styles: predictability and unpredictability; they postulate that all four styles should be considered, with a fifth style identified for extreme circumstances (Reeves et al., 2012:4-7):

- A *classical strategy* can be employed by organisations in predictable and immutable environments. Most familiar of the four styles, the focus remains on using traditional planning tools to shape an organisational goal, targeting a favourable position and utilising all available capabilities and resources to achieve the position over several years.

- An *adaptive strategy* requires greater flexibility and experimentation, working well in unpredictable and immutable environments, where a crafted classical strategy may reach obsolescence within months or weeks. In this situation, constant refining of goals, tactics and the ability to shift, acquire or divest resources smoothly and promptly, is critical through a continual process of strategy development.
- A *shaping strategy* is best when an organisation has the ability and power to change an unpredictable environment. Embracing short or continual planning cycles, with flexibility being paramount, the focus stays on experimentation – allowing the organisation to radically shift the course of an industry in a single innovative move. This ability requires a formidable ecosystem of receptive customers, suppliers or complementors who can define attractive new markets, standards, technological platforms and business practices.
- A *visionary strategy* is applicable to predictable environments where the organisation has the ability to mould or change the environment to obtain advantage, focusing on creating or building products or services to which markets will positively respond. In these markets, organisations know the future and can predict the path to realising it. This style displays similarities to the classical style; since the goal is clear, deliberate steps can be taken to reach it without requiring several alternatives such as those needed in the adaptive style. Long-term dedication and commitment of resources are required to achieve success.
- A *survival strategy*, feasible only in circumstances in which the other four will fail (for example, when access to capital and resources are limited), occurs in a harsh environment which threatens the very viability of the organisation. Its focus is clear and is intended to focus on short-term success. Organisations, however, are required to look ahead, beyond the current crises, and assess the future conditions by adopting a growth strategy.

Selection of a strategic style is suggested in order to align an organisation's overall strategy to the economic conditions of its industry. However, if there are several business units, across geographical markets or different industries or business functions, these could require their own ability to select a different style, dependent

on their requirements, providing them with the flexibility to manage diverse or fast-changing environments. Crucially, the style must align to the organisation's growth and maturity lifecycle to ensure adaptability and success (Reeves et al., 2012:9).

In comparison, the classical strategy style and, arguably, the visionary strategy style to which Reeves et al. (2012:4-7) refer, relate to the classic, traditional, mechanistic, or rational approach described by many authors (David, 2013; Feuerer and Chaharbaghi, 1997; Gates, 2010; Farjoun, 2002; Farjoun, 2007; Jones and Hill, 2010; Mintzberg, Ahlstrand and Lampel, 2009; Nienaber, 2010; Pearce and Robinson, 2007; Pitt and Koufopoulos, 2012; Schraeder, 2002; Volberda, Morgan, Reinmoeller, Hitt, Ireland and Hoskisson, 2011); while the adaptive and shaping strategy styles correlate with authors who identify the need for a more creative, adaptive and experimental approach to strategy within the current unpredictable and dynamic environment (Amsteus, 2011; Dwyer, 2009; Finkelstein, 2005; Marren, 2010; Mintzberg, 1994; Perrott, 2008; Wilson and Eilertsen, 2010).

It could be argued that, irrespective of the style followed by individual organisations, based on the perceived predictability of their industry, a revised approach to the creation of strategy is required to ensure success in such an environment. A new, integrated picture of organisational, economic, and political infrastructure behaviour characteristics is required to understand the complex systems. Several principles are highlighted to develop an integrated view (Boulton and Allen, 2007:215):

- Several possible futures exist, thus the necessity of accepting that the future is unknown, leading to an unfixed and emergent future that must be created, not discovered
- Organisations and economies may evolve into new forms with radically different characteristics, some newly created
- Change and creativity can only occur if diversity exists, thereby encouraging interconnectivity to respond to changing environments
- Micro-diversity and local variation is a prerequisite for novelty, eradicating the sole focus on standardisation, efficiency and the search for reliability and control;
- Systems are unfixed, emergent, self-organising and co-evolving

- Complexity does not infer the notion of chaos and helplessness; rather, it focuses on creating clear intentions and actions based on the best data available, while still allowing chance ideas and impulses to unintentionally work beyond one's wildest dreams.

A renewed focus on strategy, incorporating complexity theory, should encompass the following elements (Boulton and Allen, 2007:229):

- A review of the environment to establish its nature, its stability or fast-changing landscape
- A strategy conducive to the environment: adaptive / emergent / agile or poised to change, if required
- Multiple strategic elements, with an experimental culture and the agility to embrace success or cut loss
- Internal scanning for unintended successes, ideas, hidden resources and a disposition to back winners, even if not intended by the organisational strategy
- Environmental scanning to respond and adapt to change
- Foresight to strengthen the ability to anticipate possible futures
- Maintenance of intrinsic capabilities for changing and emergent markets.

Organisations ought to renew and sharpen their quest for sustainable competitive advantage by pursuing an adaptive advantage through the development of a favourable organisational context within which novel approaches to new problems frequently emerge. An adaptive advantage develops unification between reflection and execution and balances deduction with experimentation (Reeves, 2009:2).

Following an adaptive, creative and dynamic approach to strategy emphasises iterative experimentation to overcome limitations of deductive, deliberate approaches in keeping pace with incessant change. Continuously reshaping an organisation through a process of managed evolution, within an umbrella strategy, could provide superior outcomes in turbulent environments (Reeves et al., 2009:2).

Reeves et al. (2009:2) outline three attributes essential for survival in changing environments: readiness, responsiveness and resilience. Through static measures of improved forecasting and decentralised decision-making, supplemented by a

dynamic recursive approach, organisations could develop better-fitting strategies that continuously evolve to change. Recursion involves achieving variation through targeted innovation and modification of practices that are selected and amplified organisation-wide to ensure alignment with strategic intent (Reeves et al., 2009:2).

Reeves and Deimler (2009:7-8) outline several characteristics of organisations undertaking a resilient and adaptive approach: foresight, agility, flexibility, entrepreneurship, diversity and the ability to shape the competitive environment.

Syrett and Devine (2012) undertook research into the characteristics required to manage uncertainty. Their research discovered consensus around the need for an organisation to maintain a strategic readiness for sudden and unexpected threats and opportunities. The characteristics identified included a combination of strategic flexibility, strong navigational leadership, resilience, collaborative partnerships, predictive learning and agility (Syrett and Devine, 2012: xiv).

Developing the said characteristics, aligned to a revised strategy-making process, will favour organisations heavily for future advantage; however, the organisational changes required to achieve this will require fundamental shifts in corporate culture, skill building and leadership (Reeves and Deimler, 2009:8).

2.5 Diverse Views Culminating in the Key First Principles of Strategy

Descartes, in his ground-breaking work, [the] *Principles of Philosophy* (1644), posits that philosophy is the study of wisdom in order to obtain the "perfect knowledge of all that man can know" as "deduced from first causes", called first principles. Descartes described the concept of a first principle as possessing two conditions:

in the first place, they must be so clear and evident that the human mind, when it attentively considers them, cannot doubt of their truth; in the second place, the knowledge of other things must be so dependent on them as that though the principles themselves may indeed be known apart from what depends on them, the latter cannot nevertheless be known apart from the former. It will accordingly be necessary thereafter to endeavour so to deduce from those principles the knowledge of the things that depend on them, as that there may be nothing in the whole series of deductions which is not

perfectly manifest.

Descartes, crucially, describes a first principle as the base on which all other knowledge is built. Following this definition, the concept of a first principle has been defined as “the basic and most important reason for doing or believing something” (Cambridge Dictionaries Online, 2013), “the fundamental concepts or assumptions on which a theory, system, or method is based” (Oxford Dictionaries, 2013), and as “any axiom, law, or abstraction assumed and regarded as representing the highest possible degree of generalization” (Dictionary.com, 2013). First principles, a methodical alternative of understanding the world, found within the study of physics, focuses on breaking down elements into their foundational material components and reasoning from those fundamental truths. First principles are not simply a statement of definition of a concept, but the fundamental and core elements building a concept.

Within the sphere of strategy, the first principles have been well defined historically through the work of Von Neumann and Morgenstern (1947), Drucker (1954), and Chandler (1962), followed by many authors providing their own perspectives (see Table 1). The simple proposition is that strategy is concerned with the search for competitive advantage (Liedtka, 2005:76, Cravens et al., 2009:31-49) and that strategy is about winning (Tovstiga, 2010:4; Olsen and Gray, 2011:3).

Physics focuses on the general analysis of nature, conducted in order to understand how the universe behaves with the aim of discovering the universal law of first principles. Although it is one of the oldest academic disciplines, the boundaries of physics have never been rigidly defined. Theoretical breakthroughs continue to make significant contributions to new technologies; one example includes the quantum computer which makes use of quantum-mechanical phenomena, such as superposition and entanglement, to perform operations on data. While classic computers make use of data encoded to binary digits (bits – the basic units of information), each with a definite state of either 0 or 1 (an analogy would be a light switch with the off position representing 0 and the on position representing 1), quantum computation makes use of quantum bits (qubits), that are able to exist in states of 0, 1, or a superposition of both (Gershenfeld and Chuang, 1998:66).

Quantum superposition is a first (fundamental) principle of quantum mechanics

which concludes that a physical system can exist partly in all its particular theoretically possible states simultaneously or in parallel; but when measured or observed, it provides a result corresponding to just one of the possible configurations (Gershenfeld and Chuang, 1998:66).

Qubit states overrule the traditional view of a linear approach to bit computing (Gershenfeld and Chuang, 1998:66) and, by inference, may be compared to the view that traditional strategy can focus just on a single linear extrapolation of strategy, concentrating either on a deliberate or an emergent approach (Maritz, 2010:47), or one of several strategic styles (Reeves et al., 2012:4-7). Following the arguments of Mintzberg et al. (2009:12) who conclude flexibility should be established, a revised view concludes that an organisation could exist in several states simultaneously or in the form of strategic superposition.

From an organisational strategy perspective, the traditional emphasis has been on closing the gaps between external demands and internal capabilities, thereby ensuring alignment between the organisation, the business environment, and its past, present and future intent. Ensuring this alignment proved necessary for increasing stability, efficiency and enabling high performance at the cost of learning and innovation. By reducing variation, thereby increasing performance in the short-term, an organisation deprives itself of the information required to move forward (Liedtka, 2005:76; Cravens et al., 2009:31-49).

Stereotypically, strategy choice is often rationalised through the use of analogical reasoning (Gavetti and Rivkin, 2005:1), and in similar fashion humans rationalise their decision-making (Hofstadter and Sander, 2013) resulting in iterations of previous themes and paradigms. Whilst this is a powerful method of developing strategy, since it builds on good ideas and discards bad ones, an alternative, based on revised first principles, applicable to an evolving environment or to the development of parallel strategies, is required for the deep innovation necessary for the resolution of complex problems.

To focus on creating sustainable advantage by developing an adaptive, creative and dynamic strategy-making approach and process, Syrett and Devine (2012) suggest several principles must be articulated as a basis for the development of strategy that

will respond to the challenges faced by organisations. By expanding on the work of Syrett and Devine (2012) through the review and inclusion of views articulated by several authors, this study summarises the key characteristics and elements presented as first principles of strategy. These include:

- *Strategic anticipation* which provides the capability to determine and the ability to implement a strategy highly responsive to the future and unpredictable, volatile environments (Syrett and Devine, 2012:16). Strategy and corresponding plans must be flexible to respond to changes that may occur, both internally and externally. Organisational foresight provides the ability to maintain readiness and follow a provisional strategic stance, constantly ready for action in response to unfolding events (Reeves and Deimler, 2009; Boulton and Allen, 2007:215; Reeves et al., 2012; Mintzberg, Quinn and Ghoshal, 1998:12; Jackson, 2007:30-57).
- *Navigational Leadership* must be provided by the organisation's strategy. It requires the capability to instil a collective sense of where the organisation is and the confidence and optimism to move forward. Coordinated leadership, guided by clear, decisive objectives, focuses effort by setting direction, defining the organisation and providing consistency. The overall aim is to provide not only security, but to increase resource morale too. By supplying this navigation, strategy is able to inspire confidence, ensure transparency, accountability and good governance, encourage speedy decision-making and engage staff at all levels, thereby providing a sense of ownership (Syrett and Devine, 2012:41-66; Mintzberg, Quinn and Ghoshal, 1998:13; Jackson, 2007:30-57).
- *Agility* incorporates the dynamic ability to move rapidly and flexibly to shape or adapt to opportunities or threats. It allows organisations to launch new products overnight, transform the market and change the rules of their industry. Agility is focused on speed of movement, exploitation and leadership (Syrett and Devine, 2012:68), allowing the organisation to remain unfixed, emergent, self-organising and co-evolving. Adaptability, responsiveness, audacity and speed increase the organisation's ability to be disruptive, while ensuring surprise through concealment and deception. Four types of agility

can be identified: financial agility focused on liquidity to buffer against difficulty and provide freedom to pursue opportunities and experimentation; operational agility characterised by the creation of lean and efficient structures; portfolio agility identified by the ability to reshape, reinvent, and reallocate resources with speed as well as organisational agility dealing with empowering structures (Syrett and Devine, 2012:68-89; Reeves and Deimler, 2009; Reeves, 2009; Boulton and Allen, 2007:215; Reeves et al., 2012; Koch, 2011:17; Mintzberg, Quinn and Ghoshal, 1998:12; Jackson, 2007:30-57).

- *Resilience* provides the ability to absorb and build on adversity, shocks and setbacks (Syrett and Devine, 2012:96). Resilience – a continuous propensity to anticipate and adapt to critical strategic shifts in the market place – is an important driver of a creative and adaptive approach in order to ensure competitive advantage. Resilience enables organisations to perceive opportunities and risks more clearly and ensure an effective and rapid response (Reeves and Deimler, 2009:7). To build resilience, organisations must exude a strong sense of purpose and meaning, have a clear self-knowledge, maintain perspective, focus on realistic optimism and persevere while enabling a culture of internal and external co-operation (Syrett and Devine, 2012:96-119; Reeves and Deimler, 2009; Reeves et al., 2012; Jackson, 2007:30-57).
- *Open collaboration* provides the capability to dissolve boundaries, forge links and reach outside the organisation through collaborative partnerships to allow for the sharing of ideas and information, consequently providing a broader perspective and maximising innovation. Through collaboration and co-operation, organisations are able to move beyond their boundaries, both mental and organisational, to allow for greater anticipation of uncertainty and its potential impact. Externalisation provides opportunity for reducing risk and increasing innovation through relationships (Syrett and Devine, 2012:121-147; Boulton and Allen, 2007:215; Johnson, Whittington and Scholes, 2010:3; Jackson, 2007:30-57).

- *Predictive learning* allows organisations to sense, probe, analyse and reflect on previously hidden patterns and trends, in order to allow for the anticipation of sudden or disruptive change. Organisational capabilities must be focused around the use of strategic intelligence to guide decision-making through the use of analytics and knowledge management, double-loop learning to enable the modification of goals in the light of previously successful or unsuccessful attempts to achieve goals on multiple occasions and abduction, a burst of knowledge gained from communicative interaction among organisational members (Syrett and Devine, 2012:151-166; Reeves, 2009; Jackson, 2007:30-57).
- *Creativity and originality*. *Creativity* challenges assumptions, allows for the recognition of patterns and generates the ability to see in new ways, make connections, take risks and seize chances. It is the heart of any strategy and supporting process, not simply focused on the development of new products or services, but equally concerned with new processes and perceptions of opportunity. Creativity determines how an organisation realises value from new ideas and processes by which ideas are developed (Kao, 1997: 6). Amabile (1996:1) defines creativity as "the production of novel and useful ideas in any domain, while Majaro (1992:231) augments the definition by defining creativity as "the thinking process which helps us to generate ideas". *Originality* includes departing from the routine and ordinary, allowing for leaps from the obvious to something new or untried. Creativity is essential in order to ensure originality, be it through diversity, micro-diversity, novelty or imitation, to ensure the organisation pursues the goal of being different through its strategy (Reeves, 2009; Reeves et al., 2012; Reeves and Deimler, 2009; Boulton and Allen, 2007:215; Johnson, Whittington and Scholes, 2010:3; Porter, 1980; Jackson, 2007:30-57).
- *Innovation* is the ability to use knowledge in a unique and different way; to employ new thinking (Pellissier, 2012:4). It is the application of an idea towards doing things better, cheaper, more aesthetically and/ or more effectively (Majaro, 1992:230). Creativity provides ideas – be they outlandish, bizarre, wild or useless – as input to innovation, which creates useful, results-oriented, profitable or effective outputs (Majaro, 1992:231). Innovation

transforms creative ideas into successful implementation within an organisation (Amabile, 1996:1). It enhances the ability to experiment rapidly and frequently, both with products and services, as well as with business models, processes, and, vitally, business strategy. It also guides the development of strategy through organisational learning to create and maintain competitiveness (Pellissier, 2012:4; Reeves, 2009; Boulton and Allen, 2007:215; Reeves et al., 2012).

- *Entrepreneurism* involves trying new combinations; the creative destruction of an existing equilibrium within an industry; a method of transforming disembodied ideas into workable and economically viable operations, leading to value creation and value capture, aiding competitiveness (Amabile, 1996:2). Enabling entrepreneurial activity requires a concentration of force, allowing for a decisive, synchronised application of resources to realise intended effects, when and where required, while supported by an economy of effort and the judicious exploitation of human resources, material and time in relation to the achievement of strategic objectives (Reeves and Deimler, 2009; Johnson, Whittington and Scholes, 2010:3; Jackson, 2007:30-57).

The rapidly altering business environment has renewed focus on creating a sustainable advantage by developing creative and adaptive strategy-making approaches concerned with equipping organisations with the capability to deal with the changing environment. Approaches and processes, aligned to the first principles and broken down to their material components enable the creation of a creative and adaptive strategy articulated in a simple, compelling way to ensure competitive success and sustainability (Liedtka, 2005:76, Cravens et al., 2009:31-49).

2.6 Conclusion

For thousands of years' strategy has been a key construct in the military and, later, the business environment. Intricacy and uncertainty in a fluctuating business environment have provided the opportunity for the construct to mature over the past 30 years.

A review of literature reiterates the on-going discourse and evolving nature of the concept, predominantly coordinated through three research themes or constructs

over the past three decades. The first, process research, focuses on the formulation and implementation of strategy through prescriptive and descriptive methods, while content research uncovered the types of strategy organisations develop, based on their environmental and organisational conditions. The third stream, a recent one, considers the practice of strategy by asking how strategy is prepared.

While the essence of strategy remains in constant flux as conversations mature, allowing the practice to remain relevant and significant, the challenge of strategy-making must be shaped by environmental realities already mentioned (Mintzberg et al., 2009:12; Maritz, 2010:47).

As indicated, organisations in industries which act in predictable ways often utilise their unique capabilities and resources to create their market space and defend their position. Focusing on an industry's predictability, Reeves et al. (2012:2) argued that the levels of adaptability, creativity and influence required by organisations, demand alternative styles of strategy.

Realignment to a revised strategy-making process will heavily favour organisations for future advantage; however, the organisational changes required to achieve this would require fundamental shifts in corporate culture, skill building and leadership.

So as to focus on creating sustainable advantage by developing an adaptive, creative and dynamic strategy-making approach and process, in this chapter several principles have been articulated as a basis.

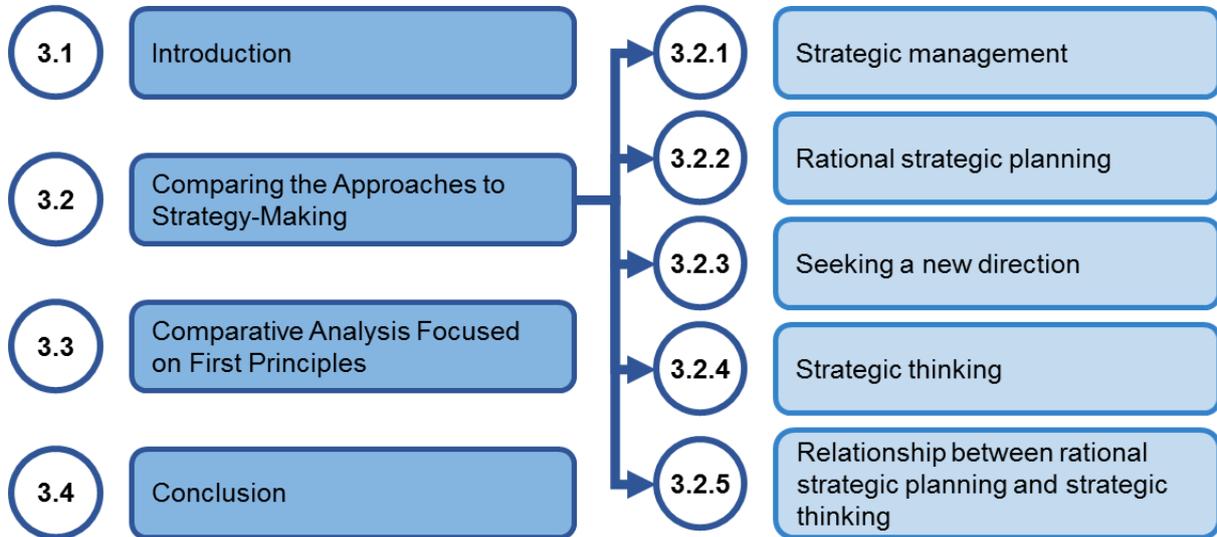
Framing this research within the process and practice research themes, the subsequent chapter undertakes a comparative review of two alternative strategy-making approaches, focused on strategy formulation, to gain insight into their best practice processes, core elements and benefits as well as their alignment to the evolved strategic paradigm in order to devise the strategy already described, based upon the first principles mentioned.

Chapter 3

Comparative Approaches to Strategy-making

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Comparative Approaches to Strategy-making



“You have to be fast on your feet and adaptive or else a strategy is useless.”

– *Charles de Gaulle*

3.1 Introduction

Strategy, as a construct, has been articulated in various forms over the past 60 years, and in the previous chapter a number of definitions were consolidated to provide a view of the purpose and elements behind this concept. In addition, three research themes or constructs were identified to focus research in the field, with the emphasis in this research being on the process and practice elements of strategy formulation. Furthermore, insight into the intricacy and unpredictability of the changing business environment was provided, thereby affording an understanding of business realities. These, in contrast to the traditional view of predictability, linearity, and controllability (Boulton and Allen, 2007:215), clearly illustrated the need for a shift in the creative development of strategy and its supporting approaches.

The consolidation of views demonstrated the evolved strategic paradigm, illustrating the need for a revised approach to the proposed crafting of a creative and adaptive strategy based upon the first principles.

Strategy is concerned with shaping the future (McKeown, 2013:1) and is about learning, discovering and inventing, all of which require sources of strategic invention and innovation. Approaches, tasked with guiding the said crafting, should, at their core, focus on understanding the current situation and assist in creatively positioning the organisation into an adaptive future (Pugh and Bourgeois, 2011:178).

It is noticeable that a transition from the corporate planning of the 1950s and 1960s to strategic management over the past forty years, concentrating on devising strategic moves and their implementation, has taken place (Grant, 2013:13). With positive and negative outcomes, authors have focused on developing dynamic processes focused on determining the most appropriate course of action (Rainey, 2010:246).

As mentioned, scientific management, pioneered by Frederick Taylor, envisaged a rational strategic planning approach, which corporate leaders would embrace as “the one best way” to devise and implement strategy to ensure the competitiveness of the

organisation (David, 2013:45). Strategic planning would involve a formal planning function, following systematic guidelines to enable the development of a strategy, implemented by managers, which could not fail. Mintzberg's critique (1994:107) was referred to earlier, as was his view (1994:109) that nowhere within the well-known strategic planning process diagrams can one find an explanation of the creative act of synthesising experiences and knowledge into a truly novel strategy. The said process's contribution should remain in the form of formal analysis and hard data (Mintzberg, 1994:108; Mintzberg et al., 2009:78).

Following the criticism of rational strategic planning by Mintzberg (1994), several strategic thinking approaches, with corresponding process models, have been articulated over the past 15 years. A strategic thinking approach, involving intuition, creativity and foresight is required in order to synthesise available intelligence, comprising transformed data and information, to develop an integrated perspective, thereby enabling a less precise, yet articulated vision of the organisation's future direction (Amsteus, 2011:64; Mintzberg, 1994:107).

Strategic thinking has, at its heart, a focus on the synthesis of information, involving intuition and creativity. Mintzberg (1994:108) argues that synthesis encourages informal learning through internalisation and comprehension, resulting in new perspectives and unique combinations. The outcome of this synthesis is an integrated perspective on an organisation and its direction (Mintzberg, 1994:108; Mintzberg et al., 2009:78).

Framing this research within the process and practice research themes identified in the preceding chapter, this chapter presents a comparative review of the two alternative strategy-making approaches, focused on strategy formulation. The rationale for this is to gain insight into their best practice processes, core elements and benefits and their alignment to the evolved strategic paradigm in order to craft a creative and adaptive strategy.

To establish an understanding of the formalised process of strategy formulation, this chapter introduces the academic field of "strategic management". It is defined and its process stages of formulation, implementation and evaluation are individually described.

A detailed overview of the two approaches to the formulation of strategy is provided, followed by a comparative analysis of these constructs centred upon the first principles of strategy.

The importance of this chapter is that it gains a thorough understanding of the several approaches to strategy-making in order to provide guidance for the identification of alternative mechanisms reviewed in the next chapter.

3.2 Comparing the Approaches to Strategy-Making

Many conversations taking place in both academia and business environments focus on the crafting of strategy, particularly concerning which strategic framework is most appropriate for the organisation. The specific focus on frameworks alone is argued to be inappropriate in that it distracts from the actual crafting of holistic creative and adaptive strategies (Pugh and Bourgeois, 2011:172).

With both positive and negative outcomes, authors have focused on developing dynamic processes focused on determining the most appropriate course of action. The goal: the development of an approach that would transform the organisation into a successful entity by enabling sustainable efforts and leadership contributions (Rainey, 2010:246).

As argued by Pugh and Bourgeois (2011:172) previously, strategy is not simply “a thing” but rather, strategy is an on-going process, a way about thinking, a way of assessing the fundamentals surrounding an organisation. As an evolutionary process, strategy requires an approach to navigate this process (Pugh and Bourgeois, 2011:172).

3.2.1 Strategic management

In the past, as indicated, the evolution of strategy was predominantly driven by the practical needs of business rather than by the development of theory (Grant, 2013:13). Latterly, the formalisation of a process for the formulation and implementation of strategy has been constructed as the academic field of “strategic management” (Nag, Hambrick and Chen, 2007:935).

Nag et al. (2007:935), however, asserted that the academic field was not yet well

defined. Through the analysis of several hundred academic articles for elements of the construct, followed by a comparative rating by several scholars for devising a distinctive strategic lexicon, an implicit consensual definition was derived. The definition by Nag et al. (2007:944) stated:

The field of strategic management deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilization of resources, to enhance the performance of firms in their external environments.

Alternative and more traditional definitions include those by Duhaime, Stimpert and Chesley (2011:1) who identify strategic management as the process that enables managers to formulate and implement organisational strategies to generate high performance and competitive advantage. David (2013:35) concurs by defining it as the “art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organisation to achieve its objectives”. Carpenter and Sanders (2009:32) articulate the concept as “the process by which a firm manages the formulation and implementation of strategy”, while Pearce and Robinson (2005:3) view it “as the set of decisions and actions that result in the formulation and implementation of plans to achieve a company’s objectives”.

Morden (2007:14), however, comments [that] “Strategic management is concerned with the character and direction of the enterprise as a whole. It is concerned with the basic decisions about what the enterprise is now, and what it is to be in the future. It determines the purpose of the enterprise.”

Nag et al. (2007) and Morden (2007) clearly illustrate the intended and emergent nature of strategic management by identifying a forward thinking focus, while the remaining definitions clearly articulate its formalised process nature as an integrating approach to combine management, marketing, finance, operations, research and development and information systems for the achievement of a common organisational objective. Due to this assertion, management of this type has become the *de facto* standard for academic institutions in educating future managers in business administration (David, 2013:35).

Such management combines the necessary organisational interfaces and activities

into a formalised process to be followed in order to achieve strategic success. Rainey (2010:247) considers the process as a means to an end – and not an end in itself – that includes a framework of several elements: a management framework; analysis of the business environment, market space, extended enterprise, and the organisation; the creation of objectives, strategies and action plans as well as the implementation and execution of plans and programmes.

Volberda, Morgan, Reinmoeller, Hitt, Ireland and Hoskisson (2011:9) describe the strategic management process as the “full set of commitments, decisions, and actions required for a firm to achieve strategic competitiveness and earn above-average returns”. Duhaime et al. (2011:12) contend that managers’ mental models, including their beliefs and understandings, rather than processes, influence their decision-making, which in turn shapes strategies, thereby impacting on organisational performance.

While several different frameworks for strategic management exist, all articulate a three stage process, comprising several critical tasks and elements (David, 2013; Duhaime et al., 2011; Carpenter and Sanders, 2009; Pearce and Robinson, 2005; Rainey, 2010; Volberda, 2011):

- *Strategy formulation:*
 - Development of a vision and mission, including statements of purpose, philosophy and goals
 - Identification of an organisation’s external opportunities and threats
 - Determination of internal strengths and weaknesses, capabilities and competencies reflecting its culture, history, informal and formal structure
 - Establishment of long-term objectives
 - Generation of alternative strategies based on most desirable options
 - Choosing particular strategies to follow.
- *Strategy implementation:*
 - Requires the establishment of annual objectives
 - Development of policies
 - Motivation of employees
 - Allocation of resources through which the matching of tasks, people,

structures, technologies and reward systems are clearly articulated and emphasised.

- *Strategy evaluation:*
 - Evaluation of the success of the strategic process as an input for future decision-making
 - Critical evaluation of internal and external factors, organisation performance
 - Taking of corrective action.

The strategic management process can be described as objective, logical and systematic. By analysing quantitative and qualitative information, effective decisions can be made. However, the shifting dynamic of the business world requires greater intuition and adaptation. In this regard, the given process, especially the formulation stage, is often compared to the long-term planning of the 1950s and 1960s and is not regarded as effective in identifying and managing change (David, 2013:36).

The strategic management process must remain fluid, dynamic and continuous. Change in any one of the elements will require a shift in one or all of the others. While this could result in immediate threats, opportunities may be identified, warranting the need for a continuous review rather than a formal yearly review of the organisation's strategy (Heracleous, 2003:16).

The collaborative formulation of strategic direction is critical for the success of organisational strategy implementation (David, 2013:36); however, while the importance of the implementation and evaluation of the success of any strategic endeavour cannot be overstated, the focus of this study falls solely on the formulation of strategy.

3.2.2 Rational strategic planning

Strategic management was designed to assist organisations become proactive, rather than reactive, in shaping their future. This focus provided them with the ability to initiate, influence and exert control over its environment. This type of management has facilitated the formulation of enhanced strategies using a systematic, logical, and rational approach (David, 2013:45).

The term “strategic management” is frequently used to describe strategic planning. However, the said term describes a holistic approach including the elements of formulation, implementation and evaluation, while strategic planning refers to just a single aspect: the formulation element (David, 2013: 35).

The notion of strategic planning came about during the 1950s, promising much success in the 1970s, but by the 1980s suspicions concerning the concept had arisen as the touted success had not been achieved. Nevertheless, a revival of the concept occurred in the 1990s, with the approach being widely taught and practiced today (David, 2013:35).

While strategic management is viewed as the art and science of developing direction for future organisational success, as noted strategic planning is simply an attempt at formalising a process for the execution of strategic formulation. The predominant mind-set of this approach is that of trying to optimise outcomes in relation to the dominant goal of the organisation. Clear intent and detailed design are thought to enhance achievement of goals. Rational and analytical frameworks and processes reinforce a formal, systematic and all-inclusive process through which goals and strategies are defined for deliberate execution within the organisation’s business environment (David, 2013:35; Pitt and Koufopoulos, 2012:15).

Scientific management, as pioneered by Frederick Taylor, envisages a strategic planning process, which corporate leaders embrace as “the one best way” to devise and implement strategy to ensure the competitiveness of the organisation (David, 2013:45). Strategic planning involves a formal planning function following systematic guidelines to enable the development of a corporate strategy, implemented by managers, which would not fail. Planning of this nature was successful in developing articulate plans, enabling formalised strategic programming that articulates and elaborates on strategies and visions that already exist (Mintzberg, 1994:107).

Gates (2010:3) describes strategic planning as “the process for defining an organisation’s plans for achieving its mission.” The end product of the planning is typically a document (a strategic plan) which distinctly elaborates the organisation’s strategy and the internal and external elements that influence it. While directional in nature, describing the current situation and environment is not intended to endorse

the status quo, but rather to direct future change. Strategic plans set the foundation for the execution of work, align organisational architecture, process flows, risk mitigation, and portfolio management, thereby informing organisation-wide guidelines (Gates, 2010:3).

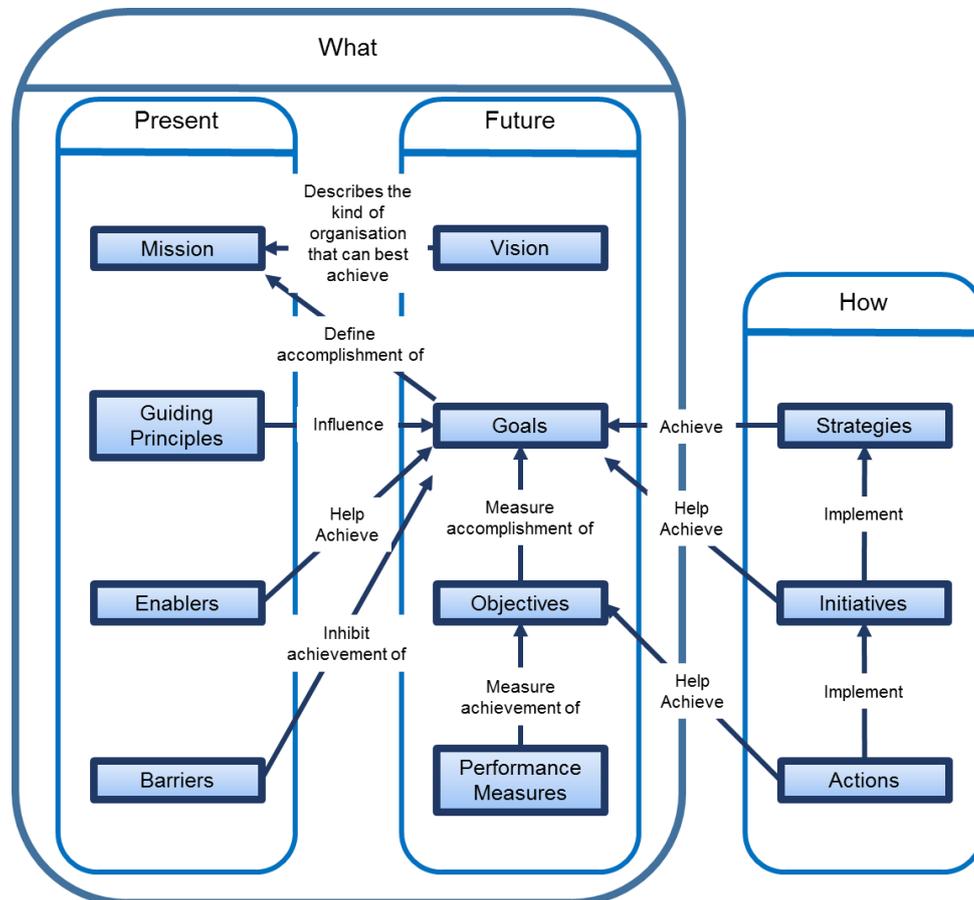


Figure 1 – Gates's strategic planning elements (Gates, 2010:4)

Gates (2010:3) outlines the typical strategic planning process as examining the current environment and abilities, considerations of growth or evolution, aspirations and future intentions. These elements, depicted in Figure 1, may be outlined as follows (Gates, 2010:3):

- *The what:* descriptions of what the organisation does and aspires to achieve, through predefined targets, which are delineated as goals, objectives, and performance measures.
- *The present:* overview of an organisation's present situation or environment, outlined by its mission, guiding principles, values, strengths and barriers, weaknesses or challenges.

- *The future*: charted by the organisational vision and targets.
- *The how*: a preferred route to attaining goals, objectives, and the organisational mission communicated as the organisation's strategy.

Strategic planning, a formal rather than informal process, engages an on-going annual planning cycle conducted at all hierarchical levels within the organisation, dependent on its complexity. It entails an iterative process, a sequence of strategic developments, dependent on internal and external changes which influence assumptions (Jones and Hill, 2010:2).

3.2.2.1 Strategic planning process and elements

Several scholars have refined formal rational planning over the past 50 years into a process that follows a sequential series of steps in order to analyse the organisation's external and internal environment to allow for the selection of appropriate strategies. Actions are consistent across the selection of strategies at the functional, business and corporate hierarchical levels of the organisation. A number of factors underpin each step while a number of activities overlap, increasing the complexity of the process (Jones and Hill, 2010:2).

Several strategic planning processes are in operation amongst organisations today. A unidirectional approach (Figure 2 below), focused on finding a fit between organisational capabilities and opportunities in the marketplace, encompasses a process of well-defined steps carried out in sequence including data collection and analysis, strategy development, evaluation, selection and implementation (Feurer and Chaharbaghi, 1997:61). The alternative strategic formulation process (Figure 3 below) clearly illustrates the inability of a structured process to allow for adjustments to fast changing conditions (Feurer and Chaharbaghi, 1997:61).

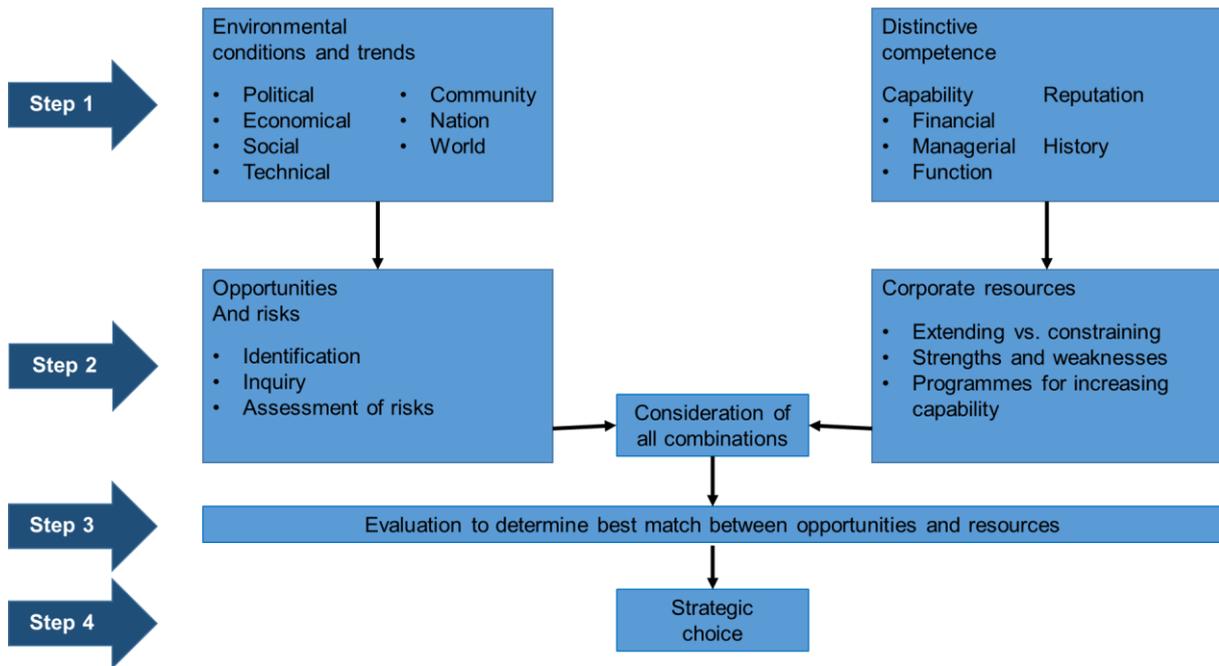


Figure 2 - Unidirectional strategic planning process (Feurer and Chaharbaghi, 1997: 61)

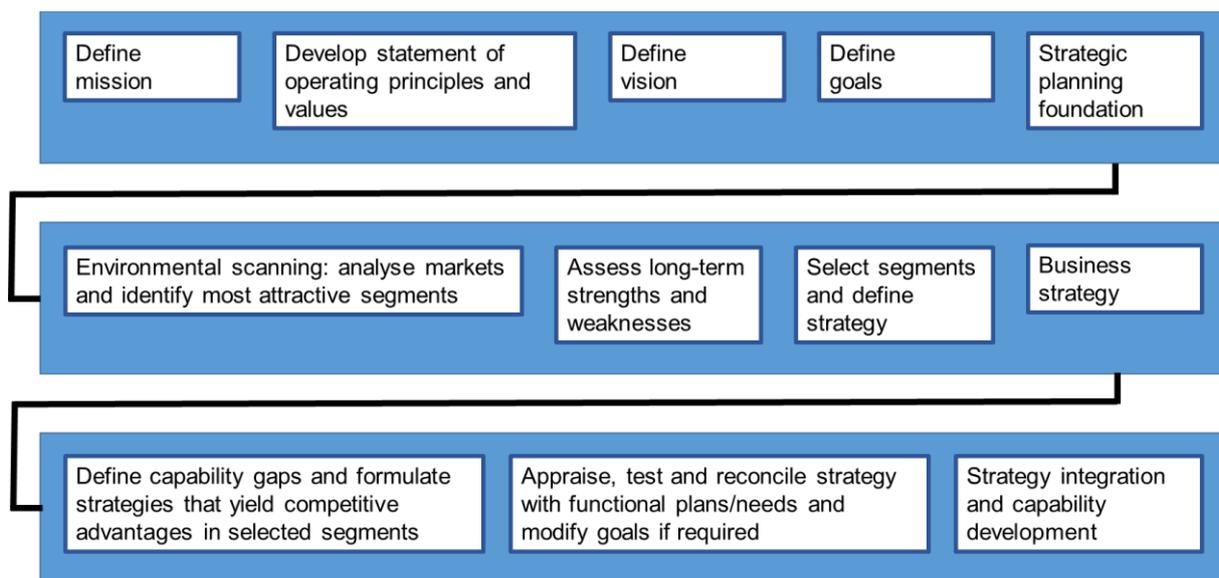


Figure 3 - Strategy formulation process (Feurer and Chaharbaghi, 1997: 61)

The two processes clearly illustrate similar, but alternative, views of linear end-to-end processes guiding strategy formulation. Schraeder (2002:14) simplifies the strategic planning process as illustrated in Figure 4 below, which, while more straightforward in nature, clearly corroborates the directional focus of the strategic planning process.

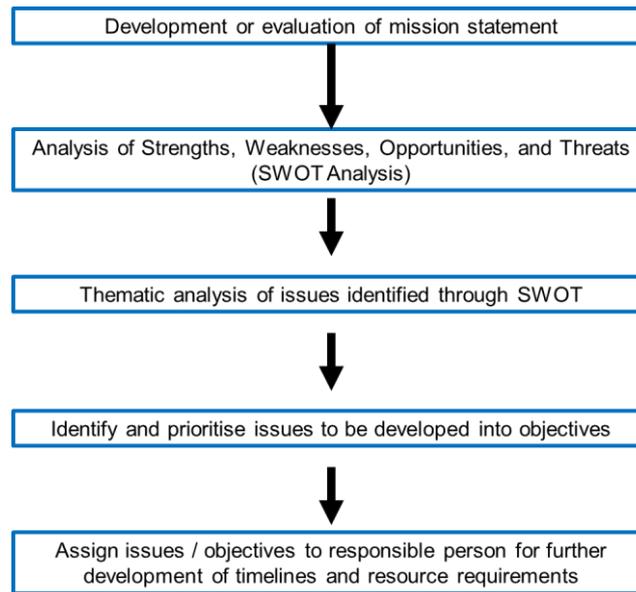


Figure 4 - Simplified strategic planning process (Schraeder, 2002:14)

The graphical representations clearly illustrate the nature of the process and individual steps to ensure conceptualisation is easier. When comparing the illustrations, it becomes clear that they are not identical; however, they each represent the essential elements of a strategic planning process. Each element is discussed in this section:

- *Vision:* Depending on the scholar, a vision statement usually precedes the development of a mission statement. Gates (2010:5) identifies a vision as that which an organisation strives to pursue. The vision delineates a future state, articulating in graphic terms what is to be achieved by answering the question “what do we want to become?” (David, 2013:40; Jones and Hill, 2010:14).
- *Mission:* While scholars differ in opinion on order of development (David, 2013:40; Feurer and Chaharbaghi, 1997:61; Jones and Hill, 2010:14; Nienaber, 2010:14; Schraeder, 2002:14), usually the first element created, the mission statement, provides the context within which the strategy is formed. The mission outlines what an organisation does (Jones and Hill, 2010:14). Gates (2010:5) likewise defines this statement as describing what the organisation does, for whom, and what the benefit is. They are those enduring statements of purpose, identifying the organisation by scoping its product and market focus. They chart the future, reminding stakeholders of why the organisation exists (David, 2013:40).

- *Goals, objectives and guiding principles:* Goals include those broad measurable aims that support the achievement of a mission, while objectives are well defined specific lower level targets set to achieve goals (Gates, 2010:5). Establishment of goals and objectives is critical for evaluation of progress and success (Jones and Hill, 2010:16). Guiding principles are statements which direct and articulate constraints placed upon the organisation by itself to guide behaviour in achieving its goals (Gates, 2010:5). Such principles guide the culture and values of the organisation, stating how managers and employees should conduct themselves and their business activities (Jones and Hill, 2010:16).
- *External analysis:* Critical to the development of an organisational strategy, is a firm understanding of the environment in which the organisation operates and competes. The external analysis identifies opportunities and threats that could affect the pursuance of its mission. Several environments are examined: the industry environment in which the organisation operates to ensure an understanding of the competitive behaviour of its rivals, their history, nature and dynamics; the country, national and potentially global environment in which the organisation competes and the socio-economic or macro-environment which may affect the organisation. The socio- and macro-environments require an analysis of the economic, social, cultural, demographic, environmental, political, legal, governmental, international, technological, and competitive trends and events which could impact the organisation or its industry (Amason, 2010:55; David, 2013:40; Jones and Hill, 2010:17; Pitt and Koufopoulos, 2012:32; Volberda et al., 2011:52).
- *Internal analysis:* Following the external analysis, a detailed understanding is gained of the organisation's resources, capabilities, and competencies to identify its strengths and weaknesses. Controllable activities are found within management, marketing, finance/ accounting, production/ operations, research and development, and information systems found company wide. These activities assist organisations to strive to meet their strategies. The critical focus is on identifying, across the organisation's value chain, tangible and intangible resources which differentiate or provide a competitive advantage due to their value, rarity, inimitability and non-substitutability

(Amason, 2010:112; David, 2013:41; Jones and Hill, 2010:19; Pitt and Koufopoulos, 2012:128; Volberda et al., 2011:97).

- *SWOT analysis*: By articulating the organisation's external and internal environments, a comprehensive strength, weakness, opportunities and threats (SWOT) analysis can be concluded. The central purpose would be to identify areas of exploitation and areas requiring protection from threats in order to build on organisational strengths and eradicate weakness (David, 2013:41; Jones and Hill, 2010:19; Volberda et al., 2011:134). Combined, this analysis guides future strategies and informs long-term objectives by establishing areas of competitive advantage (Nienaber, 2010:17). Nienaber (2010:17) contends that the latter can be established through three facets:
 - The arena(s) in which the organisation undertakes to compete
 - Value which the organisation will offer customers within these chosen arenas
 - Access that the organisation has to resources, assets, skills, processes and systems required to ensure customer value is enhanced in the defined arenas.
- *Strategic options and choice*: By comparing and contrasting alternative possible strategic directions based on the SWOT analysis conducted, a strategy could be developed to create and sustain competitive advantage. Traditionally, several generic strategic options can be manifested in four interrelated and interdependent categories (Amason, 2010:146; Jones and Hill, 2010:19; Nienaber, 2010:17; Pitt and Koufopoulos, 2012:186; Volberda et al., 2011:163):
 - Functional-level strategic options aimed at enhancing the effectiveness of operational delivery within organisations, including manufacturing, marketing, materials management, product development and customer service.
 - Business-level strategic options encompassing the organisation's competitive theme and position. Examples include: cost leadership, differentiation, focusing on a niche market or segment of an industry, or a combination of these.
 - Global strategic options guide direction for the expansion of the

organisation outside of its home country to take advantage of the benefits of globalisation.

- Corporate-level strategic options address the arena in which the organisation will compete, dealing with its scope, diversity and range of activities. Various methods are utilised to define the strategic options dependent on the different stages of the life cycle of the industry, product and organisation. These options include: growth, maintenance, co-operation, harvest and liquidation.

The strategic options identified should remain congruent with one another to ensure support for each other in order to achieve the organisation's mission.

While the strategic planning process and its elements are clearly delineated above, it has been mentioned that over the past three decades, numerous frameworks and tools have been developed to support each step of the planning process. The benefits and pitfalls of these frameworks and tools have been their ability to simplify, compartmentalise and illustrate concepts into clear, concise depictions of reality which can be used in strategic decision-making (Pugh and Bourgeois, 2011:172). A compilation of the most popular traditional frameworks and analytical tools used for strategic analysis across the strategic planning process is provided in Table 2 below (Fleisher and Bensoussan, 2003; Fleisher and Bensoussan, 2007; Pugh and Bourgeois, 2011).

Table 2 – Traditional strategic planning frameworks and tools (Fleisher and Bensoussan, 2003; Fleisher and Bensoussan, 2007; Pugh and Bourgeois, 2011)

STRATEGIC PLANNING FRAMEWORK / TOOL	
Boston Consulting Group/ McKinsey Matrix	Industry Analysis
Blind-spot Analysis	Issue Analysis
Blue Ocean Identification	Macro-environmental (STEEP)
Boston Consulting Group Growth/Share Portfolio Matrix	Management Profiling
Competitor Analysis	Patent Analysis
Customer Segmentation Analysis	Product Life cycle
Customer Value Analysis	Resource-based view
Experience Curve Analysis	S-Curve (Technology Life Cycle)
Financial Ratio and Statement Analysis	Scenario Analysis
Financial Analysis and Valuation	Stakeholder Analysis
Functional Capability and Resource Analysis	Strategic Group Analysis
GAP Analysis	Sustainable Growth Rate
General Electric Business Screen Matrix	SWOT Analysis
Growth Vector Analysis	Value Chain Analysis

3.2.2.2 Benefits and pitfalls of strategic planning execution

Analysis and research into organisations that have implemented a strategic planning process indicate significant improvement in sales, profitability and productivity over those not utilising such a process. By following such a process, rigour is embedded, allowing informed decisions to be undertaken based on internal and external strategic shifts. Poorly performing organisations are often short-sighted, with little analysis of their environment. Planning is viewed as providing tangible benefits in the form of enhancing awareness of external threats; of competitors' strategies; clear employee productivity increases; reduced resistance to change and awareness of performance and reward relationships. Clearer communication of objectives amongst management levels and employees should allow the improvement of products and services (David, 2013: 46).

The familiarity and popularity of the construct has not negated poor or non-existent strategic planning within organisations. A lack of knowledge of the subject-matter, poor reward structures, and firefighting has prevented the implementation of proper planning systems. Perception that no tangible end product is produced increases the belief that planning is a waste of time, too expensive or simply too much effort. Contentment with mediocrity and a fear of failure, over confidence and prior bad experiences reduce the reliance on formalised planning processes. Self-interest, fear of the unknown, differences in opinion and suspicion enhance the belief that planning is a threat to individual wellbeing, reducing trust in planning processes (David, 2013: 46).

Strategic planning is often involved, intricate and complex, requiring an organisation to steer into uncharted waters. There is no readymade solution and to discover one requires a long-term voyage. As a result, strategic planning is frequently used as a power base or to satisfy stakeholders or regulatory requirements. A lack of communication, delivering decisions that conflict with plans, delegation of planning to "planners" as well as failure to include key employees, reducing collaboration, and hastily moving from the mission straight to strategy formulation all reduce support for strategic planning. Extreme formality in planning further reduces flexibility and creativity (David, 2013: 46).

Pitt and Koufopoulos (2012:23) identify several further challenges to strategic planning: complacency and risk aversion amongst management; the complexity of the operating environment versus the demand of short-term pressures, aligned to the difficulty of obtaining data to analyse; and contradictions that appear between what is known and what is uncovered.

3.2.3 Seeking a new direction

Strategy involves winning by differentiating an organisation from competitors, focused on its ability to create and deliver superior value offerings to stakeholders (Tovstiga, 2010:4). Strategy is not simply about rational analysis, but is a practice discipline requiring thinking rather than simply acting. Strategy development requires decisions to be made under circumstances where incomplete information exists, not where reams of numbers are available to back up decisions (Tovstiga, 2010:15).

Rational strategic planning considers strategy as a linear, top-down structured process involving clear steps that cover primary elements including the mission and goals, internal and external analysis, selecting strategies at the different organisational levels, and ultimately supporting the implementation of the selected direction by guiding decisions on organisational structure and control systems (Heracleous, 2003:16). However, the bigger picture is never presented in a comprehensive way as dynamic environments challenge management daily in new ways (Tovstiga, 2010:6).

The traditional formulation or rational strategic planning paradigm was based on the assumption that the future is relatively predictable, thereby allowing the organisation to construct elaborate strategies which are to be pursued through long-term implementation. The changing global trends – such as inter-organisational networking, accelerated product and service design and execution, technological enhancement, globalisation, consumer sophistication, and intensifying of competition – are spurring the need for more flexible strategy formulation approaches (Heracleous, 2003:17).

The traditional approach downplays the manifestation of unplanned consequences of actions undertaken as well as the unpredictability of the global environment and focuses on a top-down process led by senior managers. The traditional paradigm

was moderated by the intrinsic belief that the future can be reasonably predicted, or that the organisation was able to control the environment through the development of plans and allocation of resources in fixed ways. Over time, the realisation that the environment has changed significantly and does so on a frequent basis has emerged and therefore, it is clear that such an approach is not feasible (Heracleous, 2003:17).

Rational strategic planning is encumbered by a grand fallacy: analysis involves synthesis, thus strategic planning is strategy-making (Mintzberg, 1994:110). Supporting this fallacy are three erroneous assumptions (Mintzberg, 1994:110):

- *The fallacy of prediction:*

Strategic planning holds that the organisation's environment will remain static while the strategic plan is being developed and thereafter, remain on the predicted course while it is being implemented. While some patterns may remain predictable, such as seasons, the forecasting of discontinuities as the result of price increases or technological innovation is virtually impossible.

- *The fallacy of detachment:*

Through the development of reporting structures focusing on hard, aggregated data, senior management undertake the formulation of strategy without leaving their offices. This formulation might take place within their minds, while front-line employees are focused on the operationalisation of the strategy. This is dangerous as this approach is ill equipped to synthesise innovation or the insight garnered on the ground. Strategic planning is said to miss the understanding that the work processes must be truly understood prior to being programmed. Over-aggregation of data precludes organisational nuances, detaching management further and creating a reliance on quantitative data rather than qualitative realities. Strategy-making is complex, involving sophisticated, subtle and sub-conscious elements of thinking. As Mintzberg (1994:111) states, "vision is unavailable to those who cannot 'see' with their own eyes".

- *The fallacy of formalisation:*

Formal processes or systems for strategic planning have failed to improve the ability to handle information, often leading to an overload. Human intuition is required to internalise, comprehend and synthesise information. Formalisation

has increased rationalised processes and activities by emphasising administrative procedure, rather than focusing on the learning required. Formal procedures will never inform or create novel strategies. As a result, strategic planning is equal to strategic programming. Strategic planning, as practiced, has become strategic programming, articulating and elaborating visions that exist (Mintzberg, 1994:107).

Wilson and Eilertsen (2010:5) undertook research to investigate the extent to which rational strategic planning supported organisations during the recent economic crises. The findings indicated that only 22 percent of respondents were prepared for the downturn, while 32 percent were substantially unprepared. The respondents were requested to indicate what they would do differently in their strategic planning cycle to mitigate such risks in the future. The most frequent improvements cited include (Wilson and Eilertsen, 2010:12):

- Strengthening of strategic thinking
- Assigning greater importance to and instituting more regularity in their strategic planning cycle
- Creating a stronger connection to resource allocation
- Increasing leadership engagement through greater visibility and direct involvement in the planning process
- Improving strategic action to enhance operational execution through change management.

The opportunities for improvement cited corroborate arguments against rational strategic planning, requiring a process more connected to environmental and future trends (Wilson and Eilertsen, 2010:13).

Planning of this type embeds the ideology of a single right answer. It allows managers to seek reprieve in a mechanistic analysis of hard data (Tovstiga, 2010:9). Rational strategic planning has very little to do with strategy and should rather be viewed as a controlling instrument to be used in the right environment, which appears static in nature (Tovstiga, 2010:9).

Strategies cannot be created through analysis, but their development can be helped

by it (Mintzberg, 1994:112). Mintzberg (1994:112-114) identifies several roles for rational strategic planning:

- *Strategic programming:*
Rational strategic planning is unable to generate strategies, but it is able to support the programming and codification of strategies for implementation. Codification includes clarifying and expressing strategy in a clear and articulate form. Interpretation and attention to articulation of nuance, subtlety and qualification is required for comprehensive elaboration into sub-strategies for realisation. This is particularly useful in an organisation with intricate operations.
- *Tools to communicate and control:*
Coordination is critical for successful understanding and execution. Schedules, budgets and other planning tools are critical for successful communication of intentions and the control of individual pursuits. Furthermore, tangible plans are essential for informing organisational outsiders and stakeholders.
- *Strategy finder:*
Managers are responsible for the identification of ideas and discoveries from employees within the organisation; however, a formalised process could assist in the uncovering of the activities within the organisation or competitors.
- *Catalyst:*
Rational strategic planning is able to encourage managers to take part in the strategy development process, by embracing conceptual ruts using methods such as provocation.

While formalisation is helpful, as intimated it creates limits and barriers to understanding complex and creative activities. Strategy-making is interwoven into the entire organisation with systems limiting the human experience, preventing strategic thinking, creativity and adaptability (Mintzberg, 1994: 114).

3.2.4 Strategic thinking

As suggested, to enhance strategy-making, a paradigm-shift is necessary to compete. Understanding this necessity, Ohmae (1982:2), Mintzberg (1994:108) and

Kaufman, Oakley-Browne, Watkins and Leigh (2003:40) formulated influential views (see Table 3 below) of the construct “strategic thinking”. Ohmae (1982:2), while describing the mind of a strategist, outlined such thinking as an intuitive grasp of the basics of strategy, aligning creativity, intuition and the propensity to disrupt in innovative ways, often construed as unconceivable.

Table 3 – Seminal strategic thinking definitions and descriptions (researcher’s own compilation)

Date	Contributor	Definition
1982	Ohmae, <i>The mind of the strategist: the art of Japanese business</i> [p.2]	“...strategist(s) of great natural talent...have an intuitive grasp of the basic elements of strategy...Because it is creative, partly intuitive and often disruptive of the status quo, the resulting plans might not even hold water from the analyst’s point of view. It is the creative element in these plans and the drive and will of the mind that conceived them that give these strategies their extraordinary competitive impact. “
1994	Mintzberg, <i>The fall and rise of strategic planning</i> [p.108]	Strategic thinking “...is about synthesis. It involves intuition and creativity. The outcome of strategic thinking is an integrated perspective of the enterprise, a not-too-precisely articulated vision of direction... strategies... must be free to appear at any time and at any place in the organisation, typically through messy processes of informal learning that must necessarily be carried out by people at various levels who are deeply involved with the specific issues at hand.”
2003	Kaufman, Oakley-Browne, Watkins and Leigh, <i>Strategic planning for success: aligning people, performance, and payoffs</i> [40]	“The way in which people in an organization think about, assess, view and create the future for themselves and their associates. It is more than responding to both day-to-day as well as long-term problems, opportunities and new realities; it is creating tomorrow. It is not reactive, but proactive... Strategic thinking always involves change, and often, profound personal change.”

Mintzberg (1994:107) concurred, suggesting that strategic thinking consolidates intuition, creativity and foresight in order to synthesise the available analysis to

develop an integrated perspective, thereby shaping a loosely articulated vision of the organisation's future direction. In addition, Kaufman, Oakley-Browne, Watkins and Leigh (2003:40) contend that strategic thinking deals with proactively thinking about and outlining the future while creating the new tomorrow through profound organisational and personal change.

In summation, O'Shannassy (2006:14) concludes that strategic thinking is "a particular way of solving strategic problems and opportunities at the individual and institutional level combining generative and rational thought processes" while Waters (2011:115) views it as "the ability to make a creative and holistic synthesis of key factors affecting an organisation and its environment in order to obtain sustainable competitive advantage and long-term success."

Strategic thinking should connect the past, the present and the future, utilising both organisational memory and historical context, but also relevant inputs on the current business environment, and insight for the forecasting of future direction (Cravens et al., 2009:31-49).

Strategic thinking is considered to transcend time, space and resources, thereby offering creative and innovative strategic options to the complicated issues organisations face in their competitive environment (Zahra and Nambisan, 2012:220). These authors (2012:220) posit that strategic thinking requires a level of creativity, foresight and insight, supported by an inventive and proactive nature. Foresight in this context leads to the shadowing of the future, thus shaping it with insight, uncovering ways to give birth and meaning to it (Zahra and Nambisan, 2012:220).

Strategic thinking requires a revised world view, an entrepreneurial one. Not only is it concerned with how to be different, but more critically, it is concerned with identifying alternative possibilities of generating value through delivery to organisational stakeholders (Abraham, 2005:7).

Strategic thinking has at its heart a focus on the synthesis of information, involving intuition and creativity. Mintzberg (1994:108) argues that synthesis encourages informal learning, through internalisation and comprehension, resulting in new perspectives and unique combinations. The outcome of this synthesis is an

integrated perspective as described earlier (Mintzberg, 1994:108; Mintzberg et al., 2009:78).

Following the Mintzberg model, Liedtka (2005:73-76) outlines strategic thinking as “a particular way of thinking”, comprised of five attributes:

- *A systems perspective*

Liedtka (2005:73) contends that a strategic thinker should have a comprehensive mental model of the organisation’s value chain, allowing her/him to understand all interdependencies within it. This model should integrate knowledge gained of the internal and external environment of the organisation to provide an understanding of “how the world works”. An all-inclusive command of the internal organisational ecosystem, supplemented by the external environment, viewed from a personal perspective, allows the strategic thinker to identify vertical and horizontal linkages within the ecosystem from multiple viewpoints. This view includes the relationships between corporate, business and functional level strategies, the inter-connections between departments and functions and those between communities of suppliers and buyers (Liedtka, 2005:73).

- *Intent-focused*

Strategic thinking is intent-focused and intent-driven. Hamel and Prahalad (in Liedtka, 2005:74) identify the attributes of strategic intent as a sense of direction, a sense of discovery and a sense of destiny. These attributes, when combined, provide a focus that allows individuals within an organisation to combine their efforts and leverage their energy, to focus their attention, to resist any distraction and concentrate, in order to achieve their goals. Strategic thinking is inevitably concerned with and driven by the shaping and re-shaping of intent (Liedtka, 2005:74).

- *Intelligent opportunism*

Within the focus delivered by the strategic intent, room should exist for intelligent opportunism, which provides managers and employees throughout the organisation with the ability to recognise and seize any opportunities that are presented. This opens the prospect of innovative strategies emerging within the focus of the well-articulated strategy, to focus organisational efforts

on alternatives better matched to a rapidly shifting environment. Allowing employees this capability, or openness to new experiences, will provide the organisation with room to adapt without relying solely on top management foresight (Liedtka, 2005:74).

- *Thinking in time*

Intent alone does not drive strategy, but includes a focus on the disjuncture between today's reality and the strategic intent for the future. Thinking in time utilises the organisation's memory and broad historical context to develop a future, by recognising patterns in the past events of its own existence and those of others. A link between the past, present, and future is necessary to ensure there is no disconnection from the past, providing a sense of continuity, informing a sense of direction for the future, maintaining a sense of command in the midst of radical changes (Liedtka, 2005:75).

- *Hypothesis-driven*

Strategic thinking is a hypothesis-driven process, mirroring the scientific method as it incorporates the central activities of hypothesis generation and testing, within the current environment of increased information availability. Strategic thinking is both creative and critical by sequentially performing these activities through iterative cycles. Hypothesis generation focuses on the creative question of "what if...?" while hypothesis testing critically evaluates this by asking "If..., then...?" This approach allows relevant data to guide analysis through, for example, hypothetical monetary spend associated with a concept. The progressive and iterative nature of this process induces the posing of hypotheses without forfeiting the exploration of new ideas (Liedtka, 2005:75).

Liedtka (2005:76) argues that the amalgamation of these five elements will provide a holistic view that can comprehend the whole and interrelated associations. This will provide a connection between the past and drive the future, based on the present. The said perspective will make use of creative thinking to design scenarios, combined with critical thinking to test them, while remaining open to emerging opportunities, both in the defined intent and in the continued suitability of the latter (Liedtka, 2005:76).

Hamel and Prahalad (in Liedtka, 2005:77) agree with the notion that strategic intent includes aspects of both designed and incremental strategy, providing stretch rather than constraint. Liedtka (2005:77) concurs that strategy making is ideally a process of continuous adaptation with emphasis on shaping and participating to ensure the strategic intent remains creative and adaptable.

3.2.4.1 Strategic thinking process and elements

Following the criticism of rational strategic planning by Mintzberg (1994), several strategic thinking process models have been articulated over the past 15 years.

Following detailed research into the commentaries of several respected scholars of strategic thinking, O'Shannassy (1999:15) balanced the lessons learnt and guidelines proposed to conceptualise a model of strategic thinking elements for effectively managing in changing environments. For the purposes of the model, O'Shannassy (1999:15) concluded that strategic thinking is a flexible means for solving strategic problems and conceptualising the future of the organisation. The model depicted in Figure 5 below adopts an end-to-end systems approach containing the following elements (O'Shannassy, 1999:15-22):

- *Flexible inputs:*
Access to flexible inputs is required by organisations to ensure that they are able to respond rapidly and responsively to changes in customer and market requirements. Inputs vary between industry and organisation but often comprise four flexible categories: flexible technology; flexible people; flexible structures; and flexible systems and processes. This creates the ability to adapt to changing conditions promptly, enhancing an organisation's position as regards uncertainty.
- *Helicopter view:*
Strategists at all levels of the organisation should hold onto the bigger picture, or helicopter view of the organisation. This broad perspective from above, as it were, with the ability to hover nearer for a closer inspection, provides the capacity to see the whole, while resolving matters by means of hypothesis, problem solving and analytical investigation. Notably, this approach allows for several perspectives to be articulated concerning the strategic problem.

- *Strategic intent:*

Strategic intent enables the direct intuitive understanding of future direction to flow from top management down to all organisational stakeholders. This provides focus, ensuring alignment and preventing external environmental distraction. Such intent guides long-term direction about the organisation's competitive position and conveys three messages: a sense of direction; one of discovery and one of destiny.
- *Participation of internal and external stakeholders:*

Participation and input from all internal stakeholders, from line staff to the chairperson and from all external stakeholders, from creditors and suppliers to analysts and shareholders, must be consolidated to understand the context within which the organisation exists in order to perform optimally. Sharing of knowledge with all provides greater autonomy in the face of uncertainty, providing flexibility in the use of intuition.
- *Thinking in time:*

Today's reality and strategic intent for the future may lead to a sizable gap needing to be bridged. Often capabilities and resources are not enough, forcing invention and innovation to extend the use of current resources to serve greater ambitions. Scenarios facilitate a disciplined means of identifying inaccurate predictions of both under-prediction and over-prediction of the future. Scenarios direct vision by providing a deeper appreciation for a myriad of factors affecting the organisation.
- *Output of strategic thinking:*

The development of an effective strategic thinking competency will provide competitive advantage, agility and adaptability in the face of uncertainty. Output solves strategic problems, conceptualises the intent for the future, disrupts alignment to conceptual models, obtains commitment of internal and external stakeholders and allows for the concurrent or sequential formulation and the implementation of strategy.

O'Shannassy's (1999:15-22) model of strategic thinking elements (Figure 5 below) combines a range of flexible inputs, outlines the importance of staff maintaining a broader perspective of the organisation and expands on the need to incorporate the

viewpoints of both internal and external stakeholders into the strategy-making process, emphasising the need for social interaction in decision-making.

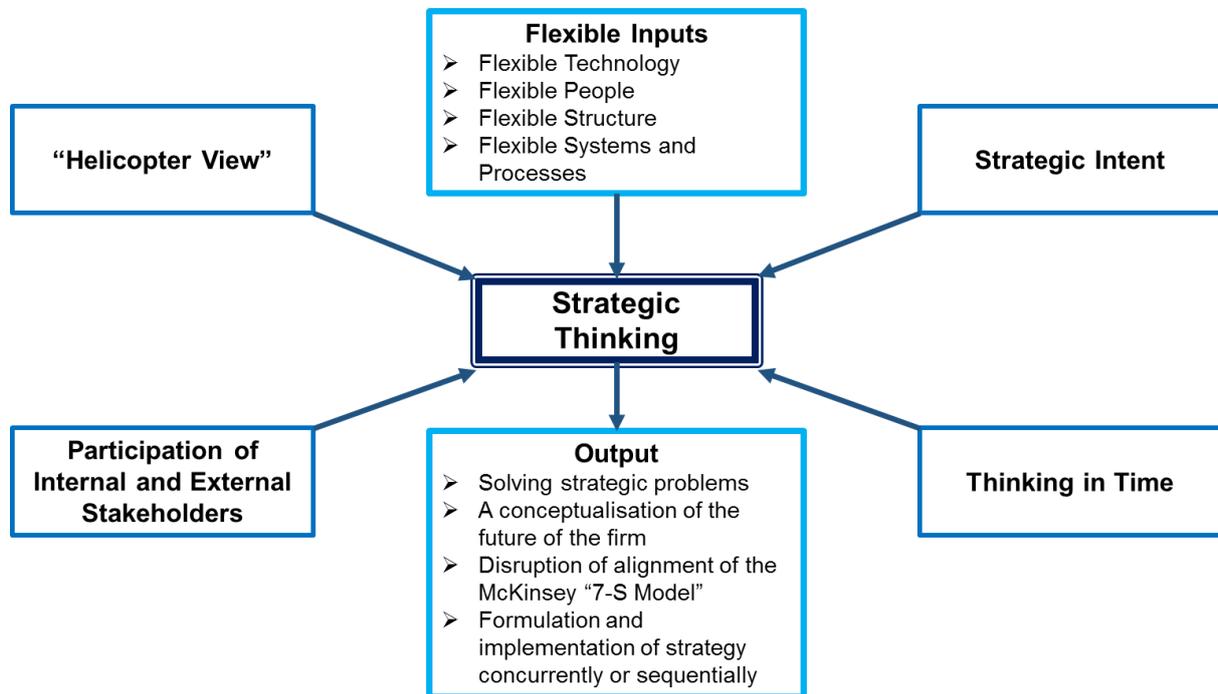


Figure 5 - Elements of strategic thinking (O'Shannassy, 1999:22)

Bonn (2005:338) suggests three additional elements of relevance to strategic thinking:

- *Systems thinking*

Systems thinking can be characterised as a change from viewing the organisation as a splintered consolidation of parts, contending for the same resources, to perceiving an organisation as a holistic system integrating several parts into a single whole. A systems thinking approach is required to disassociate from the daily operations into understanding how individual elements, problems and challenges connect with and influence one another. This approach requires the understanding of holistic processes, systems and environments, rather than single events, allowing one to uncover contradictions and develop innovative solutions.

- *Creativity*

Strategy has been articulated as involving ideas and novel solutions to enable competitive advantage. To achieve this, a discovery of new approaches must be undertaken, combined with the envisioning of a better method of doing

things. This is referred to as creativity, a creation, by individuals within a complex social system, of value enhancing and useful products, services, ideas, procedures or processes. Novelty and relevance to the organisation remain key while unpacking, reconnecting, and making new combinations of previously unconnected items. Creativity makes use of information and experience to decipher something new locked within old structures, patterns, concepts and perceptions.

- *Vision*

Uncertainty, incomplete information and equivocality limit managerial sense making of complex, multifaceted projects and the synthesising of many meanings. A strong sense of organisational strategic intent should guide appropriate decisions and courses of action. Common identity inspires individual imagination, resulting in contributions based on expertise and talents.

Cravens et al. (2009:31-49) have proposed a management framework, based on conceptual logic and empirical findings derived from numerous subject-bases. Disciplines include marketing strategy and strategic management, combined to guide strategic thinking, enabling executives to cope within a multifaceted and rapidly fluctuating global business environment. The framework identifies a method of gathering information and undertaking perceptive interpretation of strategic issues and trends, to inform the choice of the correct strategic initiatives.

The model (Figure 6 below), which is strongly marketing strategy orientated, focuses on determining the nature and scope of market changes driven by new competition, original business models and creativity and innovation (Cravens et al., 2009:33-34). Cravens et al. (2009:34) suggest that understanding fast changing markets requires identifying new market space, conducting strategic segmentation analysis, determining customer value requirements and using this knowledge to guide strategic vision and formulation, to enable the implementation of market-driven strategies for changing markets.

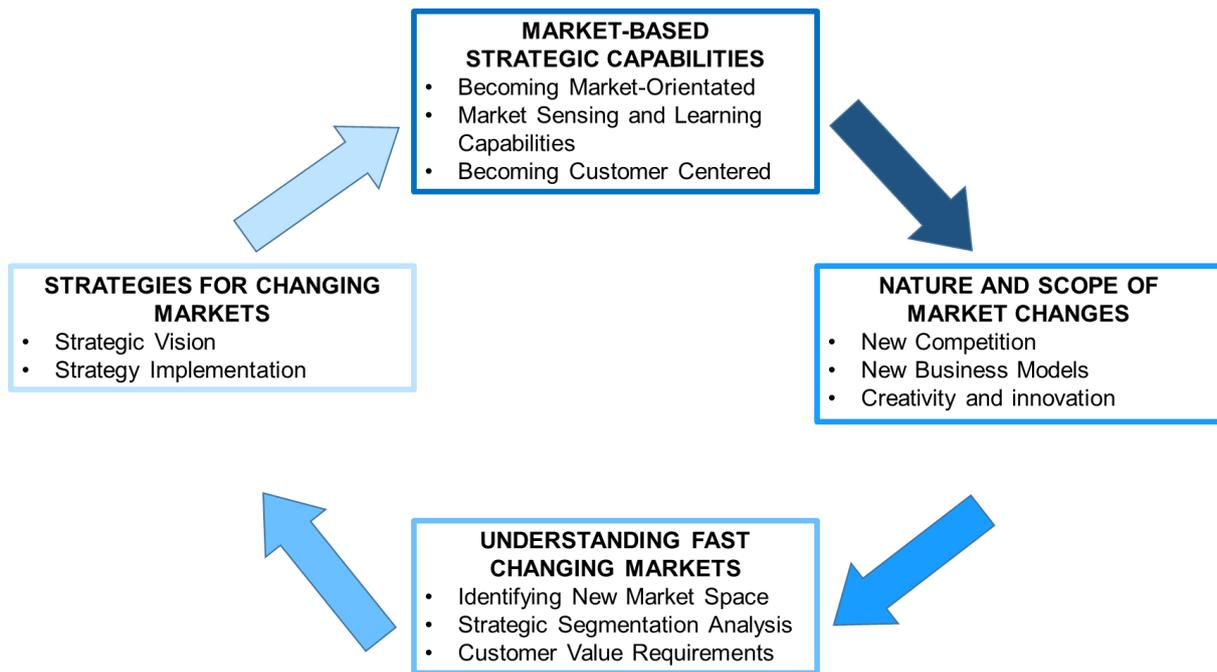


Figure 6 - Management framework for guiding strategic thinking (Cravens et al., 2009:33)

The proposed conceptual model follows a process consisting of four interrelated stages (Cravens et al., 2009:33-34):

- The first stage requires an organisation to already possess or develop three market-based strategic capabilities. These include a culture and process aligned to the market; enhanced market sensing and learning competencies; and customer-centric processes. Without these, an organisation will not be able to identify rapidly changing markets and their strategic implications.
- The second stage focuses on the nature and scope of market changes to determine their impact on the value which customers seek.
- The third stage requires a thorough understanding of what is occurring within the organisation's market and environment to enable the uncovering of emerging market spaces, applying segmentation analysis and determining the value customers require.
- Finally, the fourth stage requires the development of market-focused strategies for each relevant market that is identified. Market targeting or positioning could potentially need to be changed, based on the organisation's revised strategic intent for the future.

Tovstiga (2010:15) engages in strategic thinking from the perspective of a strategy in practice, articulating the need for strategy to be a practice discipline, driven by insight. This approach led to the development of a strategic thinking process drawing on a balanced combination of systematic analysis and intuition, creating insights relevant to strategy-making. The iterative process illustrated in Figure 7 includes the following stages (Tovstiga, 2010:15):

- *Articulation of strategic questions:*

Scoping and articulating strategic questions form the first critical stage of the strategic thinking process: each question is triggered by trends, events or changes within the organisation's internal or external environment. The questions address problems or challenges of strategic relevance. Relevance is guided by an organisation's value proposition and key stakeholders who stand to gain or lose from the situation.

Three triggers, based on changes in the competitive environment, impact the organisation: alterations in the organisation's external competitive environment; in internal competing factors and in the organisation's strategic boundary conditions. Strategic boundary conditions are a hybrid cluster of drivers including assumptions regarding where the organisation will compete, why it is in business, the way in which what it does impacts current or future stakeholders as well as how it will compete, based on its unique resource position.

Following the alignment of the questions, framing of the issues is required. High-level questions comprise multiple components, so that framing assists in clustering issues into manageable components. Issues are separated into subordinate parts until the level where strategic responses need to be generated is reached.

- *Sense making and strategic insight:*

Sense making focuses on the development of coherence and order within an unclear backdrop of multiple possible realities. Sense making introduces a degree of objectivity to enable a clearer understanding of how events are linked, and of the roles of actors and parties within complex relationships. This deconstruction and reconstruction of reality creates insight into the problem or

challenge at hand. Sense making is the process, while insights are the outcome of the process, informing the strategic questions defined in the previous stage.

The deconstruction is undertaken through a series of analyses, use of intuition and interpretation, attaching meaning to the context being examined, leading to the assembly of the bigger picture or pattern. Sense making within the organisational context involves unpacking the following elements: social context, identity, retrospection; salient clues, cues and evidence, ongoing projects, plausibility and enactment.

- *Strategic analysis:*

Strategic analysis serves three purposes: it breaks down the strategic questions and issues into constituent parts and identified triggers; it establishes the basis of these parts into insight and it provides a framework for generating the bigger picture required for strategy formulation.

Such analysis incorporates a multidisciplinary combination of scientific and informal processes to identify, derive correlations and evaluate trends, patterns and performance gaps. The use of frameworks allows for the understanding of the pieces within the bigger picture and, thereafter, assists the development of trends which tell a story, rather than snapshots as provided by rational techniques such as PESTEL analysis, or value chain analysis. Vitrally, the value of strategic analysis is not correctness, but development of focus and discipline brought about by thinking and debating. Frameworks which could be utilised include: the opportunity-response framework, key success factor analysis, the VRIO (Value, Rarity, Imitability, and Organisation) framework and the unique competing space analysis.

- *Strategy formulation and evaluation of strategic options:*

Strategies are formed on the basis of the bigger picture emerging from the strategic analysis of the previous stage. The picture is frequently incomplete, but strategy is formed based on well tested and probed assumptions. This stage concentrates on the formulation and evaluation of options.

While no “one-size-fits-all” approach exists for the formation of options, focus could be based on three emerging and fundamental changes to the competitive landscape: new bases for wealth and creation of value based on

the knowledge economy; emerging different organisational forms due to shifting competitive demands of becoming faster, nimbler and more agile based on fluctuating technological innovation, economic and socio-political conditions and finally, new rules of engagement within and between organisations.

Focused on these changes, the organisation should rethink its ability to compete, redeveloping its strategic response to the revised unique competing space identified for value creation.

After the development of several strategic options, the evaluation of the options is necessary. Evaluation undertakes several forms but the suitability of the option is based on its appropriateness, desirability and feasibility.

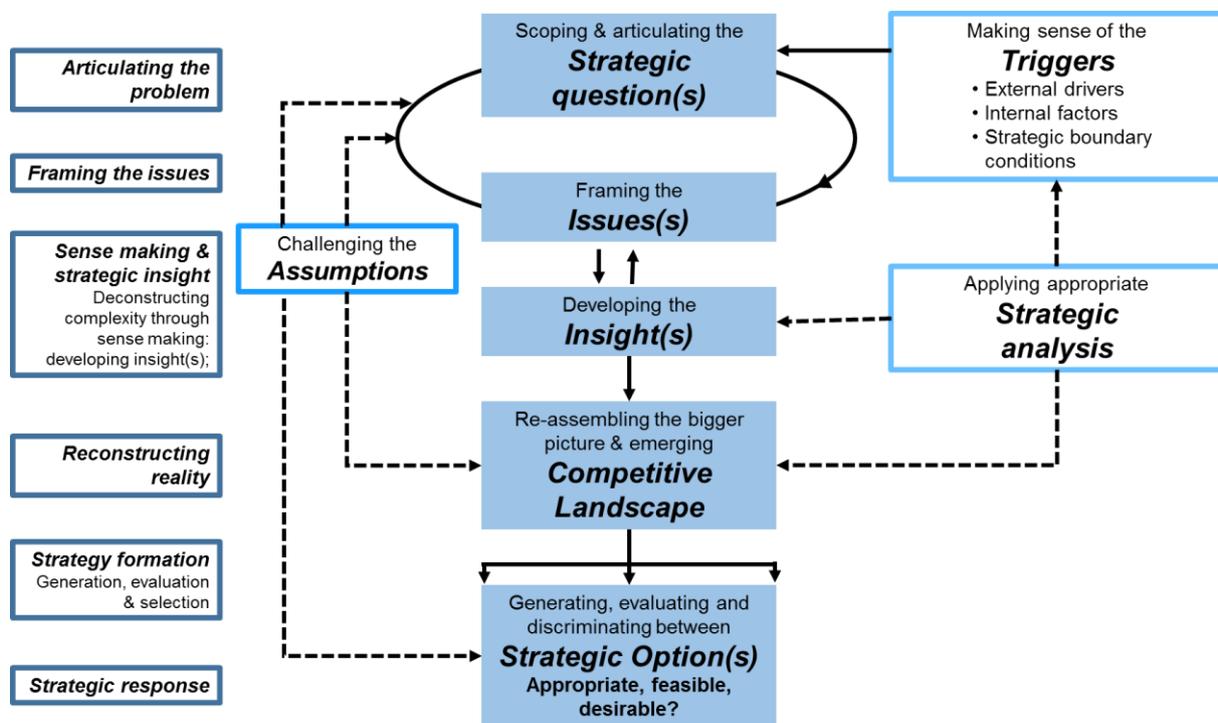


Figure 7 - Strategic thinking process (Tovstiga, 2010:15)

Waters (2011:116) proposes a non-linear strategic thinking framework (Figure 8 below) identifying the skills required by a strategic thinker, aligned to the competencies required in strategic thinking. The framework illustrates a strategic thinking process depicting the relationship between the past, present and desired future state for the organisation. The process depicts the nature of critical and creative thinking processes and the central role played by systems thinking in synthesising a holistic appreciation of all triggers and factors, both internal and

external, which affect or influence the organisation and its environment. Furthermore, the alignment of innovative strategies to the possible future environment allows for the achievement of competitive advantage (Waters, 2011:116).

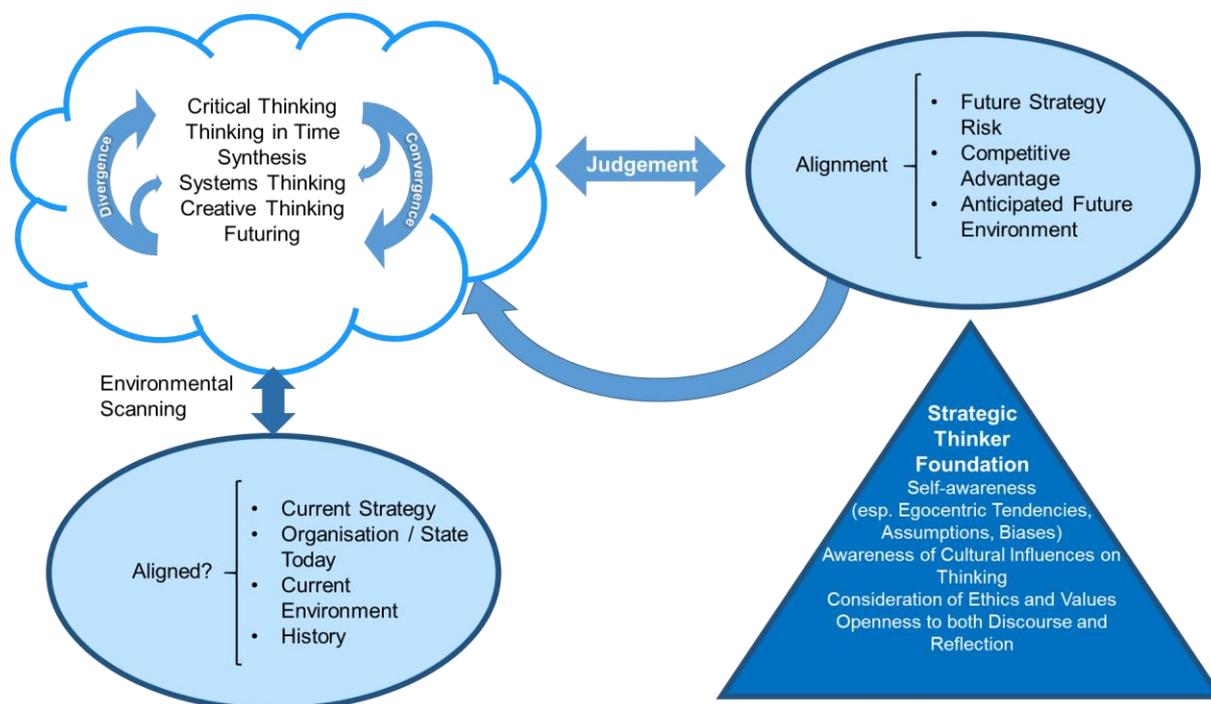


Figure 8 - Strategic thinking framework (Waters, 2011:116)

The framework proposes an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses and opportunities, while critical thinking is used to analyse data required to guide creative thought and allow for the evaluation of generated strategic options (Waters, 2011:116).

While Mintzberg (1994) and Liedtka (2005) directed the initial thinking into the attributes of strategic thinking, several scholars (O'Shannassy, 1999; Bonn, 2005; Cravens et al., 2009; Tovstiga, 2010; Waters, 2011) have described the required elements, substantiated by theoretical processes and frameworks to illustrate the said approach to strategy-making. As evidenced by the preceding discussion, substantial research has been undertaken into several dimensions of the concept of strategic thinking. Contributions largely concur; however, they do not delve into a working model of the underlying mechanisms for crafting a creative and adaptive strategy using a strategic thinking approach.

3.2.5 Relationship between rational strategic planning and strategic thinking

Within the literature, as indicated, rational strategic planning is referred to as a programmatic, analytical thought process compared to that of strategic thinking which is viewed as a more creative, divergent one. However, the relationship between the two processes, if there is the belief that one exists, has often been unclear. Depending upon the scholar concerned, the processes are distinct in nature and either could be used for strategy-making; or, alternatively, strategic planning and strategic thinking are two distinct thinking modes, with the latter preceding the former (Heracleous, 2003:38).

Expanding on the belief in the distinct nature of the concepts, Mintzberg (1994:110) limits the theoretical growth of rational strategic planning by outlining three key fallacies: prediction, in which one can predict the future of a marketplace; detachment, eradicating the belief that planners can be detached from first line business operations and market context and finally the fallacy of formulisation, which suggests that analytical procedures can produce strategies. This view questions the legitimacy and prominence of strategic planning, limiting the concept to the operationalising of existing strategies rather than that of creating new creative and adaptive strategies.

Alternatively, Porter (1991:91) advocates the concept of strategic thinking as the analytical focus on the structure of an industry and the organisation's relative position within the industry. Several analytical frameworks, predominantly used within the sphere of strategic planning, support this analytical approach: five forces analysis, value chain analysis and strategy as an activity. Porter (1991) thereby considers strategic thinking as a convergent and analytical process, or simply identical to strategic planning, rather than as a synthetic and divergent thought process.

Two further suggestions are considered by Heracleous (2003:41): the first is that "the real purpose of strategic planning is to facilitate strategic thinking", thereby making use of analytical strategic planning tools, such as scenario planning, to aid in the latter; the second view considers the notion that strategic planning has evolved into strategic thinking over time by overcoming its flaws. This other view advocates

evolution, in that rational strategic planning has evolved by shifting elements and correcting short-comings such as shifting responsibility for strategy to front line managers; decentralising decision-making; focusing more on environmental changes; enhancing planning tools; and adding greater emphasis to implementation factors such as culture (Heracleous, 2003:41).

Heracleous (2003:42) conducted extensive research into strategic planning and strategic thinking from a learning perspective, comparing both concepts to single- and double-loop learning. His conclusions emphasise the nature of each concept, with strategic planning viewed as an activity carried out within parameters, without expressly questioning these. The nature of strategic planning, in this view, is to adopt a strategic direction and control the configuration and resources allocated to the direction. Strategic thinking instead questions the specific parameters directly, following a double-loop learning process. Strategic thinking is therefore regarded as the strategy-making approach associated with reinventing the future and the creation of new industries and market space (Heracleous, 2003:45).

After undertaking this research, Heracleous (2003:48) concluded that while both rational strategic planning and strategic thinking constitute distinct thinking modes, as debated by Mintzberg (1994) and Porter (1991), they are both necessary, and neither is adequate without the other. Heracleous' (2003:48) view suggests that strategic planning and strategic thinking are interrelated in a dialectical process wherein both are necessary for strategic management.

By clarifying his viewpoints, Heracleous (2003:47) completes the perspectives shared by Mintzberg (1994), in that strategic planning does not produce ground-breaking strategies and does not clash with Porter's view that analytical tools are necessary, as they too can encourage creativity. This observation includes the view that tools used at each stage of the overarching strategic management process are not important, but rather should focus on encouraging the correct creative and analytical mind-set (Heracleous (2003:48).

Heracleous (2003:48) argues that a dialectical thought process will encourage strategists to diverge, converge, be creative and then see real-world implications, be synthetic but also analytical. This will allow individuals to perceive the big picture, but

also focus on operational implications. The process will encourage a circle of creative empowerment followed by operational execution, working complementarily. While not describing the actual managerial process, Heracleous (2003:50) proposed the best-practice approach above.

Graetz (2002:457), through focused research into the complementarities between strategic thinking and planning, concluded that if the process of strategy-making was to be truly effective, a rigid set of predetermined routines should not be followed, but instead a dynamic, opportunistic, flexible and adaptive approach must be used to guide strategy making. Supporting the belief that rational strategic planning and strategic thinking must sustain and support each other for successful strategic management, Graetz (2002:457) depicted the integral nature of a strategic management framework (Figure 9 below). While Graetz (2002:461) recognises the value of creative tension between strategic thinking and planning as providing a driving force within the strategy-making process, she cautions that future research and study must be undertaken into the nature of the complementary aspects.

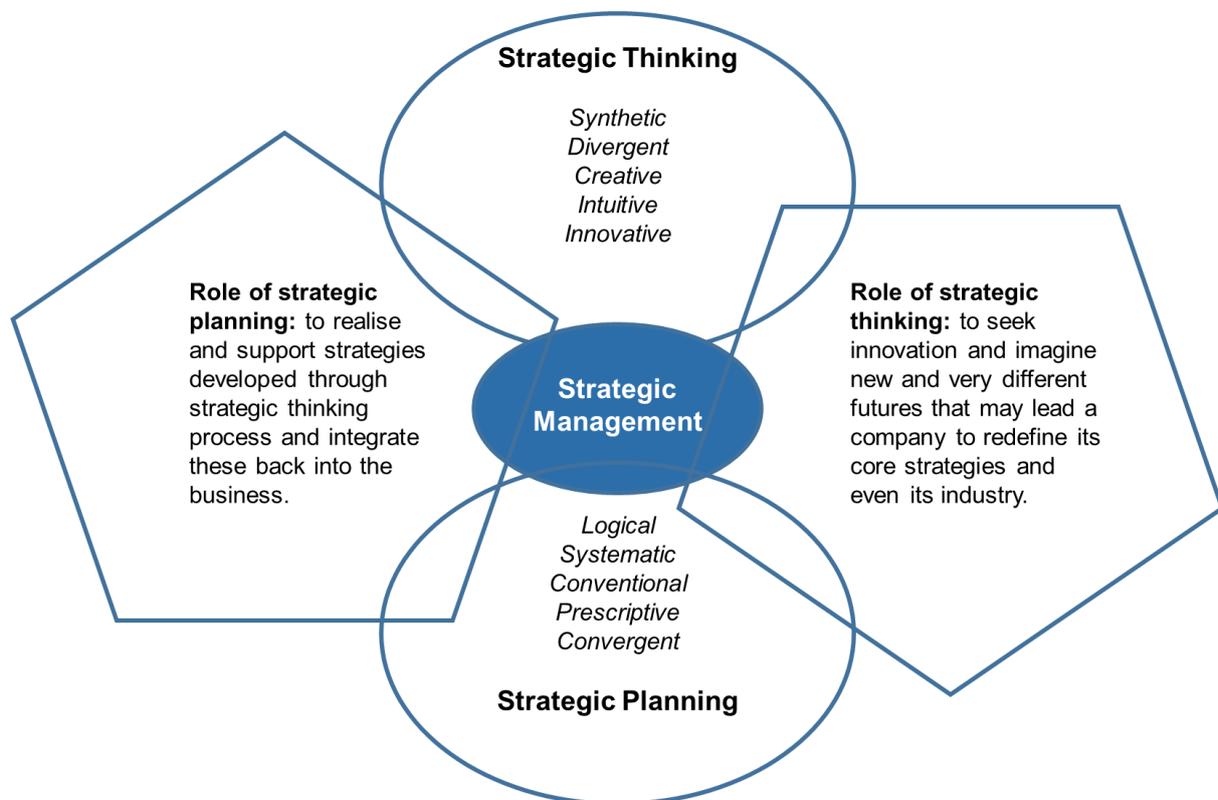


Figure 9 - Strategic thinking and strategic planning (Graetz, 2002:457)

3.3 Comparative Analysis Focused on First Principles

Rational strategic planning focuses on operationalising strategies developed by defining an organisation's vision, mission and long-term goals. Emphasis is placed on analytical, convergent, conventional and pragmatic thought processes. Alternatively, strategic thinking undertakes to discover novel, imaginative strategies that have the potential to re-write rules of the organisation's competition by envisioning potential futures significantly different from the present. Strategic thinking underlines a focus on synthesis, divergent, creative and more than linear thought processes (Graetz, 2002:457). Table 4 below outlines the differences between rational strategic planning and strategic thinking.

Table 4 - Differences between strategic planning and strategic thinking (Liedtka, 1998:30-35; 2000:201)

Rational Strategic Planning	Strategic Thinking
The future is predictable and specifiable in detail	Only the shape of the future can be predicted
Focuses coordination and control through measurement	Relies on self-reliance – a sense of strategic intent and purpose embedded in the minds of managers that guide their choices
Assumes managers below only need to know their role well	Requires managers to have an understanding of the larger system
Assumes the challenge of setting strategic direction is primarily analytic	Strategy and change are inescapably linked, and assumes that finding new strategic options is critical
Focuses on the creation of the plan as the ultimate end goal	Identifies the planning process itself as a critical value-adding element
Timing is periodic and calendar-driven	Timing is episodic and issue-driven
Involvement is through written communication, directed upward	Focuses on dialogue, advocacy and inquiry through hypothesis
Leadership's role is as the strategic thinker and decision-originator	Leadership enables process and synthesising

Articulated differently, rational strategic planning is often reactive, occurring after the fact and asking questions such as (Conway, 2014:11):

- What has happened?
- What caused it to happen?
- How do we respond?

- What will we do?

Proactive strategy development, within the sphere of strategic thinking, anticipates the changing environment by questioning (Conway, 2014:11):

- What is happening?
- What is driving the trends that will influence our future?
- What might our alternative futures be?
- What ought we do today?
- What might be the long-term consequences of our actions today?
- What will we do?

Conway (2014:14) suggests several characteristics for organisations undertaking strategic thinking; that they:

- Are open to new ideas, information and to challenging assumptions about their surrounding environment
- Seek to understand the nature of why things have developed in a certain way, integrating the past, present with an exploration of alternative futures
- Strive to understand the holistic picture, rather than silos
- Encourage differences of opinion, culture and practices
- Seek innovative solutions beyond the mainstream, exploring the periphery to identify emerging issues and trends
- Seek the outrageous and unreasonable, thereby exploring what might be possible
- Challenge assumptions, old and new, tested as the external environment changes over time
- Understand blind spots
- Freely share their knowledge, supporting others in order to gain a better worldview
- Seek to foster internal wisdom by undertaking collective activity in exploring the future
- Encourage the development of positive futures.

From a rational strategic perspective, the traditional focus has been placed on closing the gaps between external demands and internal capabilities, ensuring

alignment between the organisation, the business environment, and its past and present. Ensuring this alignment proved necessary for increasing stability, efficiency and enabling high performance, at the cost of learning and innovation. By reducing variation, thereby increasing performance in the short-term, an organisation deprives itself of the information required to move forward (Liedtka, 2005:76; Cravens et al., 2009:31-49).

Strategic thinking focuses on changing the method in which we think about the future of the organisation, moving beyond patterned responses and habitual thinking, which are destructive in an environment of uncertainty (Conway, 2014:9). Conway (2014:10) broadly outlines the characteristics of rational strategic planning and strategic thinking approaches in Table 5 below.

Table 5 - Characteristics of strategic planning and strategic thinking approaches (Conway, 2014:10)

Rational Strategic Planning	Strategic Thinking
Immediate term	Depth of vision
Focus on own business	Cross-disciplinary
Attention to detail	Broad vision
Techno-economic trends focus	Trends and emerging issues
Problem approach	Systems approach
Less attention to connections	Interactions and cross-impact
Continuity assumption	Wild cards and discontinuities
Bottom line focus	Strategic focus
“Undiscussables” are never spoken	Speak the unspeakable
Short-term focus	Long-term orientation
A single future	Alternative futures
Mainstream thinking	Mind changers
Past and present dominate decision-making	Future dominates decision-making

A comparison of the findings of this chapter, with regard to the nature of rational strategic planning and strategic thinking, is provided in this section. This provides a summary with which to compare the literature findings against the ability to sustain future competitive advantage through developing clear and concise organisational strategy. Several principles were articulated in section 2.5 as a basis for the development of strategy that will respond to the challenges faced by organisations.

The first principles of strategy include: strategic anticipation, navigational leadership, agility, resilience, open collaboration, predictive learning, creativity and originality, innovation and entrepreneurship.

Table 6 below provides a high-level comparison of strategic planning and strategic thinking against the first principles outlined above. While not conclusive, this comparison provides a high-level articulation of the differences in the ability of rational strategic planning and strategic thinking to support the development of strategy in terms of the said first principles. Findings conclude that rational strategic planning finds itself limited in its ability to meet the requirements of the first principles without changes to its elements and process, while the elements and processes suggested for strategic thinking provide clear guidelines for the crafting of a creative and adaptive strategy in line with the first principles.

Table 6 – Comparison of strategic planning and strategic thinking against first principles of strategy

First Principle	Rational Strategic Planning	Strategic Thinking
Strategic anticipation	Limited and only within its environment	Yes
Navigational Leadership	Limited	Yes
Agility	Limited	Yes
Resilience	Limited	Yes
Open collaboration	Limited	Yes
Predictive learning	Limited	Yes
Creativity and originality	Limited	Yes
Innovation	Limited	Yes
Entrepreneurism	Limited	Yes

3.4 Conclusion

Strategic management, with rational strategic planning at its core, has long been taught as the standard for the formulation, implementation and evaluation of strategy within organisations. As mentioned, with positive and negative results, authors have focused on developing dynamic processes focused on determining the most appropriate course of action (Rainey, 2010:246).

Embraced as “the one best way” to devise and implement strategy to ensure the competitiveness of the organisation, strategic planning focused on developing a formal planning function following systematic guidelines to enable the development

of a corporate strategy, implemented by managers, which could not fail. While strategic planning was successful in developing coherent plans, managers confused the notion of vision with the manipulation of figures, resulting in formalised strategic programming which articulates and elaborates on strategies and visions that already exist (Mintzberg, 1994:107).

A paradigm-shift is necessary. Hence, to rectify the fallacies and concerns with strategic planning, strategic thinking has been suggested as an alternative approach with, at its heart, a focus on the synthesis of information, involving intuition and creativity resulting in new perspectives and unique combinations. The outcome of this synthesis is an integrated perspective.

Further suggestions have articulated the idea of a dialectical thought process, combining rational strategic planning and strategic thinking under the umbrella of strategic management to encourage strategists to diverge, converge, be creative and then see real-world implications, being synthetic but also analytical.

Having framed the research within the process and practice research themes discussed in the previous chapter, the foundation for the understanding of the comparative approaches to strategy-making, by gaining insight into their processes, core elements and identified benefits has been laid.

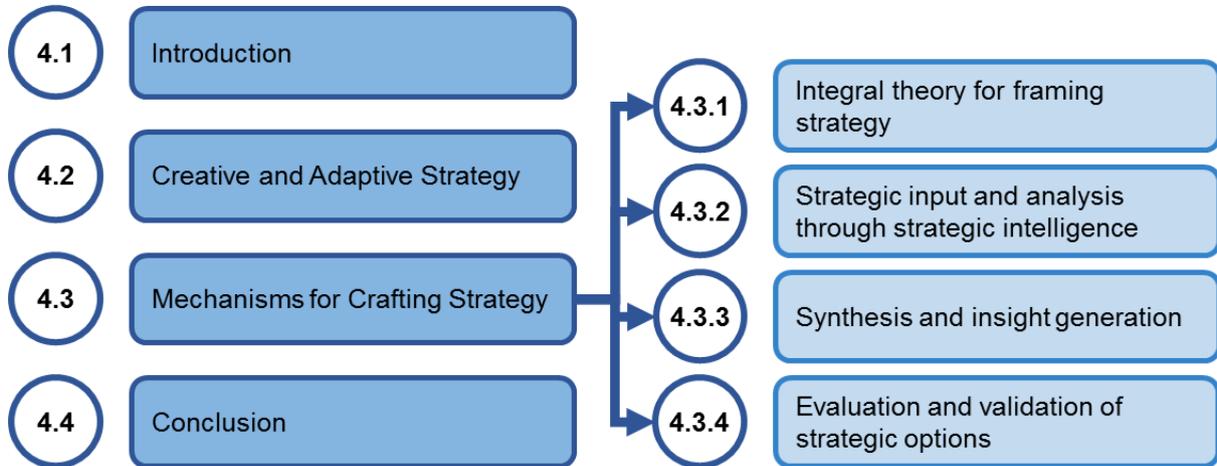
To focus on creating sustainable advantage by developing an adaptive, creative and dynamic strategy-making approach and process, rational strategic planning and strategic thinking were compared at a high level against the several first principles of strategy outlined in Chapter 2 to determine whether either will respond to the challenges faced by organisations. Findings conclude that rational strategic planning finds itself limited in its ability to meet the requirements of the first principles without changes to its elements and process, while the elements and processes suggested for strategic thinking provide clear guidelines for the crafting of a creative and adaptive strategy in line with the first principles. However, the strategic thinking process has not been defined in detail, nor have the mechanisms for crafting a creative and adaptive strategy been detailed.

Chapter 4

Mechanisms for Crafting a Creative and Adaptive Strategy

Chapter 4

Mechanisms for Crafting a Creative and Adaptive Strategy



“Most people use statistics the way a drunkard uses a lamp post, more for support than illumination.”

– *Mark Twain*

4.1 Introduction

It has been argued above that a paradigm-shift is necessary to compete in the current business environment. To focus on creating sustainable advantage, several principles were articulated in section 2.5 as a basis for the development of strategy that will respond to the challenges faced by contemporary organisations. The key characteristics presented as first principles include: strategic anticipation, navigational leadership, agility, resilience, open collaboration, predictive learning, creativity and originality, innovation and entrepreneurship.

With its clear-cut alignment to the first principles of strategy, strategic thinking has been identified as an approach with which to think about the future of an organisation within an environment of uncertainty (Conway, 2014:9). It has been designed as an alternative approach with, at its heart, a focus on the synthesis of information, involving intuition and creativity, resulting in new perspectives and unique combinations. The outcome of this synthesis is an integrated perspective on an organisation, with an articulation of clear strategic intent to assist organisational stakeholders.

While the elements and processes suggested for strategic thinking provide clear-cut conceptual guidelines for the crafting of a creative and adaptive strategy in line with the first principles, the strategic thinking process has not been defined in detail, nor have the detailed mechanisms for crafting a creative and adaptive strategy been.

The chapter begins with an introduction to creative and adaptive strategy by providing guidelines for it and an identification of the need for adaptability achieved by means of organisational agility and absorption.

The chapter then transitions to discussing components and appropriate mechanisms for crafting strategy.

The first component includes a holistic approach to understanding the organisational

environment, wherein the integral theory provides a creative approach which challenges conventional wisdom. It does this by recognising the relationship between the parts while developing a balanced and integrated whole as regards the organisation, guided by the community and external environment within which it resides. The integral theory synthesises, integrates and provides multiple perspectives. This, while contrasting with traditional theories, remains inclusive by providing a map to steer the organisation within a complex reality to enable it to gain competitive advantage.

The chapter considers the second component as strategic input to guide decision-making. Input includes conducting continuous strategic analysis, transforming data and information into strategic intelligence.

The third component considered includes synthesis and insight generation, followed by the fourth component which includes the evaluation and validation of strategic options.

This chapter is important because it identifies alternative mechanisms for crafting a creative and adaptive strategy.

4.2 Creative and Adaptive Strategy

Organisations faced with continuous change and uncertainty have, in many cases, replaced the annual planning ritual, focusing only on macroeconomic indicators, with processes more aligned to consumer data. Planning sessions are held more frequently and focus on capability, while financial modelling of options has been enhanced. Although an improvement, complex models are struggling to provide insight into “big problems”. No amount of additional data, segmentation or vigorous analysis can generate fresh ideas. Strategic issues are not just tough or persistent – they are “wicked” (Camillus, 2008:99).

“Wicked” problems frequently appear in environments undergoing constant change. Several characteristics identify these problems: many stakeholders with different values and priorities are involved; the roots of the problem are complex and tangled; the problem constantly evolves, thereby increasing difficulty in addressing it; there is no precedent for solving it; and very seldom is there a correct answer to solving the

problem (Camillus, 2008:100).

While not all strategic issues that organisations face are “wicked”, the tendency in the evolving business environment is that change and uncertainty are increasingly common and fast-paced. The said change requires more and more creativity than the traditional, rational planning process provides (Camillus, 2008:99; Kao, 1997:6).

Creativity is popularly equated with lateral thinking, brainstorming or ideation, while instead it should be embedded as an ongoing process rather than a once-off new idea. It informs the way in which knowledge is managed to facilitate quantum leaps in understanding and value creation. It also leads to new perceptions of opportunity, fundamental to the development of strategic insights (Kao, 1997:7).

Creativity challenges assumptions, allows for the recognition of patterns, and creates the ability to see in new ways, make connections, take risks and seize chances. It is the heart of any strategy and supporting process. It is not only focused on the development of new products or services, but equally concerns new processes and perceptions of opportunity. It may be described as how an organisation realises value from new ideas and processes by which ideas are developed (Kao, 1997: 6).

It contains three primary components: expertise in a specific field or area; creative thinking skills, including the individual’s tolerance for experimentation, risk-taking and ambiguity; and intrinsic task motivation (Amabile, 1996:5).

Majaro (1992:231) posits that creativity is a thinking process, the aim of which is to generate ideas, while Amabile (1996:1) augments the definition by describing creativity as “the production of novel and useful ideas in any domain”.

More extensively, Bilton and Cummings (2010:11) outline it as a “temporal system with three levels: creativity’s content; creativity’s outcome; and creativity’s process.” These include (Bilton and Cummings, 2010:16):

- The *content* of creativity is novel and valuable. It involves innovation and purpose to create more individual value. Ideas must be evaluated against application and creativity must be located in the context of intentions, actions and outcomes.
- The *outcome* of creativity is to transform context and redefine problems. The

field or domain in which the creativity occurs is connected to the outcome. As a result, creative ideas transform the context or the contextual space around them, providing new possibilities for the future.

- The creative *process* allows for the connecting of unfamiliar frames of reference and mental modes, by using different types of thinking. This allows for the tolerating of contradictions and enables greater bisociative thinking.

Following the breakdown of the three levels, Bilton and Cummings (2010:16) suggest that creativity is “something containing innovation and value, which transforms the context in which it occurs and which results from a process of paradoxical bisociative thinking.”

Strategy and its developmental approaches, have, however, failed to employ greater creativity in the past. Toma, Bratu, and Burcea (2013:149) suggest that previously, many people viewed the concepts of strategy and creativity as “being like oil and water”. Several reasons are advanced as to why strategy has not been very creative (Bilton and Cummings, 2010:30); creativity:

- cannot be planned directly, while strategic management has historically been associated with planning
- requires bisociation which is thwarted by either/or classifications which are common in strategy development
- calls for plurality, yet strategic roles have been filled by the same type of individual
- requires mistakes and accidents, and the acceptance of their value while strategic management has traditionally been risk adverse
- necessitates slack, while efficiency is the keystone of management
- correlates strongly with the belief that individuals are required to be creative
- is stimulated by creative thinking, while strategies are generally expressed in large tracts of text
- spurs creative tension, while organisational practice requires unified harmony.

On the other hand,

- Strategy is often associated with leadership, whereas creativity has moved

beyond the “individual genius”

- Strategy has focused predominantly on innovation as opposed to creativity, and the two are not the same.

Creative strategy should, as a result, build on several connections (Bilton and Cummings, 2010:9):

- Strategy should be viewed as the keystone of all business disciplines, incorporating divergent views
- Creativity and strategy should be perceived as integrating processes, whereby all creativity is potentially strategic, and all strategy should be creative
- Integration of innovation, entrepreneurship, leadership and organisation
- Incorporation of creativity and innovation which harnesses both creation and discovery
- Encouragement of diligence and diletantism
- The ability to envision the big picture for the future yet interact in the present
- The involvement of an approach that focuses the activities of others and encourages roaming into new areas.

The alignment of strategy to creativity provides an innovative base for orientation, animation and integration outcomes, which results in transformation and rethinking within and beyond the organisation (Bilton and Cummings, 2010:37). Creativity enables organisations to challenge assumptions, recognise patterns, view the world in new ways, create connections, allow for risk-taking and provide the organisation with the ability to seize appropriate chances (McCauley, 2012:4). Creativity constitutes a key element for the strategy of an organisation (Toma, Bratu and Burcea, 2013:151).

To thrive in the present business environment, organisations should not only practice creativity, but they should also be adaptable by utilising agility to quickly spot and exploit emerging business opportunities or absorb the changes where the organisation has the strength and stamina to weather the market shifts (Sull, 2009:80).

Organisational agility allows an organisation to consistently identify and capture opportunities faster than competitors (Sull, 2009:80). Three forms of agility exist (Sull, 2009:81-83):

- *Operational agility* engages the organisation's business model and capacity to identify and seize opportunities to improve operations and processes. Examples could include cost reductions, quality improvements or refinements to processes, products or services.
- *Portfolio agility* is the ability to quickly and effectively shift resources, such as cash, talent or managerial attention, from weaker performing positions to more attractive opportunities.
- *Strategic agility* allows the organisation to identify and seize game changing opportunities when they arise.

Not only should organisations remain agile, but they should also build absorption into their strategy. Absorption provides organisations with the ability to weather challenging environments by constructing a buffer against changes. It also allows companies to outlast rivals in wars of attrition, maintain defensive positions and secure early leads to reinforce their position (Sull, 2009:83).

Combined, creativity and adaptability provide the means for an organisation's strategy to look outside of its historical boundaries and identify adjacent worlds, with the ability to undertake immediate movement into new categories, geographies, channels and products, by remaining agile and developing an absorptive buffer.

4.3 Mechanisms for Crafting Strategy

4.3.1 Integral theory for framing strategy

Present day industrial society comprises massively complex systems which permeate every aspect of life. Society, our technological innovations, social institutions and organisations form ecological communities of nature entwined within ecosystems, organised to achieve maximum sustainability. Ecology is derived from the word *oikos* in the Greek, meaning "household", and therefore encapsulates the study of the relationships that interlink all members of the "earth household". The scientific framework for the study of ecology is the theory of living systems, which

considers the essence of how living systems "work": about how they maintain themselves, their structure, their interaction and behaviour as well as how they develop and change through their process of life. Living systems are found in simple forms such as single cells or as more complex supranational entities, such as multinational organisations (Capra, 1998:3).

While parts of a living system can easily be distinguished, the nature of the whole is often different from the sum of its parts. To enable a holistic understanding of the word, "systems thinking" has developed as a new way of thought. Systems thinking entails pondering living systems, considering their relationships, connectedness, and context (Capra, 1998:4).

Liedtka (2005:73) contends that a strategic thinker should have a comprehensive mental model of the organisation's value chain, allowing her or him to understand all interdependencies within it. This mental model should integrate knowledge gained regarding the internal and external environment of the organisation to provide an understanding of "how the world works". An all-inclusive command of the internal organisational ecosystem, supplemented by the external environment, viewed from a personal perspective, allows the strategic thinker to identify vertical and horizontal linkages within the ecosystem from multiple viewpoints. This view includes the relationships between corporate, business and functional level strategies, the inter-connection between departments and functions and those between communities of suppliers and buyers (Liedtka, 2005:73).

Traditional management theories have led to valuable yet incomplete views on organisations as a result of being based on a single paradigm, thereby unable to contemplate the complexity of organisational systems and global problems (Robledo, 2013:1). Previous theories sought to explain why organisations emerge, where their boundaries lie and why organisations are structured in particular ways (Landrum and Gardner, 2012:74-75):

- *Economic theories* focused on the purpose of an organisation as the pursuit of profit and maximisation of shareholder wealth, failing to account for external costs of doing business, culture and values, choices and decision-making.
- *Managerial and behavioural theories* explained that managers desire to

maximise their own utility, and expounded the organisational performance in terms of the limitations in human knowledge and how decisions are made. While focusing on non-market aspects of organisational performance, these theories do not address inter-organisational and societal networks.

- *Competency based theories* unravelled organisational capabilities, competencies and organisation-specific attributes acquired as tangible or intangible assets. While evolutionary theory, knowledge based theories and resource based theories all dominated this area, they do not however distinguish between different assets as a sustainable source of competitive advantage.
- *Stakeholder theories* encouraged the view that organisations are managed for stakeholders' and managers' interests by utilising bounded knowledge and asset maximisation. Integration of stakeholders, markets and employee considerations, aligned to the wider social audience, explained the organisation's role and performance. However, little insight was garnered on how to balance the interests of multiple stakeholders.

The persistent single paradigm theory requires a revised integral theory of the organisation to redefine the existence, boundaries and structuring of the organisation in order for it to become ecologically sustainable, socially responsible and economically competitive, well into the future. A new integral paradigm with which to incorporate individual desires, capabilities, limitations, economic profit and humanitarian interest in a synergistic manner, to maximise organisational performance, must be developed (Landrum and Gardner, 2012:74).

Cacioppe and Edwards (2005:231) formulated the view that the essence of the term "integral", within the frame of an integral theory, contains three core elements:

- The holistic nature of an entity
- The essence of the parts or constituents of an entity
- The active process where whole and essential parts forms completeness.

The elements form the fundamental qualities of perspectives considered "integral", thereby focusing on the constitutive structures, functions and processes of organisations (Cacioppe and Edwards, 2005:232).

American philosopher Ken Wilber, after studying psychology, Eastern and Western philosophy and human consciousness for over thirty years, formulated an integral approach as a comprehensive system for the integration of alternative paradigms, theories and traditions of knowledge. By integral, Wilber (2003:xii-xiii) means “comprehensive, inclusive, non-marginalizing, embracing”; he outlines [that] “Integral approaches to any field attempt to be exactly that: to include as many perspectives, styles and methodologies as possible within a coherent view of that topic.” Wilber (2003:xii-xiii) further contends that “integral approaches are ‘meta-paradigms’, or ways to draw together an already existing number of separate paradigms into an interrelated network of approaches that are mutually enriching.”

Wilber’s (2001) integral theory has been considered by several scholars from several diverse fields of research (Cacioppe and Edwards, 2005; Edwards, 2005; Landrum and Gardner, 2012; Robledo, 2013) as a keystone for the development of an integral approach which could serve as a new paradigm through which to view the organisation, its roles and responsibilities, systems and adaptability to the multiple environmental levels within which it resides.

The integral theory is built around a four-quadrant model, referred to as AQAL, the abbreviated acronym for “all quadrants, all levels”, used to analyse social phenomena. AQAL is viewed as a map of maps or as a meta-theory which incorporates the core truths from other theories. It is able to incorporate any context and scale through the integration of multiple disciplines. The model (Table 7 below) includes an internal and external view of the individual and collective, combining the dimensions of subjective experience, the physical or objective world and subjective relations with others (Landrum and Gardner, 2012:75; Robledo, 2013:4).

Table 7 - AQAL model highlighting the emphasis of each quadrant (Landrum and Gardner, 2012:75)

	Interior	Exterior
Individual	<p style="text-align: center;">I</p> <p style="text-align: center;"><i>First person</i> Me, Mine</p> <p style="text-align: center;">Beauty-self and self-expression In the eye of the beholder, art, self Intentional Self and consciousness Purpose and values</p>	<p style="text-align: center;">IT</p> <p style="text-align: center;"><i>Third person</i> He, him, she, her, they, them, its</p> <p style="text-align: center;">Truth – objective Can be investigated by science, nature Behavioural Brain and organism “The facts” and statistics</p>
Collective	<p style="text-align: center;">WE</p> <p style="text-align: center;"><i>Second person</i> You, yours</p> <p style="text-align: center;">The good – the way we treat each other Basic morality Cultural and worldview Community culture, values, feelings</p>	<p style="text-align: center;">ITS</p> <p style="text-align: center;"><i>Social</i> Social system and environment Viewed from a systems perspective Inter-objective Deep ecology – web of life Marketing and contribution</p>

The left side of the AQAL model aligns with the inner aspect of both the individual and the collective (consciousness and subjectivity) while the right side comprises the outer aspects of the individual and collective (objectivity and materiality). Language within each quadrant describes the level of consciousness within each; with the upper-left focused on “I” (first person), the subjective aspect of consciousness and individual awareness; the bottom-left “we” (second person) depicting the shared meaning and how individuals will “get along” together; the “it” (third person) perspective of the top-right describing social systems, the objective and material accounts of objective phenomena; and the bottom-right “its” articulating the inter-objective dimension (Landrum and Gardner, 2012:75; Robledo, 2013:4).

The four quadrants of the AQAL model jointly represent a holon. This word is a combination of the Greek *holos* meaning whole and the suffix “on” suggesting a part or particle. The holon is therefore part-whole, a nodal point in a nested hierarchy, seen and described in its holistic and independent nature and in its “partness” and dependent nature. A holon is a complete entity made up of smaller holons, but can

also be incorporated into larger ones. As one's focus moves along the nodes of a nested hierarchy, one's perception of the whole and the parts will change (Edwards, 2005:270).

Organisations, viewed as nested systems, are more adequately represented as complex strata of holons rather than networks of individual parts (Edwards, 2005:270). With every individual or organisation viewed as a whole component of a larger component, as depicted in Figure 10, where each individual, team, business unit, organisation, industry, national economy, global system, with its individual holon, is articulated as a node (a four quadrant model of itself), all aspects of the organisational phenomenon can be understood (Landrum and Gardner, 2012:76). With the interior nodes of holons focused on the interior organisation, organisational change begins at the centre, with the goings-on, events or event cycles of all holons affecting each other. An analytical lens focused on any organisational level provides conceptual advantages and adaptability (Edwards, 2005:276).

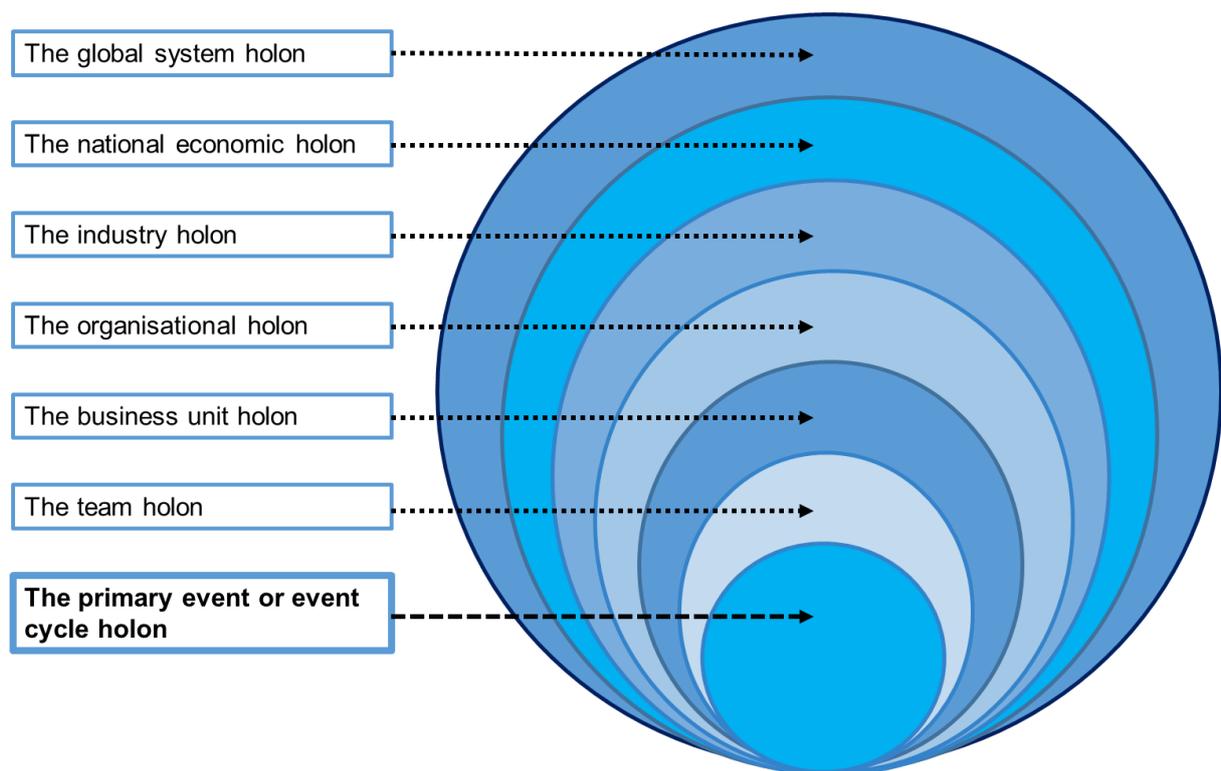


Figure 10 - Levels of organisational life as a series of holons (Edwards, 2005:276)

The fundamental premise of the integral theory and the AQAL model is that none of the four quadrants can prevail over another. All quadrants interact with each other and interaction occurs between holons; an integral approach alone is able to provide

a means for understanding and appreciating the complexity of the interactions that occur (Robledo, 2013:7).

Landrum and Gardner (2012:76-78) provide a template for each quadrant of the integral theory of the organisation:

- *Interior individual quadrant:*
Integrating ethics, spirituality and philosophy, the interior individual quadrant focuses on internal human development and understanding of an individual's full potential in mind, body and spirit, personal growth, individual care and concern for humanity and the environment. Understanding each individual, from employee to manager, and their individual development needs, facilitates an understanding of how they contribute to organisational performance. This appreciation assists the enhancement of an individual's work performance and assists in steering managers in creating value for the organisation. Essentially, the individual is the foundation upon which the organisation is built, encouraging an innate focus on self-development.
- *Exterior individual quadrant:*
Following the appreciation of the individual's internal development, an understanding can be gained of how this is reflected in observable human behaviour and interactions and how it contributes to a firm's performance. The focus remains on the individual in their relationship with the organisation, whether internal (employees, managers, entrepreneurs) or external (customers, suppliers).
- *Interior collective quadrant:*
Following insight gained from the previous two quadrants, a better understanding may be gained of how collective individual behaviours ultimately aid an organisation in reaching its full potential within the competitive environment. The emphases remain on the organisation and industry levels of analysis, with the organisation being described as a collection of individuals and the industry as a collective of organisations. Several theories are focused upon in order to assist in the understanding of the collective behaviour of individuals, organisations and industries (strategic management, economics, operations management, ethics, and stakeholder

management). The goal is to gain an understanding of the collective behaviour and its contribution to economic (inter- and intra-organisation) performance in terms of the organisation's industry, competitors and stakeholders.

- *Exterior collective quadrant:*

Within this quadrant the focus shifts to the societal and systems level of analysis, directly considering humanitarian issues and changes in an entire system. Social, environmental, economic, political, technological, sustainability, corporate social responsibility and eco-phenomenology theories bridge the two collective quadrants, establishing future foundations for modifications in world-views. Unfortunately, most of the preceding theories focus on the behaviour of the organisation, whereas a better understanding of the organisation's performance within the interconnected and global environment is required. The revised global environment requires an understanding of the new demands of humanitarianism (social and environmental), connectedness and mobility, requiring individuals, organisations and industries to interact with others and consider challenges outside of the interior collective quadrant. Successful organisations will grasp the diversity across all humanity and the natural environment as well as the complexities of globalisation.

Following an understanding of all four quadrants described above and per the summary provided in Table 8 below, a holistic perspective can be obtained from the interplay between the economic and social performance of organisations, to assist in the competitive positioning of the particular one. Similarly, individual and collective groups of individuals and organisations can appreciate how to initiate collective action for systematic, societal and world-wide change. Furthermore, the combination of non-market and market approaches could assist in navigating the development of a creative and adaptive organisational strategy through multiple levels of nodal analysis (Landrum and Gardner, 2012:78).

Table 8 - Integral theory of the organisation (Landrum and Gardner, 2012:77)

	Interior Individual	Exterior Individual	Interior Collective	Exterior Collective
Focus	Internal development (non-market)	Individual behaviour (non-market)	Economic performance (market)	Humanitarian (non-market)
Level of analysis	Individual	Individual	Organisation and/or industry	Societal and/or systems
Theories	<ul style="list-style-type: none"> • Spirituality • Individual ethics • Motivational theories • Philosophy • Psychology • Personal development • Managerial and behavioural theories of the organisation 	<ul style="list-style-type: none"> • Organisational behaviour • Human resource development • Leadership • Psychology • Managerial and behavioural theories of the organisation 	<ul style="list-style-type: none"> • Strategic management • Operations management • Corporate ethics • Stakeholder management • Sociology • Social psychology • Management • Economics • Knowledge management • Cultural studies • Economic and competence theories of the organisation 	<ul style="list-style-type: none"> • Sustainability • Environmental strategy • Corporate social responsibility • Eco-phenomenology • Diversity • Globalisation • Humanity • Natural environment • Stakeholder theories of the organisation • Systems and chaos theory • Strategy schools • Strategic intelligence • Network analysis
Contribution to firm's performance	<ul style="list-style-type: none"> • Higher potential in mind, body, spirit • Personal growth • Care and concern 	<ul style="list-style-type: none"> • Individuals reflect their potential, growth, care, and concern in their behaviour and interactions 	<ul style="list-style-type: none"> • Employees help the organisation reach its greatest economic potential • Other organisations within industry must maintain parity to survive 	<ul style="list-style-type: none"> • Collectively, organisations lead worldwide change • Change occurs at a systematic level • Societal expectations heightened • Integral transformation of industries and organisations

Robledo (2013:7) extends the AQAL model by incorporating the three fundamental and irreducible dimensions of good management, indicated in Table 9:

- *Science* analyses the organisation using objective and quantitative (logic, reason, budgets, planning and control) measures in order to maximise the value of the organisation through quality, productivity and profitability.
- *Art* refers to an aesthetic-emotional dimension focused on human potential and the beauty of the works for organisational development using creativity, imagination, intuition, design, fun, learning and passion. Organised knowledge, provided by science, lays the foundation upon which creative decision-making can point to a future direction.
- *Ethics* guides the organisation through moral, ethical principles and values such as honesty, social responsibility and respect for the environment.

Table 9 – The 3 dimensions of management within the AQAL model (Robledo, 2013:9)

	Interior	Exterior
Individual	ART	SCIENCE
Collective	ETHICS	

If the three integral components of the management triad are followed, utilising the integral approach, this allows an organisation to overcome the fragmented assumptions of science, providing an inclusive holistic systems thinking view of the complexities which organisations face (Robledo, 2013:8).

As a holistic approach to understanding the organisational environment, the integral theory provides a creative approach which challenges conventional wisdom by recognising the relationship among the parts, while developing a balanced and integrated whole of the organisation guided by the community and external environment within which it resides. The integral theory synthesises, integrates and provides multiple perspectives, in contrast to traditional theories, while remaining inclusive by providing a map to guide the organisation within a complex reality to enable competitive advantage.

4.3.2 Strategic input and analysis through strategic intelligence

Strategic intelligence has information as its foundation (Pellissier and Kruger,

2011:609). Organisations are required to comprehend their local and international business environment (its activities, processes, resources, markets, customers, products, services, and costs) to prepare for their current and future profitability, sustainability and success (Tham and Kim, 2002:1).

According to Tham and Kim (2002:2) strategic intelligence can be identified as "what a company needs to know of its business environment to enable it to gain insight into its present processes, anticipate and manage change for the future, design appropriate strategies that will create business value for customers and improve profitability in current and new markets." Marchand and Hykes (2007:2) propose that strategic intelligence provides an organisation with the information it needs regarding its business environment, enabling it to anticipate change, designing appropriate strategies to enhance customer value, thereby ensuring future growth and profits for the organisation in new markets within or across industries.

Xu and Kaye (2009:38) assert that strategic intelligence is "strategically significant information [provided] to senior managers that is scanned, analysed, digested and is meaningful that could affect senior managers' beliefs, commitments, and actions." Pellissier and Kruger (2011:613) describe strategic intelligence as "the aggregation of the various types of intelligentsia, creating a synergy between business intelligence, competitive intelligence and knowledge management to provide value-added information and knowledge toward making organisational strategic decisions". Each type of intelligentsia is defined below:

- Business intelligence is broadly defined by Haag, Cummings and Philips (2007:85) as "knowledge about your customers, your competitors, your business partners, your competitive environment, and your own internal operations that gives you the ability to make effective, important, and often strategic business decisions", as opposed to Turban, Aronson, Liang and Sharda (2007:24) who define business intelligence in a more system oriented manner, as "an umbrella term that combines architecture, tools, databases, analytical tools, applications, and methodologies", providing "business managers and analysts [with] the ability to conduct appropriate analysis" on historical and current business data. Davenport and Harris (2007:12) indicate that business intelligence incorporates "the collection, management, and

reporting of decision-orientated data as well as the analytical techniques and computing approaches that are performed on the data.”

- Competitive intelligence is defined by McGonagle and Vella (1999:212) as “the use of public sources to locate and develop data that are then transformed into information, generally about competition, competitors, and the market environment in the broadest sense”, while the Society of Competitive Intelligence Professionals (SCIP, 2014) defines competitive intelligence as “a necessary, ethical business discipline for decision-making based on understanding the competitive environment.”
- Knowledge management is delineated by Bali, Wickramasinghe and Lehaney (2009:7) as “comprised[sic] a set of tools, techniques, tactics and technologies aimed at maximising an organisation’s intangible assets through the extraction of relevant data, pertinent information and germane knowledge, to facilitate superior decision-making so that an organisation attains and maintains sustainable competitive advantage” while Jennex (2009:4) views it as “the practice of selectively applying knowledge from previous experiences of decision-making to current and future decision-making activities with the express purpose of improving the organisation’s effectiveness” and concludes that knowledge management should leverage what the organisation “knows” to better utilise knowledge assets, while connecting knowledge generators, holders and users to facilitate a flow of knowledge across all organisational levels (Jennex, 2009:4).

Strategic intelligence denotes the creation and transformation of information or knowledge used in high-level decision-making (Pellissier and Kruger, 2011:609). Research to determine the use of strategic intelligence as a tool in strategic management found that through its ability to absorb sources of information, the synergy of the intelligentsia combined to form strategic intelligence will meet the intelligence requirements of management, which could assist in creating competitive advantage and constant innovation (Pellissier and Kruger, 2011:609).

This intelligence should be continuously updated and disseminated organisation-wide, with visibility provided to areas which require further refinement (Simons, 2010:100). Crucially, field and line employees should have access to the intelligence

they require to understand the bottom-line impact of those day-to-day choices and actions for which they are responsible (Neilson, Martin and Powers, 2008:66). This intelligence will result in a frame of mind about the present and the future in order to foresee trends and the path to be taken (Johannesson and Palona, 2010:448; Tham and Kim, 2002:1).

An assimilation of diverse sources of business, market, political, technological, environmental, and social information is required to provide management with information that will assist in shaping the organisation to achieve competitive advantage in the future (Marchand and Hykes, 2007:2). According to the same authors (2007) the effectiveness of an organisation in gathering and managing all of this information depends upon three key capabilities: information processing, technology and people; it further requires that all managers should consider the following tasks as important components of their job functions (Marchand and Hykes, 2007:2):

- The development of information processes that enable and encourage people to effectively identify and leverage strategic business information
- The provision of the correct technology to enable effective information use and delivery
- The building of an organisation-wide culture that encourages and guides employees in their use of information.

To formalise this strategic intelligence, a process, containing six major activities, is outlined where each activity adds value to the intelligence and in turn, influences the creation of value for the organisation through the progressive transformation of data into intelligence (Marchand and Hykes, 2007:5). These activities follow (Marchand and Hykes, 2007:5):

- *Sensing* involves the creation of an awareness of and thereafter identifying appropriate indicators or triggers (internal or external to the organisation) of change
- *Collecting* involves methods of gathering data that are relevant and potentially meaningful
- *Organising* focuses on structuring the collected data into appropriate formats

and media as information sources

- *Processing* focuses on analysing the information by appropriate methods and tools
- *Communicating* encompasses the packaging and simplifying of access to information for users
- *Using* concentrates on applying information in decisions, action-oriented planning and implementation.

Employing a similar process, Montgomery and Weinberg (1998:44) earlier identified the need for strategic intelligence systems focused on selecting, gathering and analysing information required for strategic analysis. The authors suggest that the design of such a system should incorporate a clear understanding of the purpose for which it is intended. It should be supported by clear methods to eliminate the collection of vast quantities of meaningless data and prevent a focus that is too narrow, resulting in missed information (Montgomery and Weinberg, 1998:44). As a result, the following three purposes are noted (Montgomery and Weinberg, 1998:44):

- *Defensive intelligence* is oriented toward avoiding surprises. Organisations plan and manage themselves on the basis of certain implicit and explicit assumptions about their environment. A properly designed strategic intelligence system should monitor the organisation's environment to ensure the assumptions remain true, and notify the appropriate parties if major changes occur.
- *Passive intelligence* is designed to provide benchmark data for objective evaluation relative to competition.
- *Offensive intelligence* is further designed to identify opportunities, which would otherwise not be discovered without the assistance of a strategic intelligence system.

Utilising a strategic intelligence system provides the ability to gather information regarding several environments, both internal and external, while the advent of big data provides limitless opportunity for data collection by utilising online, real-time tools to collect data analytics within the scope and depth required by the organisation. Traditional techniques include environmental scanning, with greater

impact being provided by the Delphi technique which incorporates the gathering and validation of expert opinion (Conway, 2014:20).

The emphasis falls on how best to position the organisation to deal with future challenges and opportunities to maximise its success (Liebowitz, 2006). To achieve this rational decision-making, business should use a strategic intelligence system to process and gather intelligence organisation-wide, as an input to strategy-making (Johannesson and Palona, 2010:448).

As identified by the activities that comprise the strategic intelligence process, traditional strategic analysis is incorporated into the output of strategic intelligence, thereby ensuring that cohesive intelligence is provided in a format usable by management in decision-making (Marchand and Hykes, 2007:5). The said analysis should incorporate a multidisciplinary combination of scientific and informal processes to identify, derive correlations and evaluate trends, patterns, and performance gaps based on input data.

Revised frameworks allow for the understanding of the pieces within the bigger picture and, thereafter, steer the development of trends which narrate a story, rather than offering snapshots as provided by rational techniques such as PESTEL analysis, or value chain analysis. Traditional strategic planning frameworks and tools, including industry analysis tools (five forces, strategy maps) and Blue Ocean tools (value maps, comparative value curves) assist strategists to comprehend the competitive landscape in which they conduct their operations by creating static two-dimensional graphs and visual representations, which, in the current market landscape, do little to assist organisations to cope. The greatest failure of these tools is that they assume organisations know exactly who their stakeholders are, that market boundaries will remain static and that newcomers will not rewrite the market rules (Jacobides, 2010:77).

While the traditional strategic planning frameworks and tools (see Table 2) still provide value, a more dynamic toolset is required to anticipate future direction in changing environments. Essentially, the value of strategic analysis is not correctness, but development of focus and discipline brought about by thinking and debating (Tovstiga, 2010:15).

To bring greater strategic intelligence into the organisation, newer approaches such as Open Foresight (Miemis, Smart and Brigis, 2012:93) have been designed to harvest collective insight through the use of internet and communications technology. This participative approach allows for open access and input by a participative community, providing incentives to encourage participation. Allowing this approach to assist in the gathering of intelligence broadens the range of perspectives within the environment of uncertainty and complexity, thereby affording greater perspective for use in synthesis to generate insight, leading to deeper thinking and debating by management (Miemis, Smart and Brigis, 2012:93).

Analysis contains the process of preparing information into strategic intelligence for use within the organisational decision-making and is embedded within the scope and requirements of the organisation. Dependent on the strategic intelligence needs, several frameworks could be used to direct analysis; however, it must be cautioned that these frameworks provide greater impact when used to identify trends rather than focusing on creating single snapshots in time (Tovstiga, 2010:81-97; Conway, 2014:20):

- *Opportunity-response framework* aligns an organisation's external competitive environment to the organisation's internal basis of competitiveness. As depicted in Figure 11 below, the opportunity-response framework makes use of two intersecting curves, the first illustrating the market opportunity presented to the organisation, while the second represents the organisation's response to the market opportunity. At the intersecting point, the organisation is ready to deliver on the market opportunity. The benefit of the framework is the ability to enable thinking concerning the match required between what an organisation can achieve at a particular point in time, within the greater competitive context of what it may do.

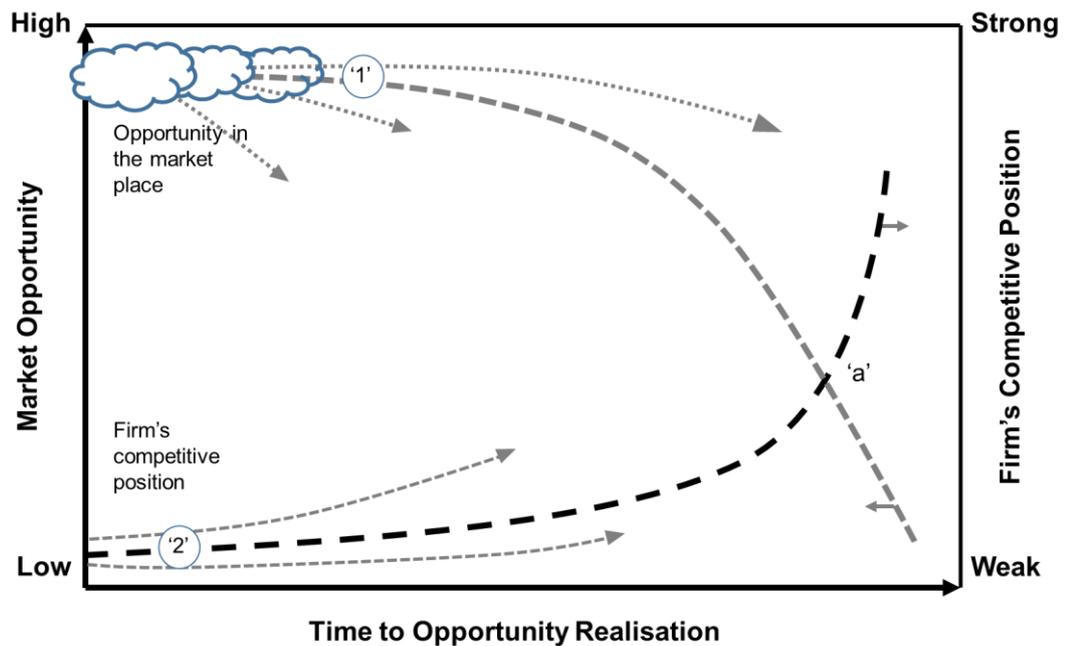


Figure 11 - Opportunity-response framework (Tovstiga, 2010:81)

- *Key success factor analysis*, where the key success factors represent rules guiding the market place in which the organisation competes. These factors are determined by the market and not a single entity, thereby capturing the determinants of successful competition that would allow an entity to succeed.
- *VRIO (value, rarity, imitability, and organisation) framework*, while not a new concept, can be used to instigate thought into the ability of the organisation to screen resources and capabilities for their strategic impact. The framework (depicted in Figure 12 below) assists in understanding a resource or capability's value in enabling an organisation to exploit opportunities or defend itself against threats: whether one or few organisations can obtain access to the resource or capability to provide the organisation with competitive advantage for a period; whether an organisation can easily purchase or substitute the resource or capability at a reasonable price and finally, whether it is able to capture value from the resource or capability.

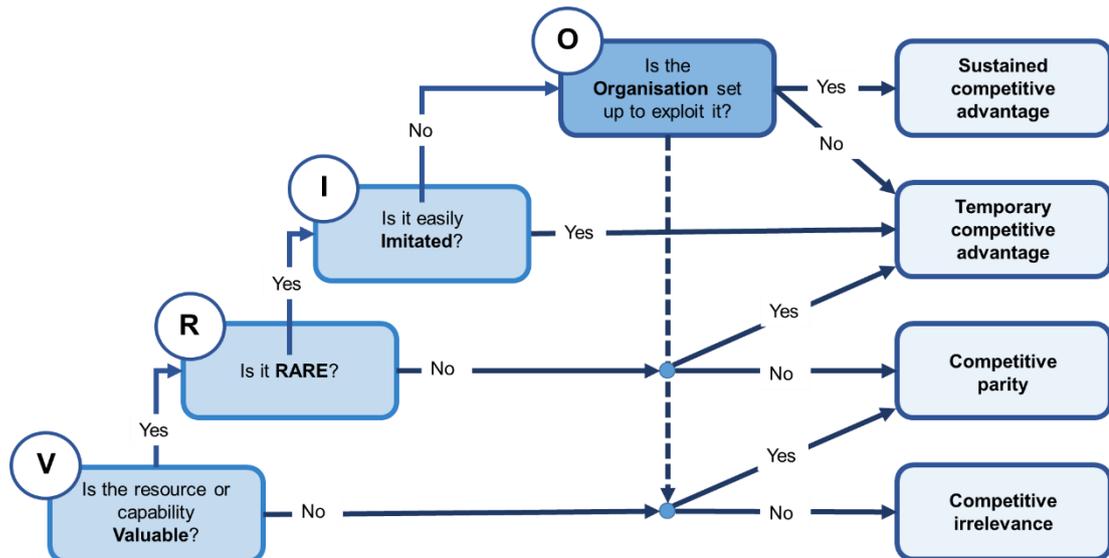


Figure 12 - VRIO framework (Tovstiga, 2010:90)

- Unique competing space analysis* draws on established concepts of strategy, rearranged to enhance strategic thinking. Following an overarching framework depicted by a Venn diagram, the framework centres analysis on customers, competitors and capabilities to establish an organisation's unique competing space. By aligning these concepts, greater insight is gained through common notions, thereby identifying the given space. From focusing on the area depicted by the dotted lines in Figure 13 below, an organisation can identify several boundary conditions defining the organisation's competitive front or differentiators; the organisation's internal resource mobilisation front, or its portfolio of resources used to compete, and its customer interface, clarifying the customers' needs and expectations that require nurturing through relationship building. Unique competing space analysis presents the organisation's competitive position in relation to customers and competitors and prompts the identification of what is required to serve the former's needs.

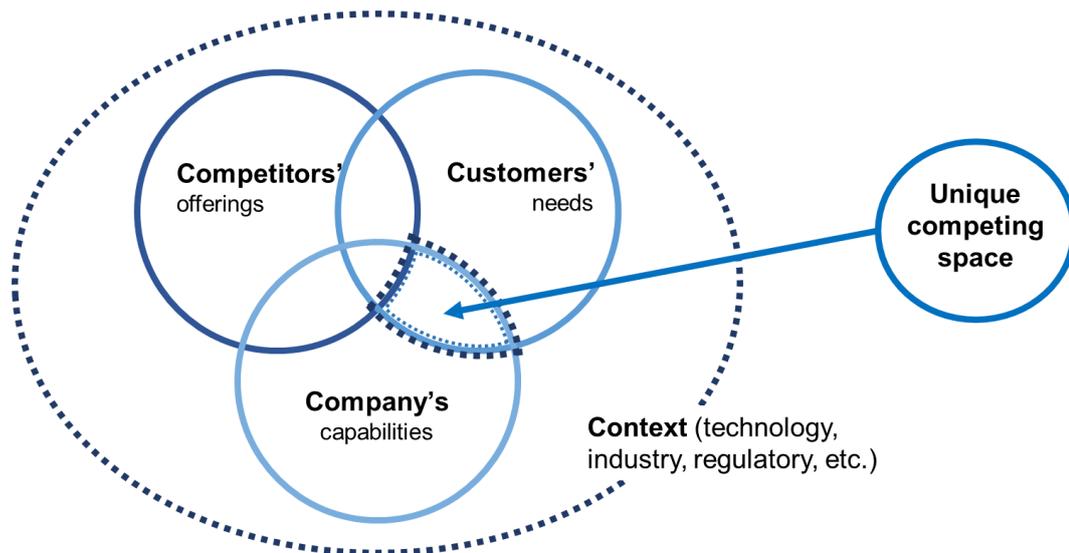


Figure 13 - Unique competing space framework (Tovstiga, 2010:95)

- *Trend analysis and forecasting*, often applied to consumer behaviour analytics; the given analysis focuses on identifying patterns in information, while forecasting seeks to project future scenarios for particular trends.
- *Emerging issue analysis* is a process to “identify seeds of the future in the present” (Conway, 2014:20). It undertakes to identify changes that occur on the periphery of an area of organisational focus (industry or market) which may affect the organisation in order to shape the latter’s response in the future.

Strategic intelligence and its underlying strategy analysis have the ability to contribute powerful insights to the strategic thinking process; hence the use of several frameworks to support the analysis could provide much insight if appropriately selected and applied. The validity, reliability and longevity of intelligence have the ability to set an organisation apart from its competitors by providing value in the form of debate and dialogue in order to assist sense making through synthesis and insight generation (Tovstiga, 2010:107).

4.3.3 Synthesis and insight generation

The synthesis of strategic intelligence will provide a valuable input to insight generation for strategy-making. As intimated, rational strategic planning processes do not however explain or identify the creative act of synthesising information, experiences and knowledge into a truly novel strategy (Mintzberg, 1994:109).

Rational strategic planning has focused on formal analysis of hard data, evaluated and grouped into formal boxes, resulting in managers confusing dynamic vision with the manipulation of historical or forecast numbers, yet without comprehension or synthesis (Mintzberg, 1994:108, Mintzberg et al., 2009). While such planning can improve outlook and drive growth during times of crises, it often neglects critical nuances, with organisations feeling the need to improve strategic thinking by more regular cycles (Wilson and Eilertsen, 2010:12). New ways of thinking, supplemented by a dynamic toolkit, are required to ensure the development of the creative and adaptive strategy needed.

As mentioned previously, traditional methods and tools have proven their mettle in past decades, however, a revised focus has been established on reinventing the way in which to develop strategy. The presumption is that traditional strategy tools do little to assist organisations cope with the rapidly changing landscape and assume organisations know exactly who their stakeholders are, that market boundaries will remain static and that newcomers will not rewrite the market rules (Jacobides, 2010:77).

Conway (2014:20) suggests categorising synthesis and insight generation into two complementary processes: interpretation and prospection. On the one hand interpretation seeks to grasp strategic issues in greater depth by exploring available data to discover deeper structure and insight. Conway (2014:20) advocates the following tools and methods to assist in interpretation:

- *Systems thinking*

A systems thinking approach allows for a visualisation of the whole system rather than a focus on smaller elements. Utilising system maps provides a method by which to understand the complexity of a particular system and the influence of the individual elements on each other during their interaction.

- *Futures wheels*

Future wheels furnish a tool with which to explore the impact of possible trends on the current reality and on several possible future realities. The tool calculates and projects cause and effect relationships that could occur between trends and issues, followed by the ripples emanating from the changes.

- *Cross impact analysis*

Cross impact analysis is used to explore interactions between forecasts or trends, pre-developed in isolation from one another. A matrix is utilised to depict the interdependencies which can then be used to consider future impact on the organisation.

- *Causal layered analysis*

Causal layered analysis embodies the fundamental belief that reality is layered and that, as a result, several different approaches to knowing are available. The intent of this method is to enable the articulation of a common understanding and provide an environment in which constitutive discourses can be articulated and shaped as alternative emerging scenarios. Four layers are identified by this method:

- *Litany* which comprises the unchallenged and unquestioned public description of an issue.
- *Systemic causes* are the drivers of change which shape the litany layer, questioned only within the confines of the dominant paradigm.
- *Worldview* includes the deeply embedded assumptions and discourse underpinning an issue – these include ideological, stakeholder, civilizational and epistemological ones, combined with the most dominant voice in the audience.
- *Metaphor/Myth* provides a view of the stories, often emotive, which occur at a cultural level.

Prospection on the other hand utilises the interpreted information to create forward views, images of what the future may hold, thereby generating plausible future worlds (Conway, 2014:21). The most common approach followed for prospection is scenario planning which outlines several processes for the creation of alternative futures, focused around a particular issue. Future scenarios are a tool, but not the end product, and are specifically designed to instigate dialogue and extend strategic thinking about the future rather than to focus on the current reality. Visioning is aligned to scenario planning, which embraces the construction of the shared view of a potential future for the organisation. In addition, backcasting consists of articulating a preferred future which then works backwards to comprehend the decision points

and events required to create the preferred reality, culminating in a roadmap for the future (Conway, 2014:21).

Most importantly, organisations collectively need to be open to recognising that worldviews and assumptions can never be defined as correct or incorrect, but rather, need to embrace thinking and debating about future possibilities rather than focus on the present as core to the organisation's strategy (Conway, 2014:24).

Crucially, organisations must embrace the richness of strategy, aligned with the first principles of strategy (see section 2.5), to liberate it from the common toolbox approach. A generalist approach merely supplies organisations with the ability to make sense of, achieve and sustain advantage in an evolving environment. Strategy must remain a combination of bold and unanticipated moves supported by flawless execution (Etzold and Buswick, 2008:279).

Strategic synthesis and insight requires sense making, which concentrates on the development of coherence and order against an imprecise backdrop of multiple possible realities. Sense making introduces a degree of objectivity to enable a distinct understanding of how events are linked and of the roles of actors and parties within complex relationships. This deconstruction and reconstruction of reality creates insight into the problem or challenge at hand. Sense making is the process, while insights are the outcome of the process informing strategic questions (Tovstiga, 2010:15).

The deconstruction is undertaken through a process based on analysis/intuition and interpretation, thereby developing meaning as regards the context being examined, leading to the assembly of the bigger picture or pattern. Sense making, within the organisational context, involves exploring the following elements: social context; identity; retrospect; salient clues, cues and evidence; ongoing projects; plausibility; and enactment (Tovstiga, 2010:15).

To embrace sense making and the creative practice of strategising demands dialogue (Brundin, Melin and Nordqvist, 2008:4). These authors (2008:4) identify dialogue as rooted in *dia* which is translated as "through" and *logos* interpreted as "the meaning of the word", and further reflect on Socrates' view of dialogue as a quest for truth, combining a cultivated "not knowing" and a coming to know in a

relationship. Dialogue is posited as fostering interaction between stakeholders so as to enable a shared and collective inquiry in order to share information which will create new shared knowledge. Dialogue enables individuals to utilise all their senses and illuminate a curiosity to discover something new. A dialogue is never finished, but rather remains fluid and changing, shaping the individual as much as the individual shapes it (Brundin, Melin and Nordqvist, 2008:4).

A strategic dialogue is cultivated by an agenda of strategic issues requiring strategic action. Dependent on the nature of the said issue, the intensity of the dialogue alters over time as actors construct and deconstruct meaning through collaboration, communication, and creativity with the aim of reaching mutual understanding, aligned with shared values and experiences so as to assist insight into future strategic direction (Brundin, Melin and Nordqvist, 2008:5).

In their seminal work, Barry and Elmes (1997:432) posit that strategic dialogue requires the support of narratives:

Traditional conceptualizations of strategy have tended towards notions of fit, prediction, and competition. In contrast, a narrative view of strategy stresses how language is used to construct meaning; consequently, it explores ways in which organizational stakeholders create a discourse of direction ... to understand and influence one another's actions.

Strategic narratives enable stakeholders to understand the business, its environment, current condition, and direction in mutual ways, thereby focusing attention on those elements critical to growth and success. Such narratives are imagined futures which set the stage by interpreting history and current reality. Narratives assist in identifying addressable challenges, describing how the challenges will be met. Strategy-as-narrative is directly linked to dialogue and language rather than being isolated from surrounding events, allowing organisations to find themselves and distinguish their capabilities (Ancel, 2012:31).

Pedersen and Vaara (2014:2) embrace the importance of storytelling and strategic narratives by analysing how strategy narratives can incorporate time and space to construct the past, present and future (Figure 14). The concept of time is critical to strategic narratives since it is linked to the understanding of human existence and

interpretations. Strategic narratives construct views of the future, providing objectives for organisational stakeholders and activities.

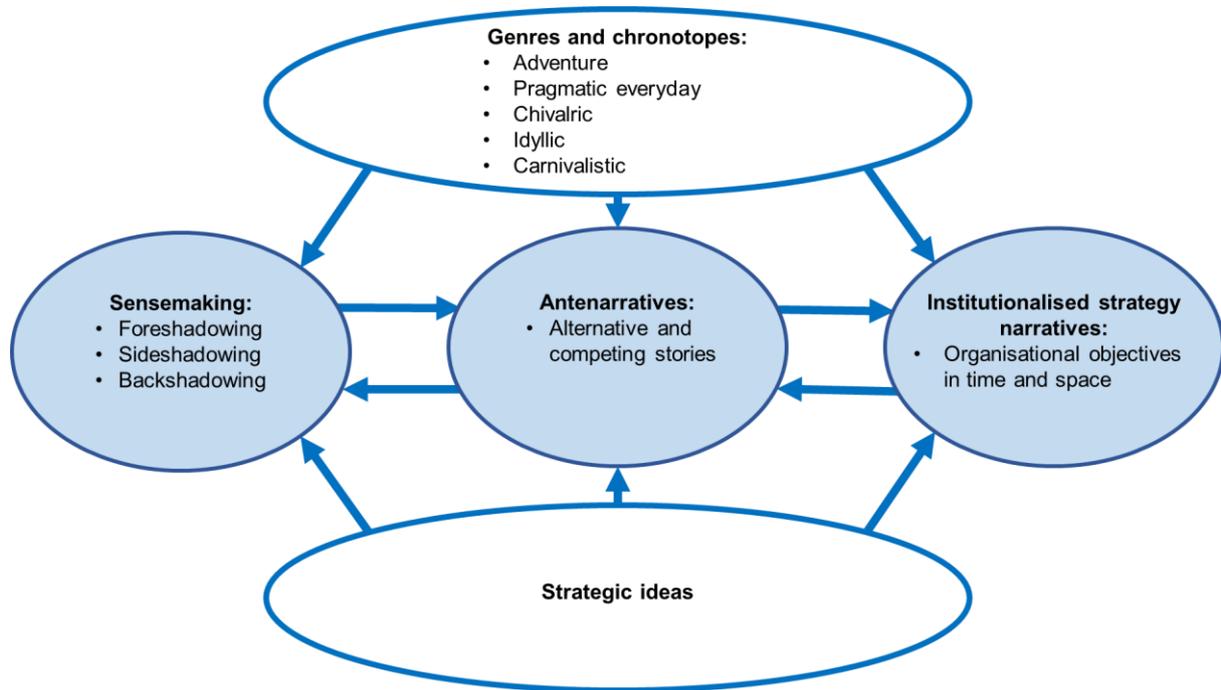


Figure 14 - Constructions of strategy narratives in time and space (Pedersen and Vaara, 2014:15)

The revised narrative view designed by Pedersen and Vaara (2014) builds on the literary sense of time, while highlighting the role of genres and chronotopes in strategic tales; it emphasises the role of fore-, side- and backshadowing in sense making and incorporates antenarratives into the process (Pedersen and Vaara, 2014:17). Each element is described below:

- *Genres and chronotopes*

Chronotopes are units of analysis depicting time and space that characterise alternative literary genres which serve as different bases for the construction of organisational strategy narratives. Several types of genres exist, aligned to their relevant chronotopes which describe their spatio-temporal basis (Table 10). The focus of the various genres and their respective chronotopes is placed on enabling an organisation to construct different trajectories by constructing events, situating them in an envisioned future.

- *Shadowing*

Three types of shadowing are identified: foreshadowing focuses on an already

told future that sends signals back to the present by backward causation, whereby the present becomes preparation for a hypothetical future; sideshadowing represents the alternative possibilities that may have been selected, but were not, illuminating alternative courses of history; while backshadowing reconstructs the past in narratives, providing insight into implications for the present and future.

- *Antenarratives*

Antenarratives are viewed as prospective bets that an antestory (before-story) has the ability to change organisational relationships. Antenarratives include fragments of discourse articulated to ensure sense is made of a chaotic reality, by means of which they are sometimes able to change the future or set in motion transformation which impacts the big picture. Antenarratives are frequently transformed into living stories spread through storytelling, providing meaning to and ultimately creating the organisational identity and strategy.

Table 10 - Literary genres and chronotopes (Pedersen and Vaara, 2014:9)

Literary genre	Space	Time	Chronotope
Greek romance	An abstract alien, golden age world	Adventure time of the future	The encounter
Adventure of everyday life	The real and concrete events of everyday life	Time of the present	The road
Biography	The public square	Real life combining past and present	The real time
Chivalric romance	A miraculous dream world in nature	Miraculous past time	The beauty of nature
Rabelaisian novel (rogue, clown and fool)	Plays and dramas including body, clothing, food, drink, sex, death, defecation	Productive growth of future and possible time	The threshold
Idyllic novel	Family territory, unity of space	Idyllic and folkloric past time	The family idyll

By incorporating the three elements into narratives, a more creative activity is engendered, removing the limits to individual imagination and succinctly expressing alternative views through narrative dialogue (Pedersen and Vaara, 2014:17).

Jacobides (2010:78), similarly, suggests organisations should undertake the

challenge of creating strategy by defining the underlying logic, story lines, decisions and motives of all the players that are creating and capturing value in the competitive environment. The author's suggestion is to use words in the form of playscripts: defined as "a narrative that sets out the cast of characters in a business, the way in which they are connected, the rules they observe, the plots and subplots in which they play a part, and how companies create and retain value as the business and the cast change". Playscripts, when created at a corporate and business level, assist in managing the complexity of the competitive landscape and facilitate analysis and action, forcing companies to concentrate on causes of change, explicating their sense of success and assumptions behind it, before translation into the daily realities of running the organisation (Jacobides, 2010:78).

In addition, the Boston Consulting Group's Strategy Institute has outlined a number of modalities of thinking, to provide inspiration and a point of departure for thinking about, and generating, strategic intent (The Strategy Institute, 2011). These modes are (The Strategy Institute, 2011):

- *Metaphorical*

A metaphor is a device used to link two domains, often not thought of as belonging together, providing a new frame through which to understand both domains. The approach focuses on the belief in the power of metaphor to unlock valuable insights. Metaphors foster strategic and innovative thinking by selecting and employing images from non-business domains, such as evolutionary biology, history, philosophy and anthropology, useful for the business strategist. This multidisciplinary approach allows one to review well-known issues with "a new set of eyes" and leads to the generation of innovative frameworks for thinking about business strategy.

- *Dialectic*

Dialectical thinking evokes a new way of thinking, guiding the thinker through extreme alternatives, thus expanding the opportunity space. An exploration of binding, or separation, forces identifies opposites, leading to a range of possible options to pursue.

- *Spatial*

To ensure the discovery of new growth opportunities, organisations should

make the transition to the frontier of recognised markets and businesses where unexplored spaces exist in the periphery. Spaces developed by human interaction outline social and cultural constructs. Strategy, based on the exploration of and movement through a space, outlines a path to navigate through unexplored and possibly shifting space, in order to arrive intact and on time at a destination favourable to further departures.

Organisations can select specific spaces to dwell in, within which opportunities and challenges arise for the strategist of spatial thinking. Occupying these spaces leads to the creation of value for the organisation and its clients.

- *Social modalities*

The focus of the social modalities mode of thinking is to identify the drivers and implications of the phenomena of different cultural perceptions in modernity.

- *Poetic*

The Strategy Institute believes poetry can facilitate thinking strategically. Reading poetry promotes a fresh focus on several emotional, contextual and cultural issues pertinent to the organisational thinker.

Much emphasis has been placed on bridging the gap between business and other disciplines by incorporating ideas through metaphorical associations. External stimuli gathered from history, philosophy, business, anthropology or any other academic field replenish richness, freedom and creativity in organisational strategy (Etzold and Buswick, 2008:279).

Metaphors are used as a symbolic language to make sense of new, problematic, ambiguous or unsettled situations. They define and provide insight into new phenomena by acting as carriers of meaning from well understood situations to those that are not. Such images lead to creative juxtapositions of concepts through the generation or creation of new meaning by a process of seeing-as or conceiving-as, thereby moving beyond similarity to provide insightful new understandings. Metaphors are fundamental to sense-making by providing a method for individuals to make sense of a reality, in order to act after reasoning about issues (Hoon, 2009:3).

Etzold and Buswick (2008:279) identify two types of metaphors: rhetorical ones

which are commonly known and are viewed as stale, limit further thinking yet create recognition; and cognitive ones which foster creativity, are not immediately obvious and require intellectual stimulation to uncover potential insights. The latter type of metaphors creates an artificial environment not connected to the business where concerns are freely raised and issues addressed, offering new associations previously not known. Furthermore, these metaphors have a limit: a fault line, after which comparisons collapse, forcing barriers to be broken, consequently allowing new, unusual, creative thinking to emerge. Cognitive metaphors allow originality and depth of thought, reflecting unique connections previously unthought-of (Etzold and Buswick, 2008:280).

Heracleous and Jacobs (2008:309) view strategy as a crafting practice and have presented an approach to strategy-making by metaphorically, and literally, crafting strategy through and in embodied metaphors during facilitated workshops. This approach allows strategists to externalise and probe their ideas and thoughts by interpreting strategic maps while constructing them. Embodied metaphors introduce a birds-eye view onto strategy, allowing strategists the opportunity to conceptually and physically construct and inter-relate strategic elements (Heracleous and Jacobs, 2008:309).

Strategic metaphors are significant because they allow for critical reflection due to their exploratory, synthetic orientation. Embodied metaphors allow for vivid capturing of intangible and collective dimensions, from which insights can be gained, leading to shifting mind-sets (Heracleous and Jacobs, 2008:322).

Crafting strategy through synthesis and insight generation, accompanied by various methods of sense making, enhances strategic thinking and is not limited to routine exercises or a set of frameworks (Bradley et al., 2011:1). Vitality, the social interaction between actors is integral to the organisation, especially regarding strategic issues. Strategic dialogues and narratives lead to and enrich an environment of communication, collaboration, relationships and creativity, fostering simplicity, robustness, flexibility and alignment or synergy across the organisation for the creation of a creative and adaptive strategy (Brundin, Melin and Nordqvist, 2008:1-24).

Sense making and the generation of strategic insight are underpinned by intuition and interpretation which occur simultaneously through a search for the meaning of data. Intuition is an internally experienced phenomenon whereby perception, influenced by external elements and context, is formed on a conscious and subconscious level. Sense making serves as a conduit to guide the assembly of various pieces of strategically relevant information, integrated into bundles of insight relevant to a particular problem (Tovstiga, 2010:57).

Sense making thereby leads to the formation of insight, which can be identified as a clear or deep perception of a situation or an unpredicted understanding of a complex issue and of how the issue fits into the bigger strategic picture. The process leading to insight is inexplicable, but it draws on more than analytical reasoning and focuses more closely on images and spatial abstraction (Tovstiga, 2010:68).

4.3.4 Evaluation and validation of strategic options

The selection of appropriate organisational strategies requires strategic thinking about the effects, impacts and consequences of strategic decisions and the support they will offer the organisation towards achieving sustainable success (Rainey, 2010:424).

The output of a strategy insight generation process results in the development of strategic options relevant to the organisation. An adaptive, creative and resilient strategy must endure a validation process to ensure intent is acceptable and feasible to the organisation. Furthermore, it is imperative that organisations do not ignore the influence of organisational dynamics on the validity and execution of organisational strategy (Rainey, 2010:424).

Prior to the implementation of such a strategy, following a strategic thinking approach (Liedtka, 2005:70-93), a validation process must make use of critical thinking to test the designed intent, while remaining aware of promising prospects, both to the strategic intent and its continued suitability (Liedtka, 2005:76).

The feasibility of strategic intent – potentially hampered by limited or no funding, resources, environmental reaction, over estimation of competence, lack of commitment and poor communications – should be evaluated to prevent failure in

implementation (Kim and Mauborgne, 2005:147).

The step of making sure that decisions are sound should be achieved through an examination of the implications of objectives, strategies, action plans and initiatives, including ensuring a strategic fit, understanding any unforeseen risks, and gaining acceptance across the organisation and management (Rainey, 2010:419). Strategic fit assures desired outcomes will lead to success. Risk assessment and mitigation ensures the organisation is capable of implementing the strategic intent, through understanding the implications of the new direction for prevailing technology, social systems and structures and adaptability to changes, alterations in the organisation's business environment and regulatory structure and their acceptance by stakeholders (Rainey, 2010:420-421).

Most importantly, acceptance by the organisation's corporate culture and strategic leadership requires assessment, since ineffective communication and poor understanding by employees result in the development of barriers to the successful implementation of strategic intent (Jooste and Fourie, 2009:65; Klein, 2011:21-28).

Strategic options represent trade-offs and compromises reflecting the responses to a complex and ever-changing reality (Tovstiga, 2010:129). Tovstiga (2010:129) identifies that there are three different approaches to evaluating such options, all with the same objective: to provide a systematic and structured approach to evaluating a preferred option from amongst several competing ones. These approaches share a number of common elements and include (Tovstiga, 2010:129):

- *Management consulting approach*

Management consultants often use decision tree-type algorithms or multiple criteria filters that evaluate strategic options by means of quantitative and qualitative criteria including financial returns, achievement of objectives, and risk. Systematic comparisons are the core, with a focus on screening out unsuitable options. Some evaluation algorithms are extremely complex and sophisticated but are still limited by the validity and reliability of data, which is often unavailable, adding little value to in-house analysis and intuition.

- *Strategic management literature approach*

The literature repeatedly identifies several sets of questions that could be

investigated, often with overlaps in sub-factors linked to major criteria, but are seldom focused upon and actioned. For example, conducting a key success factor analysis.

- *Comprehensive evaluation framework*

A further suggestion includes a more comprehensive framework, following the output of a strategic thinking process to screen for suitability, and defined as feasibility, appropriateness and desirability. Following the assessment of each option aligned with these criteria, within the context of the organisation, the remaining options could be analysed iteratively, with the final option comprising hybrid elements of several options.

Within the context of this framework, the following meanings are ascribed to the suitability of the option:

- *feasibility* questions the ability of the option to provide the change required; its ability to fulfil key success factors and the reality of delivering on the timing and demands to be placed on the organisation in relation to the opportunity to be addressed
- *appropriateness* questions whether the option is consistent with available resources and capabilities, skills and competencies, values and culture, and whether it is simple and understandable
- *desirability* evaluates the option's ability to satisfy the organisation's objectives in terms of expected returns, synergies, risk, and stakeholder expectations.

Significantly, this framework allows organisations to test underlying assumptions, their validity and suitability based on the dynamics of the organisation's competitive environment.

Syrett and Devine (2012:24) identify a further two methods for the evaluation of strategic options:

- *Option evaluation*

A structured and costed approach for the evaluation of strategic options, option evaluation provides a method for the assessment of options in terms of strategic business requirements. Options are evaluated against pre-set criteria to distinguish relative benefits and risks. Criteria could focus on the

dangers of pursuing a new direction, the financial investment involved, external stakeholder attitude, payback period and resources required in terms of technology, equipment, and human talent. Specific areas are identified for consideration:

- *Difficulties*: Several issues must be considered including: capacity, capability and the expertise needed to focus on new areas, thereby determining whether new collaborative partnerships are required; an understanding of the degree of organisational difficulty and the organisational structure required (new business units or subsidiaries); internal support and buy-in, aligned with talent management; legal and purchasing issues; competition rules; supplier requirements; and the risk of entering new markets and its effect on current markets.
- *Risks*: Potential impact and probability must be considered to identify any risks.
- *Weighting*: All factors must be weighted to establish the level of difficulty, risks and aims proportional to each other.
- *Formalisation of the decision-making process*: Often group dynamics prevent decisions being made; therefore, a decision-making process must be agreed upon prior to reaching a decision. The process must enable the expression of assumptions and value judgements in an unbiased manner that addresses all critical variables.
- *Game theory*

Game theory allows organisations to determine the best option from amongst several, by allowing the organisation to consider the perspectives of competitors, collaborators and stakeholders in relation to the option considered. A mature method, dating back to 1944, game theory provides a systematic approach to understanding the behaviour of interdependent players in any given situation – thereby putting oneself in the shoes of another to ascertain their reactions and actions. The approach allows an organisation to identify substitutes and complementors, and allows it to identify environmental elements including market players, value adders, tactics and boundaries that exist.

Alternatively, in order to stimulate thinking and dialogue to ensure the validity of the

generated intent, a number of tests are able to assess the strength of the organisation's strategy as it emerges (Bradley et al., 2011:1). Simons (2010:93) advocates that a stress test could be used to expose the shortcomings of a strategy. A stress test is viewed as an assessment of how a system will function under severe or unexpected pressure, thereby identifying issues – such as confusion, inefficiency or weakness – to address and reconsider the system (Simons, 2010:93). The questions enable the organisation to set strict priorities to concentrate on the designation of performance variables and constraints while using techniques to enhance creative tension and commitment. Several key questions are identified to consider (Simons, 2010:93):

- *Who is the primary customer and does the option support, meet or exceed their needs?* The emphasis on a primary customer ensures resources are allocated adequately rather than spread too thin over many customers.
- *How do the organisation's core values prioritise shareholders, employees and customers?* It is essential to establish which interests come first and when trade-offs are required.
- *What critical performance variables are to be monitored?* Management attention is limited, requiring concentration on the most critical of variables that will enhance organisation performance and innovation.
- *What strategic boundaries have been set?* To ensure accurate execution of a strategy, individuals must be guided to complete activities within limitations so as to control organisational risk; however, freedom must be provided to exercise creativity within the defined limits.
- *How is creative tension being generated and does the strategy provide room for individuals to present and negotiate multiple perspectives?*
- *How committed will employees be to helping each other achieve the strategy?* Does the strategy accentuate pride in the organisation's purpose, its identity, and create trust and fairness?
- *Are there any strategic uncertainties?* Strategies are based on assumptions about the future, and as market changes become reality, these assumptions must be monitored. It is vital to ensure all assumptions are well defined to reduce any uncertainties.

In addition, Bradley et al. (2011:1) have developed a number of instruments to pressure test organisational strategy. These include establishing whether the strategy (Bradley et al., 2011:1-14):

- Will beat the market
- Taps a true source of advantage
- Is granular about where to compete
- Puts the organisation ahead of trends
- Rests on privileged insights; the strategy embraces uncertainty
- Balances commitment and flexibility
- Is contaminated by bias
- Enjoys the conviction required to act on the strategy
- Has been translated into a plan that can be carried out.

The evaluation and validation of strategic options is a key step following after strategy formulation. The evaluation task ensures that a systematic and comprehensive scrutiny, comprised of objective and subjective criteria, is undertaken. By using a framework for evaluation and validation, structure is provided to guide the strategic thinking process, but not to replace or limit creativity and thinking. Fundamentally, the evaluation of future strategy is subjective, based on a projection or extrapolation of current reality into a defined future state, but crucially, criteria should ensure the strategy is not simply focused on “hard facts” or numerical data. The criteria selected should scrutinise: whether all aspects required for consideration have been deliberated on; whether assumptions have been reality checked; the final outcome considers all uncertainties and risks; and any areas that could heavily impact the strategy are flagged for continuous monitoring (Tovstiga, 2010:134).

By embracing strategic evaluation and validation through strategic dialogue, in order to test organisational strategy using a strategic thinking approach, organisational stakeholders open their minds to new ways of using strategy to create value, to ensure that adaptive, creative and resilient strategies result in success within rapidly fluctuating environments.

4.4 Conclusion

Strategic thinking has been designed as an alternative approach with, at its heart, a focus on the synthesis of information, involving intuition and creativity, resulting in new perspectives and unique combinations. The outcome of this synthesis, as noted, is an integrated perspective and the expression of clear strategic intent to assist organisational stakeholders.

While the elements and processes suggested for strategic thinking provide clear conceptual guidelines for the crafting of a creative and adaptive strategy in line with the first principles, the strategic thinking process requires an identification of detailed mechanisms for crafting such a strategy.

Within this chapter, this type of strategy was identified as being able to provide the means for an organisation to look outside of its historical boundaries and identify adjacent worlds, with the ability to move immediately into new categories, geographies, channels, and products by remaining agile and developing an absorptive buffer.

In supporting the crafting of strategy, a holistic approach to understanding the organisational environment, the integral theory, was identified as a mechanism to challenge conventional wisdom. By recognising the relationship among parts, the integral theory develops a balanced and integrated holistic view of the organisation. Such a theory synthesises, integrates and provides multiple perspectives, in contrast to traditional theories, while remaining inclusive by providing a map to guide the organisation as described above.

In making inputs to the generation of alternative strategic options, strategic intelligence and its underlying strategy analysis are able to contribute powerful insights to the strategic thinking process, while the use of several frameworks to support the analysis could provide a valuable input to generate insights for strategy-making.

Most importantly, organisations need to be collectively open to recognising that worldviews and assumptions can never be defined as correct or incorrect. Instead, they need to embrace thinking and debating about future possibilities rather than

focus on the present as core for their organisation's strategy (Conway, 2014:24).

Several mechanisms for creative and adaptive strategic thinking were identified to assist organisations embrace the richness of strategy, aligned to the first principles mentioned. Sense making requires organisational dialogue using tools such as strategic narratives, playscripts, various modalities of thinking and metaphors to enable stakeholders to understand the business, its environment, current condition, and direction in shared ways, thereby focusing attention on those elements essential to growth and success.

Crafting strategy using these creative mechanisms allows for critical reflection due to their exploratory, synthetic orientation, which leads to the shifting of mindsets from the traditional hard analysis so often undertaken. The insight generated may provide a clear or deep perception of a situation, or an unexpected understanding of a complex issue and how it fits into the bigger strategic picture.

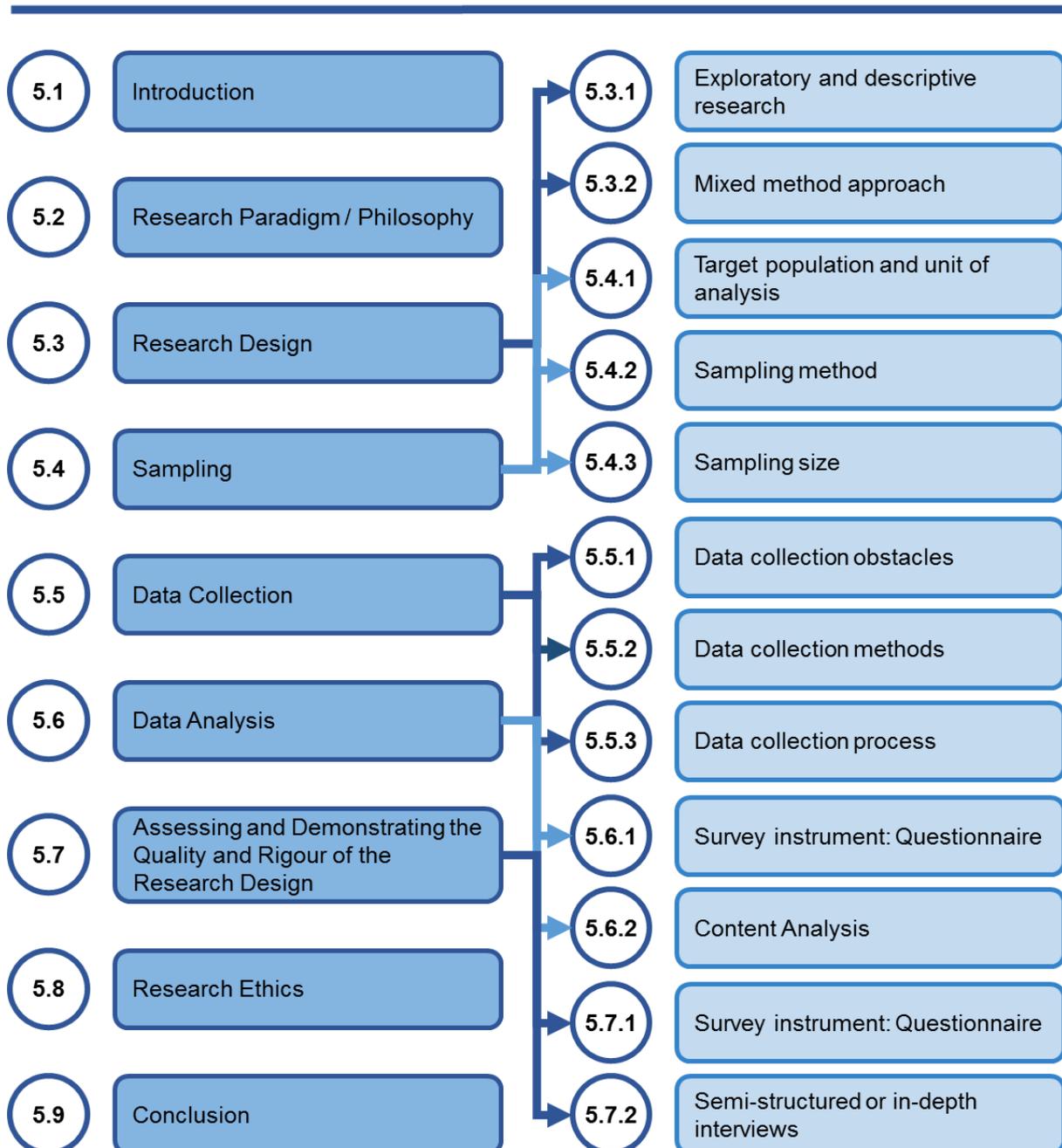
Finally, the selection, evaluation and validation of appropriate organisational strategies were identified as requiring strategic thinking about the effects, impacts and consequences of strategic decisions and the support they will offer the organisation towards achieving sustainable success.

The alternative mechanisms allow organisational stakeholders to open their minds to new ways of using strategy to create value, to ensure adaptive, creative and resilient strategies resulting in success in rapidly changing environments.

Chapter 5

Research Design and Methodology

Chapter 5 Research Design and Methodology



“Any fool can **know**. The point is to **understand**.”

– *Albert Einstein*

5.1 Introduction

As intimated, scholars in the field of strategy believe that the strategy-making process undertaken by organisations should follow a more holistic, creative strategic thinking approach that is more adaptive to current environmental realities (Amsteus, 2011:64-78; Dwyer, 2009:70-73; Finkelstein, 2005:19-28; Marren, 2010:59-61; Mintzberg, 1994:107-114; Perrott, 2008:21-30; Wilson and Eilertsen, 2010:5-14).

While strategic thinking is not a new concept within the literature, as has been noted a creative and adaptive approach to strategy-making using the concepts provided for within the strategic thinking sphere has not been comprehensively documented nor apparently integrated into standard organisational processes.

Since the focus of this study is on the development of a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy, to enable the development of such a conceptual framework, the following items were explored:

- Literature on the current state of research within the focus areas of strategy, and the alternative formulation approaches of strategic planning and strategic thinking
- Literature which defines approaches or mechanisms that are similar in nature, and which will lead to the development of a conceptual approach to the creative and adaptive development of organisational strategy
- Organisational dynamics which influence organisational strategy developed using traditional strategy-making approaches and
- Organisational and expert opinion as inputs to the conceptualisation of a strategic thinking approach for the development of creative and adaptive strategy.

This section provides a description of the research philosophy and design, as well as the sampling, data collection and analysis methods used in this study. This is

supplemented by a discussion on the quality and rigour of the research design and ethical issues considered.

5.2 Research Paradigm / Philosophy

The research philosophy guides the expansion of knowledge and outlines the character of the knowledge that is to be developed (Saunders et al., 2009:107). It outlines the central assumptions, including the perspective from which the world is viewed, underpinning the rationale for the research methodology used to conduct a study (Saunders et al., 2009:108).

The concept of the research paradigm was described earlier.

Practical considerations often influence the philosophy and paradigm adopted, outlined by the relationship between knowledge and the method by which it is developed to answer the research questions (Saunders et al., 2009:108). Simply, the philosophy and paradigm selected lead the researcher in the selection of tools, instruments, participants and methodology used in the research undertaking (Ponterotto, 2005:128).

Three research philosophies exist within management research (Creswell, 2009:6; Saunders et al., 2009:119):

- **Positivism**

A positivist philosophy observes that observable phenomena alone can provide tangible data, facts and information on social realities, with a focus on causality and law-like generalisations created from the simplest elements measured. An external, objective and independent process of data collection is followed. Predominantly, the focus remains on highly structured, large samples linked to quantitative research and observations interpreted through statistical analysis.

- **Interpretivism**

An interpretivist philosophy, in contrast to the positivist view, argues that the world is too complex to simplify through linear or quantitative observations and requires a qualitative approach to its investigation. The focus remains on understanding the details, reality and subjective meanings which are motivating actions behind certain social phenomena or situations. Data

collection is socially constructed, subjective and may change through multiple repetitions, with small samples being closely investigated.

- **Pragmatism**

A third philosophy, pragmatism, evolved as a result of the debate concerning which of the above two approaches should be chosen in a single study. The pragmatic view and the one taken within this research, is that either or both observable phenomena and subjective meanings can provide the required information, dependent upon the research question(s) defined. This is apparent in this study, where the research questions do not tend toward either a positivist nor interpretivist philosophy, but instead require insight from both quantitative and qualitative viewpoints to uncover the basis of a real-world problem. Thus, pragmatism, which integrates different perspectives and advocates a mixed methods approach to research design that includes both quantitative and qualitative methods, was used to answer the research questions.

As stated above, this study has adopted the pragmatic approach as its research philosophy. This entailed consideration of multiple realities, the notion being that using a mixed methods approach would provide a more accurate reflection of the current state of the subject matter (Creswell, 2009:10).

5.3 Research Design

5.3.1 Exploratory and descriptive research

The research has an exploratory and a descriptive nature.

An exploratory study is viewed as a valuable means for clarifying and improving the understanding of a problem. It is a method to determine “what is happening, to seek new insights, to ask questions and to assess phenomena in a new light” (Robson, 2002:59). While a clear outline of the topic was provided by the introduction and literature review, this study is viewed as exploratory because the knowledge base is insufficient to advance clear theoretical propositions for a new conceptual framework. A detailed, exploratory study, across multiple subjects, was required to develop the necessary background and a greater understanding for a full investigation on this topic.

Saunders et al. (2009:140) identify two principal methods of conducting exploratory research:

- a review of literature
- interviewing experts on the topic.

This research involved a search of relevant literature, undertaking a survey and conducting interviews with subject-matter experts and those involved in organisational management.

Robson (2002:59) further describes the objective of a descriptive study as "...to portray an accurate profile of persons, events or situations". A study of this type extends or pre-empts exploratory research. A descriptive approach is required within this study to extend the exploratory research by determining the current state strategic thinking within the South African business environment.

Following this multifaceted approach enables the gathering of new data from different sources, provides an understanding of the current situation, and affords new insights with which to develop a clear framework.

5.3.2 Mixed method approach

The emphasis of the study is empirical in order to collect and analyse new primary data, however, secondary data gathered informs the direction of the study. It was considered appropriate to use both means in gathering data to expand the knowledge of the processes of business and management, as well as to develop universal principles of significance and value to the academic community. These are based on the current phenomena and realities faced by South African organisations at the current time and triangulate several sets of data (Creswell, 2009:14; Saunders et al., 2009:8, Saunders et al., 2009:155).

Creswell (2009:3) maintains that a mixed method approach is beneficial when multiple theoretical perspectives, sources of data, or methodologies are used, as it results in data corroboration and could lead to thicker, richer data, or uncover contradictions. Creswell (2009:3) also recognises that all methods have limitations and that by triangulating data sources, biases intrinsic in any particular method could be neutralised by the biases of other methods employed. Making use of this

approach provided a fuller picture and the deeper understanding required to validate all findings.

The mixed methods sequential explanatory design undertaken consisted of two distinct phases (Ivankova, Creswell and Stick., 2006:5; Creswell, 2009:211):

The first encompassed quantitative data collection and analysis to provide generalised insight into the research problem (Ivankova et al., 2006:5). Creswell (2009:4) identifies quantitative research as "a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures." Quantitative research focuses on identifying the characteristics of observed phenomena, or on exploring the correlations between variables among a number of phenomena (Leedy and Ormrod, 2010:135).

The second, qualitative, phase consisted of data collection and analysis, in order to corroborate, expand and elaborate on the first phase's statistical results by exploring participants' views in much greater depth and detail (Ivankova et al., 2006:5). Qualitative research is an avenue for exploring and interpreting the meanings that specific individuals or groups assign to certain social or human phenomena. It involves a direct encounter, where the researcher is the research instrument, and is concerned with the way in which people construct, interpret and give meaning to certain phenomena (Creswell, 2009:4; Leedy and Ormrod, 2010:135). Creswell (2009:4) identifies the process of research as involving various emerging questions and procedures, collecting data from participants within their natural setting, developing general themes from particular data using data analysis and interpreting the meaning of the data. Qualitative research enables one to gain new insights, develop fresh concepts and discover problems which exist within the phenomena. It also allows for testing the validity of assumptions, theories and generalisations (Leedy and Ormrod, 2010:136). This form of inquiry supports a focus on arriving at meaning as well as on understanding the importance of rendering the complexity of a situation as precisely as possible (Creswell, 2009:4).

Following the completion of the two phases, the quantitative and qualitative findings are interpreted and explained in order to weave a narrative of conclusions in a

theme-by-theme or construct-by-construct basis, as the outcomes of this study in relation to the research objectives. Each phase's selected data collection and analysis methods and techniques are discussed in detail in sections 5.5 and 5.6.

5.4 Sampling

5.4.1 Target population and unit of analysis

The target population under study includes all South African organisations, but with a particular focus on JSE listed organisations, as it was expected that they would make use of a long-term strategy and utilise a formalised method of developing such a strategy. However, it is imperative to note that strategy is not confined to this class of organisation alone, with unlisted and state-owned enterprises also making use of strategies. By targeting both listed and unlisted organisations, a larger target population was created, which led to an increase in the number of potential respondents.

A unit of analysis is an element of the greater population. As the unit for this study was South African organisations, data sources or sampling units from which data was gathered included two subsets of individuals. The first grouping comprised employees of the organisations, including CEO's or strategically positioned managers and employees directly involved in the development of organisational strategy. The rationale behind this selection is that this grouping provides a first-hand view on how organisations currently develop strategy. The second grouping included subject-matter experts in the form of academics or strategists who would be able to express a view on how organisations should be creating strategy within the changing environment.

5.4.2 Sampling method

Within pure quantitative research, as opposed to a mixed methods approach, the focus would remain on probability sampling where the elements of a population, chosen randomly, have an equal chance of selection. From this sample the characteristics of the sample are equal to that of the entire population (Leedy and Ormrod, 2010:205; Saunders et al., 2009:214).

However, due to the nature of this study, a non-probability purposive/judgemental

sample was used to facilitate the selection of individuals who would possess the insight to answer the research questions and thereby meet its objectives (Creswell, 2009:14; Pellissier, 2007:32; Saunders et al., 2009: 237). Guided by the nature of the research subject matter, regarded as highly confidential and sensitive, selection was based on the researcher's access to individuals (through direct contact, prior relationships or network contacts) as well as on their expertise in the area in question.

While the sample was purposive, a heterogeneous sample selection procedure was followed to enable the selection of candidates across a broad spectrum of organisations, but in roles relevant to the topic of study to allow for the collection of enough data related to the subject-matter, so as to assist the interpretation of emergent results. Patterns that emerge are likely to be of interest and value, and allow for the documentation of uniqueness across the sample of variables (Saunders et al., 2009: 237). The limitation of this sampling approach would be the lack of statistical inferences drawn from the data to estimate the incidence of phenomena in the wider population. However, the intention of this research was to seek to acquire in-depth as well as personal information about a smaller group of people, purposively selected based on their experience and insight into the area studied.

5.4.3 Sampling size

Leedy and Ormrod (2010:213) identify the basic rule of identifying a sufficient sample size as "the larger the sample, the better". Sanders et al. (2009:234) explain that the sample size is dependent upon the nature of the research questions and objectives, and crucially, dependent upon what one wishes to discover, what would be useful to provide credibility and achievable within available resources.

Leedy and Ormrod (2010:213) indicate that for surveys, the sample size is dependent on the size of the population. For smaller populations, where the number is 100 or fewer, a survey of the entire population is appropriate. With a population size of 500, a minimum of 50% should be sampled, with the percentage surveyed decreasing until the size of the population increases above 5000, where a sample size of 400 will be adequate (Leedy and Ormrod, 2010:213).

The survey sample size for the quantitative research study was determined in

consultation with a statistician from the University of Pretoria, based on the data analysis techniques that were required to enable answering the research objectives, the margin of error and confidence level. The precise number of organisations that constitute the target population is unknown but is understood to be larger than 5000. Both listed and unlisted organisations were targeted. In total, 716 organisations were approached: 324 JSE listed organisations, 74 small, medium and micro organisations; 39 unlisted large organisations through personal contacts, and 279 unlisted, public sector and NGO organisations. Employees of the organisations, including CEO's or strategically positioned managers and employees directly involved in the development of organisational strategy, were requested to respond on behalf of the organisation.

In terms of interviews, conducted as part of the qualitative research study, Saunders et al. (2009:234) consider that the validity, understanding and insights gained are more crucial than the sample size, while suggesting that qualitative data be collected through additional interviews until a data saturation point is reached when there were indications that no new insights would be gained. Based on research conducted by Guest, Bunce and Johnson (2006:59) a sample of 6 - 12 interviews could be sufficient for the majority of research that has as its focus an understanding of common perceptions and experiences in order to develop high-level, overarching themes. The research suggests that limited new information or themes are identified beyond the first twelve interviews. Furthermore, the research identified that the basic components of overarching themes are present with only six interviews, but caution that one should not assume that six to twelve would be enough; instead suggesting the quantity be dependent on the output derived from the data set (Guest et al., 2006:78-79). For the purposes of this research, 6 interviews were conducted with subject-matter experts as saturation point was sufficiently reached to corroborated the findings of the survey research.

5.5 Data Collection

5.5.1 Data collection obstacles

Obtaining the required data for a study is largely dependent upon access to appropriate sources. While the said sources may have been identified, access to

these individuals might be difficult dependent upon their willingness or otherwise to engage in voluntary activities due to resource or time constraints. Furthermore, “gatekeepers or brokers” control access by making the final decision on whether or not to allow the undertaking of the research within the selected organisation. Saunders et al. (2009:170) identify a number of reasons for this:

- a lack of perceived value
- sensitivity to the nature of the topic and its confidentiality
- perceptions about the researcher’s credibility and competence.

To overcome these obstacles, it is imperative that a number of strategies are used in order to gain physical and cognitive access to the required data (Saunders et al., 2009:173). Firstly, it is important that the right organisation is selected, and that a thorough understanding of the business is gained before making contact. It is also essential to provide the organisation approached with a well-defined account of the purpose and type of access required, acknowledging any organisational concerns and highlighting potential benefits to the organisation. Secondly, allowing sufficient time for the facilitation of access and gathering of data, supplemented by the use of any existing or new contacts, incrementally promotes access to the organisation.

5.5.2 Data collection methods

Following a sequential explanatory mixed methods approach to data collection, both quantitative and qualitative data collection methods were utilised within this study. From a quantitative research perspective, this study made use of a survey by using a questionnaire instrument. In terms of qualitative research, in-depth interviews were employed to collect data.

5.5.2.1 Survey instrument: Questionnaire

Leedy and Ormrod (2010:187-188) identify survey research as any form of descriptive, quantitative research. The authors assert that survey research involves acquiring information regarding characteristics, opinions, attitudes or experiences, by asking questions and tabulating the responses. Surveys take a snapshot view of a certain point in time, using interviews or written questionnaires (Leedy and Ormrod, 2010:187-188). Due to time and resource constraints, this study utilised questionnaires to collect data from the sample in order to generate a descriptive view

of the characteristics of South African organisations with reference to the research topic.

Surveys, generally, provide a broad overview of a sample of a large population. Their strengths include the potential to generalise across the sample; however, they are limited through their lack of depth and insider perspective, often criticised as providing only surface level analysis (Mouton, 2001:153).

For this study, self-administered questionnaires were used to collect data from the identified sample. Specifically, an internet-mediated questionnaire was administered by electronic means to 716 organisations. The benefits of such an approach include shortened turnaround times, enhanced visual stimuli, a greater sense of anonymity and the ability to attract respondents who are geographically dispersed.

The application used was an open source survey application named LimeSurvey (<http://www.limesurvey.org>). The application allowed for the creation of several categories comprising many questions and permitted unlimited responses. LimeSurvey provided an easy-to-use interface for participants, while offering a simple-to-use tracking and export data function.

The use of a non-probability sample decreased the time consumed to ensure the correct sample was approached, while the utilisation of a technological platform simplified the setting up of the questionnaire and provided output conducive to analysis. However, as Saunders et al., (2009:362-364) point out, self-administered questionnaires are prone to low response rates.

As per the interview schedule, a detailed questionnaire was developed on completion of the literature review. The focus of the questionnaire was placed on gathering organisational opinion concerning the development of creative and adaptive strategy and those factors which could influence the development, validation and execution of organisational strategy. Individual questions focused around core themes, and took the form of list, category, and Likert-type rating scales (the questionnaire used in this study is included as Appendix A).

The questionnaire was divided into several parts, focusing on a single topic each. The structure simplified the completion and analysis of the results. The questionnaire included:

- Introductory letter providing insight into the nature and purpose of the survey, including signed, informed consent
- Part 1 consisted of general organisational and personal information
- Part 2 had four sections covering the research topics:
 - Factors affecting the business environment
 - Approach to crafting strategy
 - Mechanisms for crafting creative and adaptive strategy
 - Understanding the development of creative and adaptive strategy
- Part 3 consisted of questions regarding respondent contact information.

The format of the questions within Part 2 is highlighted in Table 11, below.

Table 11 - Format of Survey Questions

Type of Question	Questions in Questionnaire
Open-Ended Questions:	Section 2: 2.2.3.m; 2.2.4.i. Section 3: 2.3.12.m.
Closed-Ended or Structured Questions:	
Rating Questions consisted of a list of questions which the respondents were asked to rate a statement by means of a 5- or 6-point Likert-type scale ranging from “Strongly Disagree” to “Strongly Agree”, or “Unsure” to “Very Often” or “No” to “Extreme / Critical”.	Section 1: 2.1.1; 2.1.2; 2.1.3; 2.1.4; 2.1.5; 2.1.6; 2.1.7; 2.1.8; 2.1.9; 2.1.10; 2.1.11; 2.1.12; 2.1.13; 2.1.14; 2.1.15; 2.1.16; 2.1.17; 2.1.18; 2.1.19; 2.1.20; 2.1.21; 2.1.22; 2.1.23; 2.1.24. Section 2: 2.2.3.a - 2.2.3.l; 2.2.4.a - 2.2.4.h; 2.2.5; 2.2.6; 2.2.7; 2.2.8; 2.2.9. Section 3: 2.3.1; 2.3.2; 2.3.3; 2.3.4; 2.3.5; 2.3.6; 2.3.7; 2.3.8; 2.3.9; 2.3.10; 2.3.11; 2.3.12.a - 2.3.12.l; 2.3.13; 2.3.14; 2.3.15; 2.3.16; 2.3.17; 2.3.18. Section 4: 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5; 2.4.6.
Category Questions allowed the respondent to select only a single answer to the question.	Section 2: 2.2.1; 2.2.2.

Instructions for the completion of each question were positioned directly above each question.

To ensure that the questionnaire would yield the expected results, a few subject matter experts were asked to read and assess the questionnaire. This was to make certain that respondents would not have difficulties in answering the questions and it provided a platform from which suggestions on the structure of the questionnaire were gathered. Following this, pilot testing was undertaken with a sample group of 20 individuals from the University of Pretoria’s Department of Business Management. The pilot test was to confirm that most of the errors commonly found in questionnaire construction had been eliminated and whether the questionnaire made sense, as well as testing the simplicity of the questionnaire (Mouton, 2001:103-104).

The said testing also determined the length of time taken to complete the questionnaire, examined the clarity of instructions, identified any unclear or ambiguous questions as well as any major omissions or layout errors (Mouton, 2001:103-104). The pilot indicated that the time taken to complete the questionnaire by the sample group was 30 to 40 minutes. Based on this, while maintaining the comprehensiveness and depth of the questions, the questionnaire was shortened so that it conformed to a 20-minute timeframe.

5.5.2.2 In-depth interviews

Interviews are purposeful discussions between two or more individuals to gather valid and reliable data relevant to the study (Pellissier, 2007:20). An in-depth interview makes use of open-ended questions that allow for individual variations (Pellissier, 2007:20). Three types of interviews are identified:

- Unstructured informal, conversation interviews
- Semi-structured interviews
- Standardised open-ended interviews.

For the latter two interview types, an interview schedule is used with a predefined list of themes and questions to be covered, but, unlike standardised closed ended interviews, there are no predetermined responses to choose from. The interview schedule is flexible in that it can vary from interview to interview, depending upon the organisational context or responses gained in relation to a specific topic. Interview data is usually recorded by means of audio recording or transcript; however, the participant must be informed of the media used as well as the reason for record keeping (Creswell. 2009:182; Saunders et al., 2009:320-321).

Leedy and Ormrod (2010:148) believe that interviews may yield a great deal of information including facts, beliefs and perspectives, feelings, motives, behaviours and standards for behaviour as well as reasons for actions or feelings. These interviews are not as structured as quantitative interviews and could be open-ended or semi-structured interviews that are focused on a few core questions. Moreover, they are more flexible and more likely to furnish unexpected or unsolicited information.

The exploratory nature of this study requires an understanding of the reasons why organisations develop strategy in certain ways: their attitudes and opinions. Semi-structured interviews allow for the probing of answers when a detailed explanation is required to responses, to gain a detailed understanding of the subject matter.

Saunders et al. (2009:337) recommend that for the development of an interview schedule, major themes that should be covered must be outlined, followed by lists of questions for each of the themes. Broad open questions start the conversation, in order to capture the perceptions of the interviewee regarding specific situations or events, followed by probing questions to explore feedback which is of importance to the topic (Saunders et al., 2009:337-338).

The questionnaire was developed based on the material discussed above. As previously mentioned, the first phase of the qualitative research study consisted of a thorough literature review and scan of secondary data which provided input into the development of an interview schedule. The interview schedule had four focus areas:

- Dynamics affecting the business environment
- Understanding of organisational strategy
- Development of organisational strategy
- A strategic thinking approach to creative and adaptive strategy development.

In total, fifteen questions were developed; three questions appeared in the first three focus areas and the remaining six, in the fourth focus area (the interview schedule used in this study is included as Appendix B).

After the development of the interview schedule for the in-depth interviews, a pre-test was used to preview and finalise the schedule. The test involved a critical examination by two subject matter experts and practice interviews to ensure the required data collection took place during the interviews and the time duration was satisfactory.

5.5.3 Data collection process

Following the piloting of the survey questionnaire, the data collection process for the quantitative research study started with the collection and finalisation of contact information for the sample selected as part of this research. Contact information was

collected through personal contacts, Linked-in contact pages and from the individual organisations' online web presence.

The nature of the South African organisations means that Head Offices are distributed across several cities; primarily, Johannesburg, Cape Town, Pretoria and Durban. Due to the distances between the individual organisations email was selected as the primary form of communication. The electronic questionnaire eliminated the need for data collectors; notification e-mails were utilised to request participation from the sample. The email notifications included the hyperlink to the questionnaire and a signed introductory letter on the University's letterhead.

Following this dissemination of electronic questionnaires, an initial two-week period was provided for completion, followed by a reminder, after which weekly reminders to the respondents were targeted for a maximum of six weeks.

The data collection took place over a period of five months, divided into three rounds, commencing the 31st July 2015 and ending on the 30th November 2015.

For convenience, the list of organisations targeted is repeated here (indicated in section 5.4.3). The sample targeted included both listed and unlisted organisations. As indicated there were a total of 716 organisations.

Of those approached, a total of 135 participants (19%) responded to the email request. Thirty-three (33) participants (5%) provided rationales for not wanting or being unable to participate, while 102 (14%) completed the questionnaire and 24 were unreachable due to incorrect contact information. The survey response rate results are depicted in Table 12 below.

Table 12 - Survey Response Rate Results

	Final Results			
	Round 1	Round 2	Round 3	Total
Total number of participants contacted.	363	74	279	716
Completed Questionnaires.	67	5	30	102
Participants who did not want to participate.	24	2	7	33
Participants who could not be reached due to contact information errors.	24	0	0	24
Total Respondents	91	7	37	135
% Response Rate	25%	9%	13%	19%
% Completed Response Rate	18%	7%	11%	14%

Feedback from several respondents indicated that the lower than expected response rate was due to: the confidential nature of the subject-matter, limited availability of the right type of respondent and the comprehensive and in-depth nature of the questionnaire that probed very deeply into the nature of each organisation's strategic capabilities.

Regarding the qualitative research study, the second phase involved conducting interviews with the 6 subject-matter experts. These included top level management concerned with strategy, academics involved in strategy and consultants concerned with strategy. Five of the interviewees were managing directors, directors or executive corporate specialists in their respective organisations, with one a senior manager responsible for the development of strategy.

Each subject-matter expert was contacted directly by the researcher and a one-hour interview was scheduled for a location and time convenient for them, during which each type of subject-matter was investigated based on the questions listed in the interview schedule. Each interview was successfully undertaken, with varying completion times. The shortest interview occupied a total time of 19 minutes, while the longest took 49 minutes. On average, the interviews were completed within 30 - 40 minutes with robust feedback on each interview question.

5.6 Data Analysis

As previously stated, a sequential explanatory mixed methods approach, incorporating both quantitative and qualitative data analysis, was followed to ensure relevant data were analysed for this study. From a quantitative research perspective, this study made use of a survey by using an online questionnaire instrument, with the data collected being analysed using several statistical analysis techniques. In terms of qualitative research, in order to explore and understand a social or human phenomenon, a content analysis was conducted on the primary data collected through in-depth interviews.

5.6.1 Survey instrument: Questionnaire

Using the described web-based questionnaire, all responses were recorded electronically as and when the questionnaires were completed. The web-based

software used stored the responses in a database while recording the number of completed responses. This enabled progress to be monitored throughout the data collection phase. Once the survey window expired, all responses recorded were viewable online and exported to an Excel spreadsheet for analysis. This ensured the accuracy of the reporting and safeguarded the data in electronic format for future reference.

The web-based software verified the completeness of the submissions when questionnaires were flagged as completed once the participant made the final submission. The data gathered was prepared for analysis by exporting the data from the web-based system for import into SPSS, a statistical analysis software programme. The exact format for export included csv/Excel and SPSS format (syntax file and a data file). The system assigned a unique identifier to each respondent and to each question. Responses had a numeric value for analysis while text responses were analysed to identify themes.

The data imported into SPSS underwent the following statistical analyses:

- **Descriptive statistics**

Descriptive statistics describes the means, medians, standard deviations and range of scores for all variables (Pellissier, 2007:3-18). The descriptive statistics reported measures of central tendency and variability for interval data while categorical or nominal data are reported through frequency tables or cross tabulations.

- **Factor analysis**

Gaur and Gaur (2009:131) describe factor analysis as a data reduction technique used to identify a smaller number of factors underlying a large number of observed variables. According to them (2009:131) the dominant purpose of factor analysis lies in the development of objective instruments to measure constructs which are not directly observable in real life.

The Kaiser criterion was used to determine the number of factors to retain; thereby only components with eigenvalues greater than 1 were considered in the analysis. The identified factors were reviewed to ensure suitability for the

study based on the research objectives.

As part of the factor analysis, the internal consistency of the data was measured using the Cronbach's Alpha Coefficient.

- **Correlation analysis**

Pallant (2010:161) refers to correlation analysis as being a tool with which to measure the strength and direction (positive or negative) of a linear relationship between two variables. Elliot and Woodward (2011:77) point out that correlation analysis is utilised to determine whether there is a linear relationship between variables, and that the size of the correlation coefficient determines the strengths of that linear relationship. The said coefficient as used in correlation analysis is a statistic which is used to measure the strength of a linear association between two or more variables (Elliot and Woodward, 2011:77). These authors (2011:78) describe this analysis as illustrating a positive relationship between two variables, implying that in cases where the correlation is positive, whereby one variable increases, the other variable will follow suit. On the other hand, where a negative relationship exists, should the correlation be negative, one variable will increase while the other variable will decrease.

Pallant (2010:161) further explains that Pearson correlation coefficients (r), utilised in this study, are expressed as values between -1 and +1 where the -/+ provides an indication of the direction of the relationship and the absolute value provides an indication of strength. Elliot and Woodward (2011:77) indicate that the closer the value is to 0, the weaker the relationship.

- **Multiple regression analysis**

Nathans, Oswald and Nimon (2012:1-2) describe multiple regression analysis as a regularly utilised statistical tool in research, requiring one to answer questions which consider the role(s) that multiple independent variables play in accounting for variance in a single dependent variable. Nathans, et al. (2012:1-2) further indicate that the use of multiple techniques to assess variable importance will yield a complete representation of the relationship

between independent variables and the dependent variables. Techniques including ANOVA and the adjusted R^2 are utilised to secure variable importance and internal consistency during the interpretation of the results.

- **Cross tabulation, Contingency table and Chi Square Test**

Cross tabulation analysis is conducted to examine the shared distributions of variables by comparing one variable against another one. According to Alan (2013:37) a contingency table, cross-classification or cross tabulation serves as a measure allowing for the comparison of two groups on a categorical response. The result is a picture of the inter-relationship between the two variables, allowing patterns of interaction to emerge.

The cross tabulation provides the input for the Pearson's Chi-square test, a test for the independence of two variables. In the test, the pattern is assessed to determine the degree of association between variables and whether this holds a substantial relevance (Alan; 2013:37).

- **Nonparametric Test: Kruskal-Wallis**

The Kruskal-Wallis test, a rank-based nonparametric test, is used to determine whether there are statistically significant differences between two or more groups of variables from the same population. Such non-parametric tests do not assume that the data being assessed is normally distributed and are best suited when the data size is small (Guo, Zhong and Zang; 2013:135).

- **Cluster analysis**

Pellissier (2007:36) outlines cluster analysis as the categorisation of a set of variables into two or more data clusters. Each cluster belongs to individuals or groups, where members are similar in nature (Pellissier; 2007:36).

5.6.2 Content Analysis

A content analysis is comprised of a comprehensive and methodical assessment of the contents of a specific body of material in order to identify patterns, themes or biases. Content analyses are performed on forms of human communication: books, newspapers, films, television and transcripts of conversations, internet blogs and

bulletin boards. The analysis concentrates on determining certain activities or attitudes that frequently occur across the body of material (Leedy and Ormrod, 2010:142; Mouton, 2001:165-167; Pellissier, 2007:21).

It will be recalled that the focus of this research was on the development of a conceptual framework based on best practice and methods incorporated from different disciplines. A content analysis assists in the development of such a framework by identifying patterns, themes or biases across both secondary data and in-depth interviews (Leedy and Ormrod; 2010:142; Mouton, 2001:165-167).

Secondary data obtained from the detailed literature review assisted in identifying patterns, themes and biases. Such data includes both raw data and published summaries in the form of documentary, survey or multiple source data (Pellissier, 2007:32). According to Saunders et al. (2009:258), documentary data such as books and journals, are often used in research projects to provide extended qualitative data such as managers' reasons for decisions. The inclusion of such data in projects that make use of primary data collection methods, can be used to compare with or provide context and supplies a further triangulation of data to confer validity (Leedy and Ormrod; 2010:99; Saunders et al., 2009:258).

Within this research, a themed content analysis was conducted on primary data. Secondary data were included as part of the literature review, where content was identified as suitable for providing insight into the topic at hand, while the content analysis was conducted on interview transcriptions gathered during in-depth semi-structured interviews.

A thematic content analysis assists the researcher in searching for and identifying common and recurring themes found within the collected data. Taylor-Powell and Renner (2003:1) maintain that a content analysis requires a fluid analysis and interpretation to provide order and understanding, often requiring creativity, discipline and a systematic approach. Taylor-Powell and Renner (2003:2) prescribe a fluid, five step analysis process in order to analyse and interpret qualitative data:

- **Step 1:** Get to know one's data.

Analysis is based upon a detailed understanding of data.

- **Step 2:** Focus the analysis.

The analysis conducted should be focused on answering specific research questions or objectives which will guide the analysis and impact the way in which analysis is started. The focus could be on specific topics or themes, or by case, individual or group, or a combination of both.

- **Step 3:** Categorise information.

By categorising, coding or indexing the data the researcher provides meaning for words found within the data collected. This approach will allow for the identifying of: themes or patterns; ideas, concepts, behaviours, interactions, incidents, terminology or phrases used. By following this approach, data is organised into coherent categories to summarise and provide meaning to the texts.

- **Step 4:** Identifying patterns and connections within and between categories. The researcher having organised and categorised themes, patterns and connections will appear. The relative importance of these will be highlighted, creating larger categories based on relationships.

- **Step 5:** Interpretation.

By using the themes identified, the data will be interpreted to attach meaning and significance to the analysis. Key findings will be synthesised to ensure the meaning is illustrated.

Henning (2004:103) further comments that in order to understand the data analysed the following questions must be posed:

- What are the relationships in the meaning between all the categories?
- What do they say together?
- What do they say about each other?
- What is missing?
- How do they address the research questions?
- How do the categories link with what is known about the topic?
- What additional data gathering or/and analysis is required?

For each in-depth semi-structured interview, all audio recordings were transcribed. To ensure the accuracy and integrity of the data collected, each transcript was saved with the interviewee's name and organisation. The data was then prepared for analysis by making copies to work with and for safekeeping (Taylor-Powell and Renner, 2003:6).

Several rounds of content review were conducted on each transcript. An initial review was conducted by an independent analyst (a research assistant) from the University of Pretoria to provide an unbiased view of the primary messages of the contents. Following this initial compilation process, the researcher reviewed the transcribed content several times to ensure all relevant content had been combined and transferred accurately.

With the use of a table in Excel, key messages and sentences were identified and tabulated for each question in the interview schedule, linked to the interviewee's name and organisation to ensure the ability to reference back to each transcript.

Following the summation of responses per respondent for each question, clusters of responses were grouped per question. Copies of clusters were printed per question and hand tabulations were used on physical documents to develop codes, then transcribed into Excel to allow for their searching and for counting the frequency with which a code occurred or related to another (Taylor-Powell and Renner, 2003:6). Codes were counted, analysed and documented per question.

Following the analysis of each code per question, all codes were combined into a single Excel sheet. The codes were organised into groups of similar ideas, concepts, behaviours, interactions, incidents and terminology or phrases.

These collations of data were then further organised into coherent categories to assist in the development of patterns and connections within and between categories. Categorised coded data was then segmented into sub-themes, based on the relationships between each. This approach drew attention to larger categories based on relationships, identifying overarching themes.

Following the identification of themes and their corresponding sub-themes: each theme was interpreted to develop a definition of each and to attach meaning and

significance. Examples of key messages were extracted to ensure the meaning was clearly illustrated.

Data from the interviews were integrated and synthesised to ensure that differing views were consolidated and specifically noted. The process described by Taylor-Powell and Renner (2003) and Henning (2004) was closely followed to ensure common themes and factors were identified. This would enable the interpretation of the results and ensure the development of a deep understanding of the issues identified. No further quantitative or statistical analysis was conducted upon these findings.

5.7 Assessing and Demonstrating the Quality and Rigour of the Research Design

Each strategy of inquiry, research method and research instrument employs specific criteria and evaluation techniques appropriate for demonstrating the quality and rigour of a research study. The factors which could bias or distort research findings must be identified and effectively managed, to remove any negative impact on these findings.

The quality and rigour of a research design is identified as stemming from the reliability and validity of the research design (Pellissier, 2007:12). Pellissier (2007:12) describes reliability as the extent and accuracy to which data collection techniques or analytical procedures used within research studies are able to produce consistent findings. Validity, on the other hand, is concerned with whether the findings of the research study match the reality and are able to be replicated in different environments (Pellissier, 2007:12).

Within the context of this study, use was made of a questionnaire to collect data from respondents; a content analysis was undertaken on primary data collected using semi-structured interviews. A discussion on each follows.

5.7.1 Survey instrument: Questionnaire

Leedy and Ormrod (2010:93) explain that the reliability of a measurement instrument gauges the extent to which it provides the same results when the phenomena measured has not altered. Several forms of reliability are identified (Leedy and

Ormrod, 2010:93):

- Interrater reliability describes the degree to which two or more researchers evaluating identical products or performance provide indistinguishable judgements
- Internal consistency reliability refers to the degree to which all the items within a particular instrument output comparable results
- Equivalent forms reliability refers to the degree to which two dissimilar versions of the same instrument output comparable results
- Test-retest reliability is the term used to describe the degree to which the same instrument outputs identical results on two different occasions.

For the purpose of this research study, internal consistency was tested by correlating responses to each question with those of other questions in the questionnaire (Saunders et al., 2009:374). Internal consistency was tested during the factor analysis by employing the most commonly utilised method of testing for internal consistency, i.e. Cronbach's Alpha (Saunders et al., 2009:374).

The validity of a measurement instrument refers to that instrument's ability to measure what it was actually intended to measure, or the extent to which it does (Leedy and Ormrod, 2010:92; Pellissier, 2007:12). Validity can exist in different forms (Leedy and Ormrod, 2010:93; Pellissier, 2007:12; Saunders et al., 2009:372-373):

- Face validity is the extent to which, on the surface, an instrument appears as if it is measuring a particular characteristic. Face validity relies on subjective judgement and is not considered convincing evidence.
- Content validity is the extent to which a measurement instrument is a representative sample of the content area being measured.
- Criterion validity is the extent to which the results of an assessment instrument correlate with another, presumably related measure. It is concerned with the ability of the measures to make accurate predictions.
- Construct validity is the extent to which an instrument measures a characteristic that cannot be directly observed but must instead be inferred from patterns in people's behaviour.

In the context of validity in this research study, the questionnaire was tested for face validity, content validity and construct validity through a process of pre-testing the research instrument by piloting it to a small number of individuals and conducting the factor analysis. Suggestions and feedback provided were incorporated into the final questionnaire.

5.7.2 Semi-structured or in-depth interviews

Saunders et al. (2009:326) identify three data quality issues in relation to the use of semi-structured and in-depth interviews: reliability, forms of bias and validity. In qualitative research, reliability relates to whether alternative studies would reveal similar results, and these relate predominantly to issues of bias. Interviewer bias occurs when an interviewer's comments, tone or non-verbal behaviour affect the way in which an interviewee responds to questions asked. A response bias is the result of perceptions about the interviewer, or in relation to interviewer bias. Validity refers to the ability to gain access to the required knowledge and experience, and to infer the meaning that the participant intended (Saunders et al., 2009:326-327).

Saunders et al. (2009:328) believe that findings from qualitative interviews are not necessarily intended to be repeatable as they reflect reality at a point in time and may change as the situation evolves. The assumption is that the circumstances to be explored are complex and dynamic (Saunders et al., 2009:328). The authors further suggest that when using such methods, all notes, reasons for the design and methods and data obtained should be retained in order to be referred to by other researchers.

To ensure success in interviews and to overcome any bias, the researcher must prepare thoroughly by (Saunders et al., 2009:328-335): increasing her/his level of knowledge on the subject, supplying information to the interviewee prior to the interview, selecting an appropriate location and ensuring professional appearance, being aware of opening comments and approach to questioning, ensuring the correct behaviour during the interview, demonstrating active listening skills, testing understanding, recording data and recognising the significance of cultural difference and bias.

5.8 Research Ethics

As Saunders et al. (2009:183) point out, ethics outline a researcher's behaviour in relation to the rights of the individuals who take part, are affected by or are the subject of a research study. Furthermore, Saunders et al. (2009:184) emphasise that research ethics also relate to how a researcher formulates and clarifies their research topic, designs their research, gains access, collects data, processes and stores data, analyses data and writes up the research findings in a moral and responsible manner. This stance applies throughout the research study, ensuring that the design of the research remains methodologically sound and morally defensible, taking into account the rights of those involved in the research process (Saunders et al., 2009:184).

The abovementioned authors (2009:185) outline a number of key ethical issues which arise during a research study. These include: the privacy of possible and actual participants, the voluntary nature of participation and the right to withdraw partially or completely, consent from and possible deception by participants, maintenance of the confidentiality of data provided by participants and their anonymity; the reactions of participants to the way in which data is collected, used and analysed and the behaviour and objectivity of the researcher (Saunders et al., 2009:185).

Leedy and Ormrod (2010:101) provide stipulate four additional categories for ethical consideration:

- Protection from harm: research subjects should not be exposed to unnecessary physical or psychological harm while participating in a study
- Informed consent: All participation studies should be conducted strictly on a voluntary basis, with participants informed of their right to withdraw at any time. Furthermore, all of them must be given sufficient information from which to decide on whether they would like to partake in the research. All must provide their consent through the signing of a consent form. Leedy and Ormrod (2010:102) emphasise that such a document should include: a brief description of the study, activities, and duration; a statement indicating that participation is voluntary; a guarantee that all responses will remain

anonymous and confidential; contact details of the respondent; an offer to provide detailed information once the study is completed and a place where a participant may sign and date the consent form.

- Right to privacy: All research conducted, involving human beings, must respect the participants' right to privacy. They must be given unique identifiers and any written documents must be labelled as such, while anonymity must be ensured through the use of pseudonyms to conceal the identity of participants if their responses are described in detail.
- Honesty with professional colleagues: Leedy and Ormrod (2010:103) insist that it is imperative that researchers report their findings in a complete and honest manner, with no misrepresentation or fabrication of data. Furthermore, the authors indicate that letters of permission must be obtained from relevant authorities in order to approach participants of a study (Leedy and Ormrod, 2010:104).

As mentioned, this research study involved direct interaction with subject-matter experts, senior executives and organisational employees. Due to the nature of the subject matter, individuals approached were requested to provide their consent and approval. This was completed prior to the interview, while obtaining a meeting time and approval was mandatory for completion of the online questionnaire.

For the purposes of this research study, both a paper-based and online informed consent form (Annexure A and B contains the informed consent forms used in the study) were provided to and accepted by participants in this study. Ethics during the data collection phase requires that all participants be allowed an opportunity to withdraw from the survey. The online survey facility allowed individuals to discontinue their submission entirely without any means of tracing the respondents. This ensured anonymity in submissions. As a result of the survey being conducted online, and therefore being self-administered, there was no opportunity for the researcher to influence respondents in terms of participation or responses.

All completed responses, both from the interviews and the online surveys used in the data analyses, provide an honest representation of findings. The use of organisational names was restricted in this research, as agreed to with the

respective organisations contacted to participate in the study.

Ethical clearance was issued by the Faculty of Economic and Management Sciences: Research Ethics Committee of the University of Pretoria, in order to conduct this study.

5.9 Conclusion

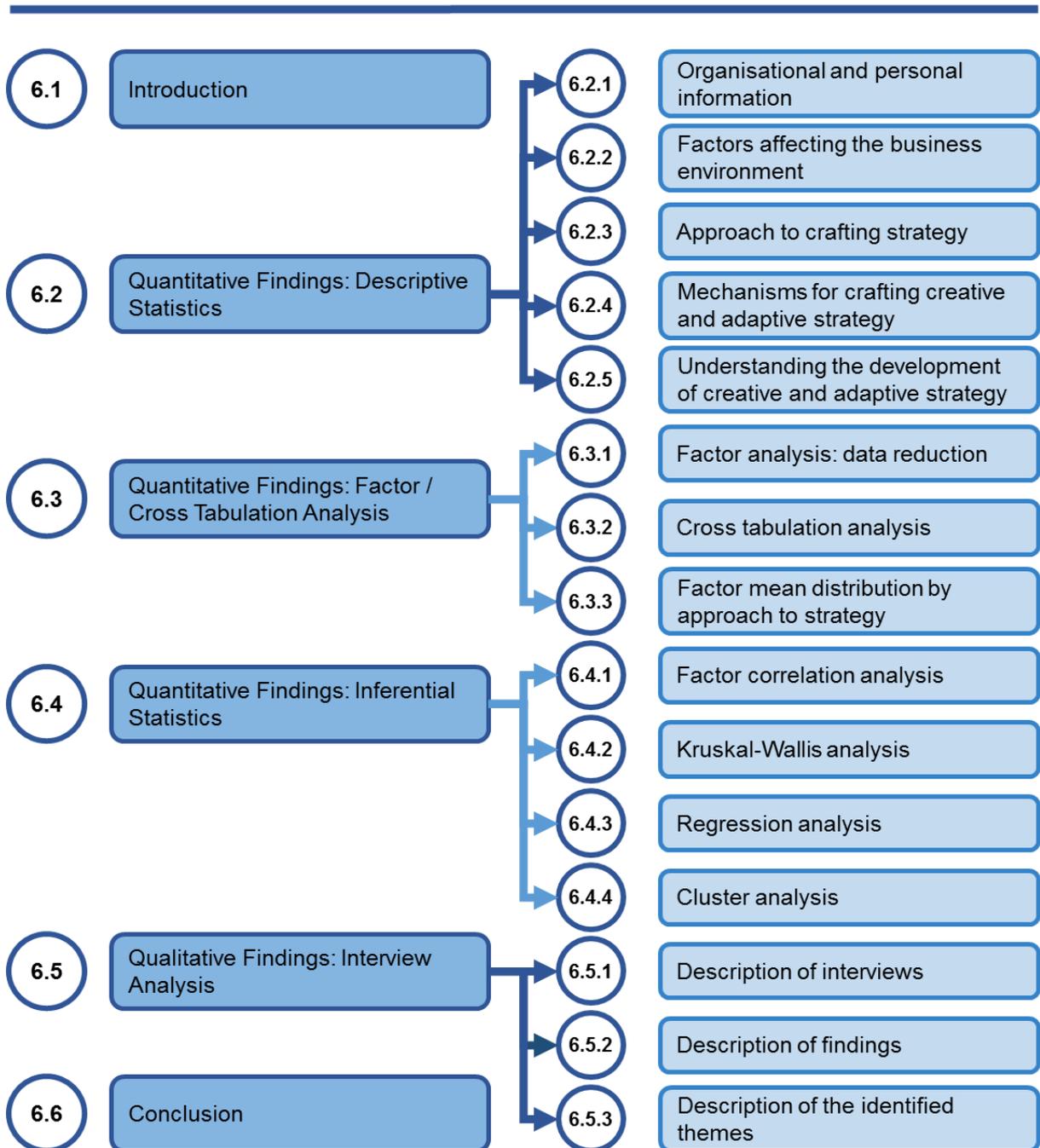
Chapter 5 introduced the research philosophy and design as well as the selection of population and sampling, and the data collection and analysis methods used in this study. The research instruments were discussed in detail, including a review of the response rate; this discussion was supplemented by one on the quality and rigour of the research design and ethical issues considered.

Chapter 6 presents the quantitative and qualitative findings of the research, broken down into variables, based on the output provided by the two sequential explanatory mixed methods approach research instruments, the survey questionnaire and interview schedule.

Chapter 6

Research Findings

Chapter 6 Research Findings



“Perception is strong and sight weak. In strategy it is important to see distant things as if they were close and to take a distanced view of close things”

– *Miyamoto Musashi, legendary Japanese swordsman*

6.1 Introduction

The previous chapter outlined the research methodology used during this study and provided specific information regarding the research paradigm/philosophy and design, the population and sample and the data collection and analysis methods. This chapter discusses the quantitative and qualitative findings of the study based on the output provided by the two research instruments – the survey questionnaire and the qualitative interview schedule.

The structure of this chapter is segmented according to the nature of the findings from each research instrument.

Quantitative findings are reported first, using descriptive statistics. Findings are structured in the same way as outlined in the questionnaire.

Each section presents a discussion of the results, following by a ranking of the variables by mean and standard deviation in order to explore the location and variability of the data. To illustrate the Likert-type scale respondent results, a diverging stacked bar graph is used (Robbins and Heiberger, 2011:1060).

Following the extraction of descriptive statistics for each of the variables, an exploratory factor analysis was conducted to determine whether the data could be reduced into factor subsets to be used in further inferential analysis. Seventeen factors were identified and examined for internal consistency (reliability) using the Cronbach’s Alpha test. A correlation analysis was undertaken to identify the strength and direction of linear relationships between the factors.

The next section of the chapter reports on the findings following the extraction of several sets of inferential statistics based on the identified factors. The said statistics included a regression analysis across the identified factors to determine the statistical significant predictors when considering a set of independent variables and a specific identified dependent variable. Cross-tabulation analysis was conducted to

determine further relationships between variables and their significance, followed by the depiction of findings. In addition, a Kruskal-Wallis analysis was conducted to determine any differences between the responses of organisations of different sizes. In concluding the inferential statistics, a cluster analysis was conducted to reveal any potential natural groupings or clusters within the data set.

The final section of the chapter focused on presenting the *qualitative findings* output by means of a thematic content analysis of the interview transcripts. The section furnishes an overview of the interviews followed by a description of the finding aligned to the focus area of each interview.

Following the previously described thorough codification, dominant codes were organised into seventeen sub-themes and aligned to six overarching themes. Each theme was defined, sub-themes highlighted and codes aligned with supporting quotations to provide a thorough description of findings.

The importance of this chapter is found in its presentation of the findings of this research, from which conclusions are drawn and triangulated across the literature review, quantitative and qualitative findings in the concluding chapter.

6.2 Quantitative Findings: Descriptive Statistics

As noted, the quantitative findings are presented through the use of descriptive statistics. Findings are structured following the logical flow and structure of the survey questionnaire instrument. The different parts and sub-sections of the questionnaire include:

- Part 1:
 - Organisational and personal information
- Part 2:
 - Factors affecting the business environment
 - Approach to crafting strategy
 - Mechanisms for crafting creative and adaptive strategy
 - Understanding the development of creative and adaptive strategy.

Each section includes a discussion of the results, followed by a ranking of the variables by mean and standard deviation in order to explore the location and

variability of the data.

The results of several questions are depicted using pie charts and bar graphs. To illustrate the Likert-type scale respondent results, Robbins and Heiberger (2011:1060) suggest using a diverging stacked bar graph. This depicts the results by illustrating a zero line (0 as depicted at the top of the graph). Percentages of respondents who agree with the statement appear to the right of the zero line; the percentages of those who disagree are shown to the left. Percentages of respondents who neither agreed nor disagreed, or displayed a response regarded as the "central point" of the scale, are split down the middle and depicted in grey. Where a scale is comprised of an even number of choices, the neutral category is depicted (Robbins and Heiberger, 2011:1060).

6.2.1 Organisational and personal information

Part 1 of the research questionnaire focussed on organisational and personal characteristics of the respondents. To this end, **Questions 1.2 to 1.5** were grouped into information regarding the organisation, followed by **Questions 1.6 to 1.10** which focussed on collecting demographic information with regard to the respondents themselves.

Question 1.2 aimed to determine the number of employees employed by the respective organisation. The question consisted of three scales: fewer than 200 employees; between 200 – 1000 employees; and more than 1000 employees. The results are provided in Figure 15 below.

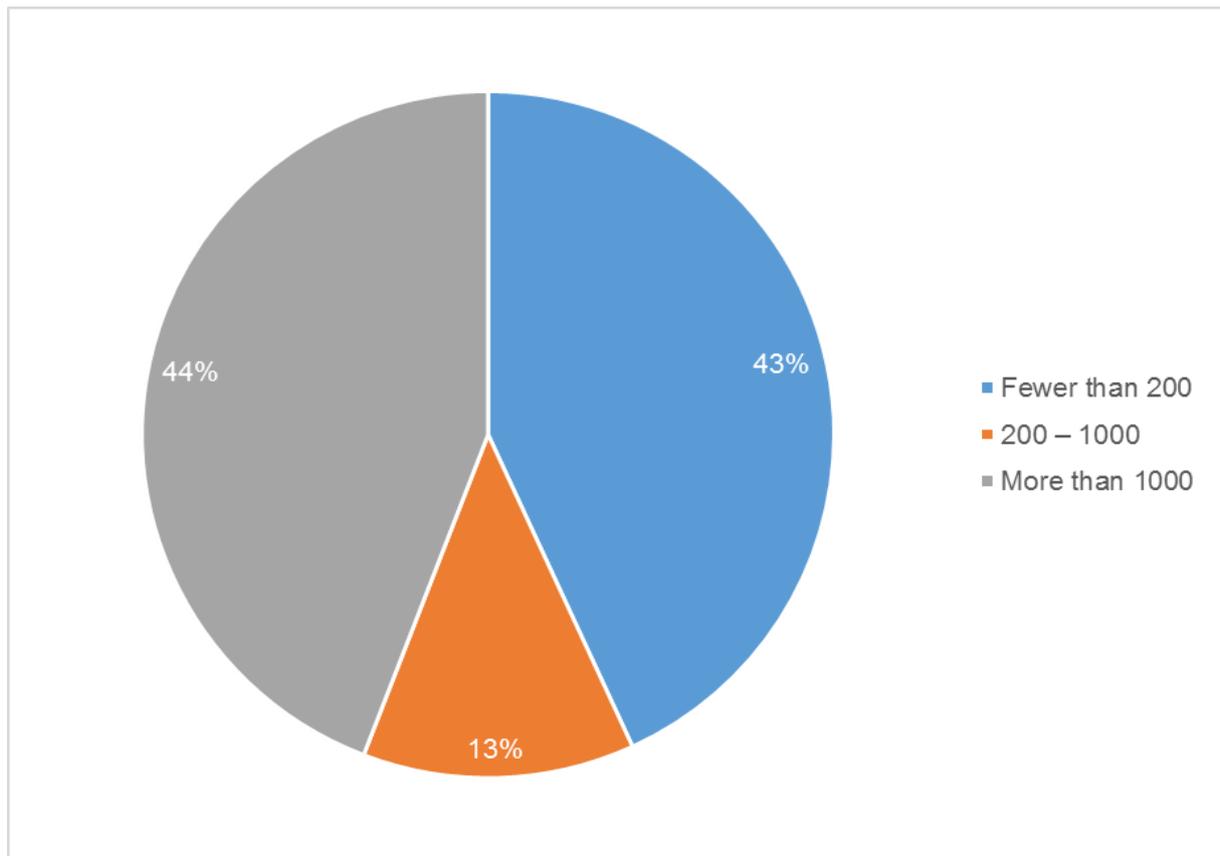


Figure 15 – Question 1.2: Number of Employees (n=102)

The spread of responses across the three scales evidenced a dichotomy between small and large organisations, with 43% of respondents having selected fewer than 200 employees; 13% between 200 – 1000 employees and 44% selecting the option for more than 1000 employees.

Question 1.3 was intended to determine the geographical exposure of the organisation's operations. The question identified whether the respondents were actively engaged internationally or solely maintained a South African footprint. Figure 16 below visually depicts the geographical exposure of the respondents.

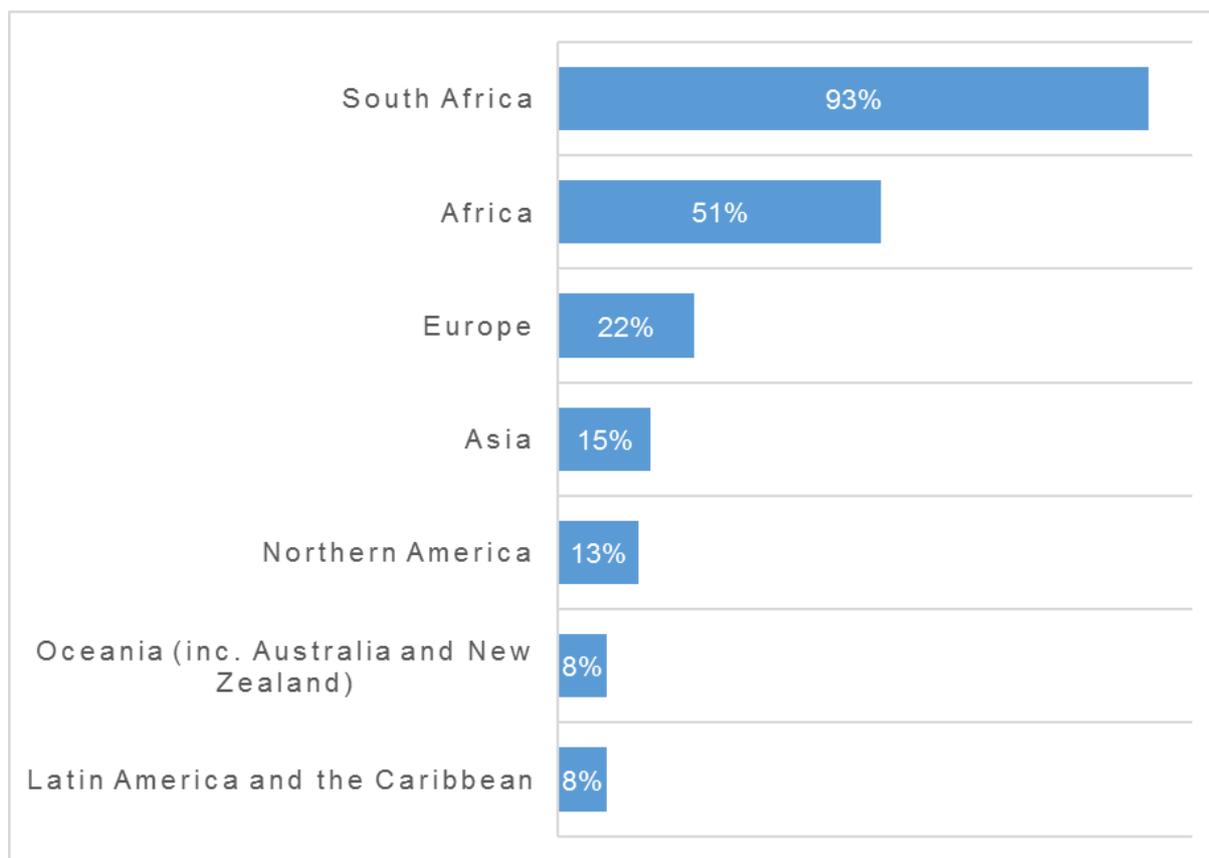


Figure 16 - Question 1.3: Geographical exposure of operations (n=102)

The question provided stakeholders with the opportunity to select more than one response; therefore, the percentages will not add up to a 100%. The results for Question 1.3 clearly indicate that 93% of organisations (the majority) have just a South African footprint while 51% indicated African exposure and a number of organisations indicated international exposure: 22% to Europe; 15% to Asia; 13% to Northern America; 8% to Oceania and 8% to Latin America and the Caribbean.

Seven percent of respondents did not indicate exposure to South Africa. However, a detailed review of the data determined that of the 7% of respondents which did not select South Africa, 3% were organisations with exposure to several African countries (including South Africa) while the remaining 4% of organisations were identified as universities and local institutions with an African focus not limited to South Africa. This therefore distorted the results to reflect just a 93% response for South Africa. Considering this information, it is clear all respondents had a South African focus.

Question 1.4 aimed to establish in which business sector the respondent's

organisation was based. Figure 17 below depicts the results.

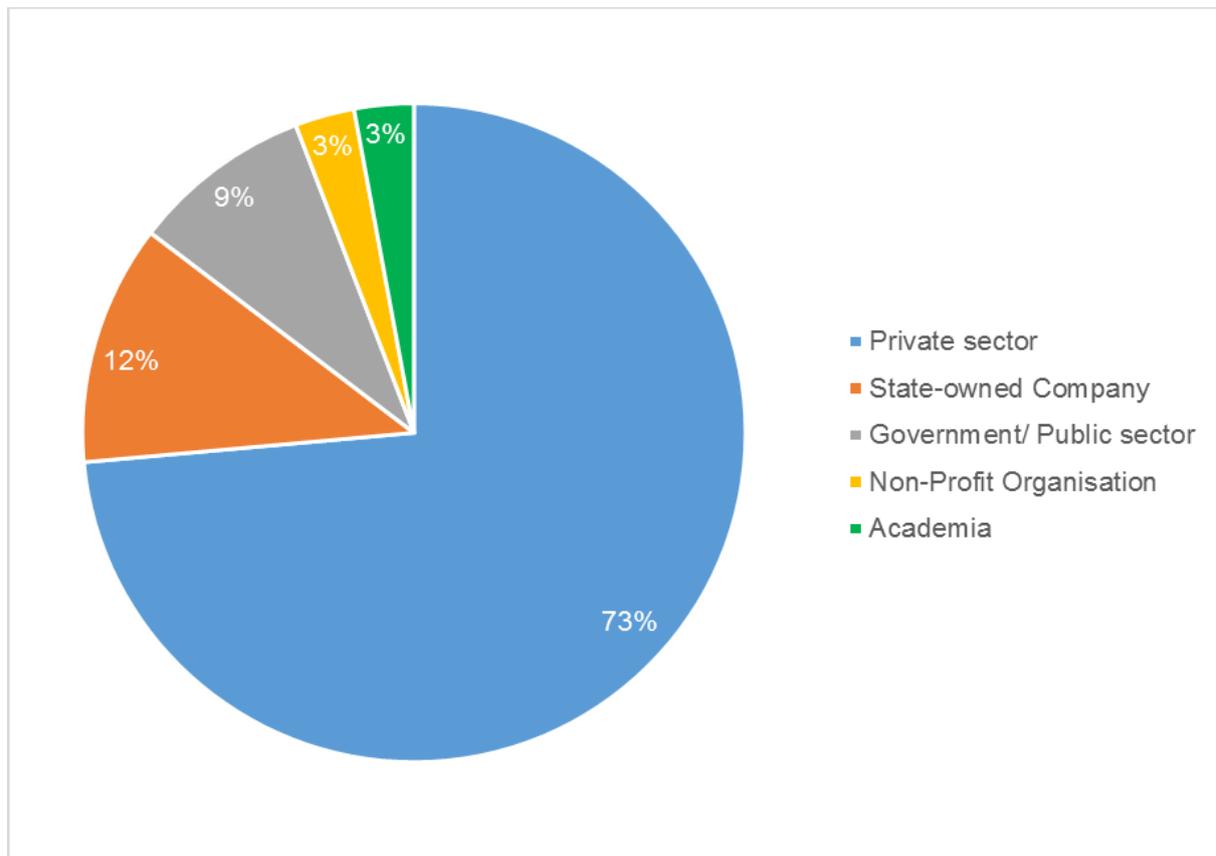


Figure 17 – Question 1.4: Business sector (n=102)

The large majority of respondents (73%) were in the private sector, with the second largest group identified as state-owned companies (12%). The remaining organisations included: 9% identified as government or public sector institutions; 3% as non-profit; and a further 3% as academic institutions.

In addition to the business sector, **Question 1.5** aimed to narrow down the industry sector in which the organisations are based. Figure 18 below provides the industry view.

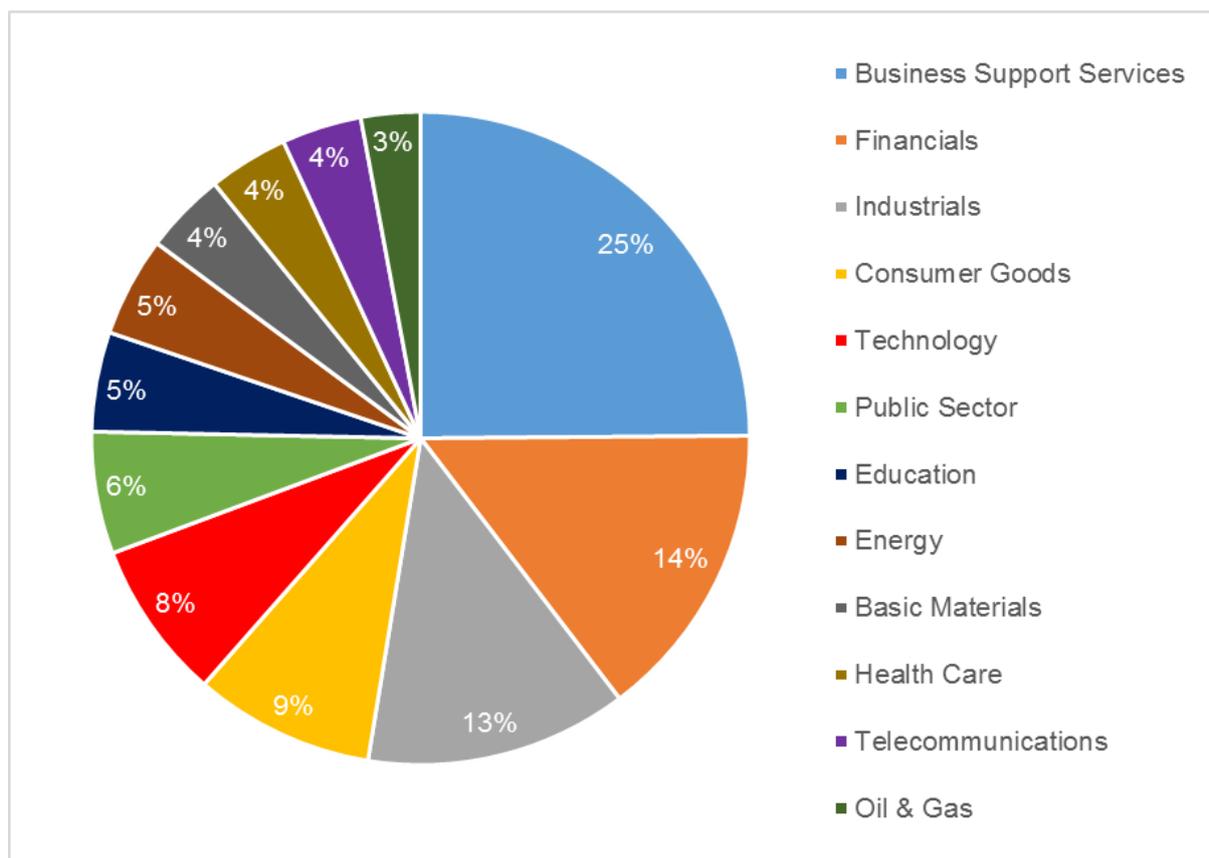


Figure 18 – Question 1.5: Revised industry sectors (n=102)

The results indicated that “other” was selected by 29% of the respondents, followed by business support services (17%), financials (12%), consumer goods (9%), industrials (8%), and technology (8%).

After a detailed investigation into the responses provided for the “other” option, it was established that the majority of the responses could be categorised into the 10 industry sectors provided in the questionnaire, with two additional sectors included: Energy and the Public Sector. Based on this revised view, the largest industry sector was business support services (25%); followed by financials (14%); industrials (13%); consumer goods (9%) and technology (8%).

Question 1.6 was designed to determine the respondent’s position or level within their organisation. Figure 19 below depicts these results.

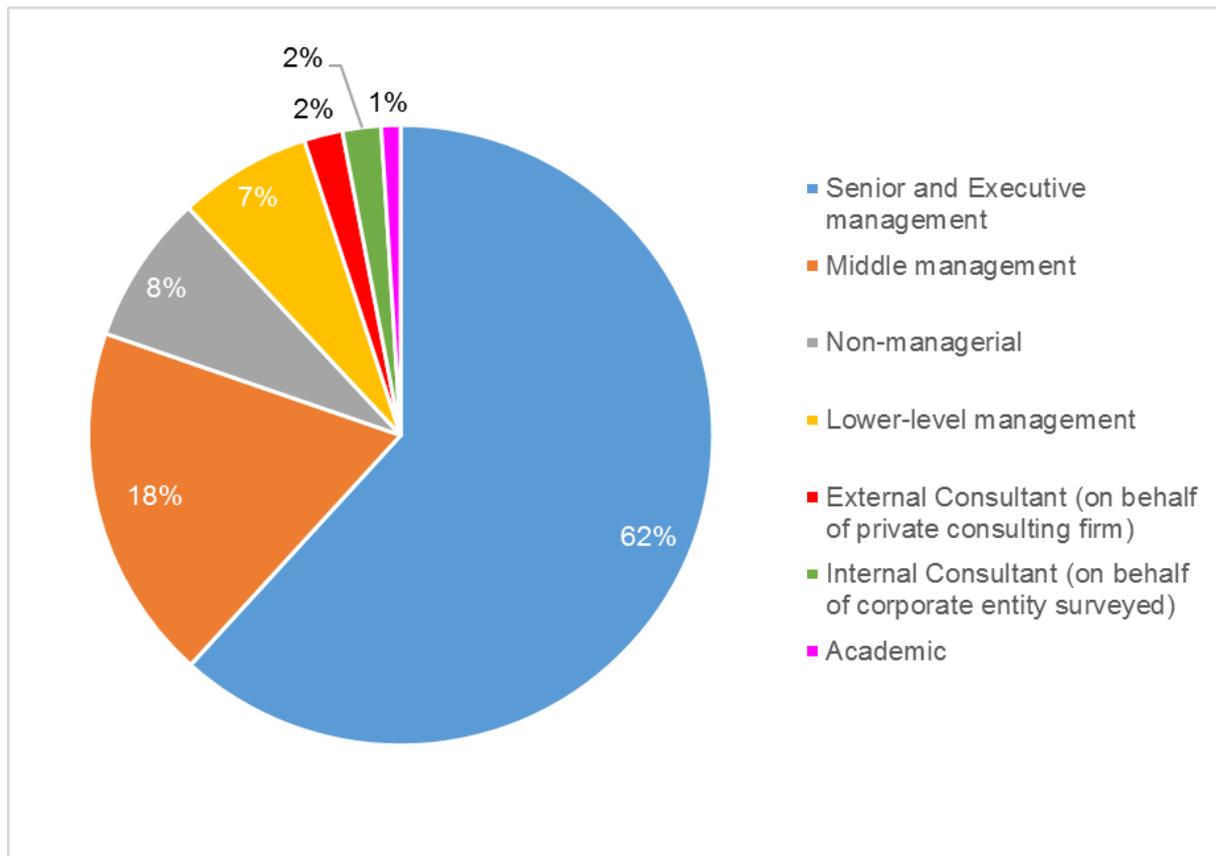


Figure 19 - Question 1.6: Position/level within organisation (n=102)

The results indicated that 62% of respondents occupied a senior and executive management role, with 18% indicating a middle management role and 7% in lower management. The remaining respondents (13%) were spread across non-managerial, consulting and academic roles.

Question 1.7 aimed to determine the period of time that the respondent had been in the employ of their respective organisation. Figure 20 below depicts the results.

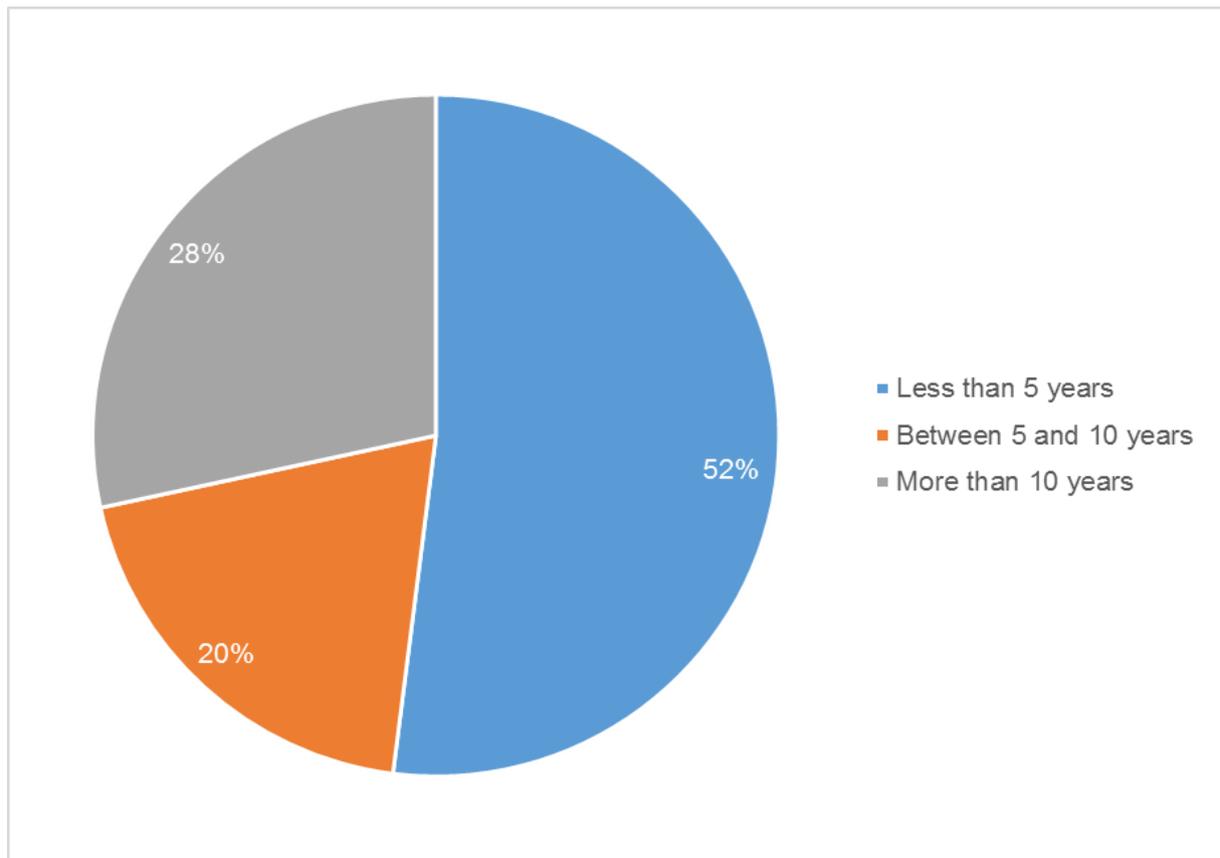


Figure 20 - Question 1.7: Period within organisation (n=102)

Three scales were used: less than 5 years; between 5 and 10 years and more than 10 years. Just over half (52%) of the respondents indicated that they had been in their position for less than 5 years, 20% between 5 and 10 years and 28% for more than 10 years.

Question 1.8 was devised to determine the respondent's functional area of involvement within their organisation. Figure 21 below illustrates the results.

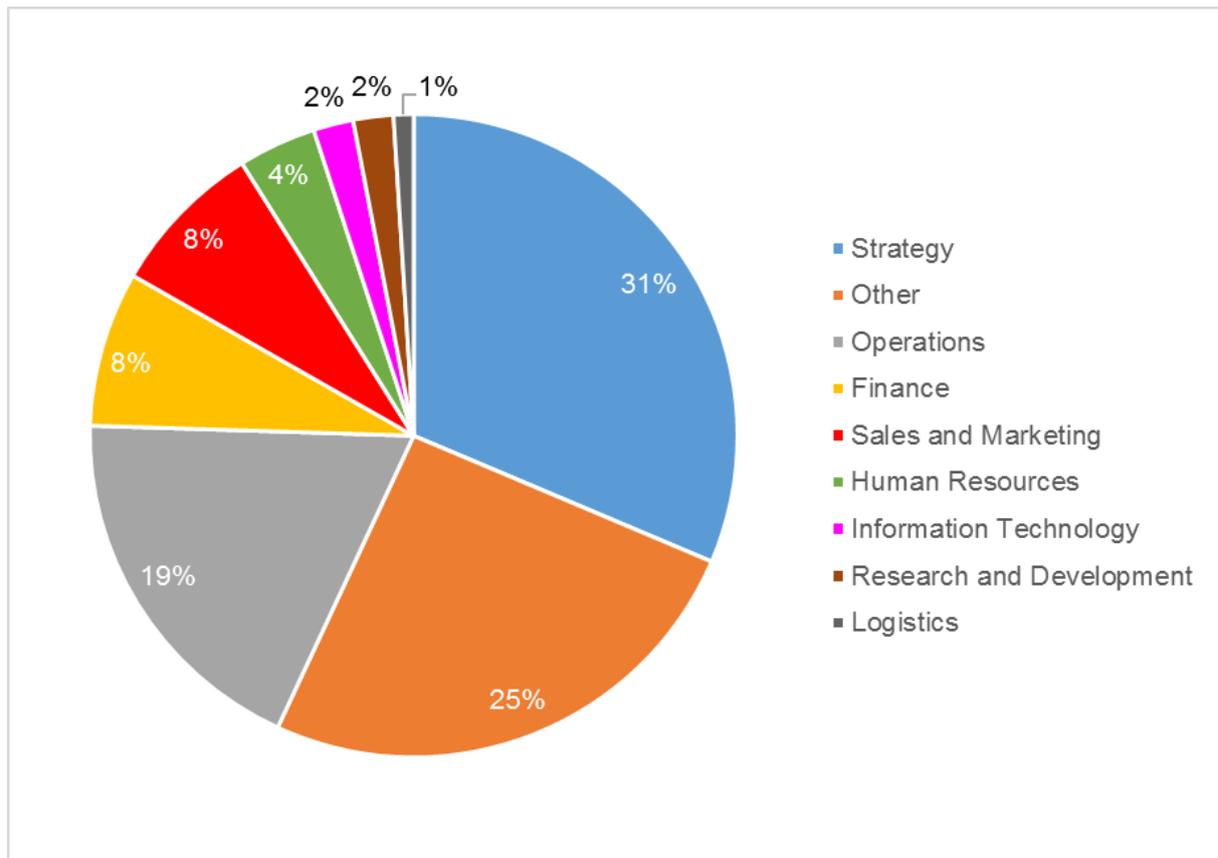


Figure 21 - Question 1.8: Functional Area of Involvement (n=102)

The results indicated that the majority of respondents were working within the functions of strategy (31%), operations (19%), finance (8%), or sales and marketing (8%). Upon further review, the “other” (25%) functional area could be broken down into strategy (12%) and operations (13%).

Question 1.9 aimed to establish the highest level of education of the respondent. Figure 22 below illustrates the results.

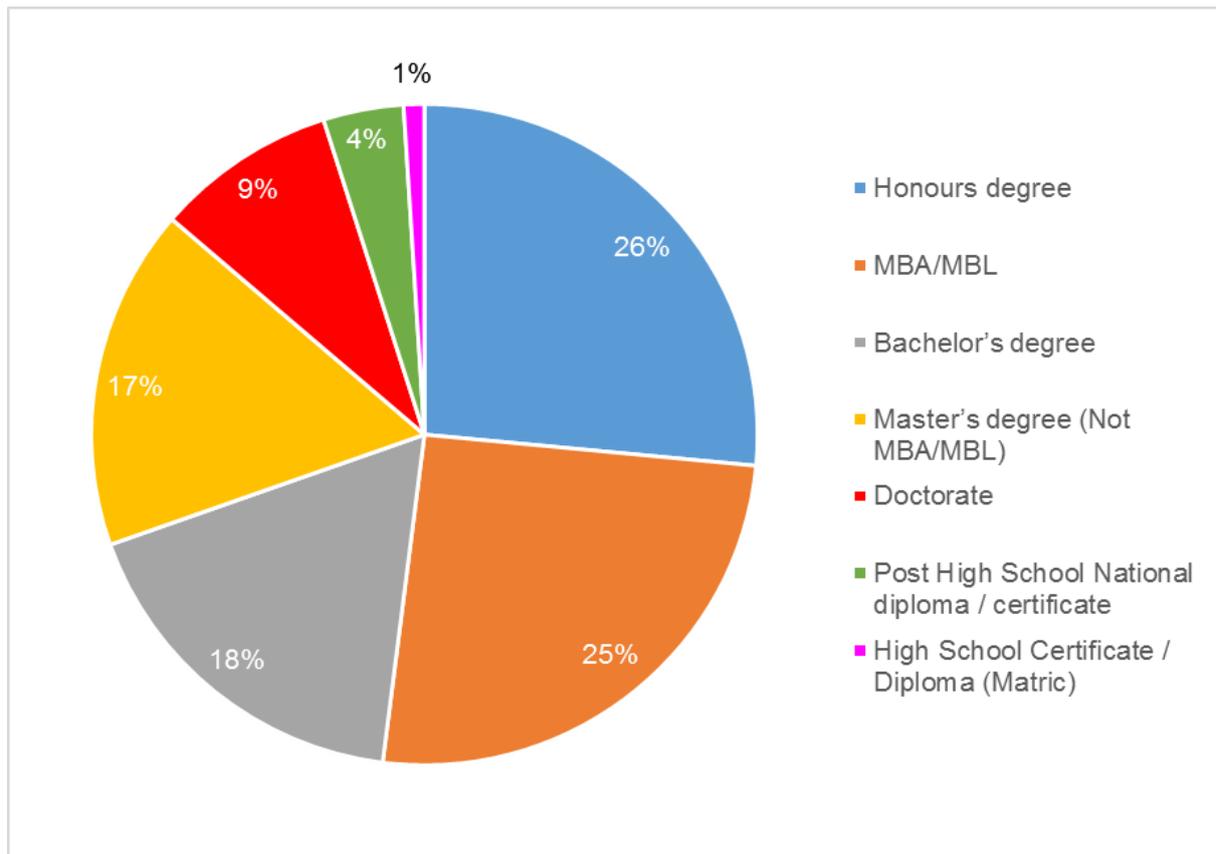


Figure 22 – Question 1.9: Highest level of education (n=102)

The majority of respondents identified their highest level of education as an honours or higher level postgraduate degree (77%) with 18% possessing a bachelor's degree and 5% a high school or post high school national certificate.

Question 1.10 aimed to establish the level of the respondents' education by focusing on the specific type of formal strategy training the respondent had undertaken. Respondents could select multiple options if applicable. Figure 23 below illustrates the results.

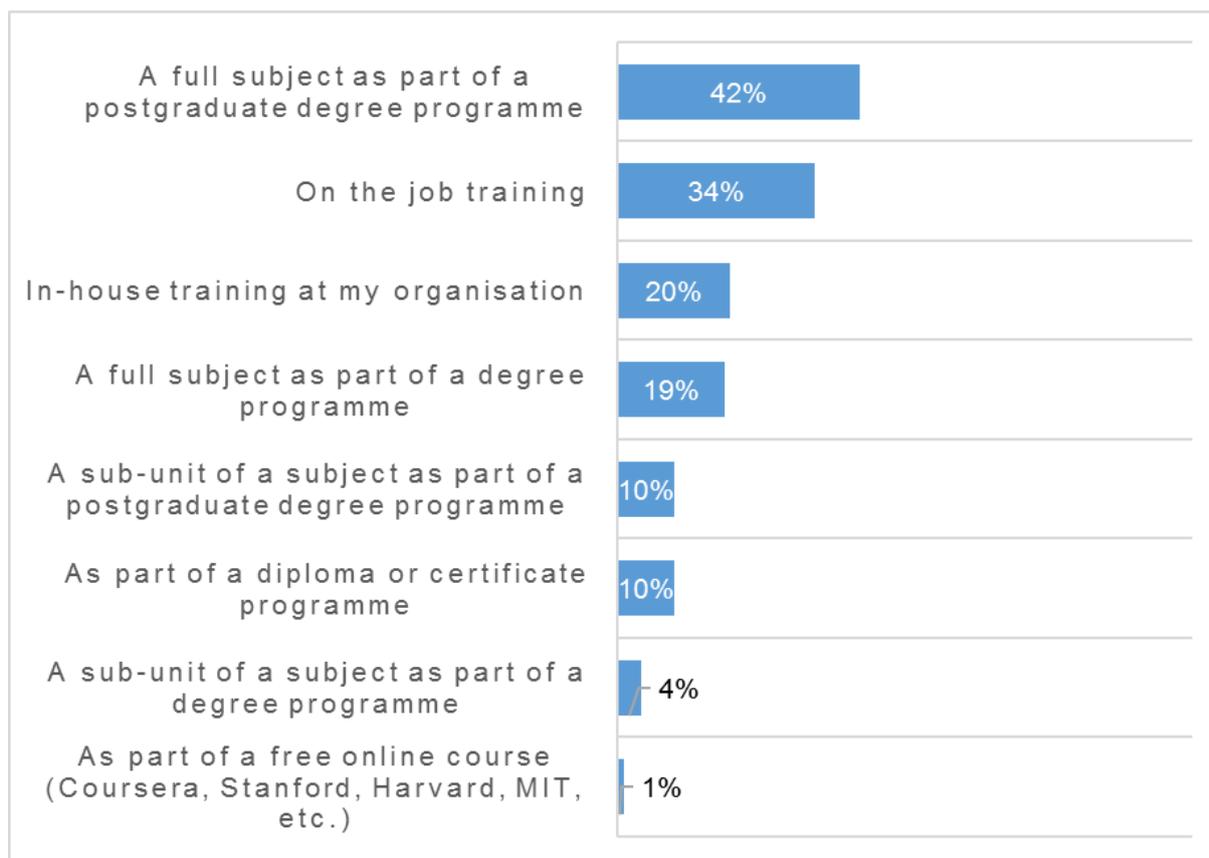


Figure 23 - Question 1.10: Types of formal strategy training undertaken (n=102)

The results indicated that 42% of respondents have undertaken a full strategy subject as part of a postgraduate degree programme, with an additional 19% having studied strategy as a full subject as part of a degree programme. Fourteen percent undertook a sub-unit of a subject as part of a degree or post graduate degree programme and 10% as part of a diploma or certificate programme. In addition, 34% have undertaken on-the-job training while 20% have undergone in-house training at their respective organisations. Just 1% indicated that they had undertaken strategy training as part of a free online course.

Aligned with this definition of the respondents, the following considers the results of Part 2 of the questionnaire.

6.2.2 Factors affecting the business environment

The **first section of Part 2** of the questionnaire was designed to investigate the factors that affect the business environment of each respondent's organisation.

As a result of the pace of change within the external business environment (Marren,

2010:59; Reeves, 2009) and considering that organisations have been found to encounter several internal behavioural problems during the development of strategy (Lenz and Lyles, 1981:73; Roxburgh, 2003:26-39; O'Shannassy, 1999:15; Speculand, 2011:3-4), it is critical to understand the primary factors affecting organisations within the South African context as input for achieving the research objectives. To this end, **Questions 2.1.1 to 2.1.24** were developed to determine the following:

- To what extent do changing external dynamics of the business environment impact the level of uncertainty and potential sustainability of the organisation
- The current state of strategy within the organisation
- Whether external or internal organisational dynamics have impacted the organisation's development or execution of its strategy in the past five years
- Whether the organisation has a systematic process for monitoring external threats and opportunities
- Whether the organisation systematically acts on external threats and opportunities
- Whether the organisation actively considers how to manage uncertainty in their organisation?

The various questions in section 1, within Part 2 of the questionnaire, are divided into three groups and are discussed in the ensuing paragraphs.

6.2.2.1 Discussion of results

The **first group of questions** within section 1 focused on the effect of the external environment on the organisation. **Questions 2.1.1 to 2.1.9** comprised a dual Likert-type scale to determine the level of uncertainty and the potential impact of the listed factors on the sustainability of the organisation. The factors included: political, economic, social, technological, legal, environmental, demographic and competition. The results are depicted in Figure 24 and 25 below as a diverging stacked bar graph.

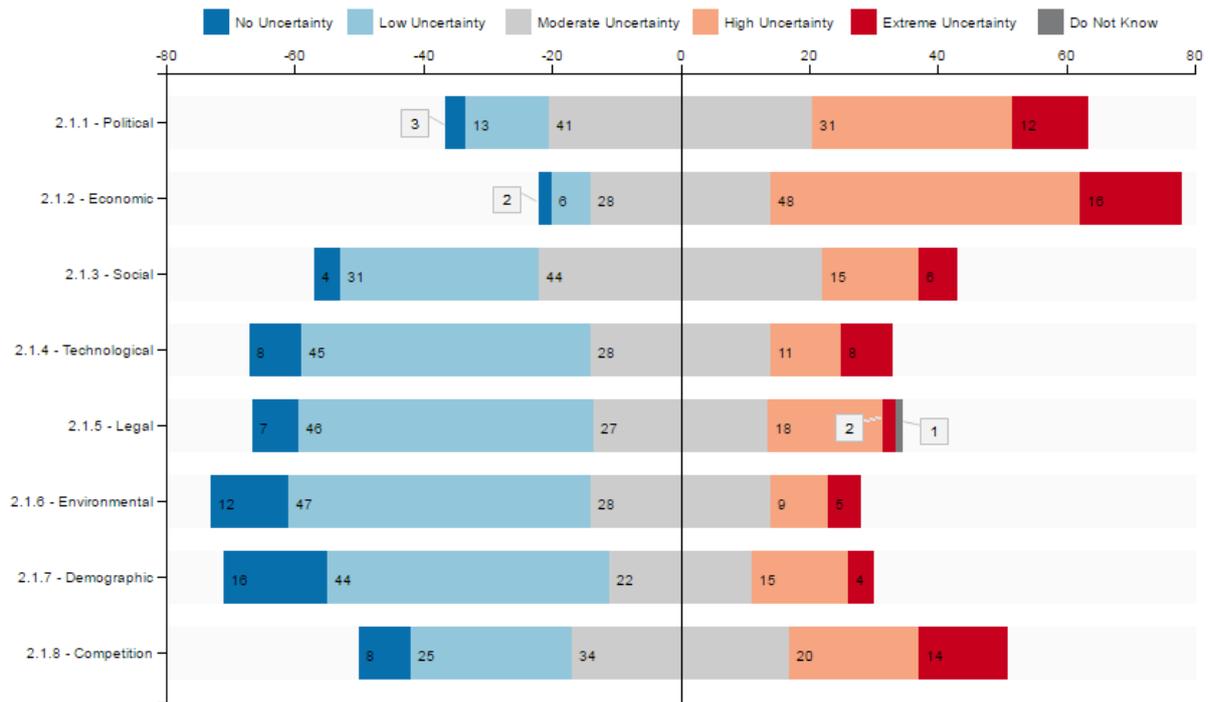


Figure 24 - Questions 2.1.1 to 2.1.9: Level of uncertainty the changing external dynamics of the business environment imposes on an organisation (n=102)

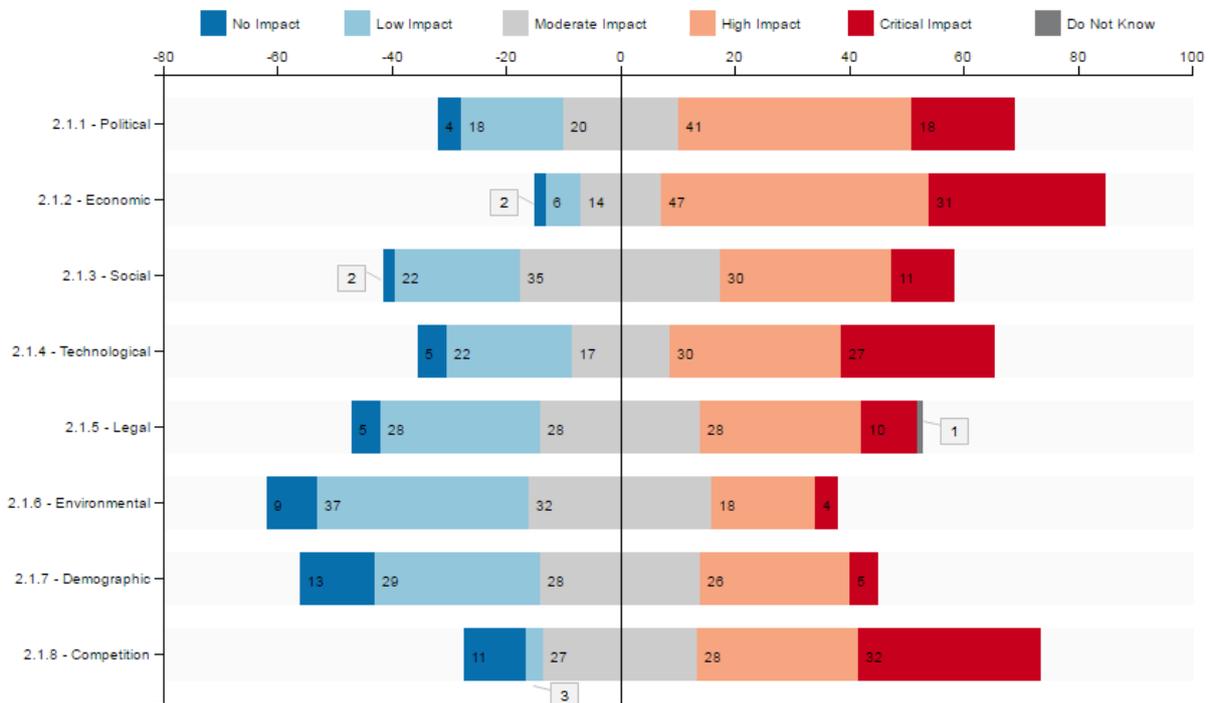


Figure 25 - Questions 2.1.1 to 2.1.9: Potential impact that the changing external dynamics of the business environment have on the sustainability of an organisation (n=102)

The diverging stacked bar graphs depict the results by illustrating a zero line (0 as depicted at the top of the graph). Percentages of respondents who responded with

high to extreme uncertainty to the statement appear to the right of the zero line; the percentages of those who responded with no to low uncertainty are listed to the left. Percentages of respondents who suggested moderate uncertainty or displayed a response regarded as the "central point" of the scale, are split down the middle and depicted in grey.

The mean, standard deviation and the percentage of response results for the variables for **Questions 2.1.1 to 2.1.8**, with a focus on **uncertainty** of external dynamics, are illustrated in Table 13 below.

Table 13 - Questions 2.1.1 to 2.1.8: External dynamics - Uncertainty variables

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT				
External dynamics - Uncertainty:				
Variable	Question	Mean	Std. deviation	Result
2.1.1	Political	3.36	0.956	84% of respondents indicated moderate to extreme political uncertainty
2.1.2	Economic	3.70	0.880	92% of respondents indicated moderate to extreme economic uncertainty
2.1.3	Social	2.87	0.924	75% of respondents indicated low to moderate social uncertainty
2.1.4	Technological	2.66	1.042	73% of respondents indicated low to moderate technological uncertainty
2.1.5	Legal	2.61	0.927	73% of respondents indicated low to moderate legal uncertainty
2.1.6	Environmental	2.48	0.976	87% of respondents indicated no to moderate environmental uncertainty
2.1.7	Demographic	2.47	1.045	82% of respondents indicated no to moderate demographic uncertainty
2.1.8	Competition	3.07	1.135	82% of respondents indicated low to high competitive uncertainty

In addition, Table 14 below further illustrates the variables and the summary of mean, standard deviation and the percentage of response results for **Questions 2.1.1 to 2.1.8**, with the aim of investigating which variables **impact the sustainability** of an organisation.

Table 14 - Questions 2.1.1 to 2.1.8: External dynamics - Impact on sustainability

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT				
External dynamics - Impact on sustainability:				
Variable	Question	Mean	Std. deviation	
2.1.1	Political	3.51	1.092	79% of respondents indicated moderate to critical political environment impact
2.1.2	Economic	4.00	0.938	78% of respondents indicated high to critical economic environment impact
2.1.3	Social	3.26	0.989	87% of respondents indicated low to high social environment impact
2.1.4	Technological	3.52	1.238	57% of respondents indicated high to critical technological environment impact
2.1.5	Legal	3.11	1.076	84% of respondents indicated low to high legal environment impact
2.1.6	Environmental	2.71	0.981	78% of respondents indicated no to moderate environmental environment impact
2.1.7	Demographic	2.80	1.107	83% of respondents indicated low to high demographic environment impact
2.1.8	Competition	3.68	1.264	87% of respondents indicated moderate to critical competitive environment impact

In conjunction with the tables above, the factors affecting the business environment – as per **Questions 2.1 to 2.8** – were depicted with the use of a portfolio graph. To achieve this, the mean scores for each of the respective factors, “uncertainty” and “impact levels”, were utilised and depicted as the horizontal and vertical axis. Figure 26 below illustrates the portfolio graph.

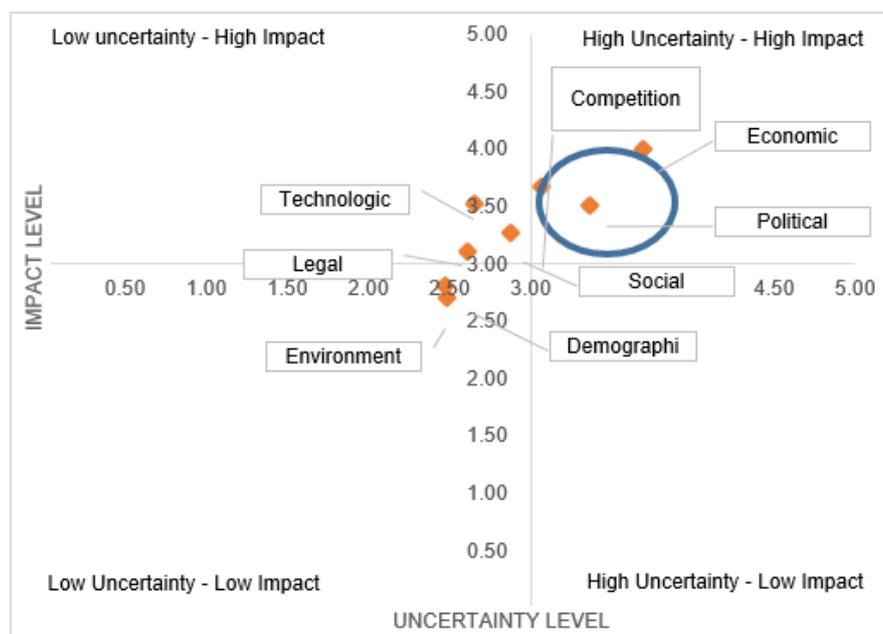


Figure 26 - Questions 2.1.1 to 2.1.8: Factors affecting the business environment
Portfolio Graph

The graph above clearly illustrates that three areas, economic, political and competition, are considered as high uncertainty and high impact areas. The technological, legal, and social factors were considered to be low uncertainty and high impact areas, while demographic and environmental factors were considered to be low uncertainty, low impact areas.

The final **Question, 2.1.9**, requested respondents to provide any other external dynamics which may impact their organisation. Ten (10) additional external dynamics were indicated by the respondents:

- The labour environment increases difficulty in doing business in South Africa
- Dependent upon Government subsidies and donations to be effective where programmes are sponsored, yet no additional governmental nor organisational personnel are provided to drive the programmes
- Failures of various State-Owned Companies (e.g. Eskom, SAA, Post Office etc.) result in a loss of clients to the private sector
- Financial environment limitations
- Human resources are regarded as separate from social trends where skills and expertise are required to support growth strategy
- Negative international benchmarking trends of regulators
- Limited international collaboration
- Lack of confidence due to lack of support from government for lengthy periods of time
- Legislative and regulatory environment hindrances – differentiated from the legal environment
- The major decreased demand for commodities and over-supply of other commodities, with subsequent decrease in commodity prices and decreased demand for our support services in those industries, severely negatively impact the private sector.

The **second group of questions** within **section 1 - Questions 2.1.10 to 2.1.17** - focused on the effect of internal organisational dynamics on the organisation and interrogated respondents concerning the current state of strategy within their organisation. The results are depicted in Figure 27 below.

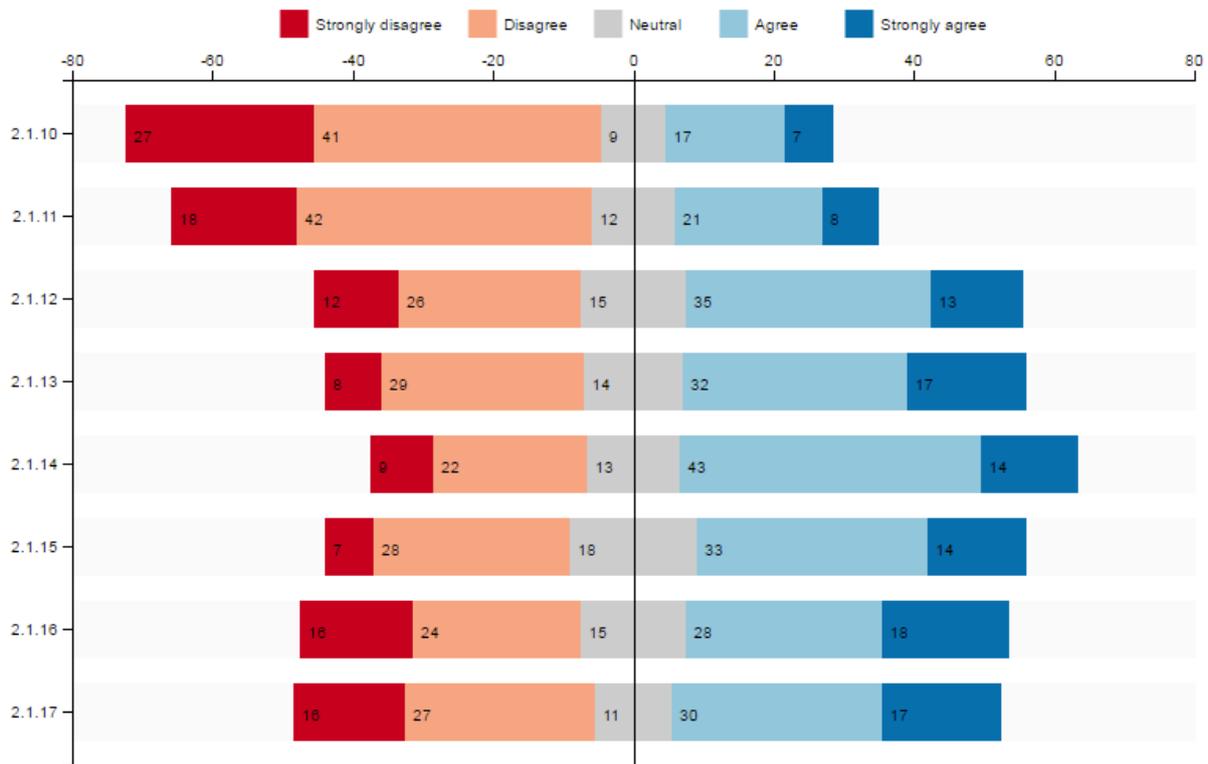


Figure 27 - Questions 2.1.10 to 2.1.17: State of strategy in organisations (n=102)

The diverging stacked bar graph depicts the results by illustrating a zero line (0 as depicted at the top of the graph). Percentages of respondents who agree with the statement appear to the right of the zero line; the percentages of those who disagree are shown to the left. Percentages of respondents who neither agreed nor disagreed, or displayed a response regarded as the "central point" of the scale, are split down the middle and depicted in grey.

As a summary, the mean, standard deviation and the percentage of response results for the variables for **Questions 2.1.10 to 2.1.17** are illustrated in Table 15 below.

Table 15 - Question 2.1.10 to 2.1.17: Internal dynamics

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT				
Internal dynamics:				
Variable	Question	Mean	Std. deviation	Results
2.1.10	Our strategy is flawed.	2.36	1.233	68% of respondents disagreed, 17% agreed and 7% strongly agreed with the statement, making it clear that the majority of organisations view their strategy as being sound
2.1.11	We misinterpret strategic insight.	2.59	1.222	60% of respondents disagreed with the statement, indicating that the majority of organisations correctly interpret strategic insight
2.1.12	We respond slowly to strategic insight.	3.12	1.261	48% agreed or strongly agreed with the statement, making it clear that the majority of respondents felt their organisations respond slowly to strategic insight
2.1.13	We struggle with the execution of our strategy.	3.21	1.253	49% of respondents agreed or strongly agreed with the statement, making it clear that the majority of respondents felt their organisations struggled with the execution of their strategy
2.1.14	Mind-sets and behaviours hinder our strategy.	3.31	1.210	57% of respondents agreed or strongly agreed with the statement, indicating clearly that mind-sets and behaviours hinder an organisation's strategy
2.1.15	Limited organisational capabilities hinder our strategy.	3.19	1.192	47% of respondents agreed or strongly agreed with the statement, indicating that the majority of organisations struggle with limited capabilities, which hinder their strategy
2.1.16	Organisational culture hinders our strategy.	3.09	1.365	46% of respondents agreed and strongly agreed, while 40% disagreed or strongly disagreed, indicating that the majority of organisations felt that organisational culture hinders their strategy
2.1.17	Organisational communication hinders our strategy.	3.06	1.370	47% of respondents agreed and strongly agreed while 43% disagreed or strongly disagreed indicating that the majority of organisations believe that organisational communication hinders their strategy

The results distinctly illustrate that organisations view their strategy as being sound and are able to correctly interpret strategic insight; however, they respond slowly to strategy insight and execute their strategy poorly. In addition, mind-sets and behaviours, organisational capabilities, organisational culture and organisational communication all hinder an organisation's strategy.

The **third group of questions** within section 1 – **Questions 2.1.18 to 2.1.24** – focused on the overall impact of organisational dynamics on the organisation and questioned respondents on whether internal and external dynamics have impacted the development and execution of their organisation’s strategy. In addition, respondents were questioned on whether they had a systematic process in place for monitoring and responding to threats and uncertainty. The results are depicted in Figure 28 below.

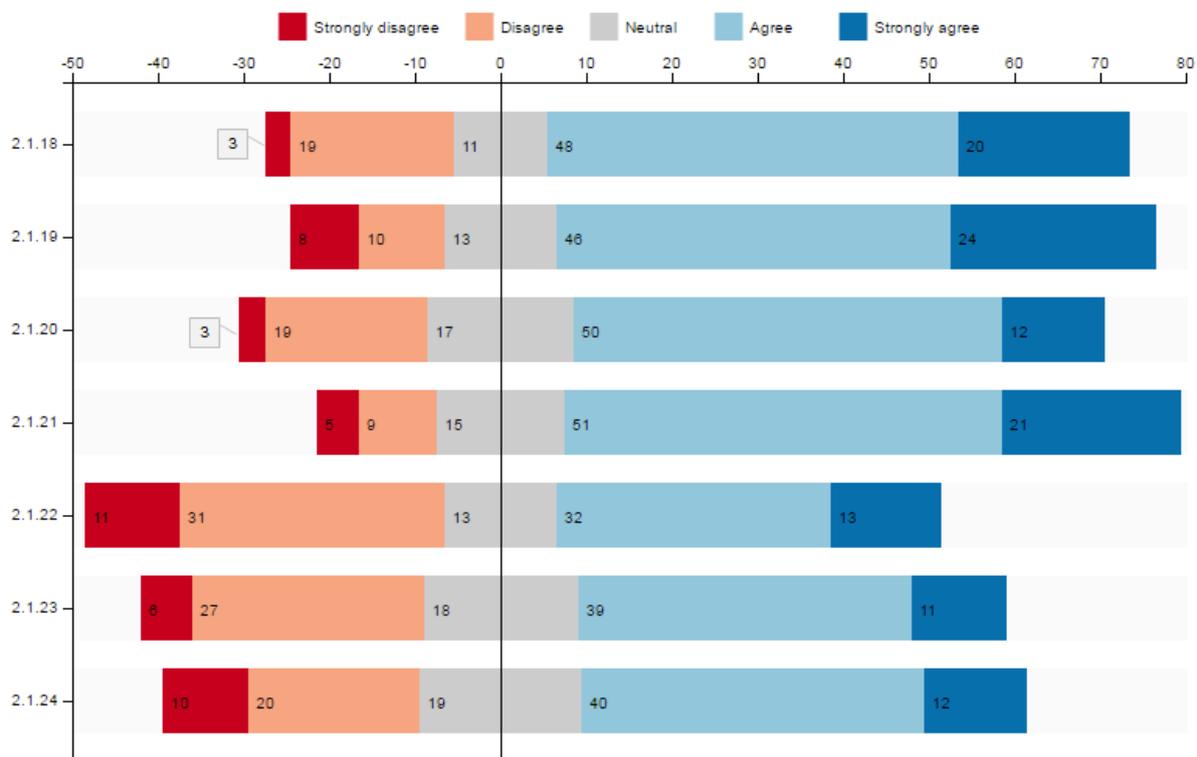


Figure 28 - Questions 2.1.18 to 2.1.24: Impact of organisational dynamics (n=102)

The first question in this group was **Question 2.1.18**, which enquired whether external organisational dynamics have impacted the organisation’s strategy development in the past five years. The mean was determined to be 3.63 with a standard deviation of 1.089, indicating a wide spread of responses to the statement. The result indicates that 68% of respondents were in agreement, clearly demonstrating that the majority of organisations felt that the development of their strategy had been impacted by external organisational dynamics in the past five years.

Question 2.1.19 conversely questioned whether internal organisational dynamics

had impacted the organisation's strategy development in the past five years. The mean was determined to be 3.68, with a standard deviation of 1.170, indicating a wide spread of responses to the statement. The result indicates that 70% of respondents were in agreement, indicating that the majority of organisations felt that the development of their strategy had been impacted by internal organisational dynamics in the past five years.

In **Question 2.1.20**, the focus reverts to the external environment by questioning whether external organisational dynamics have impacted the organisation's strategy execution/implementation in the past five years. The mean was determined to be 3.49, with a standard deviation of 1.022, indicating a spread of responses to the statement. The result indicates that 62% of respondents were in agreement, but a large proportion (17%) selected a neutral response to the question. The result suggests that the majority of organisations felt that external organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years.

In addition to Question 2.1.19, **Question 2.1.21** focuses on internal organisational dynamics, questioning whether internal organisational dynamics have impacted the organisation's strategy execution/implementation in the past five years. The mean was determined to be 3.74 with a standard deviation of 1.043, indicating, again, a spread of responses to the statement. The result indicated that 72% of respondents were in agreement, with 15% opting for a neutral response to the question. The result suggests that the majority of organisations felt internal organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years.

Question 2.1.22 aimed to determine whether organisations have a systematic process for monitoring external threats and opportunities. The mean was determined to be low at 3.05 with a high standard deviation of 1.262, indicating a high spread of responses to the statement. The result indicates that 45% of respondents were in agreement but 42% were in disagreement with the question. The result depicts a clear dichotomy, with a slightly higher percentage of organisations having a systematic process for monitoring external threats and opportunities in place.

Question 2.1.23 aimed to determine whether organisations systematically act on external threats and opportunities. The mean was determined to be 3.23 with a high standard deviation of 1.134, indicating a high spread of responses to the statement. The result indicates that while 50% of respondents were in agreement, 33% were in disagreement. The result suggests that the majority of organisations felt they systematically act on external threats and opportunities.

In addition, **Question 2.1.24** aimed to determine whether organisations actively consider how to manage uncertainty. The mean was determined to be 3.25 with a high standard deviation of 1.189, indicating a high spread of responses to the statement. The result indicated that 52% of respondents were in agreement with the question. The result suggests that a narrow majority of organisations felt they actively consider how to manage uncertainty.

6.2.2.2 Ranking variables

Focusing on the variables answered by the respondents, within the first section of Part 2 of the questionnaire, the tabulation of the overall mean and standard deviation results identify the variables that are, on average, considered as the most and least important by the respondents. The ranking of the variables by mean and standard deviation was completed in order to explore the location and variability of the data. All the variables are ranked in Tables 16 to 23 below.

Table 16 below, illustrates the variables for **Questions 2.1.1 to 2.1.8** with a focus on **uncertainty** of external dynamics, sorted by their mean scores.

Table 16 - Questions 2.1.1 to 2.1.8: External dynamics - Uncertainty variables sorted by mean

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT				
External dynamics - Uncertainty:				
Variable	Question	Mean	Std. deviation	
2.1.2	Economic	3.70	0.880	
2.1.1	Political	3.36	0.956	
2.1.8	Competition	3.07	1.135	
2.1.3	Social	2.87	0.924	
2.1.4	Technological	2.66	1.042	
2.1.5	Legal	2.61	0.927	
2.1.6	Environmental	2.48	0.976	
2.1.7	Demographic	2.47	1.045	

The ranking clearly illustrates a variation in responses from respondents to all the questions, with the higher mean scores indicating variables which have a higher level of uncertainty. The high mean scores for Questions 2.1.1 and 2.1.2 indicate that political and economic factors lead to the highest level of uncertainty in the majority of organisations.

Table 17 below, illustrates the variables for **Questions 2.1.1 to 2.1.8** with the aim of understanding which variable **impacts the sustainability** of an organisation, sorted by their mean scores.

Table 17 - Questions 2.1.1 to 2.1.8: External dynamics - Impact on sustainability sorted by mean

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
External dynamics - Impact on sustainability:			
Variable	Question	Mean	Std. deviation
2.1.2	Economic	4.00	0.938
2.1.8	Competition	3.68	1.264
2.1.4	Technological	3.52	1.238
2.1.1	Political	3.51	1.092
2.1.3	Social	3.26	0.989
2.1.5	Legal	3.11	1.076
2.1.7	Demographic	2.80	1.107
2.1.6	Environmental	2.71	0.981

The ranking clearly illustrates a variation in responses from respondents to all the questions, with the higher mean scores indicating variables which have a higher impact on sustainability. The high mean scores for question 2.1.2 and 2.1.8 clearly depict the difficult economic and competitive environment and the perceived impact on organisational sustainability in South Africa.

Table 18 below illustrates the variables for **Questions 2.1.10 to 2.1.17** sorted by their mean scores.

Table 18 - Questions 2.1.10 to 2.1.17: Internal dynamics sorted by mean

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
Internal dynamics:			
Variable	Question	Mean	Std. deviation
2.1.14	Mind-sets and behaviours hinder our strategy	3.31	1.210
2.1.13	We struggle with the execution of our strategy	3.21	1.253
2.1.15	Limited organisational capabilities hinder our strategy	3.19	1.192
2.1.12	We respond slowly to strategic insight	3.12	1.261
2.1.16	Organisational culture hinders our strategy	3.09	1.365
2.1.17	Organisational communication hinders our strategy	3.06	1.370
2.1.11	We misinterpret strategic insight	2.59	1.222
2.1.10	Our strategy is flawed	2.36	1.233

The ranking clearly illustrates a spread in agreement to the responses, with the higher mean scores depicting agreement with the statements. Variables 2.1.13 to 2.1.15 indicate that mind-sets and behaviours, execution and limited capabilities affect organisations as identified by their mean score being above 3.0, indicating an almost perfect spread between 1,2 on the one side of the scale and 3,4 on the other; while the majority of respondents felt that they interpreted strategic insight correctly, and that their strategies are not flawed.

Table 19 below illustrates the variables for **Questions 2.1.18 to 2.1.24** sorted by their mean scores.

Table 19 - Questions 2.1.18 to 2.1.24: Organisational dynamics sorted by mean

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
Organisation dynamics:			
Variable	Question	Mean	Std. deviation
2.1.21	Internal organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years	3.74	1.043
2.1.19	Internal organisational dynamics have impacted the organisation's development of its strategy in the past five years	3.68	1.170
2.1.18	External organisational dynamics have impacted the organisation's development of its strategy in the past five years	3.63	1.089
2.1.20	External organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years	3.49	1.022
2.1.24	We actively consider how to manage uncertainty in our organisation	3.25	1.189
2.1.23	We systematically act on external threats and opportunities	3.23	1.134
2.1.22	We have a systematic process for monitoring external threats and opportunities	3.05	1.262

The ranking illustrates that the majority of respondents agreed positively to all the statements, with the higher mean scores relating to internal and external dynamics and their impact. The mean scores were found to be lower for the remaining questions, which indicated a perceived lack of management of uncertainty and availability of systematic processes for monitoring and acting on external threats and opportunities.

Table 20 below sorts the tabulated variables for **Questions 2.1.1 to 2.1.8**, with a focus on **uncertainty** of external dynamics, by their standard deviation scores, which depict the level of agreement between respondents.

Table 20 - Questions 2.1.1 to 2.1.8: External dynamics - Uncertainty variables sorted by standard deviation

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
External dynamics - Uncertainty:			
Variable	Question	Mean	Std. deviation
2.1.8	Competition	3.07	1.135
2.1.7	Demographic	2.47	1.045
2.1.4	Technological	2.66	1.042
2.1.6	Environmental	2.48	0.976
2.1.1	Political	3.36	0.956
2.1.5	Legal	2.61	0.927
2.1.3	Social	2.87	0.924
2.1.2	Economic	3.70	0.880

The higher the standard deviation score, the greater the range of responses to the question, indicating a lack of consensus among the respondents' answers. The highest standard deviation found was for variable 2.1.8, competition, and was 1.135. The tabulated ranking shows that the variable with the highest mean score has the lowest standard deviation.

Table 21 below sorts the tabulated variables for **Questions 2.1.1 to 2.1.8**, with the aim of understanding which variable **impacts the sustainability** of an organisation, by their standard deviation scores.

Table 21 - Questions 2.1.1 to 2.1.8: External dynamics - Impact on sustainability sorted by standard deviation

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
External dynamics - Impact on sustainability:			
Variable	Question	Mean	Std. deviation
2.1.8	Competition	3.68	1.264
2.1.4	Technological	3.52	1.238
2.1.7	Demographic	2.80	1.107
2.1.1	Political	3.51	1.092
2.1.5	Legal	3.11	1.076
2.1.3	Social	3.26	0.989
2.1.6	Environmental	2.71	0.981
2.1.2	Economic	4.00	0.938

Variable 2.1.8, competition, ranks the highest with a standard deviation of 1.264, indicating the greatest range of responses to the question, evidencing a lack of consensus in the respondents' answers. The tabulated ranking shows that the variable with the highest mean score has the lowest standard deviation.

Table 22 below sorts the tabulated variables for **Questions 2.1.10 to 2.1.17**, by their standard deviation scores.

Table 22 - Questions 2.1.10 to 2.1.17: Internal dynamics sorted by standard deviation

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
Internal dynamics:			
Variable	Question	Mean	Std. deviation
2.1.17	Organisational communication hinders our strategy	3.06	1.370
2.1.16	Organisational culture hinders our strategy	3.09	1.365
2.1.12	We respond slowly to strategic insight	3.12	1.261
2.1.13	We struggle with the execution of our strategy	3.21	1.253
2.1.10	Our strategy is flawed	2.36	1.233
2.1.11	We misinterpret strategic insight	2.59	1.222
2.1.14	Mind-sets and behaviours hinder our strategy	3.31	1.210
2.1.15	Limited organisational capabilities hinder our strategy	3.19	1.192

Variables 2.1.17 and 2.1.16, which focus on communication and culture, have the highest standard deviation scores, indicating a high lack of consensus among the respondents' answers. In addition, variables 2.1.14 and 2.1.15, referring to mind-sets and behaviours and organisation capabilities respectively, both have high mean scores but have the lowest standard deviation. In general, the standard deviation scores of the variables grouped are high, indicating a wide difference in opinion in how internal dynamics impact the organisation.

Table 23 below sorts the tabulated variables for **Questions 2.1.18 to 2.1.24**, by their standard deviation scores.

Table 23 - Questions 2.1.18 to 2.1.24: Organisational dynamics sorted by standard deviation

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT			
Organisation dynamics:			
Variable	Question	Mean	Std. deviation
2.1.22	We have a systematic process for monitoring external threats and opportunities	3.05	1.262
2.1.24	We actively consider how to manage uncertainty in our organisation	3.25	1.189
2.1.19	Internal organisational dynamics have impacted the organisation's development of its strategy in the past five years	3.68	1.170
2.1.23	We systematically act on external threats and opportunities	3.23	1.134
2.1.18	External organisational dynamics have impacted the organisation's development of its strategy in the past five years	3.63	1.089
2.1.21	Internal organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years	3.74	1.043
2.1.20	External organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years	3.49	1.022

Variables 2.1.22 and 2.1.24 had the highest standard deviation scores, indicating a high lack of consensus in the respondents' answers. The questions focus on whether organisations have a systematic process for monitoring external threats and whether they actively consider how to manage uncertainty, respectively. In general, the standard deviation scores of the variables are high, indicating a wide difference in opinion, with the lowest standard deviation scores focusing on how external and internal dynamics have impacted the organisation – an area where the majority of respondents agreed positively.

6.2.3 Approach to crafting strategy

The **second section of Part 2** of the questionnaire was designed to understand the approaches used to craft strategy.

As noted, strategy involves winning by differentiating an organisation from its competitors, focused on its ability to create and deliver superior value offerings to stakeholders (Tovstiga, 2010:4). Strategy-making includes the creating and operationalising, or putting into practice, of a strategy or strategies using a linear or non-linear, formal or informal process (Pretorius and Maritz, 2011:25). The approach used by an organisation will depend not only on the environment in which it competes, but also on the understanding of strategy by organisational practitioners.

To this end, Questions **2.2.1 to 2.2.9** were developed to establish the following:

- To gain a view of organisations' understanding of strategy
- To gain a view of the organisational process of crafting strategy
- To what extent traditional analytical frameworks and tools are used within organisations for strategy development
- To what extent alternative frameworks and tools are used within organisations for strategy development
- The preference for and extent to which organisations use frameworks and tools to support the development of strategy.

The various questions in section 2, Part 2 of the questionnaire are discussed here.

6.2.3.1 Discussion of results

The first question within section 2 – **Question 2.2.1** provided two alternative strategy-making approaches as statements, which describe how organisations understand strategy. The results are depicted in Figure 29 below.

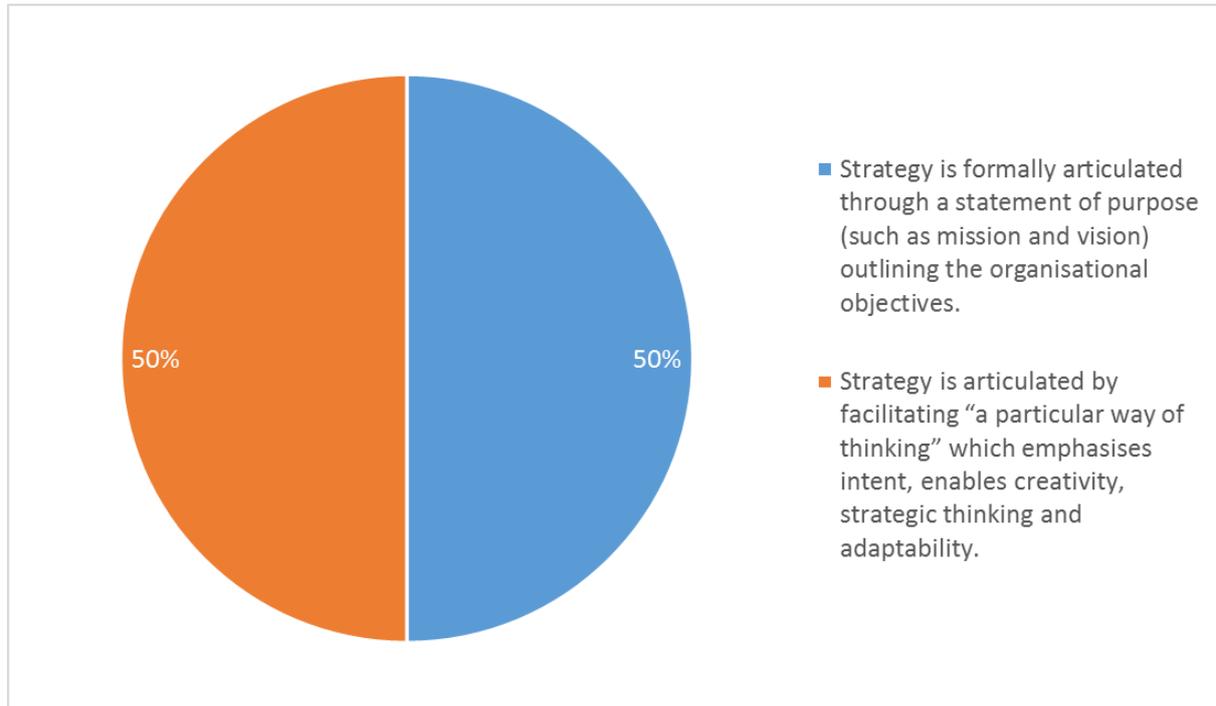


Figure 29 – Question 2.2.1: Understanding of strategy (n=102)

The results illustrate that a clear dichotomy in understanding exists; 50% of the respondents identified with the statement “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives”, while the remaining 50% selected “strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability”.

Question 2.2.2 delved further so as to understand the process of how strategy is crafted within organisations. Two alternatives were provided, from which respondents could choose to best describe their organisation’s strategy-making process. The results are depicted in Figure 30 below.

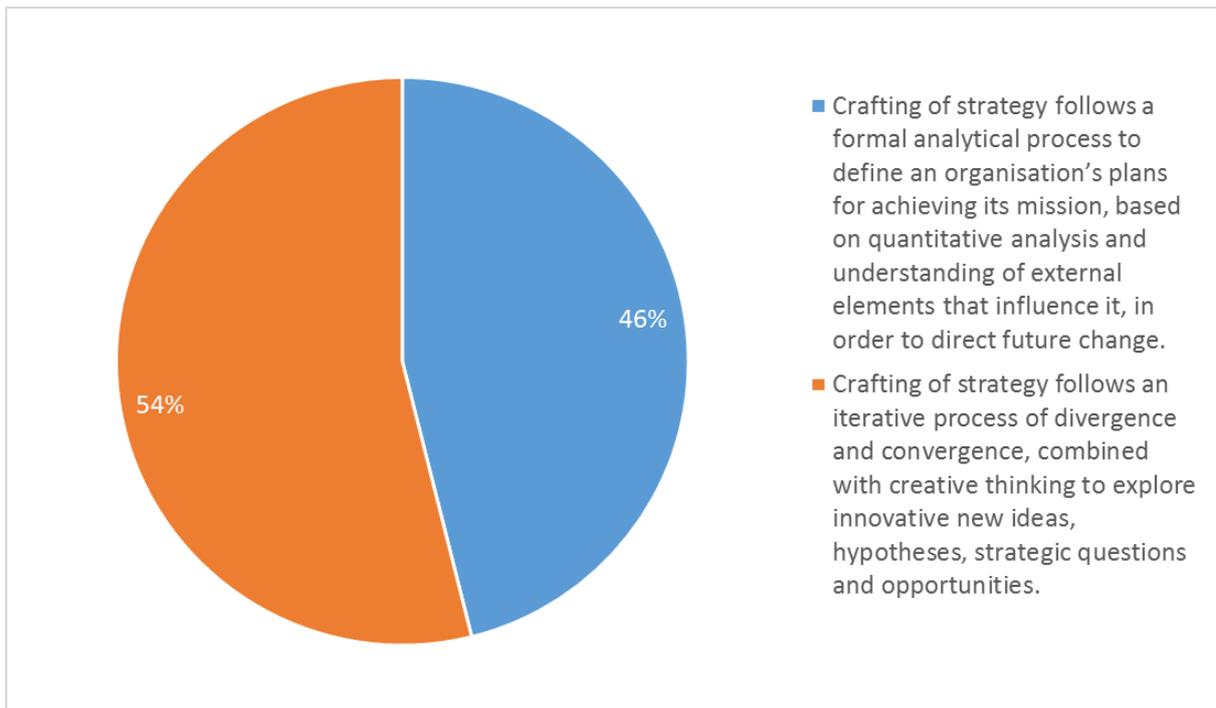


Figure 30 – Question 2.2.2: Process of how strategy is crafted (n=102)

The results illustrate that 46% of respondents selected the statement describing a formal analytical process as “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change”; alternatively, 54% identified with the iterative and creative thinking approach described in the statement “crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities”.

Question 2.2.3 changes focus to determine the frequency of organisational use of a variety of traditional analytical frameworks and tools used for strategy development, as discussed in section 3.2.2.1 and identified in Table 2. The results are depicted in Figure 31 below as a diverging stacked bar graph.

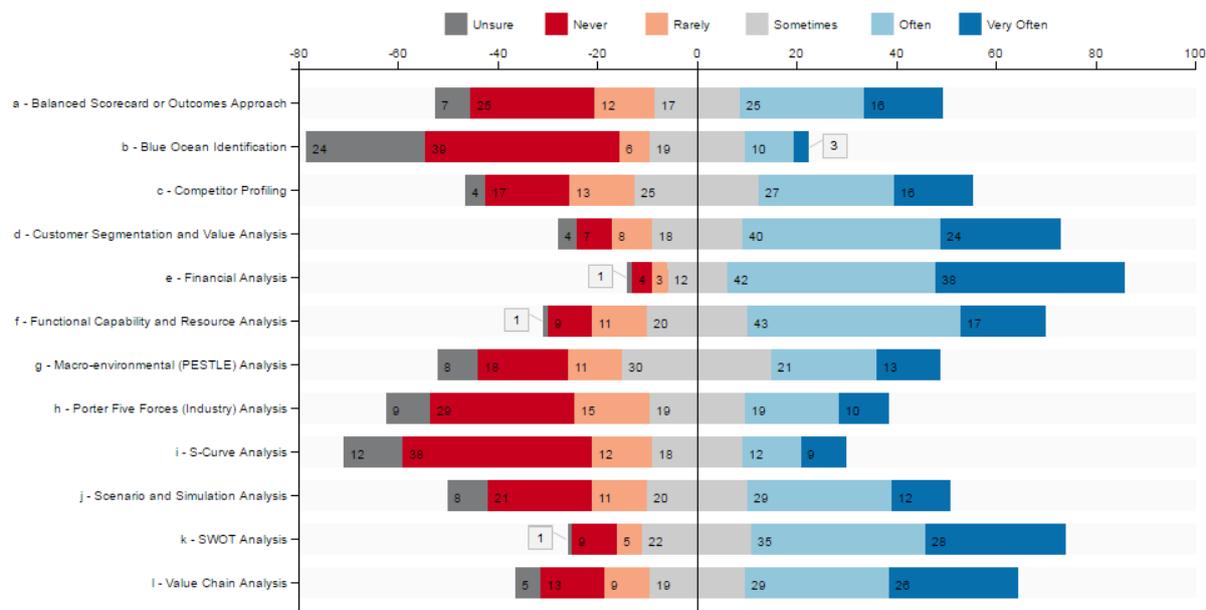


Figure 31 - Question 2.2.3: Traditional analytical frameworks and tools (n=102)

The first option provided in **Question 2.2.3.a**, the balanced scorecard or outcomes approach, obtained a mean of 3.50, with an extremely high standard deviation of 1.853. **Question 2.2.3.b**, blue ocean identification, had a mean of 2.64 and a high standard deviation of 1.534. **Question 2.2.3.c**, competitor profiling, obtained a mean of 3.78, with a very high standard deviation of 1.718. **Question 2.2.3.d**, customer segmentation and value analysis, had a mean of 4.47, with a high standard deviation of 1.460.

Financial analysis, **Question 2.2.3.e**, was determined to have a mean of 5.00, with a high standard deviation of 1.208. **Question 2.2.3.f**, functional capability and resource analysis, obtained a mean of 4.27 and a high standard deviation of 1.516. Macro-environmental (PESTLE) analysis, **Question 2.2.3.g**, had a mean of 3.61 and a very high standard deviation of 1.637. Porter's five forces (industry) analysis, **Question 2.2.3.h**, obtained a mean of 3.09 and a very high standard deviation of 1.761.

Question 2.2.3.i, the s-curve (technology, experience, product life cycle) analysis tool, obtained a mean of 2.78 and a very high standard deviation of 1.758. The scenario and simulation analysis, **Question 2.2.3.j**, obtained a mean of 3.61 and a very high standard deviation of 1.743. **Question 2.2.3.k**, the SWOT analysis, was determined to have a mean of 4.54 and a standard deviation of 1.493. **Question**

2.2.3.I, value chain analysis, had a mean of 4.20 and very high standard deviation of 1.697.

In general, the standard deviation for all the traditional frameworks and tools was very high, indicating a large spread in usage.

Restructuring the results by sorting them in terms of frequency of usage (as depicted in Figure 32 below) provides a view of the most commonly used traditional frameworks and tools.

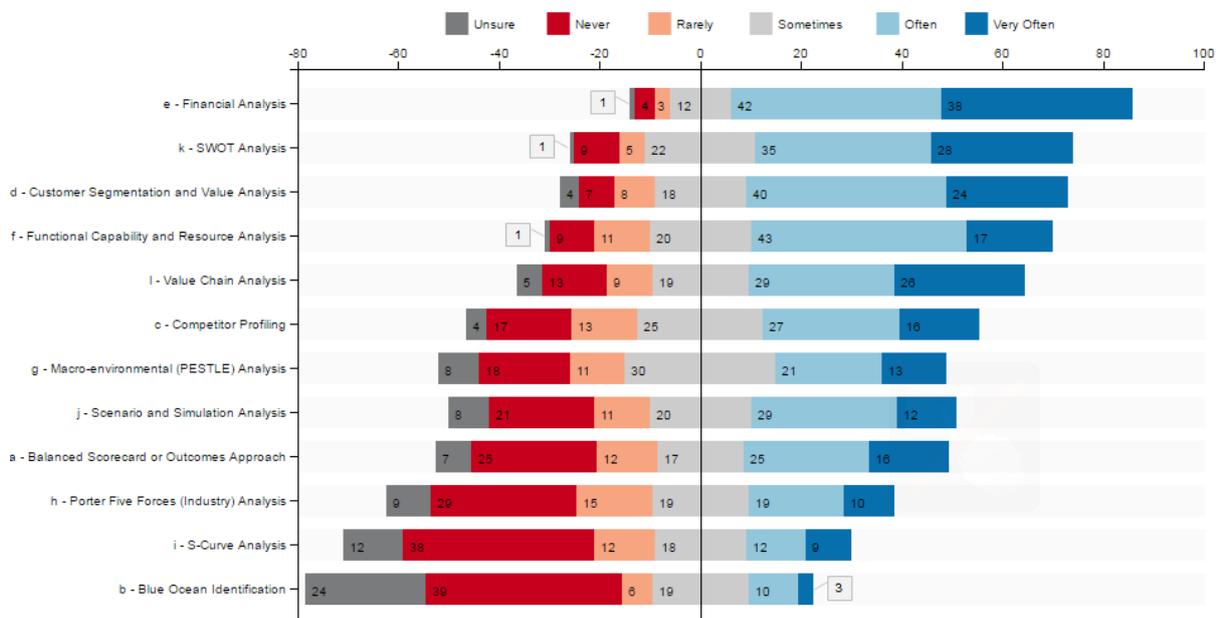


Figure 32 - Question 2.2.3: Traditional analytical frameworks and tools sorted by usage (n=102)

The results depicted indicate that financial analysis is the most commonly used traditional framework or tool, with 80% of respondents using it often or very often. This was followed by customer segmentation and value analysis (64%); SWOT analysis (63%); functional capability and resource analysis (60%); and value chain analysis (55%).

On the opposite side of the usage spectrum, blue ocean identification was identified as the least frequently used, with 45% of respondents indicating usage of rarely or never, while 24% indicated they were unsure about its usage. This was followed by s-curve analysis (50% rarely or never used) and Porter's five forces analysis (44% rarely or never used).

Question 2.2.4 aimed to determine the frequency of organisational use of a variety of alternative frameworks and tools used for the crafting of strategy. The results are depicted in Figure 33 below.

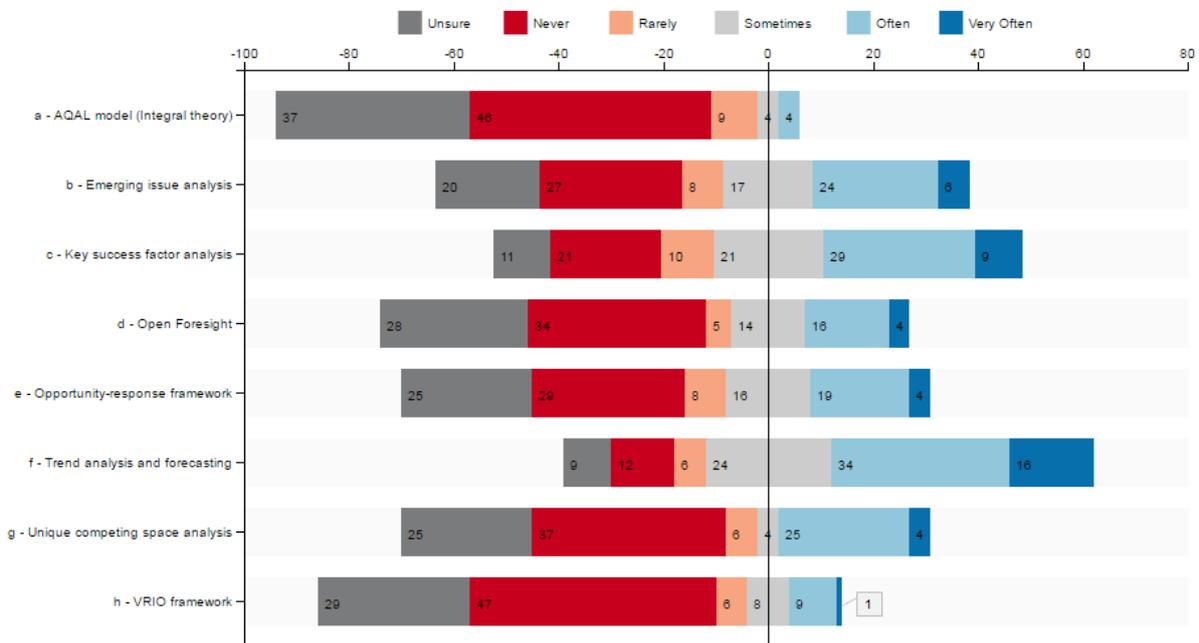


Figure 33 – Question 2.2.4: Alternative frameworks and tools (n=102)

The first framework or tool provided, **Question 2.2.4.a**, the AQAL model (Integral theory), obtained a mean of 2.11, with a standard deviation of 1.160. **Question 2.2.4.b**, emerging issue analysis, had a mean of 3.21 and a very high standard deviation of 1.661. **Question 2.2.4.c**, key success factor analysis, obtained a mean of 3.55, with a very high standard deviation of 1.681. Open foresight, provided as **Question 2.2.4.d**, gained a mean of 2.83 and a high standard deviation of 1.593.

An opportunity-response framework, as **Question 2.2.4.e**, was determined to have a mean of 2.98 and a high standard deviation of 1.592. **Question 2.2.4.f**, trend analysis and forecasting, obtained a high mean of 4.10 with a standard deviation of 1.538. Unique competing space analysis, as **Question 2.2.4.g**, had a mean of 2.84 and an exceptionally high standard deviation of 1.710. The final framework or tool provided as **Question 2.2.4.h**, the VRIO (value, rarity, imitability, and organisation) framework, was determined to have a mean of 2.28 and a standard deviation of 1.403.

The low mean scores, combined with the very high standard deviations determined

for **question 2.2.4**, indicated a large spread in usage of the alternative frameworks and tools provided for in the question. Restructuring the results by sorting them in terms of frequency of usage (as depicted in Figure 34 below) provides a view of the most commonly used alternative analytical frameworks and tools.

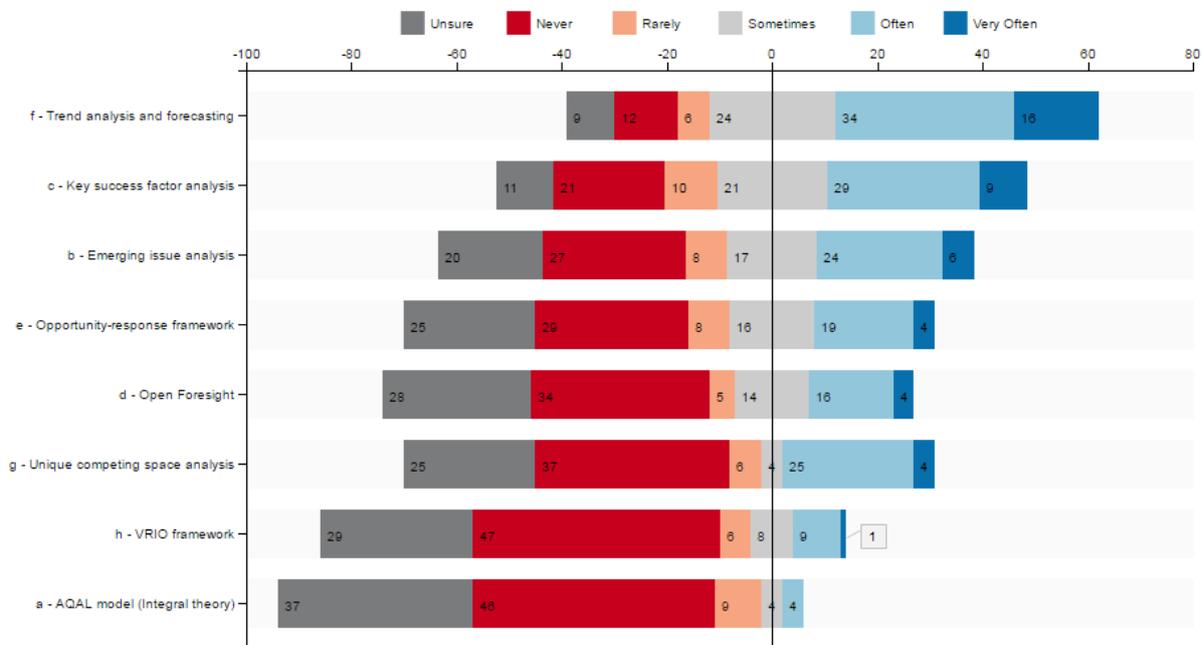


Figure 34 – Question 2.2.4: Alternative frameworks and tools sorted by usage (n=102)

The results depicted indicate that the two most commonly used alternative frameworks or tools were trend analysis and forecasting and key success factor analysis, with 50% and 38% indicating usage that was often or very often respectively. The remaining frameworks or tools were identified by less than 30% of the respondents as being used often or very often.

On the opposite side of the usage spectrum, the AQAL model (Integral theory) was identified as the least frequently used, with 55% of respondents indicating usage as rarely or never, while 37% indicating they were unsure about its usage. This was followed by the VRIO (value, rarity, imitability, and organisation) framework (53% rarely or never used); unique competing space analysis (43% rarely or never used); and open foresight (39% rarely or never used).

The five lowest scored questions obtained a 25% or greater unsure response, possibly indicating a lack of awareness of alternative frameworks or tools that could be used for crafting strategy.

The **remaining group of questions – Questions 2.2.5 to 2.2.9** – queried the use of frameworks and tools within the organisation. The results are depicted in Figure 35 below.

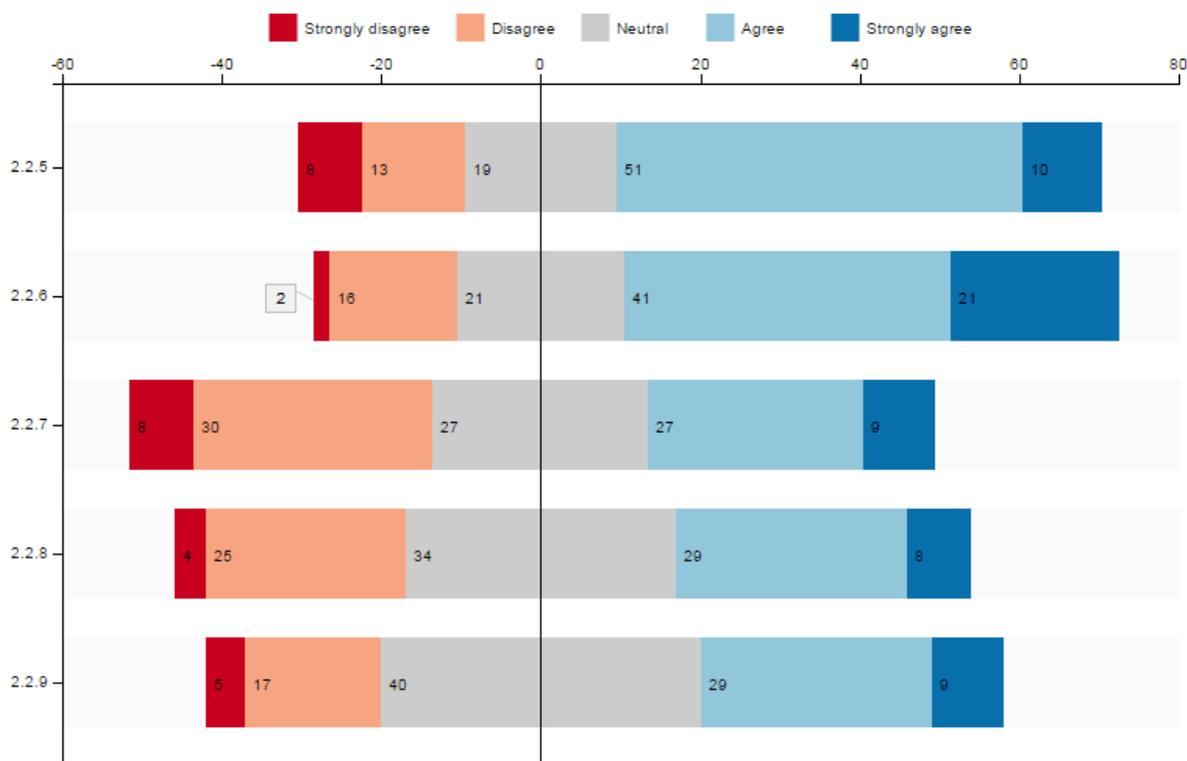


Figure 35 – Questions 2.2.5 to 2.2.9: Use of frameworks and tools to craft strategy (n=102)

The first item in this group, **Question 2.2.5**, enquired as to whether organisations prefer traditional analytical frameworks and tools (see **Question 2.2.3**) that simplify, compartmentalise and illustrate concepts into clear, concise depictions of reality. The mean was determined to be 3.42, with a standard deviation of 1.085, indicating a spread of responses to the statement. The result indicates that 61% of respondents were in agreement, clearly indicating that the majority of organisations still prefer traditional analytical frameworks and tools.

Question 2.2.6 aimed to determine whether organisations focus extensively on financial modelling. The mean was determined to be 3.63, with a standard deviation of 1.043, indicating a spread of responses to the statement. The result indicates that 62% of respondents were in agreement, signifying that the majority of organisations focus extensively on financial modelling.

Conversely, **Question 2.2.7** aimed to establish whether organisations extensively use tools that enable lateral thinking and creativity. The mean was determined to be 2.98, with a standard deviation of 1.117, indicating a wide spread of responses to the statement. The result indicates that 36% of respondents were in agreement, but a larger proportion (38%) disagreed with the question. The result indicates a possible dichotomy in results, with 27% of respondents maintaining a neutral stance.

Question 2.2.8 was intended to determine whether organisations prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts. The mean was established to be 3.13, with a standard deviation of 1.002, indicating a spread of responses to the statement. The result indicates that 37% of respondents were in agreement, with 34% taking a neutral stance and 29% disagreeing with the question.

The final question within the group, **Question 2.2.9**, aimed to determine whether organisations find tools that enable lateral thinking and creativity more beneficial than traditional (see **Question 2.2.3**) analytical tools, methods or models. The mean was determined to be 3.21, with a standard deviation of 0.988, indicating a lower spread of responses to the statement. The result indicates that 38% of respondents were in agreement, with 40% adopting a neutral stance and 22% disagreeing with the question.

6.2.3.2 Ranking variables

Focusing on the variables for **Questions 2.2.3 to 2.2.9**, the overall mean and standard deviation results for each question were tabulated to identify the variables that are considered as the most and least important by the respondents. The ranking of the variables by mean and standard deviation was completed in order to explore the location and variability of the data. All the variables are ranked in Table 24 to Table 29 below – grouped by question.

Table 24 below, illustrates the variables for **Question 2.2.3**, which mentioned a number of traditional analytical frameworks and tools used for crafting of strategy, sorted by their mean scores.

Table 24 - Question 2.2.3: Traditional analytical frameworks and tools sorted by mean

SECTION 2: APPROACH TO CRAFTING STRATEGY			
Traditional analytical frameworks and tools:			
Variable	Question	Mean	Std. deviation
2.2.3.e	Financial Analysis	5.00	1.208
2.2.3.k	SWOT Analysis	4.54	1.493
2.2.3.d	Customer Segmentation and Value Analysis	4.47	1.460
2.2.3.f	Functional Capability and Resource Analysis	4.27	1.516
2.2.3.l	Value Chain Analysis	4.20	1.697
2.2.3.c	Competitor Profiling	3.78	1.718
2.2.3.g	Macro-environmental (PESTLE) Analysis	3.61	1.637
2.2.3.j	Scenario and Simulation Analysis	3.61	1.743
2.2.3.a	Balanced Scorecard or Outcomes Approach	3.50	1.853
2.2.3.h	Porter Five Forces (Industry) Analysis	3.09	1.761
2.2.3.i	S-Curve (Technology, Experience, Product Life Cycle) Analysis	2.78	1.758
2.2.3.b	Blue Ocean Identification	2.64	1.534

The ranking illustrates a variation in responses from respondents, with the higher mean scores indicating a greater frequency of usage of the specific traditional analytical framework or tool. Financial analysis obtained the highest mean score, but the creative traditional analytical tool, blue ocean identification, obtained the lowest mean score.

Table 25 below, illustrates the variables for **Question 2.2.4**, which offered a number of alternative frameworks and tools used for crafting of strategy, sorted by their mean scores.

Table 25 - Question 2.2.4: Alternative frameworks and tools sorted by mean

SECTION 2: APPROACH TO CRAFTING STRATEGY			
Alternative frameworks and tools:			
Variable	Question	Mean	Std. deviation
2.2.4.f	Trend analysis and forecasting	4.10	1.538
2.2.4.c	Key success factor analysis	3.55	1.681
2.2.4.b	Emerging issue analysis	3.21	1.661
2.2.4.e	Opportunity-response framework	2.98	1.592
2.2.4.g	Unique competing space analysis	2.84	1.710
2.2.4.d	Open Foresight	2.83	1.593
2.2.4.h	VRIO (value, rarity, imitability, and organisation) framework	2.28	1.403
2.2.4.a	AQAL model (Integral theory)	2.11	1.160

The ranking illustrates a variation in responses from respondents ranging from a high mean for variable 2.2.4.f at 4.10 to variable 2.2.4.a with a low mean of 2.11. The higher mean scores indicated a greater frequency of usage of the specific alternative framework or tool. The majority of variables obtained low mean scores, indicating a

no or low frequency of usage of the tools.

Table 26, below, lists the variables for **Question 2.2.5 to 2.2.9**, which queried the preference for and extent to which organisations use frameworks and tools to support the development of strategy, sorted by their mean scores.

Table 26 – Question 2.2.5 to 2.2.9: Use of frameworks and tools sorted by mean

SECTION 2: APPROACH TO CRAFTING STRATEGY			
Use of frameworks and tools:			
Variable	Question	Mean	Std. deviation
2.2.6	We focus extensively on financial modelling	3.63	1.043
2.2.5	We prefer traditional analytical frameworks and tools (see Q 2.2.3) that simplify, compartmentalise and illustrate concepts into clear, concise depictions of reality	3.42	1.085
2.2.9	We find tools that enable lateral thinking and creativity more beneficial than traditional (see Q 2.2.3) analytical tools, methods or models	3.21	0.988
2.2.8	We prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts	3.13	1.002
2.2.7	We extensively use tools that enable lateral thinking and creativity	2.98	1.117

The ranking illustrates a consistency in responses from respondents ranging from a higher mean for variable 2.2.6 at 3.63 to variable 2.2.7 with a low mean of 2.98. The higher mean scores were obtained for the questions regarding the use of traditional frameworks or tools, while the remaining questions, which were focused on lateral thinking and creativity, obtained the lower mean scores.

Table 27, below, sorts the tabulated variables for **Question 2.2.3**, including a number of traditional analytical frameworks and tools used for crafting of strategy, by their standard deviation scores, which depict the level of agreement between respondents.

Table 27 - Question 2.2.3: Traditional analytical frameworks and tools sorted by standard deviation

SECTION 2: APPROACH TO CRAFTING STRATEGY			
Traditional analytical frameworks and tools:			
Variable	Question	Mean	Std. deviation
2.2.3.a	Balanced Scorecard or Outcomes Approach	3.50	1.853
2.2.3.h	Porter Five Forces (Industry) Analysis	3.09	1.761
2.2.3.i	S-Curve (Technology, Experience, Product Life Cycle) Analysis	2.78	1.758
2.2.3.j	Scenario and Simulation Analysis	3.61	1.743
2.2.3.c	Competitor Profiling	3.78	1.718
2.2.3.l	Value Chain Analysis	4.20	1.697
2.2.3.g	Macro-environmental (PESTLE) Analysis	3.61	1.637
2.2.3.b	Blue Ocean Identification	2.64	1.534
2.2.3.f	Functional Capability and Resource Analysis	4.27	1.516
2.2.3.k	SWOT Analysis	4.54	1.493
2.2.3.d	Customer Segmentation and Value Analysis	4.47	1.460
2.2.3.e	Financial Analysis	5.00	1.208

The very high standard deviation scores across all variables, indicated an extremely wide range of responses and lack of consensus regarding the answer to the question. The highest standard deviation found was for variable 2.2.3.a and was 1.853. The tabulated ranking shows that the variable with the highest mean score has the lowest standard deviation.

Table 28, below, sorts the tabulated variables for **Question 2.2.4**, including a number of alternative frameworks and tools used for the crafting of strategy, by their standard deviation scores.

Table 28 - Question 2.2.4: Alternative frameworks and tools sorted by standard deviation

SECTION 2: APPROACH TO CRAFTING STRATEGY			
Alternative frameworks and tools:			
Variable	Question	Mean	Std. deviation
2.2.4.g	Unique competing space analysis	2.84	1.710
2.2.4.c	Key success factor analysis	3.55	1.681
2.2.4.b	Emerging issue analysis	3.21	1.661
2.2.4.d	Open Foresight	2.83	1.593
2.2.4.e	Opportunity-response framework	2.98	1.592
2.2.4.f	Trend analysis and forecasting	4.10	1.538
2.2.4.h	VRIO (value, rarity, imitability, and organisation) framework	2.28	1.403
2.2.4.a	AQAL model (Integral theory)	2.11	1.160

The very high standard deviation scores across all variables indicated an exceptionally wide range of responses and lack of consensus. The highest standard

deviation found was for variable 2.2.4.g and was 1.710. The tabulated ranking shows that the variable with the lowest mean score has the lowest standard deviation.

Table 29, below, sorts the tabulated variables for **Questions 2.2.5 to 2.2.9**, regarding the use of frameworks and tools for the crafting of strategy, by their standard deviation scores.

Table 29 - Questions 2.2.5 to 2.2.9: Use of frameworks and tools sorted by standard deviation

SECTION 2: APPROACH TO CRAFTING STRATEGY			
Use of frameworks and tools:			
Variable	Question	Mean	Std. deviation
2.2.7	We extensively use tools that enable lateral thinking and creativity	2.98	1.117
2.2.5	We prefer traditional analytical frameworks and tools (see Q 2.2.3) that simplify, compartmentalise and illustrate concepts into clear, concise depictions of reality	3.42	1.085
2.2.6	We focus extensively on financial modelling	3.63	1.043
2.2.8	We prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts	3.13	1.002
2.2.9	We find tools that enable lateral thinking and creativity more beneficial than traditional (see Q 2.2.3) analytical tools, methods or models	3.21	0.988

The average mean scores across all questions, combined with average standard deviation scores, plainly indicated that while there was a spread of responses, most respondents responded in a similar manner to all the questions.

The results indicate that to a large extent respondents demonstrated a preference for traditional analytical frameworks and tools.

6.2.4 Mechanisms for crafting creative and adaptive strategy

Several mechanisms for supporting creative and adaptive strategic thinking have been identified to assist organisations embrace the richness of strategy. However, few have been combined to develop an integrated approach to allow organisational stakeholders to open their minds to new ways of using strategy to create value; to ensure that adaptive, creative and resilient strategies increase the likelihood of success in rapidly evolving environments.

The **third section of Part 2** of the questionnaire was designed to determine the use

of mechanisms for crafting creative and adaptive strategy.

To this end, **Questions 2.3.1 to 2.3.18** were developed to determine the following:

- Whether organisations undertake strategic intelligence activities
- Whether organisations conduct strategic synthesis and insight generation
- To what extent synthesis and insight generation frameworks or models are used within organisations for strategy development
- Whether organisations evaluate and validate strategic options.

The different questions in part 2 of section 3 of the questionnaire have been grouped by subject-matter, and will now be discussed.

6.2.4.1 Discussion of results

The **first group of questions, Questions 2.3.1 to 2.3.7**, focused on the strategic intelligence activities undertaken by organisations. The results are presented in Figure 36 below.

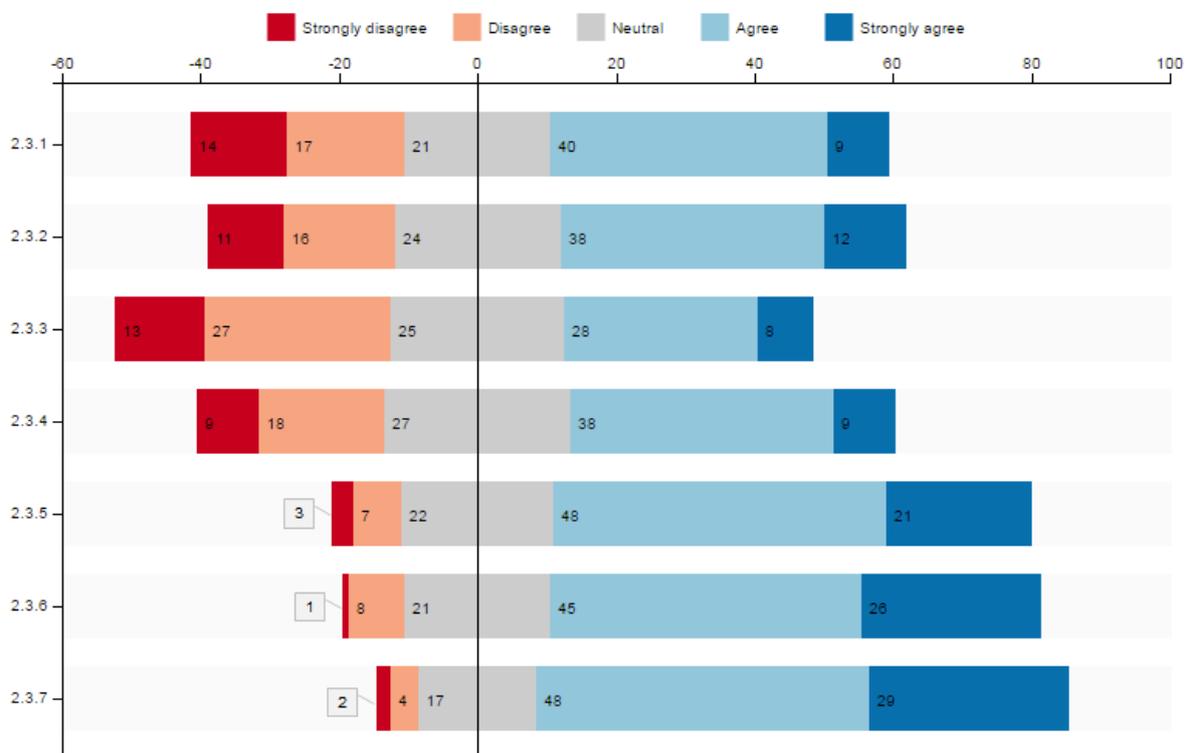


Figure 36 - Question 2.3.1 to 2.3.7: Strategic intelligence activities (n=102)

Question 2.3.1 was devised to determine whether organisations have a strategic intelligence process in place. The mean score for the question was calculated to be

3.14 with a high standard deviation of 1.211. A higher standard deviation demonstrates that respondents did not provide similar responses to a question, thereby indicating less agreement among the respondents on the subject at hand. 49% of the respondents indicated agreement, while 31% indicated disagreement with the statement, with a further 21% providing a neutral response. Considering the two polar opposites, 9% indicated a strongly agree response, with 14% indicating a strongly disagree response.

Question 2.3.2 aimed to establish whether organisations merge business intelligence, competitive intelligence and knowledge management (to create strategic intelligence) for use in decision-making. The mean score for the question was calculated to be 3.25 with a high standard deviation of 1.181. The standard deviation result indicates a wide range of responses to the question. The majority of respondents (50%) indicated agreement with the statement; with only 27% indicating disagreement.

Question 2.3.3 was intended to determine the extent to which managers are provided with access to a single source of information that provides a comprehensive perspective on internal and external organisational dynamics and trends. The mean score for the question was calculated to be 2.92 with a high standard deviation of 1.175, indicating a wide range of responses to the question. 40% of the respondents indicated disagreement with the statement, 36% indicated agreement, and 25% took a neutral stance. The result indicates that organisations do not provide managers with comprehensive input to decision making.

Question 2.3.4 was devised to establish whether managers use strategic intelligence as an input into their strategy-making process. The mean score for the question was calculated to be 3.21 with a standard deviation of 1.111, indicating a wide range of responses to the question. The majority of respondents, at 47%, indicated that they agreed with the statement, while 27% disagreed. The result demonstrates that managers generally use strategic intelligence as an input in their strategy-making.

The intention of **Question 2.3.5** was to determine whether strategic intelligence assists managers to make better, fact-based decisions. The mean score for the

question was calculated to be 3.76 with a standard deviation of 0.956. The result indicates that 69% of respondents were in agreement, 10% in disagreement and 22% providing a neutral response to the question. The result depicts that the majority of respondents use strategic intelligence to assist managers make better, fact-based decisions.

Question 2.3.6 aimed to establish whether strategic intelligence is considered critical to enhancing the strategy-making process. The mean score for the question was calculated to be 3.86 with a standard deviation of 0.923. The result indicates that 71% of respondents were in agreement, 9% in disagreement while 21% provided a neutral response to the question. The result suggests that the majority of respondents consider strategic intelligence as critical to enhancing the strategy-making process.

The final question in this group, **Question 2.3.7**, was intended to determine whether the use of strategic intelligence was believed to lead to competitive advantage. The mean score for the question was established to be 3.99 with a low standard deviation of 0.895. 77% of respondents were in agreement, 6% were in disagreement, and 17% provided a neutral response to the question. The result established that the majority of respondents believe the use of strategic intelligence leads to competitive advantage.

The **second group of questions** within section 3, **Questions 2.3.8 to 2.3.11**, focused on strategic synthesis and insight generation. The results are presented in Figure 37 below.

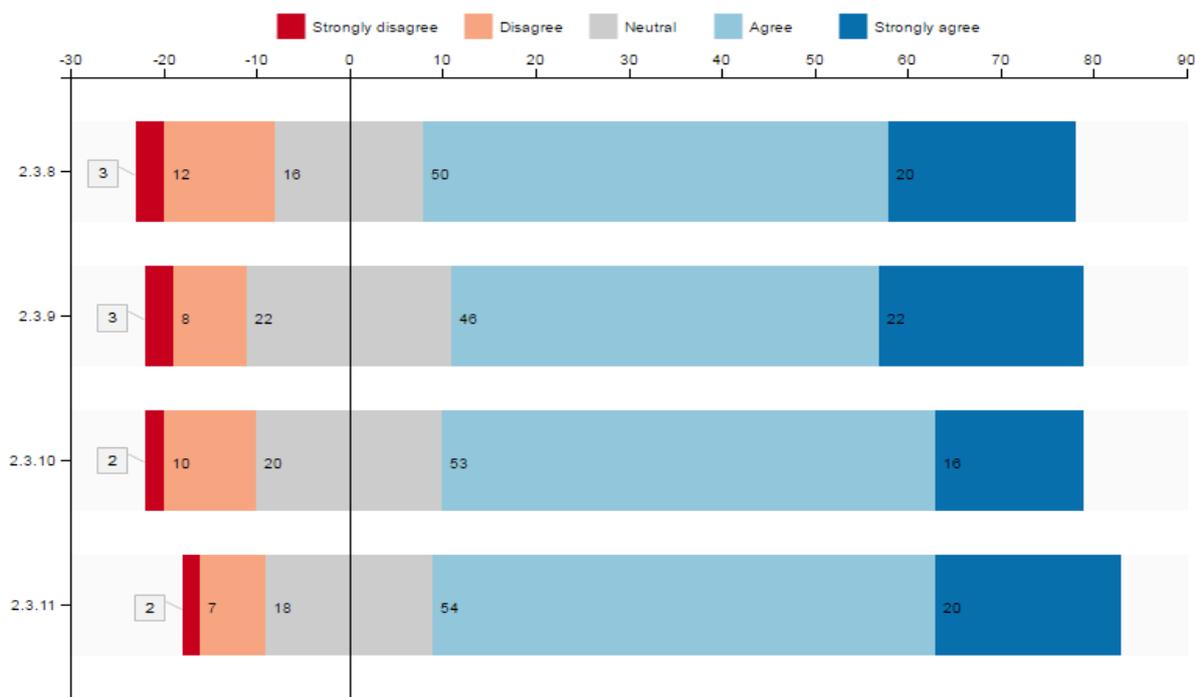


Figure 37 - Question 2.3.8 to 2.3.11: Strategic synthesis and insight generation (n=102)

The aim of **Question 2.3.8** was to determine whether strategic issues are explored to find deeper structure and insight. The mean was determined to be 3.72, with a standard deviation of 1.009. 70% of respondents agreed with the statement, while only 15% disagreed. The result indicated that strategic issues are predominantly explored to find deeper structure and insight.

In addition, **Question 2.3.9** endeavoured to discover whether information is interpreted to create forward looking views and to generate plausible future worlds. The mean of the question was determined to be 3.75, while the standard deviation was found to be 0.979. 68% of respondents agreed with the statement, while only 11% disagreed. The result illustrates that, in general, information is interpreted to create forward views and to generate plausible future worlds.

Question 2.3.10 sought to determine whether the generation of strategic insight is guided by intuition. The mean of the question was determined to be 3.71, while the standard deviation was found to be 0.918. 69% of respondents agreed with the statement, while only 12% disagreed, and 20% took a neutral stance. The result revealed that the majority of respondents believe the generation of strategic insight is guided by intuition.

Question 2.3.11, the final question in the group, was designed to establish whether formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge. The mean was found to be 3.82, while the standard deviation was found to be 0.895. The result indicated that 74% of the respondents agreed that formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge, while only 9% disagreed.

The third group of questions within section 3, **2.3.12.a to 2.3.12.l**, focused on identifying the frequency with which synthesis and insight generation frameworks or models are used within organisations for strategy development. The results are rendered in Figure 38 and 39 below.

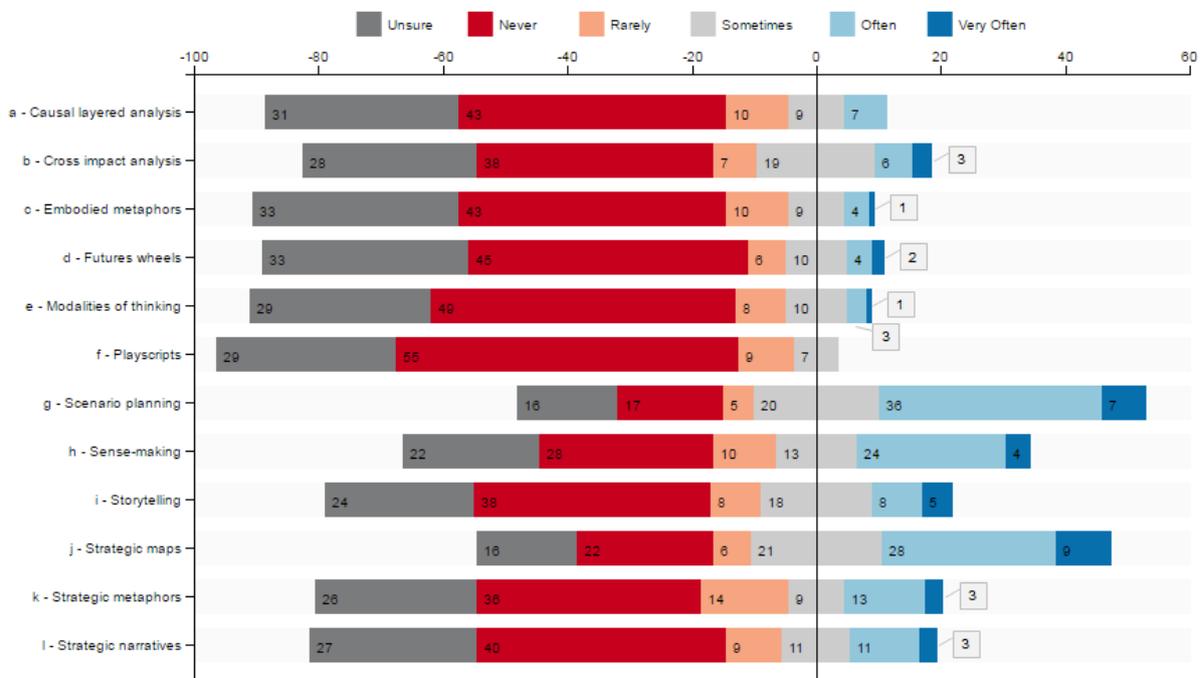


Figure 38 – Question 2.3.12: Synthesis and insight generation frameworks or models (n=102)

The first framework or tool provided for in **Question 2.3.12.a**, causal layered analysis, obtained a mean of 2.28, with a standard deviation 1.289. **Question 2.3.12.b**, focusing on cross impact analysis, had a mean of 2.56 and a high standard deviation of 1.459. **Question 2.3.12.c**, for embodied metaphors obtained a mean of 2.25, with a standard deviation of 1.260. Futures wheels, **Question 2.3.12.d**, gained a mean of 2.26 and a standard deviation of 1.332.

Question 2.3.12.e, which explored modalities of thinking (metaphorical, dialectic,

spatial, social modalities, poetic) was determined as having a mean of 2.14 and a standard deviation of 1.265 and playscripts, in **Question 2.3.12.f**, obtained a low mean of 1.86 with a standard deviation of 1.040. Scenario planning (visioning, backcasting) on the other hand in **Question 2.3.12.g**, obtained a higher mean of 3.73 and a high standard deviation of 1.568.

Question 2.3.12.h, sense-making, obtained a mean of 3.03 with a very high standard deviation of 1.634. Storytelling, **Question 2.3.12.i**, was determined to have a mean of 2.65 and a very high standard deviation of 1.558. **Question 2.3.12.j**, strategic maps, was calculated to have a mean of 3.51 with a very high standard deviation of 1.665. **Question 2.3.12.k**, strategic metaphors, had a mean of 2.54 with a high standard deviation of 1.500. And the final variable provided for in **Question 2.3.12.l**, strategic narratives (shadowing, ante-narratives), obtained a mean of 2.53 and a high standard deviation of 1.514.

On average, the very high standard deviations determined for **Question 2.3.12** indicated a large spread in the responses to the usage of the synthesis and insight generation frameworks or models provided as variables in the question.

Restructuring the results by sorting them by frequency of usage (as depicted in Figure 39 below) affords a view of the most commonly used synthesis and insight generation frameworks or models.

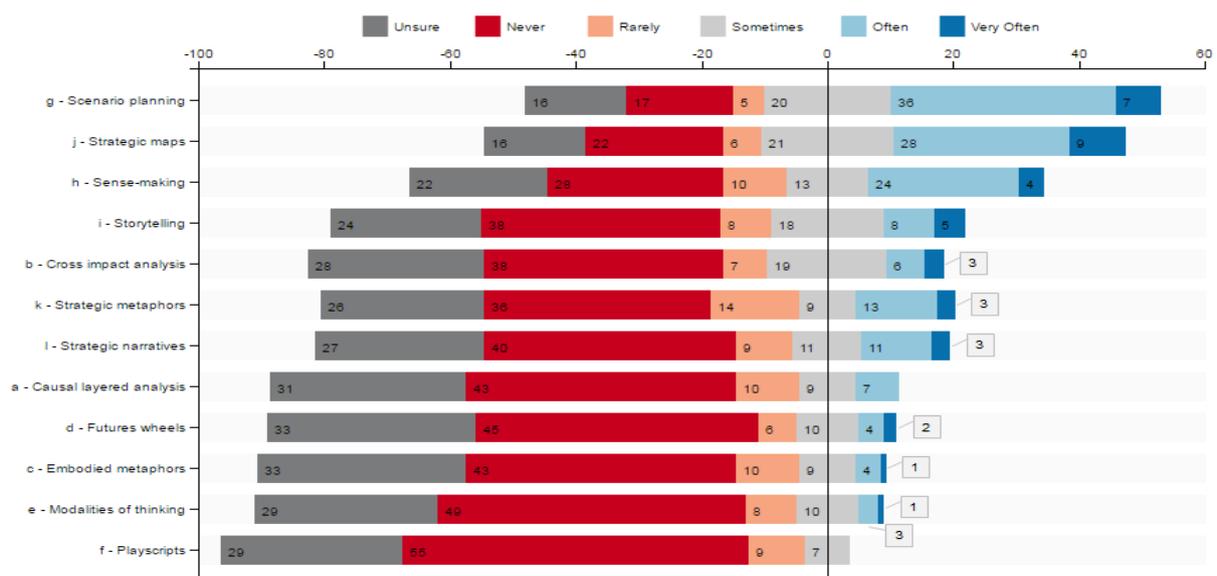


Figure 39 - Question 2.3.12: Synthesis and insight generation frameworks sorted by usage (n=102)

The three most frequently employed synthesis and insight generation frameworks or models were scenario planning (visioning, backcasting) with 43% reporting usage often or very often; strategic maps with usage of 37% often or very often and sense-making, with 28% usage often or very often. The remaining frameworks or tools had less than 16% of the respondents identifying them as being used often or very often.

On the opposite side of the usage spectrum, playscripts was identified as the least frequently used framework or model, with 64% of respondents indicating usage rarely or never, with 29% indicating they were unsure about its usage. This was followed by the modalities of thinking (metaphorical, dialectic, spatial, social modalities, poetic) at 57% rarely or never used; embodied metaphors (53% rarely or never used) and futures wheels (51% rarely or never used).

Ten of the questions attracted a 22% or greater unsure response, possibly indicating a lack of awareness of synthesis and insight generation frameworks or models.

The **last group of questions** within section 3, **Questions 2.3.13 to 2.3.18**, focused on the evaluation and validation of strategic options. The results are depicted in Figure 40 below.

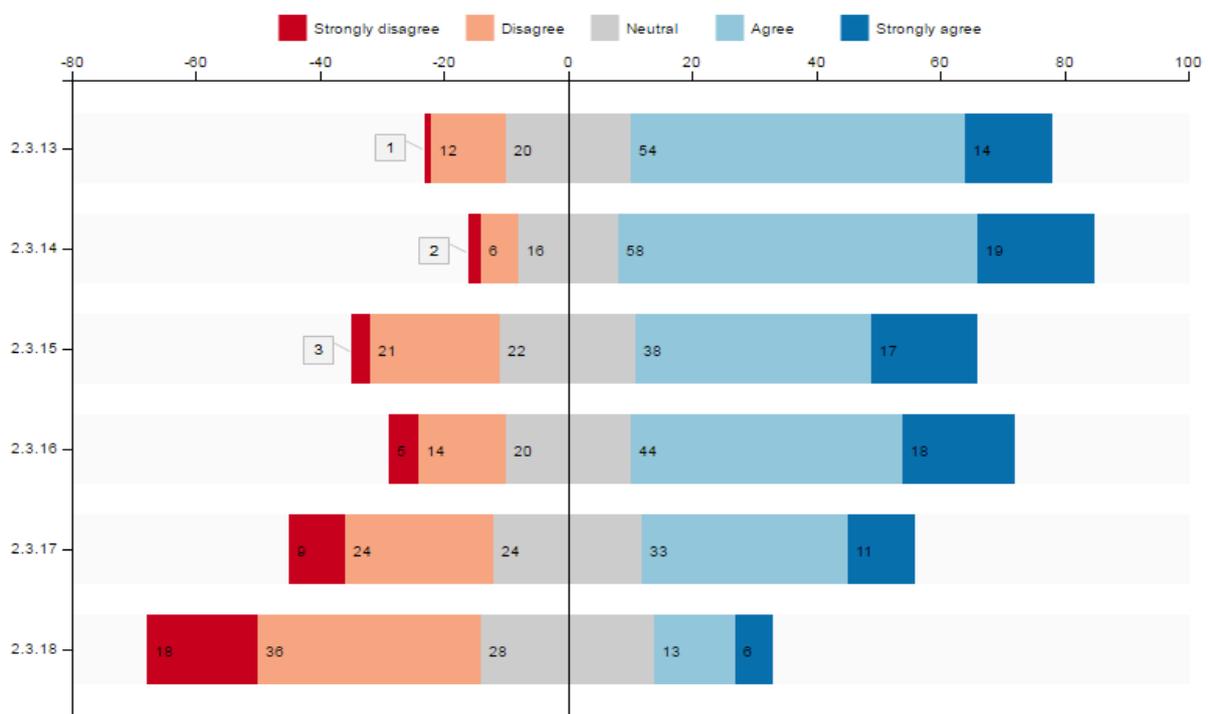


Figure 40 – Question 2.3.13 to 2.3.18: Evaluation and validation of strategic options (n=102)

The first question, **Question 2.3.13**, was formulated as to whether organisations evaluate and validate strategic options after strategy formulation. The question obtained a mean of 3.68 and a standard deviation of 0.892. 68% of respondents agreed that they evaluate and validate strategic options, while only 13% indicated they did not.

Question 2.3.14 queried whether organisations evaluate and validate strategic options to understand any unforeseen risks and their effect on the organisation. The mean was determined to be 3.85, with a standard deviation of 0.861. 77% of the respondents agreed that they evaluate and validate strategic options to understand any unforeseen risks and their effect on the organisation.

Question 2.3.15 aimed to establish whether organisations evaluate and validate strategic options to gain acceptance across the organisation for their strategy. The mean was determined to be 3.45, with a standard deviation of 1.087. The results indicate that 55% of respondents agreed, 24% disagreed and 22% were neutral to the statement. This indicates that the majority of organisations do evaluate and validate strategic options to gain acceptance across the organisation for their strategy.

Question 2.3.16 was intended to determine if strategic options go through a validation process to ensure that they are actionable, acceptable and feasible to the organisation. The mean was determined to be 3.56, with a standard deviation of 1.086. The result indicates that 62% of respondents agreed with the statement.

Question 2.3.17 aimed to establish whether organisations have developed an internal evaluation methodology to screen strategic options. The mean was calculated to be 3.14, while the standard deviation was 1.161 indicating a wide range of responses. Only 44% of respondents agreed with having developed an internal evaluation methodology to screen strategic options, while 33% disagreed with the statement.

The final question of the group, **Question 2.3.18** was asked to determine whether game theory was used in organisations to select the best option from several options, by considering the perspective of competitors, collaborators and stakeholders. The mean was calculated to be 2.53, while the standard deviation was

1.105, indicating a wide range of responses. Only 19% of respondents agreed, while the majority, at 54%, disagreed with the statement, indicating few organisations make use of game theory.

6.2.4.2 Ranking variables

Focusing on the variables for **Questions 2.3.1 to 2.3.18**, the overall mean and standard deviation results for each question were tabulated to identify the variables that are considered as the most and least important by the respondents. The ranking of the variables by mean and standard deviation was completed in order to explore the location and variability of the data. All the variables are ranked in Table 30 to Table 37 below – grouped by question.

Table 30 below illustrates the variables for **Question 2.3.1 to 2.3.7**, which questioned whether organisations undertake strategic intelligence activities, sorted by their mean scores.

Table 30 – Questions 2.3.1 to 2.3.7: Strategic Intelligence activities sorted by mean

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Strategic Intelligence activities:			
Variable	Question	Mean	Std. deviation
2.3.7	The use of Strategic Intelligence leads to competitive advantage	3.99	0.895
2.3.6	Strategic Intelligence is critical to enhancing our strategy-making process	3.86	0.923
2.3.5	Strategic Intelligence assists managers to make better, fact-based decisions	3.76	0.956
2.3.2	We fuse our Business Intelligence, Competitive Intelligence and Knowledge Management (to create Strategic Intelligence) for use in decision-making	3.25	1.181
2.3.4	Managers use Strategic Intelligence as an input in their strategy-making	3.21	1.111
2.3.1	Our organisation has a Strategic Intelligence process in place	3.14	1.211
2.3.3	Our organisation provides managers with access to a single source of information that provides a comprehensive perspective on internal and external organisational dynamics and trends	2.92	1.175

The ranking clearly illustrates a consistency in responses from respondents ranging from a higher mean for variable 2.3.7 at 3.99 to variable 2.3.3 with a low mean of 2.92. The higher mean scores were obtained for the questions regarding the advantage strategic intelligence can provide organisations, while the lower mean scores focus on the use of strategic intelligence within organisations.

Table 31, below, illustrates the variables for **Questions 2.3.8 to 2.3.11**, which queried whether organisations conduct strategic synthesis and insight generation, sorted by their mean scores.

Table 31 – Questions 2.3.8 to 2.3.11: Strategic synthesis and insight generation sorted by mean

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Strategic synthesis and insight generation:			
Variable	Question	Mean	Std. deviation
2.3.11	Formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge	3.82	0.895
2.3.9	We interpret information to create forward views and to generate plausible future worlds	3.75	0.979
2.3.8	Strategic issues are explored to find deeper structure and insight	3.72	1.009
2.3.10	The generation of strategic insight is guided by intuition	3.71	0.918

The high average mean scores provided in the ranking illustrates that the majority of respondents agreed positively with the value that strategic synthesis and insight generation could provide the organisation.

Table 32 below illustrates the variables for **Question 2.3.12**, which provided a number of synthesis and insight generation frameworks or models that could be used for crafting of strategy, sorted by their mean scores.

Table 32 – Questions 2.3.12: Synthesis and insight generation frameworks or models sorted by mean

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Synthesis and insight generation frameworks or models:			
Variable	Question	Mean	Std. deviation
2.3.12.g	Scenario planning (visioning, backcasting)	3.73	1.568
2.3.12.j	Strategic maps	3.51	1.665
2.3.12.h	Sense-making	3.03	1.634
2.3.12.i	Storytelling	2.65	1.558
2.3.12.b	Cross impact analysis	2.56	1.459
2.3.12.k	Strategic metaphors	2.54	1.500
2.3.12.l	Strategic narratives (Shadowing, Ante-narratives)	2.53	1.514
2.3.12.a	Causal layered analysis	2.28	1.289
2.3.12.d	Futures wheels	2.26	1.332
2.3.12.c	Embodied metaphors	2.25	1.260
2.3.12.e	Modalities of thinking (Metaphorical, Dialectic, Spatial, Social Modalities, Poetic)	2.14	1.265
2.3.12.f	Playscripts	1.86	1.040

The ranking illustrates a variation in responses from respondents, with three variables obtaining mean scores higher than 3.00, indicating a greater frequency of

usage; while the majority obtained mean scores between 2.00 and 3.00 and one variable obtained a low mean of 1.86. The lower mean scores indicate a low frequency of usage.

Table 33 below illustrates the variables for **Questions 2.3.13 to 2.3.18**, which probed whether organisations evaluate and validate strategic options, sorted by their mean scores.

Table 33 – Question 2.3.13 to 2.3.18: Evaluation and validation of strategic options sorted by mean

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Evaluation and validation of strategic options:			
Variable	Question	Mean	Std. deviation
2.3.14	We evaluate and validate strategic options to understand any unforeseen risks and their effect on our organisation	3.85	0.861
2.3.13	We evaluate and validate strategic options after strategy formulation	3.68	0.892
2.3.16	Our strategic options go through a validation process to ensure that they are actionable, acceptable and feasible to the organisation	3.56	1.086
2.3.15	We evaluate and validate strategic options to gain acceptance across the organisation for our strategy	3.45	1.087
2.3.17	We have developed an internal evaluation methodology to screen strategic options	3.14	1.161
2.3.18	We use Game theory to select the best option from several options, by considering the perspective of competitors, collaborators and stakeholders	2.53	1.105

The ranking illustrates a consistency in responses from respondents ranging from a higher mean for variable 2.3.14 at 3.85, to variable 2.3.18 with a low mean of 2.53. Five of the variables obtained mean scores higher than 3.00, with the two highest mean scores obtained for questions enquiring whether organisations evaluate and validate strategic options to determine unforeseen risks, and the timing of when they undertake the activity.

Table 34, below, sorts the tabulated variables for **Questions 2.3.1 to 2.3.7**, regarding strategic intelligence activities, by their standard deviation scores.

Table 34 - Questions 2.3.1 to 2.3.7: Strategic Intelligence activities sorted by standard deviation

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Strategic Intelligence activities:			
Variable	Question	Mean	Std. deviation
2.3.1	Our organisation has a Strategic Intelligence process in place	3.14	1.211
2.3.2	We fuse our Business Intelligence, Competitive Intelligence and Knowledge Management (to create Strategic Intelligence) for use in decision-making	3.25	1.181
2.3.3	Our organisation provides managers with access to a single source of information that provides a comprehensive perspective on internal and external organisational dynamics and trends	2.92	1.175
2.3.4	Managers use Strategic Intelligence as an input in their strategy-making	3.21	1.111
2.3.5	Strategic Intelligence assists managers to make better, fact-based decisions	3.76	0.956
2.3.6	Strategic Intelligence is critical to enhancing our strategy-making process	3.86	0.923
2.3.7	The use of Strategic Intelligence leads to competitive advantage	3.99	0.895

The average mean scores across most questions, combined with average to high standard deviation scores, indicate that while there was a spread of responses, most respondents responded in a similar manner to all the questions.

Table 35, below, sorts the tabulated variables for **Questions 2.3.8 to 2.3.11**, regarding strategic synthesis and insight generation, by their standard deviation scores.

Table 35 - Questions 2.3.8 to 2.3.11: Strategic synthesis and insight generation sorted by standard deviation

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Strategic synthesis and insight generation:			
Variable	Question	Mean	Std. deviation
2.3.8	Strategic issues are explored to find deeper structure and insight	3.72	1.009
2.3.9	We interpret information to create forward views and to generate plausible future worlds	3.75	0.979
2.3.10	The generation of strategic insight is guided by intuition	3.71	0.918
2.3.11	Formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge	3.82	0.895

The high mean scores across all questions, combined with average standard deviation scores indicate that there was a lower spread of responses – most respondents responded in a positive manner to all the questions, indicating that strategic synthesis and insight generation takes place within organisations and is

viewed as adding value.

Table 36 below sorts the tabulated variables for **Question 2.3.12**, providing a list of synthesis and insight generation frameworks or models, by their standard deviation scores, depicting the level of agreement between respondents and the range of responses.

Table 36 - Questions 2.3.12: Synthesis and insight generation frameworks sorted by standard deviation

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Synthesis and insight generation frameworks or models:			
Variable	Question	Mean	Std. deviation
2.3.12.j	Strategic maps	3.51	1.665
2.3.12.h	Sense-making	3.03	1.634
2.3.12.g	Scenario planning (visioning, backcasting)	3.73	1.568
2.3.12.i	Storytelling	2.65	1.558
2.3.12.l	Strategic narratives (Shadowing, Ante-narratives)	2.53	1.514
2.3.12.k	Strategic metaphors	2.54	1.500
2.3.12.b	Cross impact analysis	2.56	1.459
2.3.12.d	Futures wheels	2.26	1.332
2.3.12.a	Causal layered analysis	2.28	1.289
2.3.12.e	Modalities of thinking (Metaphorical, Dialectic, Spatial, Social Modalities, Poetic)	2.14	1.265
2.3.12.c	Embodied metaphors	2.25	1.260
2.3.12.f	Playscripts	1.86	1.040

The highest standard deviation found for this section was for variable 2.3.12.j, and was 1.665. All of the variables gained a standard deviation of greater than 1.000, indicating an extremely high range of responses for this question. Variable 2.3.12.f obtained both the lowest mean and the lowest standard deviation scores.

Table 37 below sorts the tabulated variables for **question 2.3.13 to 2.1.18**, by their standard deviation scores.

Table 37 - Questions 2.3.13 to 2.1.18: Evaluation and validation of strategic options sorted by standard deviation

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY			
Evaluation and validation of strategic options:			
Variable	Question	Mean	Std. deviation
2.3.17	We have developed an internal evaluation methodology to screen strategic options	3.14	1.161
2.3.18	We use Game theory to select the best option from several options, by considering the perspective of competitors, collaborators and stakeholders	2.53	1.105
2.3.15	We evaluate and validate strategic options to gain acceptance across the organisation for our strategy	3.45	1.087
2.3.16	Our strategic options go through a validation process to ensure that they are actionable, acceptable and feasible to the organisation	3.56	1.086
2.3.13	We evaluate and validate strategic options after strategy formulation	3.68	0.892
2.3.14	We evaluate and validate strategic options to understand any unforeseen risks and their effect on our organisation	3.85	0.861

Variables 2.3.17 and 2.3.18 have the highest standard deviation scores, indicating a high lack of consensus among the respondents' answers. The questions focus on whether organisations have developed an internal evaluation methodology to screen strategic options and whether they actively use game theory to select strategic options, respectively. In general, the standard deviation scores of the variables indicated a wide divergence in opinion, with the lowest standard deviation scores focusing on how organisations evaluate and validate strategic options. The variables with the highest mean scores also recorded the lowest standard deviation scores.

The results for section 3 indicate that, to a large extent, respondents agree with the value that the identified mechanisms for crafting creative and adaptive strategy provide organisations. Furthermore, they indicate that they undertake such activities to an extent; however, there is very little awareness or usage of available synthesis and insight generation frameworks or models.

6.2.5 Understanding the development of creative and adaptive strategy

To thrive in the business environment, organisations should not only utilise creativity, but they should also be adaptable to changing conditions by utilising agility to quickly spot and exploit emerging business opportunities, or absorb the changes where the organisation has the strength and stamina to weather the market shifts (Sull, 2009:80).

Toma, Bratu, and Burcea (2013:149-151) posit that in the past, many people viewed the concepts of strategy and creativity as “being like oil and water” and suggest that creativity constitutes a key element for the strategy of an organisation.

Strategy-making approaches should, by implication, assist in creatively positioning the organisation into an adaptive future (Pugh and Bourgeois, 2011:178). However, strategy and its rational strategy-making approaches have failed to employ greater creativity in the past.

Section 4 of part 2 of the questionnaire was designed to investigate organisational activities related to the development of creative and adaptive strategy. To this extent **Questions 2.4.1 to 2.4.6** were developed to determine the following:

- Whether traditional strategy-making approaches have become outdated and unsuitable to the new reality
- To what extent creative and adaptive approaches can lead to the successful development of organisational strategy within changing environments
- To what extent an environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy
- Whether creativity and adaptability is critical in the development of organisational strategy
- To what extent organisational strategies are creative and adaptive in the changing business environment
- Whether South African organisations’ strategies are creative and adaptive in the changing business environment.

The various questions in section 4, Part 2 of the questionnaire are discussed below.

6.2.5.1 Discussion of results

The group of questions within section 4, **Question 2.4.1 to 2.4.6**, focused on clarifying whether, and to what extent, organisational activities lead to creative and adaptive strategy. The results are depicted in Figure 41 below.



Figure 41 – Question 2.4.1 to 2.4.6: Creative and adaptive strategy activities (n=102)

Question 2.4.1 interrogated whether traditional strategy-making approaches have become outdated and unsuitable to the new business reality. The mean score for the question was calculated to be 3.05 with a standard deviation of 1.102. This standard deviation clarifies that respondents did not provide similar responses to a question, thereby indicating less agreement among the respondents on the matter. Thirty-eight percent (38%) of the respondents indicated agreement, while 38% indicated disagreement with the statement, with a further 24% provided a neutral response. Considering the two polar opposites, 10% indicated a strongly agree response, with 5% indicating a strongly disagree response.

Question 2.4.2 aimed to determine whether creative and adaptive approaches could lead to the successful development of organisational strategy within changing environments. The mean was determined to be high at 4.17, with a low standard deviation of 0.631, indicating a positive response to the statement. Eighty-nine percent (89%) of respondents indicated agreement and just 1% were in disagreement with the question. The result confirms that there is a belief that creative and adaptive approaches could lead to the successful development of organisational strategy within changing environments.

Question 2.4.3 aimed to establish whether an environment of communication, collaboration, open relationships and creativity is required for the development of an

adaptive strategy. The mean was determined to be high at 4.39, with a very low standard deviation of 0.600, indicating a consistently positive response to the statement. Ninety-six percent (96%) of respondents indicated agreement with just 1% in disagreement to the question. The result illustrates that an environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy.

Question 2.4.4 was intended to determine whether creativity and adaptability are critical in the development of organisational strategy. The mean was calculated to be high at 4.25, with a very low standard deviation of 0.608, indicating a consistently positive response to the statement. Ninety-three percent (93%) of respondents were in agreement and only 1% disagreed. The result demonstrated that there is common understanding that creativity and adaptability is critical in the development of organisational strategy.

Question 2.4.5 aimed to determine whether respondents believe their organisations' strategies are creative and adaptive in the changing business environment. The mean was established to be 3.35, with a high standard deviation of 1.131 indicating a wide spread of responses to the statement. Fifty-four percent (54%) of respondents indicated agreement, 24% disagreement and 23% provided a neutral response to the question. The result depicts that while the majority of respondents believe that their organisation's strategy is creative and adaptive in the changing business environment, a large number of respondents believe there could be an improvement.

The final question of section 4, **Question 2.4.6**, was devised to determine whether respondents believe, in general, that South African organisations' strategies are creative and adaptive in the evolving business environment. The mean was determined to be very low at 2.70, with an average standard deviation of 0.899. Forty-five percent (45%) of respondents were in disagreement, 18% were in agreement and a high proportion at 37% provided a neutral response to the question.

6.2.5.2 Ranking variables

Having discussed the questions in the previous section, it is important to show that

there was a strong dichotomy in the mean and standard deviation results of section 4. With regard to the individual variables, the tabulations of the overall mean and standard deviation results identify the variables that are considered as the most and least important by the respondents. The ranking of the variables by mean and standard deviation was completed in order to explore the location and variability of the data. All the variables are ranked in Table 38 and Table 39 below.

Table 38 below illustrates the variables of **Questions 2.4.1 to 2.4.6** sorted by their mean scores.

Table 38 – Questions 2.4.1 to 2.4.6: Creative and adaptive strategy activities by mean

SECTION 4: CREATIVE AND ADAPTIVE STRATEGY			
Organisation's strategy activities:			
Variable	Question	Mean	Std. deviation
2.4.3	An environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy	4.39	0.600
2.4.4	Creativity and adaptability is critical in the development of organisational strategy	4.25	0.608
2.4.2	Creative and adaptive approaches can lead to the successful development of organisational strategy within changing environments	4.17	0.631
2.4.5	My organisation's strategies are creative and adaptive in the changing business environment	3.35	1.131
2.4.1	Traditional strategy-making approaches have become outdated and unsuitable to the new reality	3.05	1.102
2.4.6	In general South African organisations' strategies are creative and adaptive in the changing business environment	2.70	0.899

The ranking illustrates that the majority of respondents agreed positively with the questions that related to activities related to development of creative and adaptive strategy. The lower mean scores related directly to opinion on whether organisations' strategies are creative and adaptive, and whether traditional strategy-making approaches are outdated and unsuitable to the new business reality.

Table 39 below sorts the tabulated variables of **Question 2.4.1 to 2.4.6** by their standard deviation scores, which depict the level of agreement between respondents and the range of responses. The higher the standard deviation score, the greater the range of responses to the question, indicating the lack of consensus among the respondents' answers.

Table 39 - Questions 2.4.1 to 2.4.6: Creative and adaptive strategy activities sorted by standard deviation

SECTION 4: CREATIVE AND ADAPTIVE STRATEGY			
Organisation's strategy activities:			
Variable	Question	Mean	Std. deviation
2.4.5	My organisation's strategies are creative and adaptive in the changing business environment	3.35	1.131
2.4.1	Traditional strategy-making approaches have become outdated and unsuitable to the new reality	3.05	1.102
2.4.6	In general South African organisations' strategies are creative and adaptive in the changing business environment	2.70	0.899
2.4.2	Creative and adaptive approaches can lead to the successful development of organisational strategy within changing environments	4.17	0.631
2.4.4	Creativity and adaptability is critical in the development of organisational strategy	4.25	0.608
2.4.3	An environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy	4.39	0.600

The highest standard deviation found for this section was for variable 2.4.5, and was 1.131. This questioned whether respondents believed that their organisations' strategies are creative and adaptive in the changing business environment. An average mean score clearly indicated that this was predominantly the case, although the high standard deviation proved a spread of responses. By studying the tabulations for the questionnaire, it was found that section 4 contained three of the highest mean scores combined with three of the lowest average standard deviation scores.

The results indicate that while creativity and adaptability are important in the development of strategy, not all organisations' strategies are creative and adaptive, and that respondents were divided on whether traditional strategy-making approaches were still suitable to the development of strategy in the current business reality.

6.3 Quantitative Findings: Factor / Cross Tabulation Analysis

6.3.1 Factor analysis: data reduction

Following the extraction of descriptive statistics for each of the variables, principal component analysis was conducted, using both Promax and Varimax rotation, to determine whether the data could be reduced into factor subsets to be used in further inferential analysis.

The factor analysis identified nineteen factor subsets across the questionnaire. The factor subsets are listed in Table 40 below. The nineteen factor subsets are described below; however, by maintaining the internal consistency (reliability) above the acknowledged threshold of 0.6 for exploratory research, only eighteen of the factor subsets were found suitable and approved for inclusion in further analysis.

Table 40 - Identified factor subsets

Factor Number	Factor Name	Approved
Factor 1	External Dynamics (Ext_Dynamics)	Yes
Factor 2	Internal Dynamics (Int_Dynamics)	Yes
Factor 3	Process for Identifying and Responding to Changing Dynamics (Process_Dynamics)	Yes
Factor 4	Strategic Options/Choice Frameworks and Tools (Strategic_Options)	Yes
Factor 5	Internal Implementation Frameworks and Tools (Int_Imp)	Yes
Factor 6	Market Analysis Frameworks and Tools (Market_Analysis)	Yes
Factor 7	Alternative Frameworks and Tools (Alt_Frameworks)	Yes
Factor 8	Preference for Traditional Frameworks and Tools (Pref_Trad)	Yes
Factor 9	Preference for Creative and Lateral Thinking Frameworks (Pref_Creative)	Yes
Factor 10	Strategic Intelligence Process (Strat_Int_Process)	Yes
Factor 11	Strategic Intelligence Outcomes (Strat_Int_Outcome)	Yes
Factor 12	Strategic Synthesis and Insight Generation Process (Synt_Int_Process)	Yes
Factor 13	Strategic Synthesis and Insight Generation Enablers (Synt_Int_Enablers)	Yes
Factor 14	Interpretation Frameworks and Tools (Interpretation)	Yes
Factor 15	Prospection Frameworks and Tools (Prospection 1)	Yes
Factor 16	Prospection Frameworks and Tools (Prospection 2)	Yes
Factor 17	Evaluation and Validation Options (Eval_Options)	Yes
Factor 18	Creative and Adaptive Strategy Enablers (Creative_Enablers)	Yes
Factor 19	Adoption of Creative and Adaptive Strategy (Creative_Adoption)	No

6.3.1.1 Factors affecting the business environment

Conducting a factor analysis on variables 2.1.18 to 2.1.24 provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.585, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the seven items regarding organisational dynamics that affect the business environment, indicating that a factor analysis was appropriate.

The analysis identified three components based on the eigenvalue criterion (eigenvalue greater than 1). Combined, the three components explained a total variance of 79.69%. The first component explained 33.57% of the variance, the second 25.23% and the third, 20.89%.

Following the Varimax with the Kaiser Normalization rotated method, a rotated component matrix was extracted, providing the factor loadings for each individual variable.

The first factor subset included two items, identified as focusing on whether external organisational dynamics impacted the organisation over the past five years. The factor loadings are shown in Table 41 below:

Table 41 – Factor 1: External dynamics

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
External Dynamics (Ext_dynamics)	2.1.18	External organisational dynamics have impacted the organisation's development of its strategy in the past five years	0.770	0.637	3.56	4.00	0.905
	2.1.20	External organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years	0.910				

Using Cronbach's Alpha, the internal consistency (reliability) for the external dynamics factor was found to be 0.637. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.56
- The median was 4.00 and
- The standard deviation was 0.905.

The second factor subset included two items and were identified as focusing on internal organisational dynamics and whether they impacted the organisation over the past 5 years. The factor loadings are shown in Table 42 below:

Table 42 – Factor 2: Internal dynamics

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Internal Dynamics (Int_dynamics)	2.1.19	Internal organisational dynamics have impacted the organisation's development of its strategy in the past five years	0.933	0.831	3.71	4.00	1.025
	2.1.21	Internal organisational dynamics have impacted the organisation's execution/implementation of its strategy in the past five years	0.876				

Using Cronbach's Alpha, the internal consistency (reliability) for the internal dynamics factor was found to be 0.831. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.71
- The median was 4.00 and
- The standard deviation was 1.025.

The third factor subset included three items which were identified as focusing on whether the organisation has a process in place for identifying and responding to changing internal organisational and external market dynamics. The factor loadings are shown in Table 43 below:

Table 43 – Factor 3: Process for identifying and responding to changing dynamics

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Process for identifying and responding to changing dynamics (Process_dynamics)	2.1.22	We have a systematic process for monitoring external threats and opportunities	0.907	0.860	3.17	3.33	1.057
	2.1.23	We systematically act on external threats and opportunities	0.857				
	2.1.24	We actively consider how to manage uncertainty in our organisation	0.858				

Using Cronbach's Alpha, the internal consistency (reliability) for the "process for identifying and responding to changing dynamics" factor was found to be 0.860. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.17
- The median was 3.33 and
- The standard deviation was 1.057.

6.3.1.2 Traditional analytical frameworks and tools

Analysing the factor analysis output on variables 2.2.3.a to 2.2.3.f. provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.830, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the twelve items identified as traditional analytical frameworks and tools used during the crafting of strategy, indicating that a factor analysis was appropriate.

The analysis identified three components based on the eigenvalue criterion (eigenvalue greater than 1). Combined the three components explained a total variance of 60.11%. The first component explained 26.45% of the variance, the second 18.00% and the third, 15.65%.

Following the Varimax with the Kaiser Normalization rotated method, a rotated component matrix was extracted, providing the factor loadings for each individual variable.

The first factor subset included seven items, identified as traditional frameworks and tools focusing on providing an organisation with strategic options or choices. The factor loadings are shown in Table 44 below:

Table 44 – Factor 4: Strategic Options/Choice Frameworks and Tools

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Strategic Options/Choice Frameworks and Tools (Strategic_Options)	2.2.3.b	Blue Ocean Identification	0.502	0.833	3.50	3.71	1.176
	2.2.3.g	Macro-environmental (PESTLE) Analysis	0.679				
	2.2.3.h	Porter Five Forces (Industry) Analysis	0.716				
	2.2.3.i	S-Curve (Technology, Experience, Product Life Cycle) Analysis	0.776				
	2.2.3.j	Scenario and Simulation Analysis	0.661				
	2.2.3.k	SWOT Analysis	0.560				
	2.2.3.l	Value Chain Analysis	0.534				

Using Cronbach's Alpha, the internal consistency (reliability) for the strategic options/choice frameworks and tools factor was found to be 0.833. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.50
- The median was 3.71 and
- The standard deviation was 1.176.

The second factor subset included three items identified as traditional frameworks and tools used for internal organisational analysis or implementation of strategy. The factor loadings are shown in Table 45 below:

Table 45 – Factor 5: Internal Implementation Frameworks and Tools

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Internal Implementation Frameworks and Tools (Int_Imp)	2.2.3.a	Balanced Scorecard or Outcomes Approach	0.578	0.612	4.26	4.33	1.158
	2.2.3.e	Financial Analysis	0.829				
	2.2.3.f	Functional Capability and Resource Analysis	0.653				

Using Cronbach's Alpha, the internal consistency (reliability) for the internal implementation frameworks and tools factor was established to be 0.612. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 4.26
- The median was 4.33 and
- The standard deviation was 1.158.

The third factor subset included two items, identified as traditional frameworks and tools that could be utilised for market analysis. The factor loadings are shown in Table 46 below:

Table 46 – Factor 6: Market Analysis Frameworks and Tools

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Market Analysis Frameworks and Tools (Market_Analysis)	2.2.3.c	Competitor Profiling	0.839	0.734	4.13	4.50	1.410
	2.2.3.d	Customer Segmentation and Value Analysis	0.839				

Using Cronbach's Alpha, the internal consistency (reliability) for the market analysis frameworks and tools factor was determined to be 0.734. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the

variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 4.13
- The median was 4.50 and
- The standard deviation was 1.410.

6.3.1.3 Alternative frameworks and tools

The factor analysis for variables 2.2.4.a to 2.2.4.h provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.885, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the eight items identified as identifying alternative frameworks and tools used to craft strategy, indicating that a factor analysis was appropriate.

The analysis extracted only one component based on the eigenvalue criterion (eigenvalue greater than 1), where the single component provided a total variance of 57.95%.

The identified component included eight items identified as identifying alternative frameworks and tools used to craft strategy. The factor loadings are shown in Table 47 below:

Table 47 – Factor 7: Alternative Frameworks and Tools

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Alternative Frameworks and Tools (Alt_Frameworks)	2.2.4.a	AQAL model (Integral theory)	0.719	0.895	2.99	3.13	1.177
	2.2.4.b	Emerging issue analysis	0.755				
	2.2.4.c	Key success factor analysis	0.817				
	2.2.4.d	Open Foresight	0.784				
	2.2.4.e	Opportunity-response framework	0.774				
	2.2.4.f	Trend analysis and forecasting	0.644				
	2.2.4.g	Unique competing space analysis	0.846				
	2.2.4.h	VRIO (value, rarity, imitability, and organisation) framework	0.733				

Using Cronbach's Alpha, the internal consistency (reliability) for the alternative frameworks and tools factor was found to be 0.895. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 2.99
- The median was 3.13 and
- The standard deviation was 1.177.

6.3.1.4 Use of frameworks and tools

The factor analysis output for variables 2.2.5 to 2.2.9 provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.686, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the five items which describe the use of frameworks and tools, indicating that a factor analysis was appropriate.

The analysis identified two components based on the eigenvalue criterion (eigenvalue greater than 1). Combined, the two components explained a total variance of 71.77%. The first component explained 46.20% of the variance, and the second, 25.56%.

Following the rotated method of Promax with Kaiser Normalization, a pattern matrix was extracted, calculating the factor loadings for each individual variable.

The first factor subset included two items, identified as displaying a preference for using traditional frameworks and tools within the organisation. The factor loadings are listed in Table 48 below:

Table 48 – Factor 8: Preference for Traditional Frameworks and Tools

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Preference for Traditional Frameworks and Tools (Pref_Trad)	2.2.5	We prefer traditional analytical frameworks and tools (see Q 2.2.3) that simplify, compartmentalise and illustrate concepts into clear, concise depictions of reality	0.709	0.479	3.52	3.50	0.863
	2.2.6	We focus extensively on financial modelling	0.468				

Using Cronbach's Alpha, the internal consistency (reliability) for the preference for traditional frameworks and tools factor was established to be 0.479. As this value is below 0.6 for exploratory research, it was deemed unacceptable but was included in further analysis as an identifying measure of respondent preference for traditional frameworks and tools. Importantly, Factor 8 was included in further analysis as it was the alternative to Factor 9: Preference for Creative and Lateral Thinking Frameworks. Together, the two factors clarified the preferences held by respondents for the two alternative framework types.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.52
- The median was 3.50 and
- The standard deviation was 0.863.

The second factor subset included three items, identified as indicating a preference for creative and lateral thinking frameworks and tools for use during the crafting of strategy. The factor loadings are reported in Table 49 below:

Table 49 – Factor 9: Preference for Creative and Lateral Thinking Frameworks

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Preference for Creative and Lateral Thinking Frameworks and Tools (Pref_Creative)	2.2.7	We extensively use tools that enable lateral thinking and creativity	0.766	0.821	3.10	3.00	0.890
	2.2.8	We prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts	0.748				
	2.2.9	We find tools that enable lateral thinking and creativity more beneficial than traditional (see Q 2.2.3) analytical tools, methods or models	0.852				

Using Cronbach's Alpha, the internal consistency (reliability) for the preference for creative and lateral thinking frameworks and tools factor was discovered to be 0.821. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.10
- The median was 3.00 and
- The standard deviation was 0.890.

6.3.1.5 Strategic intelligence activities

Factor analysis output for variables 2.3.1 to 2.3.7 provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.763, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the six items which focus on strategic intelligence activities, indicating that a factor analysis was appropriate.

The analysis identified two components based on the eigenvalue criterion (eigenvalue greater than 1). Combined, the two components explained a total variance of 74.33%. The first component explained 52.93% of the variance, and the second 21.40%.

Following the rotated method of Promax with Kaiser Normalization, a pattern matrix was extracted, providing the factor loadings for each individual variable.

The first factor subset included four items, identified as describing the strategic intelligence process used by an organisation. The factor loadings are recorded in Table 50 below:

Table 50 – Factor 10: Strategic Intelligence Process

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Strategic Intelligence Process (Strat_Int_process)	2.3.1	Our organisation has a Strategic Intelligence process in place	0.842	0.876	3.13	3.25	0.999
	2.3.2	We fuse our Business Intelligence, Competitive Intelligence and Knowledge Management (to create Strategic Intelligence) for use in decision-making	0.970				
	2.3.3	Our organisation provides managers with access to a single source of information that provides a comprehensive perspective on internal and external organisational dynamics and trends	0.672				
	2.3.4	Managers use Strategic Intelligence as an input in their strategy-making	0.698				

Using Cronbach's Alpha, the internal consistency (reliability) for the strategic intelligence process factor was determined to be 0.876. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.13
- The median was 3.25 and
- The standard deviation was 0.999.

The second factor subset included two items identified as describing the outcomes of utilising strategic intelligence. The factor loadings are presented in Table 51 below:

Table 51 – Factor 11: Strategic Intelligence Outcomes

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Strategic Intelligence Outcomes (Strat_Int_Outcome)	2.3.5	Strategic Intelligence assists managers to make better, fact-based decisions.	0.864	0.650	3.88	4.00	0.797
	2.3.7	The use of Strategic Intelligence leads to competitive advantage.	0.555				

Using Cronbach's Alpha, the internal consistency (reliability) for the strategic intelligence outcomes factor was found to be 0.650. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.88
- The median was 4.00 and
- The standard deviation was 0. 0.797.

6.3.1.6 Strategic synthesis and insight generation

Analysing the factor analysis output on variables 2.3.8 to 2.3.11 provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.632, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the four items identified as describing strategic synthesis

and insight generation within an organisation, indicating that a factor analysis was appropriate.

The analysis identified two components based on the eigenvalue criterion (eigenvalue greater than 1). Together, the two components explain a total variance of 79.40%. The first component explained 54.23% of the variance, and the second 25.17%.

Following the rotated method of Promax with Kaiser Normalization, a pattern matrix was extracted, providing the factor loadings for each individual variable.

The first factor subset included two items, identified as describing the strategic synthesis and insight generation process. The factor loadings are reported in Table 52 below:

Table 52 – Factor 12: Strategic Synthesis and Insight Generation Process

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Strategic Synthesis and Insight Generation Process (Synt_Int_P rocess)	2.3.8	Strategic issues are explored to find deeper structure and insight.	0.791	0.817	3.74	4.00	0.914
	2.3.9	We interpret information to create forward views and to generate plausible future worlds.	0.898				

Using Cronbach's Alpha, the internal consistency (reliability) for the strategic synthesis and insight generation process factor was found to be 0.817. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.74
- The median was 4.00 and
- The standard deviation was 0.914.

The second factor subset included two items identified as describing the enablers for

strategic synthesis and insight generation. The factor loadings are shown in Table 53 below:

Table 53 – Factor 13: Strategic Synthesis and Insight Generation Enablers

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Strategic Synthesis and Insight Generation Enablers (Synt_Int_Enablers)	2.3.10	The generation of strategic insight is guided by intuition.	0.658	0.578	3.76	4.00	0.760
	2.3.11	Formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge.	0.618				

Using Cronbach's Alpha, the internal consistency (reliability) for the strategic synthesis and insight generation enablers factor was established to be 0.578. As this value is below the acknowledged threshold of 0.6 for exploratory research, it was deemed poor, but nevertheless included in further analysis as it is the primary identifier of respondent use of the enablers supporting strategic synthesis and insight generation, not identified by any other factors.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.76
- The median was 4.00 and
- The standard deviation was 0.760.

6.3.1.7 Synthesis and insight generation frameworks or models

The factor analysis output on variables 2.3.12.a to 2.3.12.l provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.834, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the twelve items identified as synthesis and insight generation frameworks or models used for crafting creative and adaptive strategy, indicating that a factor analysis was appropriate.

The analysis identified three components based on the eigenvalue criterion

(eigenvalue greater than 1). Combined, the three components explain a total variance of 67.98%. The first component explained 31.53% of the variance, the second 18.31% and the third, 18.14%.

Following the Varimax with Kaiser Normalization rotated method, a rotated component matrix was extracted, providing the factor loadings for each individual variable.

The first factor subset included six items; these were identified as interpretation frameworks and tools used for exploring and unpacking the past and current reality while crafting a creative and adaptive strategy. The factor loadings are depicted in Table 54 below:

Table 54 – Factor 14: Interpretation Frameworks and Tools

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Interpretation Frameworks and Tools (Interpretation)	2.3.12.a	Causal layered analysis	0.831	0.882	2.22	2.33	1.017
	2.3.12.b	Cross impact analysis	0.817				
	2.3.12.c	Embodied metaphors	0.751				
	2.3.12.d	Futures wheels	0.751				
	2.3.12.e	Modalities of thinking (Metaphorical, Dialectic, Spatial, Social Modalities, Poetic)	0.754				
	2.3.12.f	Playscripts	0.608				

Using Cronbach's Alpha, the internal consistency (reliability) for the interpretation frameworks and tools factor was found to be 0.882. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 2.22
- The median was 2.33 and
- The standard deviation was 1.017.

The second factor subset included three items identified as prospection frameworks and tools used for unpacking and exploring future worlds or the direction during the crafting of a creative and adaptive strategy. The factor loadings are reported in Table 55 below:

Table 55 – Factor 15: Prospection Frameworks and Tools (1)

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Prospection Frameworks and Tools (Prospection 1)	2.3.12.g	Scenario planning (visioning, backcasting)	0.834	0.761	3.44	3.50	1.334
	2.3.12.h	Sense-making	0.633				
	2.3.12.j	Strategic maps	0.815				

Using Cronbach's Alpha, the internal consistency (reliability) for the first prospection frameworks and tools factor was established to be 0.761. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was considered satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.44
- The median was 3.50 and
- The standard deviation was 1.334.

The third factor subset included three items which were identified as prospection frameworks and tools used for unpacking and exploring future worlds or direction during the crafting of a creative and adaptive strategy, in addition to the above factor. The factor loadings are recorded in Table 56 below:

Table 56 – Factor 16: Prospection Frameworks and Tools (2)

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Prospection Frameworks and Tools (Prospection 2)	2.3.12.i	Storytelling	0.801	0.767	2.58	3.00	1.259
	2.3.12.k	Strategic metaphors	0.756				
	2.3.12.l	Strategic narratives (Shadowing, Ante-narratives)	0.602				

Using Cronbach's Alpha, the internal consistency (reliability) for the second prospection frameworks and tools factor was determined to be 0.767. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 2.58
- The median was 3.00 and
- The standard deviation was 1.259.

6.3.1.8 Evaluation and validation of strategic options

Variables 2.3.13 to 2.3.18 provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.837, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the six variable items identified as ways of conducting the evaluation and validation of strategic options. The analysis extracted only one component based on the eigenvalue criterion (eigenvalue greater than 1), where the single component provided a total variance of 60.27%.

The identified component included six items identified as ways of conducting the evaluation and validation of strategic options. The factor loadings are shown in Table 57 below:

Table 57 – Factor 17: Evaluation and validation options

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Evaluation and validation options (Eval_options)	2.3.13	We evaluate and validate strategic options after strategy formulation	0.800	0.853	3.37	3.33	0.788
	2.3.14	We evaluate and validate strategic options to understand any unforeseen risks and their effect on our organisation	0.834				
	2.3.15	We evaluate and validate strategic options to gain acceptance across the organisation for our strategy	0.841				
	2.3.16	Our strategic options go through a validation process to ensure that they are actionable, acceptable and feasible to the organisation	0.879				
	2.3.17	We have developed an internal evaluation methodology to screen strategic options	0.774				
	2.3.18	We use Game theory to select the best option from several options, by considering the perspective of competitors, collaborators and stakeholders	0.449				

Using Cronbach's Alpha, the internal consistency (reliability) for the evaluation and validation of strategic options factor was established to be 0.853. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was deemed satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 3.37
- The median was 3.33 and
- The standard deviation was 0.788.

6.3.1.9 Organisational strategy activities

Factor analysis output for variables 2.4.1 to 2.4.6 provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.712, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the six items identified as describing organisational strategy activities undertaken during the crafting of strategy, indicating that a factor analysis was appropriate.

The analysis identified two components based on the eigenvalue criterion (eigenvalue greater than 1). Combined, the two components explain a total variance of 59.14%. The first component explained 37.68% of the variance, while the second explained a variance of 21.46%.

Following the Varimax with Kaiser Normalization rotated method, a rotated component matrix was extracted, providing the factor loadings for each individual variable.

The first factor subset included just one item considering whether traditional strategy-making approaches have become outdated and unsuitable to the new reality. This variable had a factor loading of 0.382, lower than the remaining items in component one, and in addition could not rationally be grouped with the remaining items in component 1. This item was therefore grouped on its own and excluded from further analysis.

The second factor subset included three items, identified as enablers required for crafting a creative and adaptive strategy. The factor loadings are depicted in Table 58 below:

Table 58 – Factor 18: Creative and Adaptive Strategy Enablers

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Creative and Adaptive Strategy Enablers (Creative_Enablers)	2.4.2	Creative and adaptive approaches can lead to the successful development of organisational strategy within changing environments	0.830	0.799	4.27	4.00	0.518
	2.4.3	An environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy	0.821				
	2.4.4	Creativity and adaptability is critical in the development of organisational strategy	0.849				

Using Cronbach's Alpha, the internal consistency (reliability) for the creative and adaptive strategy enabler's factor was indicated to be 0.799. As this value is above the acknowledged threshold of 0.6 for exploratory research, it was considered satisfactory.

A factor-based score was subsequently calculated as the average score of the variables included in the factor for every observation. Across the data set, the descriptive statistics for this factor were:

- A mean score of 4.27
- The median was 4.00 and
- The standard deviation was 0.518.

The third factor subset included two items: these were identified as indicating the level of adoption of creative and adaptive strategy in South Africa. The factor loadings are shown in Table 59 below:

Table 59 – Factor 19: Adoption of Creative and Adaptive Strategy

Construct	Item	Question	Factor loadings	Cronbach Alpha	Mean	Median	Std. Deviation
Adoption of Creative and Adaptive Strategy (Creative_adoption)	2.4.5	My organisation's strategies are creative and adaptive in the changing business environment	0.742	0.219	-	-	-
	2.4.6	In general South African organisations' strategies are creative and adaptive in the changing business environment	0.593				

Using Cronbach alpha, the internal consistency (reliability) for the adoption of creative and adaptive strategy factor was found to be 0.219. As this value is far below the acknowledged threshold of 0.6 for exploratory research, it was considered unacceptable and was not used in the remaining analysis.

6.3.1.10 Additional Factor Analysis

In addition to the factors identified above, factor analysis was conducted on the following variables.

- Variables 2.1.1.1 to 2.1.8.1 measured the level of uncertainty of several external dynamics that affect the business environment and provided a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.718, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the eight variable items, indicating that a factor analysis was appropriate. The analysis extracted three components based on the eigenvalue criterion (eigenvalue greater than 1); however, this grouping of variables was not included in the factor analysis but was instead combined into a separate analysis regarding the external environment (see Figure 26 in section 6.2.2.1).
- Variables 2.1.1.2 to 2.1.8.2 measured the potential impact of several external dynamics on the sustainability of the respondents' organisation and resulted in a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.678, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the eight variable items, indicating that a factor analysis was appropriate. The analysis extracted two components

based on the eigenvalue criterion (eigenvalue greater than 1); however, this grouping of variables was not included in the factor analysis but was instead combined in a separate analysis regarding the external environment (see Figure 26 in section 6.2.2.1).

- Variables 2.1.10 to 2.1.17 resulted in a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.893, which is above the recommended threshold of 0.5. In addition, the Bartlett's Test of Sphericity was significant ($p < 0.001$) for the eight variable items identified as describing the internal dynamics affecting the business environment, indicating that a factor analysis was appropriate. The analysis extracted only one component based on the eigenvalue criterion (eigenvalue greater than 1); however, this grouping of variables was not included in the factor analysis but was combined in a separate analysis regarding the internal environment (see section 6.4.2.1).

6.3.2 Cross tabulation analysis

An important focus of the research study was to clarify participants' understanding of strategy and the process of how strategy is crafted. While questions 2.2.1 and 2.2.2 provided descriptive insight into the responses generated per question option, further insight was required regarding the cross selection of definition and process and an understanding of who the respondents are. A cross-tabulation analysis was therefore conducted to summarise data from two or more nominal or ordinal variables into a single table, so as to assist in identifying any statistical significant relationships between the variables. The Pearson's Chi-square test of independence was used to evaluate the existence and statistical significance of identified relationships.

6.3.2.1 Understanding of strategy by the process of how strategy is crafted

To determine whether organisations' understanding of strategy is linked to the accompanying process of crafting strategy, a cross tabulation assessment was conducted on 102 participant responses to Part 2 Section 2, Questions 2.2.1 and 2.2.2 as depicted in contingency Table 60 below. This was done to examine the shared distributions based on the statement options selected by participants, falling under the questions "Consider your understanding of strategy" (Section 2, Question 2.2.1) and "Consider your understanding of the process of how strategy is crafted"

(Section 2, Question 2.2.2). The Pearson Chi-Square Test = 37.920, df=1, p=0.000 indicated that there was a significant relationship between the two options.

Table 60 - Understanding of strategy by the process of how strategy is crafted contingency table

		2.2.2 Consider your understanding of the process of how strategy is crafted	
		Crafting of strategy follows a <u>formal analytical process</u> to define an organisation's plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change	Crafting of strategy follows an <u>iterative process of divergence and convergence, combined with creative thinking</u> to explore innovative new ideas, hypotheses, strategic questions and opportunities
2.2.1 Consider your understanding of strategy	Strategy is <u>formally articulated</u> through a statement of purpose (such as mission and vision) outlining the organisational objectives	76.50%	23.50%
	Strategy is articulated by facilitating " <u>a particular way of thinking</u> " which emphasises intent, enables creativity, strategic thinking and adaptability	15.70%	84.30%

The contingency table yielded the following results:

- Of the 50% who selected the first statement "Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives" from "Consider your understanding of strategy" (Section 2, 2.2.1), 76.5% selected "Crafting of strategy follows a formal analytical process to define an organisation's plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change" from "Consider your understanding of the process of how strategy is crafted" (Section 2, 2.2.2). The remaining 23.5% selected "Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities" from "Consider your understanding of the process of how strategy is crafted" (Section 2, 2.2.2).

- Of the other 50% who selected the second statement “Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability” from “Consider your understanding of strategy” (Section 2, 2.2.1) 84.3% selected “Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2). The remaining 15.7% selected “Crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2).

6.3.2.2 Understanding of strategy by the size of the organisation

To determine whether organisations of different sizes share a common or divergent understanding of strategy, a cross tabulation assessment was conducted on 102 participant responses to Section 2, 2.2.1 and the size of their respective organisations as depicted in contingency Table 61 below. This allowed for an examination of the shared distributions based on the statement options selected by participants, falling under the question “Consider your understanding of strategy” (Section 2, 2.2.1) and organisation size, which was divided into three groups (1=<200, 2=200 – 1000 and 3=>1000).

The Pearson Chi-Square Test = 5.039, df=2, p=0.081 indicated that there was a significant relationship in the tenth percentile between “Consider your understanding of strategy” (Section 2, 2.2.1) and organisation size (Part 1, Question 2).

Table 61 - Understanding of strategy by the size of the organisation contingency table

		2.2.1 Consider your understanding of strategy	
		Strategy is <u>formally articulated through a statement of purpose</u> (such as mission and vision) outlining the organisational objectives	Strategy is <u>articulated by facilitating “a particular way of thinking”</u> which emphasises intent, enables creativity, strategic thinking and adaptability
Number of Employees (Size)	Fewer than 200	33.30%	52.90%
	200 – 1000	11.80%	13.70%
	More than 1000	54.90%	33.30%

The contingency table yielded the following results:

- Of the 50% who selected “Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” from “Consider your understanding of strategy” (Section 2, 2.2.1), 33.3% are employed by an organisation with fewer than 200 employees, 11.8% are employed by an organisation with 200 – 1000 employees, while 54.9% are employed by an organisation with more than 1000 employees.
- Of the other 50% who selected “Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability” from “Consider your understanding of strategy” (Section 2, 2.2.1), 52.9% are employed by an organisation with fewer than 200 employees, 13.7% are employed by an organisation with 200 – 1000 employees whereas 33.3% are employed by an organisation with more than 1000 employees.

6.3.2.3 Understanding of strategy by position/level

To establish whether a common or divergent understanding of strategy is shared by respondents across their position/level, a cross tabulation assessment was conducted on 102 participants’ responses to Section 2, 2.2.1 and the position/level held by the participants in their respective organisations as depicted in contingency Table 62 below. This was performed to examine the shared distributions based on the statement options selected by participants, falling under the question “Consider your understanding of strategy” (Section 2, 2.2.1) and the position levels (Part 1, Question 6): external (internal, external consultants and academics); non-

managerial; lower-level management; middle management; senior and executive management.

The Pearson Chi-Square Test = 10.031, df=4, p=0.040 indicated that there was a significant relationship between “Consider your understanding of strategy” (Section 2, 2.2.1) and the position/level (Part 1, Question 6).

Table 62 - Understanding of strategy by position/level contingency table

		Position/level within organisation				
		External	Non-managerial	Lower-level	Middle	Senior and Executive
2.2.1 Consider your understanding of strategy	Strategy is <u>formally articulated through a statement of purpose</u> (such as mission and vision) outlining the organisational objectives	5.90%	13.70%	11.80%	15.70%	52.90%
	Strategy is <u>articulated by facilitating “a particular way of thinking”</u> which emphasises intent, enables creativity, strategic thinking and adaptability	3.90%	2.00%	2.00%	21.60%	70.60%

The contingency table yielded the following results:

- Of the 50% who selected “Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” from “Consider your understanding of strategy” (Section 2, 2.2.1), whereas 5.9% held an external role (internal, external consultants and academics), 13.7% a non-managerial position, 11.8% a lower-level management position, 15.7% a middle management position and 52.9% a senior or executive management position.
- Of the remaining 50% who selected “Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability” from “Consider your understanding of strategy” (Section 2, 2.2.1), 3.9% held an external role (internal, external consultants and academics), 2.0% occupied a non-managerial position, 2.0% a lower-level management position, 21.6% a middle management position and 70.6% held a senior or executive management position.

6.3.2.4 Understanding of strategy by highest level of education

To determine whether a common or divergent understanding of strategy is shared by

respondents who have undertaken different levels of education, a cross tabulation assessment was conducted on 102 participants' responses to Section 2, 2.2.1 and the highest level of education held by the participants as depicted in contingency Table 63 below. This was carried out to examine the shared distributions based on the statement options selected by participants, falling under the question "Consider your understanding of strategy" (Section 2, 2.2.1) and the highest level of education (Part 1, Question 9): High School Certificate / Diploma (Matric) combined with a Post High School National Diploma / Certificate, Bachelor's degree, Honours degree, Master's degree (Not MBA / MBL), MBA / MBL and Doctorate.

Pearson Chi-Square Test = 4.160, df=5, p=0.527 indicated that there was no statistically significant relationship between "Consider your understanding of strategy" (Section 2, 2.2.1) and the highest level of education (Part 1, Question 9).

Table 63 - Understanding of strategy by highest level of education contingency table

		Highest level of education					
		High School Certificate (Matric) & Post High School National Diploma	Bachelors	Honours	Masters	MBA/MBL	Doctorate
2.2.1 Consider your understanding of strategy	Strategy is <u>formally articulated through a statement of purpose</u> (such as mission and vision) outlining the organisational objectives	3.90%	17.60%	25.50%	19.60%	29.40%	3.90%
	Strategy is <u>articulated by facilitating "a particular way of thinking"</u> which emphasises intent, enables creativity, strategic thinking and adaptability	5.90%	17.60%	27.50%	13.70%	21.60%	13.70%

The contingency table yielded the following results:

- Of the 50% participants who selected "Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives" from "Consider your understanding of strategy" (Section 2, 2.2.1), 3.9% of them had achieved a High School Certificate / Diploma (Matric) or a Post High School National Diploma / Certificate, 17.6% of participants a Bachelor's degree, 25.5% an Honours degree, 19.6% of participants a Master's degree (not MBA / MBL), 29.4% a MBA / MBL while 3.9% of participants hold a Doctorate.

- Of the other 50% participants who selected “Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability” from “Consider your understanding of strategy” (Section 2, 2.2.1), 5.9% of the participants had attained a High School Certificate / Diploma (Matric) or a Post High School National Diploma / Certificate, 17.6% of participants a Bachelor’s degree, 27.5% an Honours degree, 13.7% of participants a Master’s degree (not MBA / MBL), 21.6% a MBA / MBL and 13.7% a Doctorate.

6.3.2.5 Process of how strategy is crafted by the size of the organisation

To determine the process that organisations of different sizes follow to craft strategy, a cross tabulation assessment was conducted on 102 participants’ responses to Part 2 Section 2, 2.2.2 and the size of their respective organisations as depicted in contingency Table 64 below. This was carried out to examine the shared distributions based on the statement options selected by participants, falling under the question “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2) and the organisation’s size, which was divided into three groups (1=<200, 2=200 – 1000 and 3=>1000).

The Pearson Chi-Square Test = 17.032, df=2, p=0.000 indicated that there was a significant relationship between “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2) and size (Part 1 Question 2).

Table 64 - Process of how strategy is crafted by the size of the organisation contingency table

		2.2.2 Consider your understanding of the process of how strategy is crafted	
		Crafting of strategy follows a <u>formal analytical process to define an organisation’s plans</u> for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change	Crafting of strategy follows an <u>iterative process of divergence and convergence, combined with creative thinking</u> to explore innovative new ideas, hypotheses, strategic questions and opportunities
Number of Employees (Size)	Fewer than 200	27.70%	56.40%
	200 – 1000	6.40%	18.20%
	More than 1000	66.00%	25.50%

The contingency table yielded the following results:

- Of the 46.1% participants who selected “Crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2), 27.7% are employed by an organisation with fewer than 200 employees, while 6.4% are employed by one with 200 – 1000 employees and 66.0% are employed by an organisation with more than 1000 employees.
- Of the other 53.9% participants who selected “Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2), 56.4% are employed by an organisation with fewer than 200 employees, 18.2% are employed by an organisation with 200 – 1000 employees whereas 25.5% are employed by one with more than 1000 employees.

6.3.2.6 Process of how strategy is crafted by position/level

To determine whether a common process for crafting strategy is shared by respondents across position/level, a cross tabulation assessment was conducted on 102 participants’ responses to Part 2 Section 2, 2.2.2 and the position/level held by the participants in their respective organisations as depicted in contingency Table 65 below. This was done performed to examine the shared distributions based on the statement options selected by participants, falling under the question “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2) and the position levels (Part 1, Question 6): external (internal, external consultants and academics); non-managerial; lower-level management; middle management; senior and executive management.

The Pearson Chi Square Test = 11.785, df=4, p=0.019 indicated that there was a significant relationship between “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2) and the position/level (Part 1, Question 6).

Table 65 - Process of how strategy is crafted by position/level contingency table

		Position/level within organisation				
		External	Non-managerial	Lower-level	Middle	Senior and Executive
2.2.2 Consider your understanding of the process of how strategy is crafted	Crafting of strategy follows a formal analytical process to <u>define an organisation's plans</u> for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change	4.30%	10.60%	14.90%	21.30%	48.90%
	Crafting of strategy follows an <u>iterative process of divergence and convergence, combined with creative thinking</u> to explore innovative new ideas, hypotheses, strategic questions and opportunities	5.50%	5.50%	0.00%	16.40%	72.70%

The contingency table yielded the following results:

- Of the 46.1% who selected “Crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2), 4.3% held an external role (internal, external consultants and academics), 10.6% a non-managerial position, 14.9% a lower-level management position, 21.3% a middle management position and 48.9% a senior or executive management position.
- Of the remaining 53.9% who selected “Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2), 5.5% held an external role (internal, external consultants and academics), 5.5% occupied a non-managerial position, 0.0% a lower-level management position, 16.4% a middle management position and 72.7% a senior or executive management position.

6.3.2.7 Process of how strategy is crafted by highest level of education

To determine whether a common process for crafting strategy is shared by

respondents with different education levels, a cross tabulation assessment was conducted on 102 participants' responses to Section 2, 2.2.2 and the highest level of education held by the participants as depicted in contingency Table 66 below. This was carried out to examine the shared distributions based on the statement options selected by participants, falling under the question "Consider your understanding of the process of how strategy is crafted" (Section 2, 2.2.2) and the highest level of education (Part 1, Question 9): a High School Certificate / Diploma (Matric) combined with a Post High School National Diploma / Certificate, Bachelor's degree, Honours degree, Master's degree (Not MBA / MBL), MBA / MBL and Doctorate.

The Pearson Chi-Square Test = 8.371, df=5, p=0.137 indicated that a significant relationship did not exist between "Consider your understanding of the process of how strategy is crafted" (Section 2, 2.2.2) and the highest level of education (Part 1, Question 9).

Table 66 - Process of how strategy is crafted by highest level of education contingency table

		Highest level of education					
		High School Certificate (Matric) & Post High School National Diploma	Bachelors	Honours	Masters	MBA/MBL	Doctorate
2.2.2 Consider your understanding of the process of how strategy is crafted	Crafting of strategy follows a <u>formal analytical process to define an organisation's plans</u> for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change	2.10%	17.00%	27.70%	17.00%	34.00%	2.10%
	Crafting of strategy follows an <u>iterative process of divergence and convergence, combined with creative thinking</u> to explore innovative new ideas, hypotheses, strategic questions and opportunities	7.30%	18.20%	25.50%	16.40%	18.20%	14.50%

The contingency table yielded the following results:

- Of the 46.1% of participants who selected "Crafting of strategy follows a formal analytical process to define an organisation's plans for achieving its

mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2), 2.1% of the participants had achieved a High School Certificate / Diploma (Matric) or a Post High School National Diploma / Certificate, 17.0% of participants a Bachelor’s degree, 27.7% a Honours degree, 17.0% a Master’s degree (not MBA / MBL), 34.0% a MBA / MBL and 2.1% of participants a Doctorate.

- Of the other 53.9% of participants who selected “Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” from “Consider your understanding of the process of how strategy is crafted” (Section 2, 2.2.2), 7.3% of the participants had attained a High School Certificate / Diploma (Matric) or a Post High School National Diploma / Certificate, 18.2% a Bachelor’s degree, 25.5% an Honours degree, 16.4% a Master’s degree (Not MBA / MBL), 18.2% an MBA / MBL and 14.5% of participants a Doctorate.

6.3.3 Factor mean distribution by approach to strategy

As seen above, Questions 2.2.1 and 2.2.2 provided respondents with the opportunity to select between two alternative statements posed in each question to best describe their organisation’s strategy-making approach. To interpret the differences in responses across all identified factors per statement of each question, radar charts were utilised to depict the factor mean distributions.

6.3.3.1 Factors by understanding of strategy

The radar chart in Figure 42 below compared the statements selected for question 2.2.1 “Consider your understanding of strategy” with the average frequencies of the 18 factors that have been assessed and approved for further analysis (listed in Table 40). The graph graphically depicts the variation between each of the 18 factors, against the two statements to easily distinguish differences in frequencies visually. The findings are then discussed. The first selected statement is “Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the

organisational objectives” while the second statement reads “Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability”.

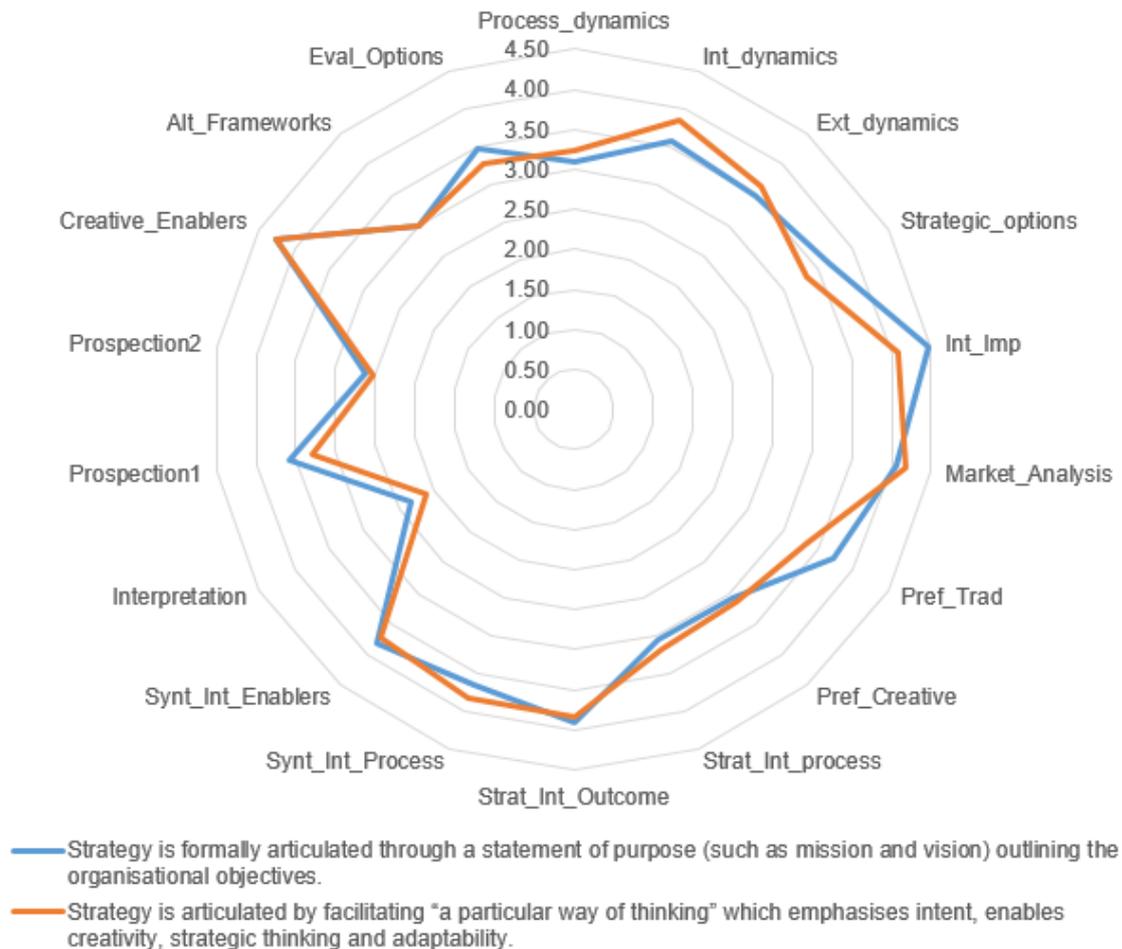


Figure 42 - Factors by understanding of strategy radar chart

Both statements display a very similar radial pattern across all 18 factors (listed in Table 40).

Marginal differences (<0.5) are seen between the two statements in relation to these factors: internal dynamics (int_dynamics/ factor 2), strategic options/choice frameworks and tools (strategic_options/ factor 4), internal implementation frameworks and tools (int_imp/ factor 5), preference for traditional frameworks and tools (pref_trad/ factor 8), prospection frameworks and tools (prospection 1) and evaluation and validation options (eval_options/ factor 17).

Strong spikes (>4.00) are observed in these factors: internal implementation frameworks and tools (int_imp/ factor 5; 0=4.4575, 1=4.0719), market analysis

frameworks and tools (market_analysis/ factor 6; 0=4.0686, 1=4.1863) and creative and adaptive strategy enablers (creative_enablers/ factor 18; 0=4.2680, 1=4.2745).

Weaker averages (<3.00) in frequency are observed in the following factors: interpretation frameworks and tools (interpretation/ factor 14; 0=2.3235, 1=2.1242), prospection frameworks and tools (prospection 2/ factor 16; 0=2.6333, 2.5229) and alternative frameworks and tools (alt_frameworks/ factor 7; 0=2.9828, 1=2.9926).

6.3.3.2 Factors by process of how strategy is crafted

The radar chart in Figure 43 below compared the statements selected for question 2.2.2 “Consider your understanding of the process of how strategy is crafted” with the average frequencies of the 18 factors that were assessed and approved for further analysis (listed in Table 40). The graph graphically depicts the variation between each of the 18 factors, against the two statements to easily distinguish differences in frequencies visually. The findings are then discussed. The first selected statement reads “Crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” and the second statement “Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities”.

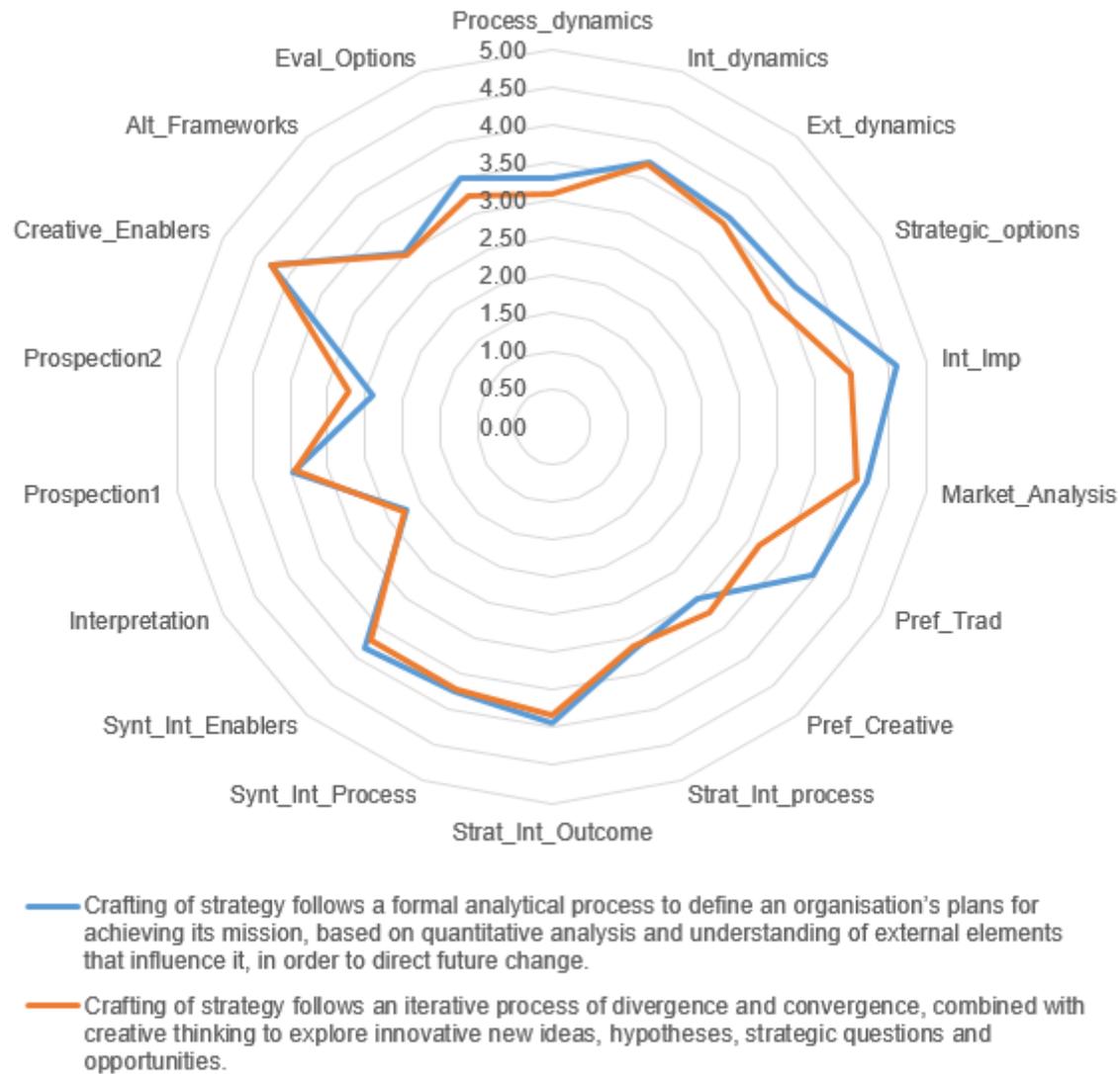


Figure 43 - Factors by process of how strategy is crafted radar chart

Both statements indicate a very similar radial pattern across all 18 factors (listed in Table 40).

Moderate differences (>0.5) are observed between the two statements in relation to the factors: internal implementation frameworks and tools (int_imp / factor 5) and preference for traditional frameworks and tools (pref_trad / factor 8) showing the most significant difference.

Marginal differences (<0.5) are noted between the two statements in relation to these factors: process for identifying and responding to changing dynamics (process_dynamics / factor 3), strategic options/choice frameworks and tools (strategic_options / factor 4), preference for creative and lateral thinking frameworks

(pref_creative / factor 9), prospection frameworks and tools (prospection 2 / factor 16) and evaluation and validation options (eval_options / factor 17).

Strong spikes (>4.00) are observed in the following factors: internal implementation frameworks and tools (int_imp / factor 5; 0=4.5957), market analysis frameworks and tools (market_analysis / factor 6; 0=4.2021, 1=4.0636) and creative and adaptive strategy enablers (creative_enablers / factor 18; 0=4.2553, 1=4.2848).

Weaker averages (<3.00) in frequency are noted in these factors: preference for creative and lateral thinking frameworks (pref_creative / factor 9; 0=2.9716), interpretation frameworks and tools (interpretation / factor 14; 0=2.3986, 1=2.7273) and alternative frameworks and tools (alt_frameworks / factor 7; 0=2.9750).

6.4 Quantitative Findings: Inferential Statistics

6.4.1 Factor correlation analysis

To determine the strength of the linear relationships between each combination of the factors identified in section 6.3.1, this research study will use the correlation coefficient. The correlation coefficient is viewed as having a real value of between -1 and +1, where +1 will represent a perfect correlation and -1 a perfect negative correlation (Saunders et al., 2009:459).

While no specific boundaries are set to indicate a high positive correlation or negative correlation relationship, for the purpose of this research study the researcher used the following scale:

- -1.0 to -0.6 indicates a strong negative association
- -0.6 to -0.4 indicates a moderate negative association
- -0.4 to -0.2 indicates a weak negative association
- -0.2 to +0.2 indicates little or no association
- +0.2 to +0.4 indicates a weak positive association
- +0.4 to +0.6 indicates a moderate positive association
- +0.6 to +1.0 indicates a strong positive association.

For the purpose of this study the correlation analysis focused on factor relationships that fall into the -1.0 to -0.4 and +0.4 to +1.0 categories, indicating moderate to

strong negative or moderate to strong positive linear relationships. A correlation matrix was used to simplify the identification of factor relationships, with all correlations identified as being significant at the 0.05 level.

The following correlations were identified as having a **strong positive linear relationship** (greater than +0.6):

- Organisations who embedded a systematic process for identifying and responding to changing dynamics (process_dynamics/ factor 3) did so with a strategic intelligence process (strat_int_process/ factor 10).
- Organisations commonly utilised strategic options/choice frameworks and tools (strategic_options/ factor 4) with internal implementation frameworks and tools (int_imp/ factor 5) and alternative frameworks and tools (alt_frameworks/ factor 7).
- Organisations actively implemented and utilised a strategic intelligence process (strat_int_process/ factor 10) with evaluation and validation of strategic options (eval_options/ factor 17).

The following correlations were identified as indicating a **moderate positive linear relationship** (greater than +0.4):

- Organisations embedded a process for identifying and responding to changing dynamics (process_dynamics/ factor 3) with:
 - Strategic options/choice frameworks and tools (strategic_options/ factor 4),
 - Internal implementation frameworks and tools (int_imp/ factor 5),
 - Market analysis frameworks and tools (market_analysis/ factor 6),
 - Prospection frameworks and tools (prospection 1/ factor 15), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).
- Organisations utilised strategic options/choice frameworks and tools (strategic_options/ factor 4) with:
 - Market analysis frameworks and tools (market_analysis/ factor 6),
 - A strategic intelligence process (strat_int_process/ factor 10),
 - Strategic synthesis and insight generation process (synt_int_process/

- factor 12),
 - Interpretation frameworks and tools (interpretation/ factor 14),
 - Prospection frameworks and tools (prospection 1/ factor 15), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).
- Organisations utilised internal implementation frameworks and tools (int_imp/ factor 5) with:
 - Alternative frameworks and tools (alt_frameworks/ factor 7),
 - A strategic intelligence process (strat_int_process/ factor 10), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).
- Organisations utilised market analysis frameworks and tools (market_analysis/ factor 6) with:
 - A strategic intelligence process (strat_int_process/ factor 10),
 - Prospection frameworks and tools (prospection 1/ factor 15), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).
- Organisations who indicated a preference for traditional frameworks and tools (pref_trad/ factor 8) did so with internal implementation frameworks and tools (int_imp/ factor 5).
- Organisations indicated a preference for creative and lateral thinking frameworks and tools (pref_creative/ factor 9) combined with:
 - A strategic intelligence process (strat_int_process/ factor 10),
 - A strategic synthesis and insight generation process (synt_int_process/ factor 12),
 - Prospection frameworks and tools (prospection 1/ factor 15), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).
- Organisations actively implemented and utilised a strategic intelligence process (strat_int_process/ factor 10) together with:
 - Alternative frameworks and tools (alt_frameworks/ factor 7),
 - A strategic synthesis and insight generation process (synt_int_process/ factor 12), and

- Prospection frameworks and tools (prospection 1 and prospection 2/ factor 15 & 16).
- Organisations actively implemented and utilised a strategic synthesis and insight generation process (synt_int_process/ factor 12) along with:
 - Prospection frameworks and tools (prospection 1/ factor 15), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).
- Organisations actively implemented and utilised interpretation frameworks and tools (interpretation/ factor 14) combined with:
 - Alternative frameworks and tools (alt_frameworks/ factor 7), and
 - Prospection frameworks and tools (prospection 1 and prospection 2/ factor 15 & 16).
- Organisations actively implemented and utilised prospection frameworks and tools (prospection1/ factor 15) together with:
 - Alternative frameworks and tools (alt_frameworks/ factor 7),
 - Prospection frameworks and tools (prospection 2/ factor 16), and
 - Methods for the evaluation and validation of strategic options (eval_options/ factor 17).

6.4.2 Kruskal-Wallis analysis

6.4.2.1 Internal Dynamics by size of the organisation

Internal dynamics are identified as influencing the development and execution of the organisation's strategy. The intention of Questions 2.1.10 to 2.1.17 was to determine the dynamics which influence the organisation's internal environment.

In addition, a Kruskal-Wallis test was conducted to determine if there were any significant differences in the responses provided by organisation size. This factor was divided into three groups (1= \leq 200, 2=200–1000 and 3= \geq 1000), while the seven statements pertaining to the current state of strategy as influenced by Internal Dynamics included: "Our strategy is flawed", "We misinterpret strategic insight", "We respond slowly to strategic insight", "We struggle with the execution of our strategy", "Mind-sets and behaviours hinder our strategy", "Limited organisational capabilities hinder our strategy", "Organisational culture hinders our strategy", and

“Organisational communication hinders our strategy”.

The Kruskal-Wallis test revealed that statistically significant differences were noted at the 5% level for the following statements regarding internal dynamics influencing the participants’ state of strategy within their respective organisations:

- “We respond slowly to strategic insight” indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=6.296$, $p=0.043$, with a mean rank in organisation size of 48.10 for size 1, 70.00 for size 2 and 49.48 for size 3.

The mean rank indicates that organisations with an employee size of 200 to 1000 tend to respond slower to strategic insight than their larger and smaller peers.

- “Organisational culture hinders our strategy” indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=7.298$, $p=0.026$, with a mean rank in organisation size of 46.05 for size 1, 70.65 for size 2 and 51.30 for size 3.

The mean rank indicates that organisations with an employee size of 200 to 1000 tend to have their organisational strategy hindered by their organisational culture significantly more than their larger and smaller peers do.

- “Organisational communication hinders our strategy” indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=10.391$, $p=0.006$, with a mean rank in organisation size of 46.35 for size 1, 75.15 for size 2 and 49.70 for size 3.

The mean rank indicates that in organisations with an employee size of 200 to 1000, organisational communication hinders the state of their strategy significantly more than their larger and smaller peers.

6.4.2.2 Factors by size of the organisation

A Kruskal-Wallis test was conducted comparing organisation size, which was divided into three groups (1= ≤ 200 , 2=200–1000 and 3= > 1000), and the 18 independent factors approved for further analysis (listed in Table 40).

The Kruskal-Wallis test revealed that statistically significant differences were noted

at the 5% level for the following independent variables / factors:

- Process for identifying and responding to changing dynamics (process_dynamics/ factor 3) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=6.192$, $p=0.045$, with a mean rank in organisation size of 45.52 for size 1, 43.69 for size 2 and 59.60 for size 3.

The mean rank indicates that organisations with an employee size of greater than 1000 employees, tend to demonstrate a greater preference for processes that identify and respond to changing dynamics (process_dynamics/ factor 3).

- Strategic options/choice frameworks and tools (strategic_options/ factor 4) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=6.630$, $p=0.036$, with a mean rank in organisation size of 44.24 for size 1, 44.38 for size 2 and 59.37 for size 3.

The mean rank suggests the tendency of organisations with an employee size of greater than 1000 employees, to have a greater preference for strategic options or choice frameworks and tools (strategic_options/ factor 4) than their smaller peers.

- Internal implementation frameworks and tools (int_imp/ factor 5) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=16.303$, $p=0.000$, with a mean rank in organisation size of 39.06 for size 1, 49.62 for size 2 and 64.21 for size 3.

The mean rank indicates that organisations with an employee size of more than 1000 employees tend to display a strong preference for internal implementation frameworks and tools (int_imp/ factor 5).

- Market analysis frameworks and tools (market_analysis/ factor 6) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=10.849$, $p=0.004$, with a mean rank in organisation size of 46.78 for size 1, 33.77 for size 2 and 61.23 for size 3.

The mean rank indicates a tendency of organisations with an employee size of greater than 1000 employees to prefer market analysis frameworks and tools (market_analysis/ factor 6).

- Preference for traditional frameworks and tools (pref_trad/ factor 8) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=14.965$, $p=0.001$, with a mean rank in organisation size of 38.72 for size 1, 60.15 for size 2 and 61.50 for size 3.

The mean rank indicates that organisations with an employee size of 200 to 1000 and organisations of more than 1000 employees, tend to indicate a similar preference for traditional frameworks and tools (pref_trad/ factor 8); far larger than organisations with an employee size of fewer than 200.

- Preference for creative and lateral thinking frameworks (pref_creative/ factor 9) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=12.613$, $p=0.002$, with a mean rank in organisation size of 61.75 for size 1, 31.00 for size 2 and 47.40 for size 3.

The mean rank indicates a tendency of organisations with an employee size of fewer than 200 employees to exhibit a significantly higher preference for creative and lateral thinking frameworks (pref_creative/ factor 9), than their larger peers.

- Evaluation and validation options (eval_options/ factor 17) indicated a statistically significant difference between the different organisation sizes, $\chi^2(2)=8.903$, $p=0.012$, with a mean rank in organisation size of 45.92 for size 1, 37.88 for size 2 and 60.89 for size 3.

The mean rank indicates that organisations with an employee size of more than 1000 employees tend to demonstrate a preference for evaluation and validation options (eval_options/ factor 17).

- In addition, the strategic intelligence process (strat_int_process/ factor 10) indicated a statistically significant difference in the tenth percentile (10% level), between the different organisation sizes, $\chi^2(2)=5.743$, $p=0.057$, with a mean rank in organisation size of 46.28 for size 1, 42.35 for size 2 and 59.24 for size 3.

The mean rank indicates a tendency of organisations with an employee size of more than 1000 employees to display a preference for strategic intelligence processes (strat_int_process/ factor 10).

6.4.3 Regression analysis

The purpose of this study, it will be recalled, was to investigate the extent to which strategic thinking is used by organisations in order to determine commonly used tools, elements and mechanisms as inputs into the conceptualisation of a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy. For this purpose, a hierarchical multiple regression analysis was undertaken with the factors identified through the data reduction, as described in section 6.3.1, in order to determine whether relationships exist between them. To conduct the regression analysis, a dependent variable/factor was analysed against one or more independent variables/factors to predict whether a relationship exists.

The hierarchical regression analysis followed a sequential process to provide insight not possible when running only one single model, as illustrated in Figure 44 below; each step adding another building block in order to develop a thorough understanding of the relationships between each factor. In addition, the hierarchical multiple regression analysis allowed the assessor to determine the overall fit of the model and the relative contribution of each of the predictors to the overall fit.

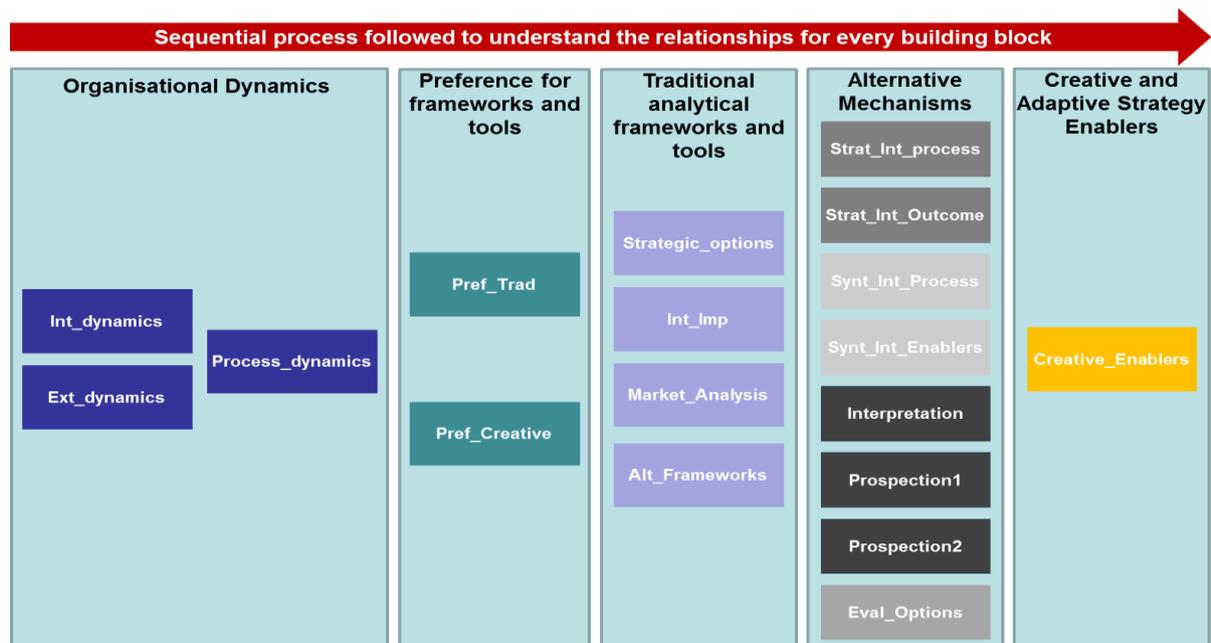


Figure 44 – Regression process

An important aspect to consider prior to the use of regression analysis is the applicable sample size. The sample size requirement for such an analysis is

dependent on the use of the analysis. This research focuses on explaining the strength of the contributing s in explaining variation in the dependent variable; a smaller number of cases/observations is considered acceptable per variable. In this analysis, the sample size is 15 to 1 for the case where seven variables were included.

The eighteen approved variables/factors listed in Table 40 were used.

6.4.3.1 Process for identifying and responding to changing dynamics

A single stage multiple regression was conducted with the “process for identifying and responding to changing dynamics” as the dependent variable. Internal dynamics and external dynamics were entered as the independent variables. The regression statistics are depicted in Table 67 below.

Table 67 - Regression results for process for identifying and responding to changing dynamics

Process_dynamics	
Independent Variable	Model 1
Int_dynamics	-0.292 *
Ext_dynamics	0.216 **
R ²	0.104
F (p value)	5.717 (-0.004)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The multiple regression revealed that internal dynamics and external dynamics contributed significantly to the regression model ($F(2,99)=5.717$, $p<0.05$), and accounted for 10.4% of the variation in “process for identifying and responding to changing dynamics”, with internal dynamics having a small (standardised Beta = -0.292) statistically significant negative relationship, keeping the other variable in the model constant, and external dynamics having a small (standardised Beta = 0.216) statistically significant positive relationship, keeping the other variable in the model constant. The relationships are depicted in Figure 45 below.

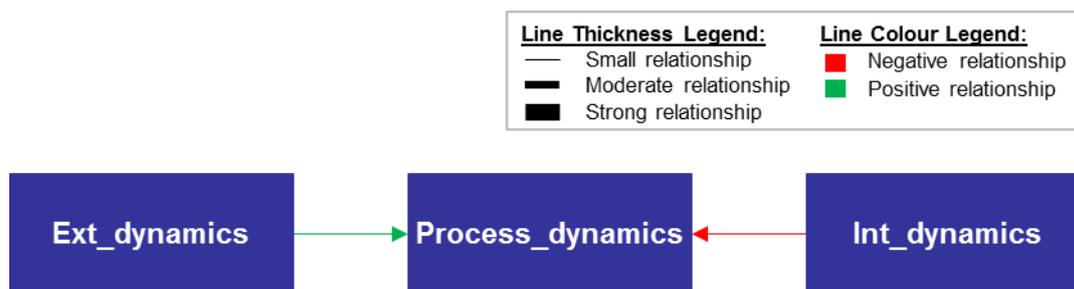


Figure 45 - Process for identifying and responding to changing dynamics regression relationships

6.4.3.2 Preference for traditional frameworks and tools

Hierarchical multiple regression was conducted with “preference for traditional frameworks and tools” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression and “process for identifying and responding to changing dynamics” was entered at stage two. The regression statistics are depicted in Table 68 below.

Table 68 - Regression results for preference for traditional frameworks and tools

Pref_Trad		
Independent Variable	Model 1	Model 2
Int_dynamics	0.024	0.048
Ext_dynamics	0.240 **	0.222 **
Process_dynamics		0.084
R ²	0.061	0.067
ΔR ²	0.061	0.006
F (p value)	3.205 (-0.045)	2.352 (-0.077)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model (F(2,99)=3.205, p<0.05) and accounted for 6.1% of the variation in “preference for traditional frameworks and tools”. External dynamics had a small (standardised Beta = 0.240) statistically significant positive relationship. The addition of “process for identifying and responding to changing dynamics” explained an additional 0.6% of the variation of “preference for traditional frameworks and tools” and this change in R² was significant in the tenth percentile (p=0.077); (F(3,98)=2.352, p<0.1) according to the ANOVA test for this model. External dynamics did yield a small (standardised Beta = 0.222) statistically significant positive relationship, keeping the other variables in the model constant.

When all three independent variables were included in the second stage of the regression model; internal dynamics and “process for identifying and responding to changing dynamics” were not statistically significant predictors of “preference for traditional frameworks and tools”. The strongest and only statistically significant variable was external dynamics. Together, the three independent variables accounted for 6.7% of the variance in “preference for traditional frameworks and tools”. The relationships are depicted in Figure 46 below.

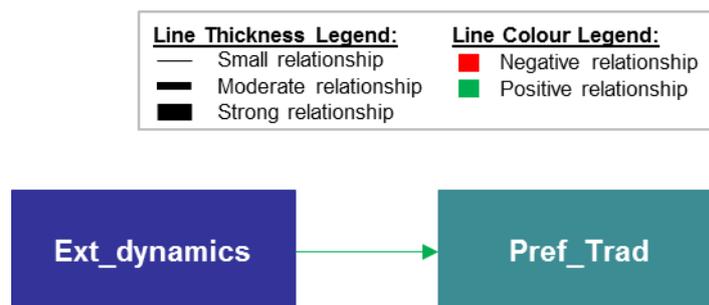


Figure 46 - Preference for traditional frameworks and tools regression relationships

6.4.3.3 Preference for creative and lateral thinking frameworks

A hierarchical multiple regression was conducted with “preference for creative and lateral thinking frameworks” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression and “process for identifying and responding to changing dynamics” was entered at stage two. The regression statistics are depicted in Table 69 below.

Table 69 - Regression results for preference for creative and lateral thinking frameworks

Pref_creative		
Independent Variable	Model 1	Model 2
Int_dynamics	-0.175***	-0.093
Ext_dynamics	0.050	-0.010
Process_dynamics		0.279 *
R ²	0.029	0.099
ΔR ²	0.029	0.070
F (p value)	1.478 (-0.233)	3.574 (-0.007)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), external dynamics did not statistically significantly contribute to the regression model

($F(2,99)=1.478$, $p>0.1$), and accounted for only 2.9% of the variation in “preference for creative and lateral thinking frameworks”. Internal dynamics yielded a small (standardised Beta = -0.175) statistically significant negative relationship with “preference for creative and lateral thinking frameworks” in the tenth percentile ($p=0.089$).

The addition of “process for identifying and responding to changing dynamics” explained an additional 7% of the variation of “preference for creative and lateral thinking frameworks” and this change in R^2 contributed statistically significantly ($F(3,98)=3.574$, $p<0.01$), according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a small (standardised Beta = 0.279) positive relationship, keeping the other variables in the model constant.

When all three independent variables were included in the second stage of the regression model, the internal dynamics and external dynamics were not statistically significant predictors of “preference for creative and lateral thinking frameworks”. The strongest and only statistically significant variable was “process for identifying and responding to changing dynamics”. Together the three independent variables accounted for 9.9% of the variance in “preference for creative and lateral thinking frameworks”. The relationships are depicted in Figure 47 below.

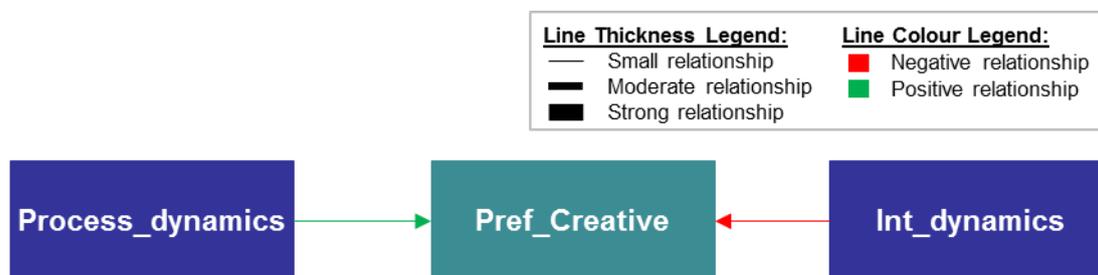


Figure 47 - Preference for creative and lateral thinking frameworks regression relationships

6.4.3.4 Strategic options/choice frameworks and tools

Hierarchical multiple regression was conducted with “strategic options/choice frameworks and tools” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression, “process for identifying and responding to changing dynamics” at stage two, and “preference for traditional frameworks and tools” at stage three. The same regression was run a second time

with the change from “preference for traditional frameworks and tools” in stage three to “preference for creative and lateral thinking frameworks”.

The first two stages of both regression analyses yielded identical results. The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before "preference for traditional frameworks and tools" or "preference for creative and lateral thinking frameworks" can be selected. The regression statistics are depicted in Table 70 below.

Table 70 – Regression results for strategic options/choice frameworks and tools

Strategic_options				
Independent Variable	Model 1	Model 2	Model 3.1	Model 3.2
Int_dynamics	-0.290 *	-0.172 ***	-0.182***	-0.151
Ext_dynamics	0.232 **	0.144	0.100	0.146
Process_dynamics		0.404 *	0.385 *	0.340 *
Pref_Trad			0.199 **	
Pref_Creative				0.228 **
R ²	0.107	0.253	0.290	0.300
ΔR ²	0.107	0.146	0.037	0.047
F (p value)	5.877 (-0.004)	10.980 (0.000)	9.817 (0.000)	10.304 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model (F (2,98) = 5.877, p<0.01), and accounted for 10.7% of the variation in “strategic options/choice frameworks and tools”. Internal dynamics revealed a small (standardised Beta = -0.290) statistically significant negative relationship, while external dynamics yielded a small (standardised Beta = 0.232) statistically significant positive relationship.

Introducing “process for identifying and responding to changing dynamics” explained an additional 14.6% of variation in “strategic options/choice frameworks and tools” and this change in R² was significant (F (3, 97) = 10.980, p<0.001) according to the ANOVA test for this model. External dynamics was not a statistically significant predictor of “strategic options/choice frameworks and tools” in the second stage. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta = 0.404) statistically significant positive relationship with “strategic options/choice frameworks and tools”. Internal dynamics yielded a small

(standardised Beta = -0.172) statistically significant negative relationship with a tenth percentile ($p=0.071$).

Adding the variable “preference for traditional frameworks and tools” to the regression model explained an additional 3.7% of the variation in “strategic options/choice frameworks and tools” and this change in R^2 was significant ($F(4,96) = 9.817, p<0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta = 0.385) statistically significant positive relationship, while “preference for traditional frameworks and tools” has a small (standardised Beta = 0.199) statistically significant positive relationship, and in addition, internal dynamics yielded a small (standardised Beta = -0.182) statistically significant negative relationship with “strategic options/choice frameworks and tools” in the tenth percentile ($p=0.052$). External dynamics was not a statistically significant predictor of “strategic options/choice frameworks and tools”, keeping the other variables in the model constant.

The same regression was run a second time with a change from “preference for traditional frameworks and tools” (Stage 3.1) to “preference for creative and lateral thinking frameworks” (Stage 3.2). The first two stages of both regression analyses yielded identical results. The addition of “preference for creative and lateral thinking frameworks” explained an additional 4.7% of the variation in “strategic options/choice frameworks and tools” and this change in R^2 was also significant ($F(4,96) = 10.304, p<0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta = 0.340) statistically significant positive relationship while “preference for creative and lateral thinking frameworks” yielded a small (standardised Beta = 0.228) statistically significant positive relationship on “strategic options/choice frameworks and tools”, keeping the other variables in the model constant.

When all four independent variables were included in Stage 3.1 of the regression model, internal dynamics and external dynamics were not statistically significant predictors of “strategic options/choice frameworks and tools”. When all four independent variables were included in Stage 3.2 of the regression model, internal dynamics and external dynamics were not statistically significant predictors of

“strategic options/choice frameworks and tools”. The strongest statistically significant predictor of “strategic options/choice frameworks and tools” was “process for identifying and responding to changing dynamics”. Together the four independent variables accounted for 29% and 30% of the variance in “strategic options/choice frameworks and tools”. The relationships are depicted in Figure 48 below.

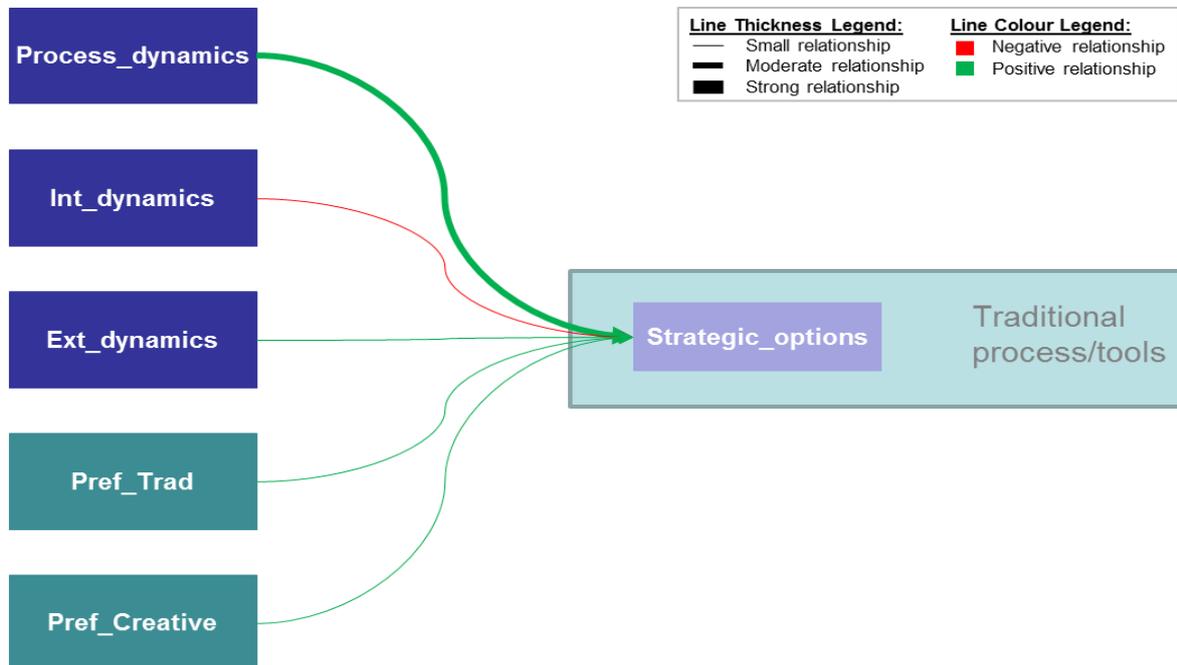


Figure 48 - Strategic options/choice frameworks and tools regression relationships

6.4.3.5 Internal implementation frameworks and tools

Hierarchical multiple regression was conducted with “internal implementation frameworks and tools” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two and “preference for creative and lateral thinking frameworks” at stage three. The same regression was run a second time with the change from “preference for creative and lateral thinking frameworks” in stage three to “preference for traditional frameworks and tools”.

The first two stages of both regression analyses yielded identical results. The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “preference for traditional frameworks and tools” or “preference for creative and lateral thinking frameworks” can be selected. The regression statistics are in Table

71 below.

Table 71 – Regression results for internal implementation frameworks and tools

Int_Imp				
Independent Variable	Model 1	Model 2	Model 3.1	Model 3.2
Int_dynamics	0.055	0.184 ***	0.184 ***	0.167 ***
Ext_dynamics	0.154	0.059	0.059	-0.019
Process_dynamics		0.440 *	0.438 *	0.411 *
Pref_Creative			0.008	
Pref_Trad				0.351 *
R ²	0.030	0.204	0.204	0.320
△R ²	0.030	0.174	0.000	0.115
F (p value)	1.556 (-0.216)	8.390 (0.000)	6.230 (0.000)	11.388 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (Model 1), internal dynamics and external dynamics did not statistically significantly contribute to the regression model ($F(2,99) = 1.556, p > 0.1$), and accounted for 3% of the variation in “internal implementation frameworks and tools”. Both internal and external dynamics proved not to be statistically significant predictors of “internal implementation frameworks and tools” at this stage of the regression model.

Introducing “process for identifying and responding to changing dynamics” explained an additional 17.4% of variation in “internal implementation frameworks and tools” and this change in R² was statistically significant, ($F(3, 98) = 8.390, p < 0.001$) according to the ANOVA test for this model. External dynamics was not a statistically significant predictor of “internal implementation frameworks and tools” in the second stage. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta = 0.440) statistically significant positive relationship with “internal implementation frameworks and tools”, while internal dynamics had a small (standardised Beta = -0.184) statistically significant positive relationship in the tenth percentile ($p = 0.060$), keeping the other variables in the model constant.

Adding the variable “preference for creative and lateral thinking frameworks” to the regression model explained 0% variation in “internal implementation frameworks and tools” and this change in R² was significant, ($F(4,97) = 6.230, p < 0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing

dynamics” yielded a moderate (standardised Beta = 0.438) statistically significant positive relationship while internal dynamics yielded a small (standardised Beta = 0.184) statistically significant positive relationship with “internal implementation frameworks and tools” in the tenth percentile ($p=0.062$). External dynamics and “preference for creative and lateral thinking frameworks” were not statistically significant predictors of “internal implementation frameworks and tools”, keeping the other variables in the model constant.

The same regression was run a second time with the change from “preference for creative and lateral thinking frameworks” (Stage 3.1) to “preference for traditional frameworks and tools” (Stage 3.2). The first two stages of both regression analyses yielded identical results. The addition of “preference for traditional frameworks and tools” explained an additional 11.5% of the variation in “internal implementation frameworks and tools” and this change in R^2 was also significant ($F(4,97) = 11.388$, $p < 0.001$) according to the ANOVA test for this model. Both “process for identifying and responding to changing dynamics” (standardised Beta = 0.411) and “preference for traditional frameworks and tools” (standardised Beta = 0.351) yielded a moderate statistically significant positive relationship with “internal implementation frameworks and tools”, while internal dynamics yielded a small (standardised Beta = 0.167) statistically significant positive relationship with “internal implementation frameworks and tools” in the tenth percentile ($p=0.067$).

When all four independent variables were included in Stage 3.1 of the regression model, internal dynamics and external dynamics were not statistically significant predictors of “internal implementation frameworks and tools”. When all four independent variables were included in Stage 3.2 of the regression model, external dynamics was not a significant predictor of “internal implementation frameworks and tools”. The strongest statistically significant predictor of “internal implementation frameworks and tools” was “process for identifying and responding to changing dynamics”. Together the four independent variables accounted for 20.4% and 31.9% of the variance in “internal implementation frameworks and tools”. The relationships are depicted in Figure 49 below.

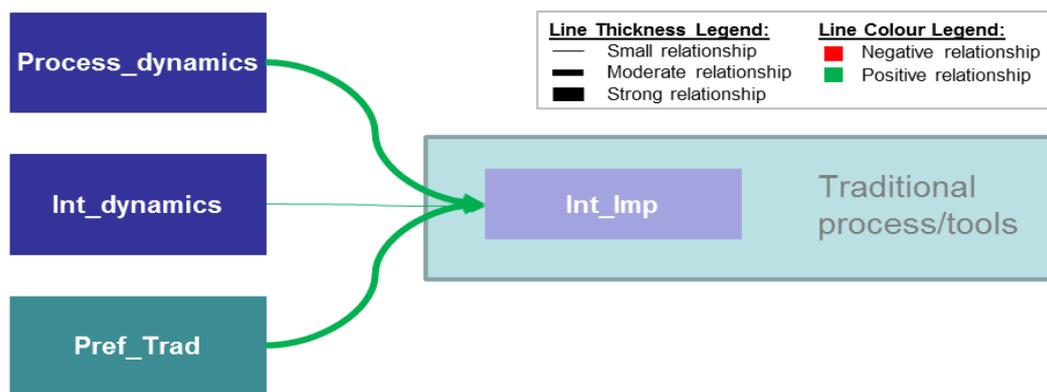


Figure 49 - Internal implementation frameworks and tools regression relationships

6.4.3.6 Market analysis frameworks and tools

Hierarchical multiple regression was conducted with market analysis as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two and “preference for traditional frameworks and tools” at stage three. The same regression was run a second time with the change from “preference for traditional frameworks and tools” in stage three to “preference for creative and lateral thinking frameworks”.

The first two stages of both regression analyses yielded identical results. The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “preference for traditional frameworks and tools” or “preference for creative and lateral thinking frameworks” could be selected. The regression statistics are depicted in Table 72 below.

Table 72 – Regression results for market analysis frameworks and tools

Market_Analysis				
Independent Variable	Model 1	Model 2	Model 3.1	Model 3.2
Int_dynamics	-0.103	0.045	0.039	0.065
Ext_dynamics	-0.017	-0.127	-0.152	-0.125
Process_dynamics		0.507 *	0.497 *	0.445 *
Pref_Creative				0.220 **
Pref_Trad			0.111	
R ²	0.012	0.242	0.253	0.285
ΔR ²	0.012	0.230	0.012	0.044
F (p value)	0.592 (-0.555)	10.417 (0.000)	8.228 (0.000)	9.689 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics did not statistically significantly contribute to the regression model ($F(2,99) = 0.592, p > 0.1$) and accounted for 1.2% of the variation. Both internal and external dynamics proved not to be statistically significant predictors of “internal implementation frameworks and tools” at this stage of the regression model.

Introducing “process for identifying and responding to changing dynamics” explained an additional 23% of variation in “market analysis frameworks and tools” and this change in R^2 was significant ($F(3, 98) = 10.417, p < 0.001$) according to the ANOVA test for this model. Both internal and external dynamics proved not to be statistically significant predictors of “market analysis frameworks and tools” in the second stage of the regression model. “Process for identifying and responding to changing dynamics” yielded a strong (standardised Beta = 0.507) statistically significant positive relationship with “market analysis frameworks and tools”, keeping the other variables in the model constant.

Adding the variable “preference for traditional frameworks and tools” to the regression model explained an additional 1.2 % of the variation in “market analysis frameworks and tools” and this change in R^2 was significant ($F(4,97) = 8.228, p < 0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta = 0.497) statistically significant positive relationship with “market analysis frameworks and tools”. Internal and external dynamics and “preference for traditional frameworks and tools” were not statistically significant predictors of “market analysis frameworks and tools”.

The same regression was run a second time with the change from “preference for traditional frameworks and tools” (Stage 3.1) to “preference for creative and lateral thinking frameworks” (Stage 3.2). The first two stages of both regression analyses yielded identical results. The addition of “preference for creative and lateral thinking frameworks” explained an additional 4.4% of the variation in “market analysis frameworks and tools” and this change in R^2 was statistically significant, ($F(4,97) = 9.689, p < 0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta =

0.445) statistically significant positive relationship with “market analysis frameworks and tools” while “preference for creative and lateral thinking frameworks” yielded a small (standardised Beta = 0.220) statistically significant positive relationship.

When all four independent variables were included in Stage 3.1 of the regression model: internal dynamics, external dynamics and “preference for traditional frameworks and tools” were not statistically significant predictors of “market analysis frameworks and tools”.

When all four independent variables were included in Stage 3.2 of the regression model; internal dynamics and external dynamics were not statistically significant predictors of “market analysis frameworks and tools”. The strongest statistically significant predictor of “market analysis frameworks and tools” was “process for identifying and responding to changing dynamics”. Together, the four independent variables accounted for 25.4% and 28.6% of the variance in “market analysis frameworks and tools”. The relationships are depicted in Figure 50 below.

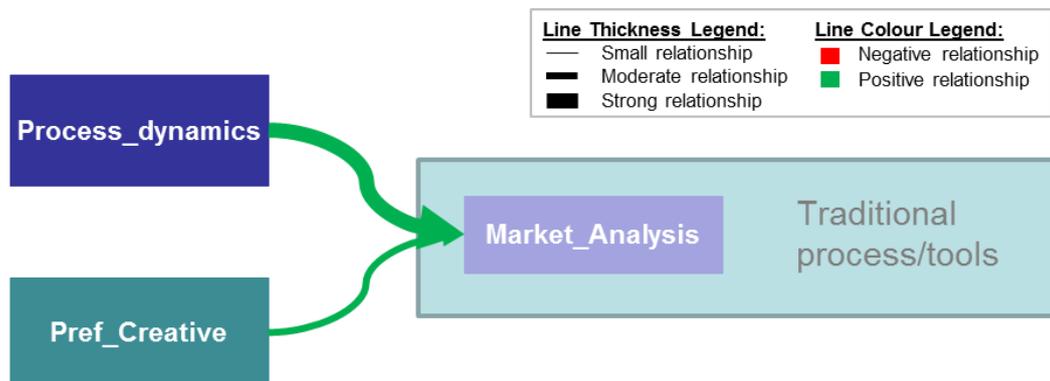


Figure 50 - Market analysis frameworks and tools regression relationships

6.4.3.7 Alternative frameworks and tools

Hierarchical multiple regression was conducted with “alternative frameworks and tools” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage. “Process for identifying and responding to changing dynamics” was entered at stage two and “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before

"preference for traditional frameworks and tools" or "preference for creative and lateral thinking frameworks" could be selected. The regression statistics are in Table 73 below.

Table 73 – Regression results for alternative frameworks and tools

Alt_Frameworks			
Independent Variable	Model 1	Model 2	Model 3
Int_dynamics	-0.063	0.012	0.028
Ext_dynamics	0.188	0.133	0.093
Process_dynamics		0.254 **	0.162
Pref_Trad			0.192 ***
Pref_Creative			0.273 *
R ²	0.034	0.092	0.176
ΔR ²	0.034	0.058	0.084
F (p value)	1.741 (-0.181)	3.308 (-0.023)	4.112 (-0.002)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics did not statistically significantly contribute to the regression model ($F(2,99) = 1.741, p > 0.1$), and accounted for only 3.4% of the variation in "alternative frameworks and tools".

Introducing "process for identifying and responding to changing dynamics" explained an additional 5.8% of variation in "alternative frameworks and tools" and this change in R² was statistically significant ($F(3,98) = 3.308, p < 0.05$) according to the ANOVA test for this model. "Process for identifying and responding to changing dynamics" revealed a small (standardised Beta = 0.254) statistically significant positive relationship with "alternative frameworks and tools".

Adding the variables "preference for traditional frameworks and tools" and "preference for creative and lateral thinking frameworks" to the regression model explained an additional 8.4% of the variation in "alternative frameworks and tools" and this change in R² was statistically significant ($F(5,96) = 4.112, p < 0.01$) according to the ANOVA test for this model. "Preference for creative and lateral thinking frameworks" (standardised Beta = 0.273) and "preference for traditional frameworks and tools" (standardised Beta = 0.192) yielded small statistically significant positive relationships with "alternative frameworks and tools" in the tenth

percentile ($p=0.052$) keeping the other variables in the model constant.

When all five independent variables were included in stage three of the regression model, internal dynamics, external dynamics and “process for identifying and responding to changing dynamics” were not statistically significant predictors of “alternative frameworks and tools”. The strongest statistically significant predictor of “alternative frameworks and tools” was “preference for creative and lateral thinking frameworks”. Together, the five independent variables accounted for 17.6% of the variance in “alternative frameworks and tools”. The relationships are depicted in Figure 51 below.

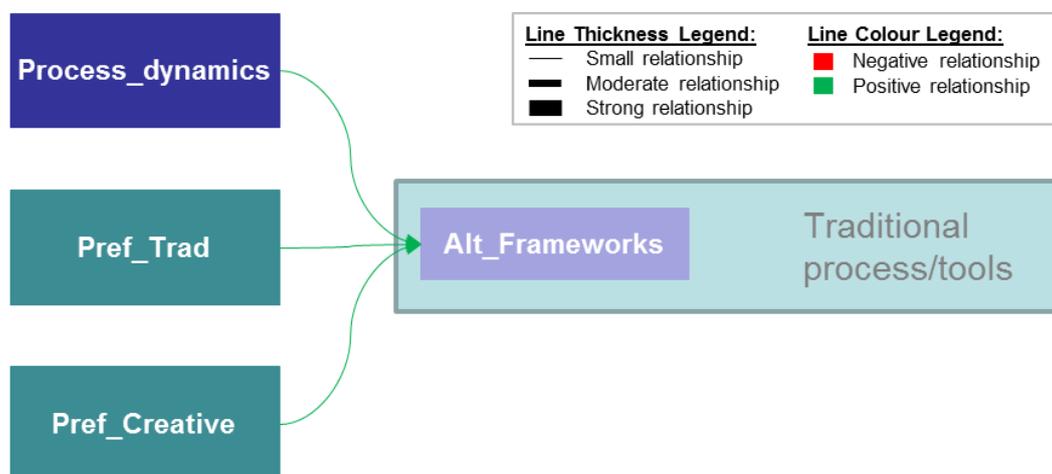


Figure 51 - Alternative frameworks and tools regression relationships

6.4.3.8 Strategic intelligence process

A hierarchical multiple regression was conducted with strategic intelligence process as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are

depicted in Table 74 below.

Table 74 – Regression results for strategic intelligence process

Strat_Int_process				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.219 **	-0.034	-0.006	-0.029
Ext_dynamics	0.199 **	0.061	0.043	0.058
Process_dynamics		0.634 *	0.525 *	0.369 *
Pref_Creative			0.355 *	0.265 *
Pref_Trad			0.100	-0.007
Strategic_options				0.075
Int_Imp				0.136
Market_Analysis				0.164 **
Alt_Frameworks				0.070
R ²	0.068	0.428	0.539	0.609
ΔR ²	0.068	0.360	0.111	0.069
F (p value)	3.549 (-0.032) (-0.429)	24.196 (0.000) (-0.197)	22.236 (0.000) (-0.035)	15.726 (0.000) (-0.006)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model (F (2,98) = 3.549, p<0.05), and accounted for 6.8% of the variation in strategic intelligence process. Internal dynamics revealed a small (standardised Beta = -0.219) statistically significant negative relationship, while external dynamics yielded a small (standardised Beta = 0.199) statistically significant positive relationship with strategic intelligence process.

Introducing “process for identifying and responding to changing dynamics” explained an additional 36% of variation in strategic intelligence process and this change in R² was statistically significant, (F (3,97) = 24.196, p<0.001) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” revealed a strong (standardised Beta = 0.634) statistically significant positive relationship on strategic intelligence process.

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 11.1% of the variation in strategic intelligence process and

this change in R^2 was statistically significant ($F(5,95) = 22.236, p < 0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” revealed a strong (standardised Beta = 0.525) statistically significant positive relationship with “preference for creative and lateral thinking frameworks” yielding a moderate (standardised Beta = 0.355) statistically significant positive relationship.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 6.9% of the variation in strategic intelligence process and this change in R^2 was also statistically significant ($F(9,91) = 15.726, p < 0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a moderate (standardised Beta = 0.369) statistically significant positive relationship, while both “preference for creative and lateral thinking frameworks” (standardised Beta = 0.265) and “market analysis frameworks and tools” (standardised Beta = 0.164) yielded a small statistically significant positive relationship with strategic intelligence process.

When all nine independent variables were included in stage four of the regression model, internal dynamics, external dynamics, “preference for traditional frameworks and tools”, “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools” and “alternative frameworks and tools” were not statistically significant predictors of strategic intelligence process. The strongest statistically significant predictor of this process was “process for identifying and responding to changing dynamics”. Together the nine independent variables accounted for 60.8% of the variance in strategic intelligence process. The relationships are depicted in Figure 52 below.

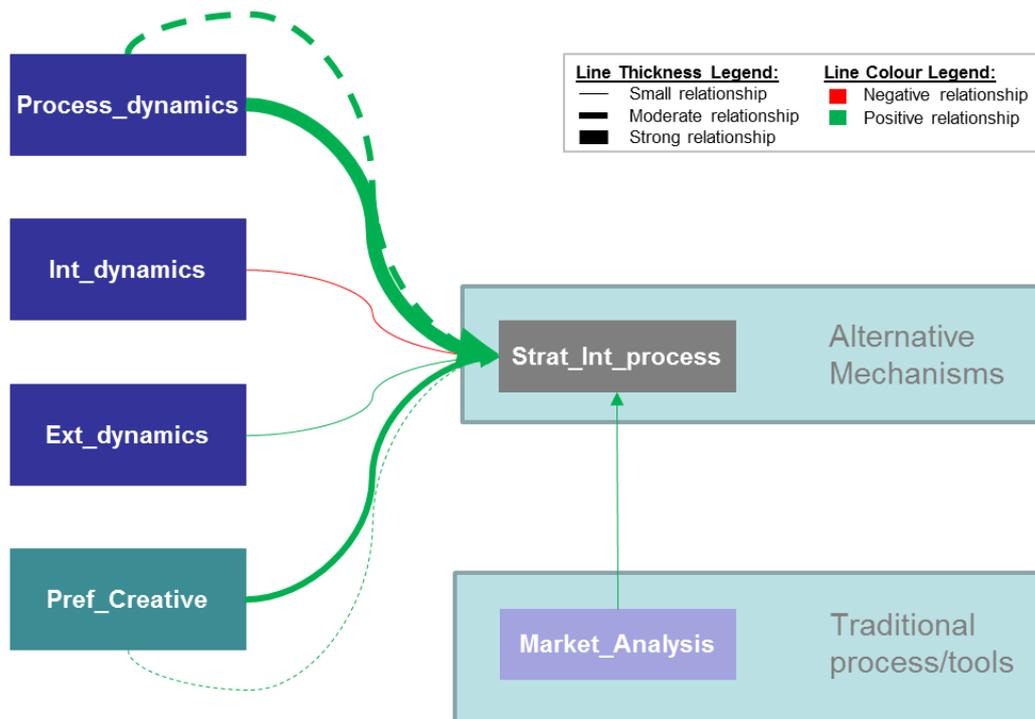


Figure 52 - Strategic intelligence process regression relationships

6.4.3.9 Strategic intelligence outcomes

A hierarchical multiple regression was conducted with strategic intelligence outcomes as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are depicted in Table 75 below.

Table 75 – Regression results for strategic intelligence outcomes

Strat_Int_Outcome				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.054	-0.001	0.007	0.100
Ext_dynamics	0.132	0.093	0.046	0.056
Process_dynamics		0.182***	0.103	0.047
Pref_Creative			0.208 **	0.123
Pref_Trad			0.223 **	0.242 **
Strategic_options				0.323 **
Int_Imp				-0.293 **
Market_Analysis				0.215 ***
Alt_Frameworks				-0.129
R ²	0.017	0.047	0.116	0.218
△R ²	0.017	0.030	0.070	0.101
F (p value)	0.854 (-0.429)	1.590 (-0.197)	2.505 (-0.035)	2.813 (-0.006)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics did not contribute statistically significantly to the regression model ($F(2,98) = 0.854, p > 0.1$), and accounted for 1.7% of the variation in strategic intelligence outcomes.

Introducing “process for identifying and responding to changing dynamics” explained an additional 3% of variation in strategic intelligence outcomes and this change in R² was not statistically significant ($F(3,97) = 1.590, p > 0.1$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” yielded a small (standardised Beta = 0.182) statistically significant positive relationship on strategic intelligence outcomes in the tenth percentile ($p = 0.085$).

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 7% of the variation in strategic intelligence outcomes and this change in R² was statistically significant ($F(5,95) = 2.505, p < 0.05$) according to the ANOVA test for this model. Both “preference for traditional frameworks and tools” (standardised Beta = 0.223) and “preference for creative and lateral thinking frameworks” (standardised Beta = 0.208) yielded small statistically significant positive relationships.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 10.1% of the variation in strategic intelligence outcomes and this change in R^2 was also statistically significant ($F(9,91) = 2.813, p < 0.01$) according to the ANOVA test for this model. “Preference for traditional frameworks and tools” yielded a small (standardised Beta = 0.242) statistically significant positive relationship with strategic intelligence outcomes while “market analysis frameworks and tools” yielded a small (standardised Beta = 0.215) statistically significant positive relationship in the tenth percentile ($p = 0.064$). “Strategic options/choice frameworks and tools” yielded a moderate (standardised Beta = 0.323) statistically significant positive relationship, while “internal implementation frameworks and tools” yielded a small (standardised Beta = -0.293) statistically significant negative relationship with strategic intelligence outcomes.

When all nine independent variables were included in stage four of the regression model, internal dynamics, external dynamics, “process for identifying and responding to changing dynamics”, “preference for creative and lateral thinking frameworks” and “alternative frameworks and tools” were not statistically significant predictors of strategic intelligence outcomes. The strongest significant predictor of strategic intelligence outcomes was “strategic options/choice frameworks and tools”. Together, the nine independent variables accounted for 21.8% of the variance in strategic intelligence outcomes. The relationships are depicted in Figure 53 below.

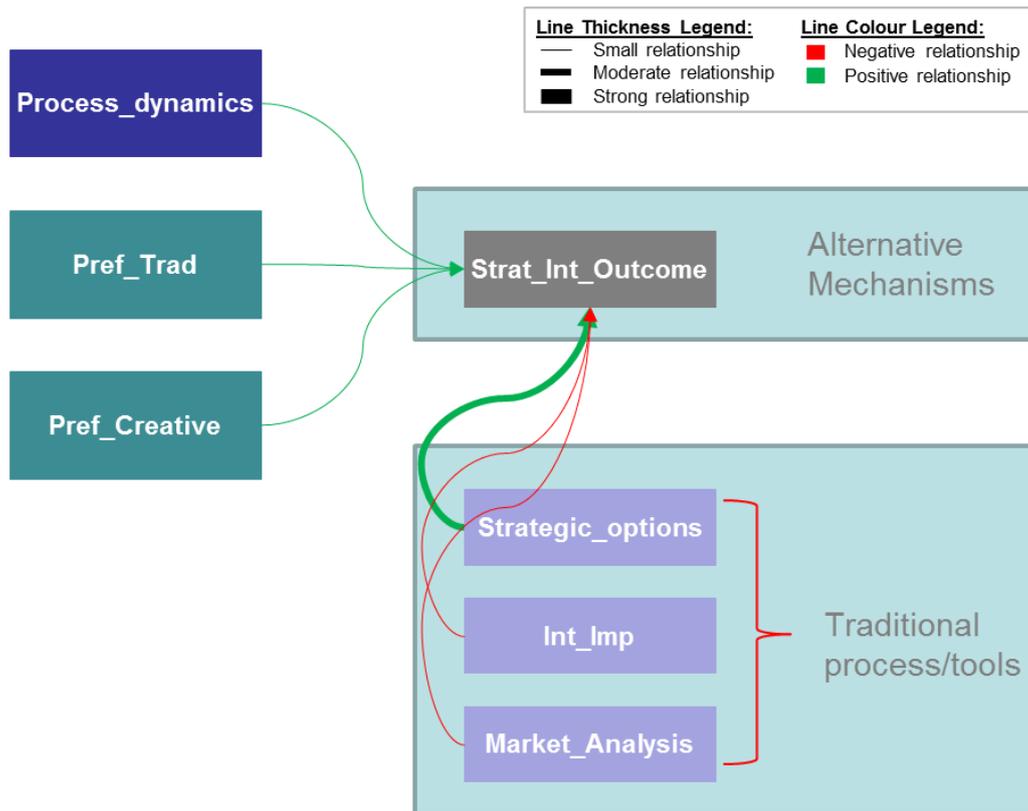


Figure 53 - Strategic intelligence outcomes regression relationships

6.4.3.10 Strategic synthesis and insight generation process

A hierarchical multiple regression was conducted with “strategic synthesis and insight generation process” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are depicted in Table 76 below.

Table 76 – Regression results for strategic synthesis and insight generation process

Synt_Int_Process				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.230 **	-0.142	-0.109	-0.108
Ext_dynamics	0.191 ***	0.125	0.114	0.101
Process_dynamics		0.302 *	0.185 ***	0.049
Pref_Creative			0.392 *	0.303 *
Pref_Trad			0.071	-0.043
Strategic_options				0.182
Int_Imp				0.134
Market_Analysis				0.046
Alt_Frameworks				0.065
R ²	0.069	0.151	0.285	0.361
△R ²	0.069	0.082	0.134	0.076
F (p value)	3.652 (-0.030)	5.761 (-0.001)	7.578 (0.000)	5.719 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model (F (2,98) = 3.652, p<0.05) and accounted for 6.9% of the variation in “strategic synthesis and insight generation process”. Internal dynamics yielded a small (standardised Beta = -0.230) statistically significant negative relationship while external dynamics yielded a small (standardised Beta = 0.191) statistically significant positive relationship with “strategic synthesis and insight generation process” in the tenth percentile (p=0.059).

Introducing “process for identifying and responding to changing dynamics” explained an additional 8.2% of variation in “strategic synthesis and insight generation process” and this change in R² was statistically significant (F (3,97) = 5.761, p<0.001) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” revealed a moderate (standardised Beta = 0.302) statistically significant positive relationship keeping the other variables in the model constant.

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 13.4% of the variation in “strategic synthesis and insight generation process” and this change in R² was statistically significant (F (5,95) = 7.578, p<0.001) according to the ANOVA test for this model. “Process for identifying

and responding to changing dynamics” yielded a small (standardised Beta = 0.185) statistically significant positive relationship in the tenth percentile ($p=0.057$), while “preference for creative and lateral thinking frameworks” yielded a moderate (standardised Beta = 0.392) statistically significant positive relationship with “strategic synthesis and insight generation process”.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 7.6% of the variation in “strategic synthesis and insight generation process” and this change in R^2 was significant ($F(9,91) = 5.719, p < 0.001$) according to the ANOVA test for this model. “Preference for creative and lateral thinking frameworks” yielded a moderate (standardised Beta = 0.303) statistically significant positive relationship with “strategic synthesis and insight generation process” keeping the other variables in the model constant.

When all nine independent variables were included in stage four of the regression model, internal dynamics, external dynamics, “process for identifying and responding to changing dynamics”, “preference for traditional frameworks and tools”, “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” were not statistically significant predictors of “strategic synthesis and insight generation process”. The strongest statistically significant predictor of “strategic synthesis and insight generation process” was “preference for creative and lateral thinking frameworks”. Together, the nine independent variables accounted for 36.1% of the variance in “strategic synthesis and insight generation process”. The relationships are depicted in Figure 54 below.

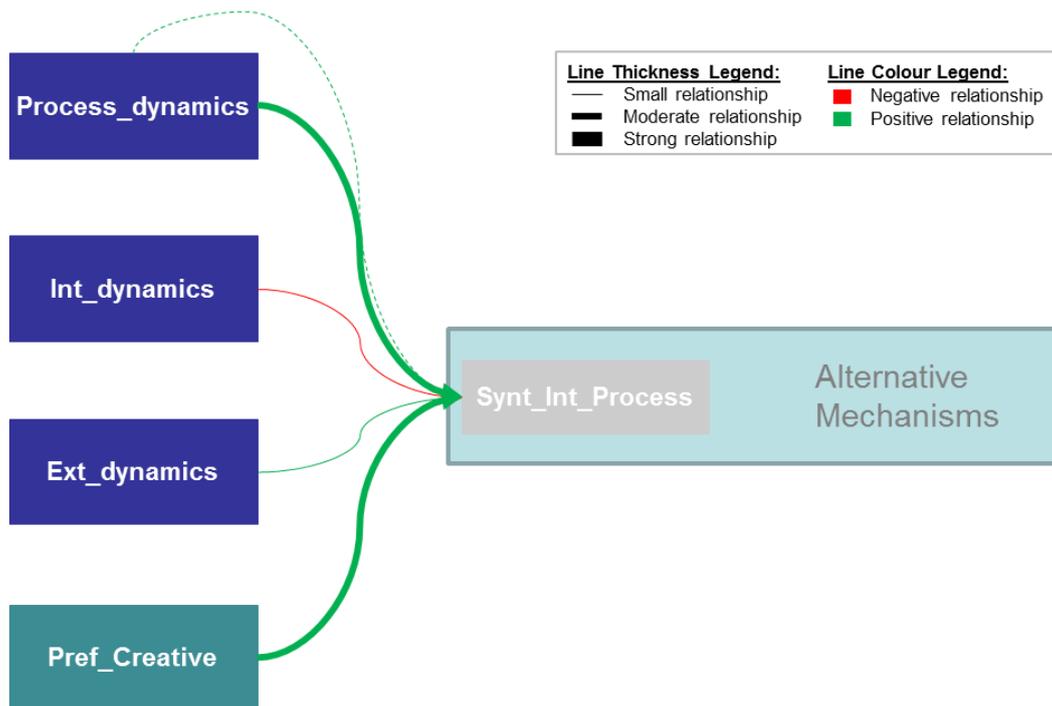


Figure 54 - Strategic synthesis and insight generation process regression relationships

6.4.3.11 Strategic synthesis and insight generation enablers

A hierarchical multiple regression was conducted with “strategic synthesis and insight generation enablers” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are depicted in Table 77 below.

Table 77 – Regression results for strategic synthesis and insight generation enablers

Synt_Int_Enablers				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.051	-0.015	-0.001	0.055
Ext_dynamics	0.000	-0.027	-0.077	-0.069
Process_dynamics		0.121	0.019	-0.02
Pref_Trad			0.241 **	0.251 **
Pref_Creative			0.284 *	0.233 **
Strategic_options				0.201
Int_Imp				-0.169
Market_Analysis				0.137
Alt_Frameworks				-0.094
R ²	0.003	0.016	0.120	0.159
△R ²	0.003	0.013	0.104	0.039
F (p value)	0.128 (-0.880)	0.519 (-0.670)	2.586 (-0.031)	1.913 (-0.060)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics did not statistically significantly contribute to the regression model ($F(2,98) = 0.128, p > 0.1$) and accounted for 0.3% of the variation in “strategic synthesis and insight generation enablers”.

Introducing “process for identifying and responding to changing dynamics” explained an additional 1.3% of variation in “strategic synthesis and insight generation enablers” and this change in R² was not statistically significant ($F(3,97) = 0.519, p > 0.1$) according to the ANOVA test for this model.

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 10.4% of the variation in “strategic synthesis and insight generation enablers” and this change in R² was statistically significant ($F(5,95) = 2.586, p < 0.05$) according to the ANOVA test for this model. Both “preference for traditional frameworks and tools” (standardised Beta = 0.241) and “preference for creative and lateral thinking frameworks” (standardised Beta = 0.284) yielded small statistically significant positive relationships with “strategic synthesis and insight generation enablers”.

The addition of “strategic options/choice frameworks and tools”, “internal

implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 3.9% of the variation in “strategic synthesis and insight generation enablers” and this change in R^2 was statistically significant in the tenth percentile ($p=0.060$); ($F(9,91) = 1.913, p<0.1$) according to the ANOVA test for this model. Both “preference for traditional frameworks and tools” (standardised Beta = 0.251) and “preference for creative and lateral thinking frameworks” (standardised Beta = 0.233) yielded small statistically significant positive relationships with “strategic synthesis and insight generation enablers”.

When all nine independent variables were included in stage four of the regression model, internal dynamics, external dynamics, “process for identifying and responding to changing dynamics”, “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” were not statistically significant predictors of evaluation options. The strongest statistically significant predictors of “strategic synthesis and insight generation enablers” were “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks”. Together, the nine independent variables accounted for 15.9% of the variance in “strategic synthesis and insight generation enablers”. The relationships are depicted in Figure 55 below.

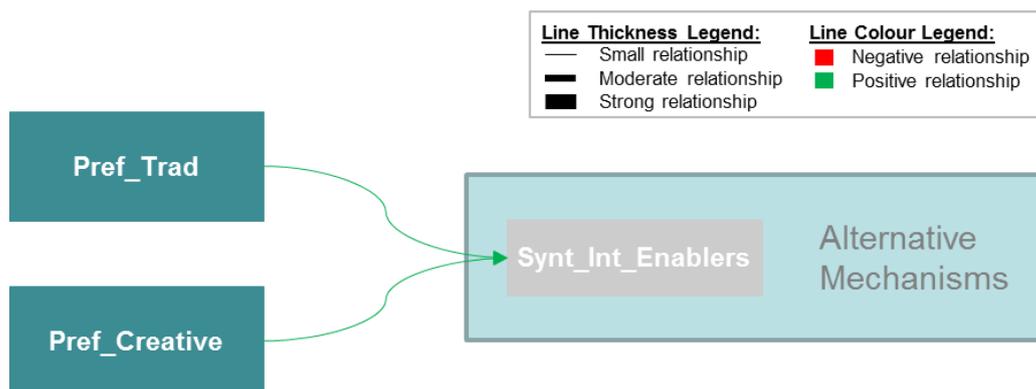


Figure 55 - Strategic synthesis and insight generation enablers regression relationships

6.4.3.12 Interpretation frameworks and tools

A hierarchical multiple regression was conducted with “interpretation frameworks and

tools” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are presented in Table 78 below.

Table 78 – Regression results for interpretation frameworks and tools

Interpretation				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.045	-0.005	0.011	0.051
Ext_dynamics	0.066	0.036	-0.003	-0.056
Process_dynamics		0.138	0.043	-0.109
Pref_Trad			0.189 ***	0.063
Pref_Creative			0.272 *	0.087
Strategic_options				0.284 **
Int_Imp				-0.050
Market_Analysis				0.055
Alt_Frameworks				0.364 *
R ²	0.005	0.022	0.105	0.336
ΔR ²	0.005	0.017	0.083	0.231
F (p value)	0.249 (-0.780)	0.730 (-0.536)	2.232 (-0.057)	5.113 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics did not statistically significantly contribute to the regression model ($F(2,98) = 0.249, p > 0.1$), and only accounted for 0.5% of the variation in “interpretation frameworks and tools”.

Introducing “process for identifying and responding to changing dynamics” explained an additional 1.7% of variation in “interpretation frameworks and tools” and this change in R² was not statistically significant ($F(3,97) = 0.730, p > 0.1$) according to the ANOVA test for this model.

Adding the variables “preference for traditional frameworks and tools” and

“preference for creative and lateral thinking frameworks” to the regression model explained an additional 8.3% of the variation in “interpretation frameworks and tools” and this change in R^2 was statistically significant in the tenth percentile ($p=0.057$); ($F(5,95) = 2.232, p<0.1$) according to the ANOVA test for this model. “Preference for traditional frameworks and tools” yielded a small (standardised Beta = 0.189) statistically significant positive relationship with “interpretation frameworks and tools” in the tenth percentile ($p=0.067$) and “preference for creative and lateral thinking frameworks” yielded small (standardised Beta = 0.272) statistically significant positive relationships.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 23.1% of the variation in “interpretation frameworks and tools” and this change in R^2 was statistically significant ($F(9,91) = 5.113, p<0.001$) according to the ANOVA test for this model. “Strategic options/choice frameworks and tools” yielded a small (standardised Beta = 0.284) statistically significant positive relationship, while “alternative frameworks and tools” yielded a moderate (standardised Beta = 0.364) statistically significant positive relationship with “interpretation frameworks and tools”.

When all nine independent variables were included in stage four of the regression model, internal dynamics, external dynamics, “process for identifying and responding to changing dynamics”, “preference for traditional frameworks and tools”, “preference for creative and lateral thinking frameworks”, “internal implementation frameworks and tools” and “market analysis frameworks and tools” were not significant predictors of “interpretation frameworks and tools”. The strongest statistically significant predictor of “interpretation frameworks and tools” was “alternative frameworks and tools”. Together, the nine independent variables accounted for 33.6% of the variance in “interpretation frameworks and tools”. The relationships are depicted in Figure 56 below.

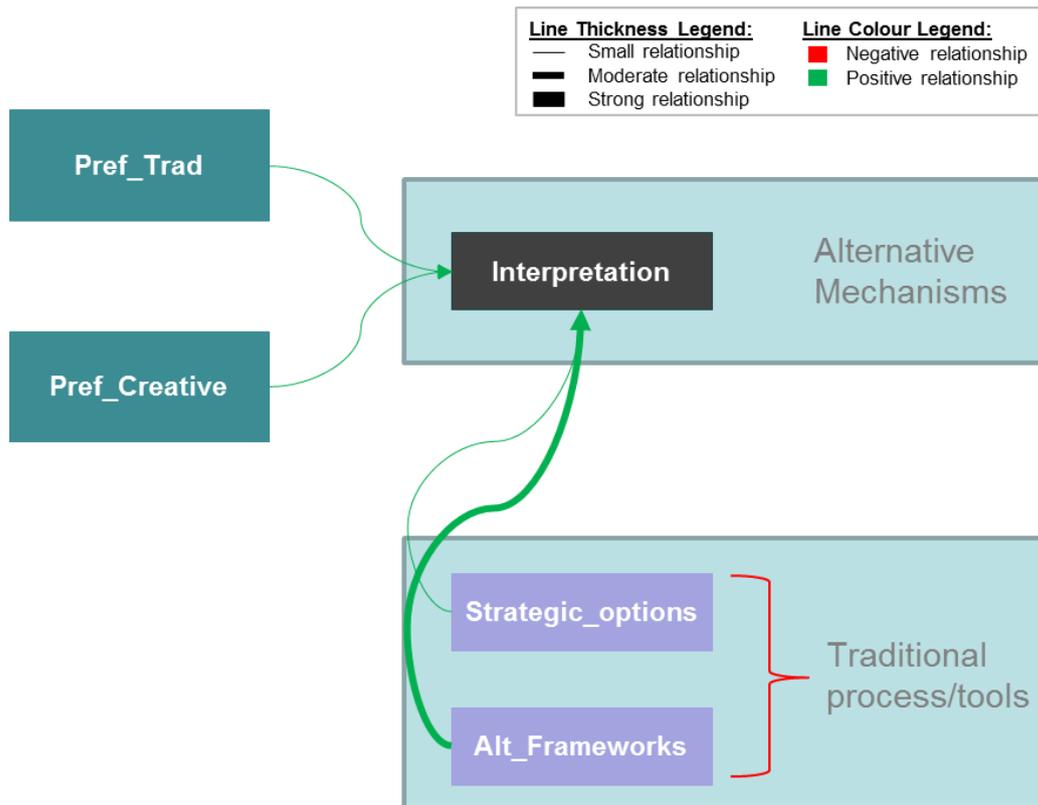


Figure 56 - Interpretation frameworks and tools regression relationships

6.4.3.13 Prospection frameworks and tools (1)

A hierarchical multiple regression was conducted with “prospection frameworks and tools (1)” as the dependent variable (comprised of scenario planning (visioning, backcasting); sense-making; and strategic maps). Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are in Table 79 below.

Table 79 – Regression results for prospection frameworks and tools (1)

Prospection 1				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.217 **	-0.099	-0.068	-0.062
Ext_dynamics	-0.009	-0.096	-0.108	-0.121
Process_dynamics		0.403 *	0.289 *	0.118
Pref_Trad			0.071	-0.061
Pref_Creative			0.380 *	0.249 *
Strategic_options				0.208 ***
Int_Imp				0.098
Market_Analysis				0.110
Alt_Frameworks				0.145
R ²	0.048	0.193	0.319	0.442
△R ²	0.048	0.145	0.126	0.123
F (p value)	2.471 (-0.090)	7.749 (0.000)	8.907 (0.000)	8.000 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model “prospection frameworks and tools (1)” in the tenth percentile (p=0.090); (F (2,98) = 2.471, p<0.1), and accounted for 4.8% of the variation in “prospection frameworks and tools (1)”. Internal dynamics revealed a small (standardised Beta = -0.217) statistically significant negative relationship on “prospection frameworks and tools (1)”.

Introducing “process for identifying and responding to changing dynamics” explained an additional 14.5% of variation in “prospection frameworks and tools (1)” and this change in R² was statistically significant (F (3,97) = 7.749, p<0.001) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” revealed a moderate (standardised Beta = 0.403) statistically significant positive relationship with “prospection frameworks and tools (1)” keeping the other variables in the model constant.

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 12.6% of the variation in “prospection frameworks and tools (1)” and this change in R² was statistically significant (F (5,95) = 8.907, p<0.001) according to the ANOVA test for this model. “Process for identifying and responding

to changing dynamics” revealed a small (standardised Beta = 0.289) statistically significant positive relationship, while “preference for creative and lateral thinking frameworks” yielded a moderate (standardised Beta = 0.380) statistically significant positive relationship with “prospection frameworks and tools (1)”.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 12.3% of the variation in “prospection frameworks and tools (1)” and this change in R^2 was statistically significant ($F(9,91) = 8.000, p < 0.001$) according to the ANOVA test for this model. Both “preference for creative and lateral thinking frameworks” (standardised Beta = 0.249) and “strategic options/choice frameworks and tools” (standardised Beta = 0.208) yielded a small statistically significant positive relationship in the tenth percentile ($p = 0.097$).

When all nine independent variables were included in stage four of the regression model, internal dynamics, external dynamics, “process for identifying and responding to changing dynamics”, “preference for traditional frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” were not statistically significant predictors of “prospection frameworks and tools (1)”. The strongest statistically significant predictor of “prospection frameworks and tools (1)” was “preference for creative and lateral thinking frameworks”. Together, the nine independent variables accounted for 44.2% of the variance in “prospection frameworks and tools (1)”. The relationships are depicted in Figure 57 below.

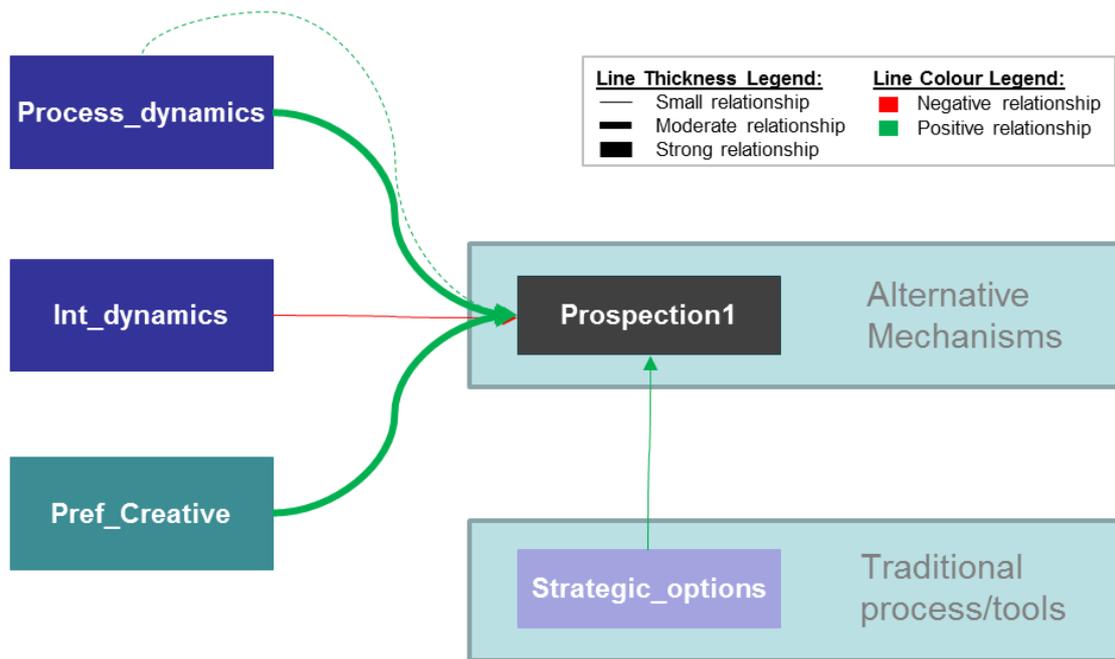


Figure 57 - Prospection frameworks and tools (1) regression relationships

6.4.3.14 Prospection frameworks and tools (2)

A hierarchical multiple regression was conducted with “prospection frameworks and tools (2)” as the dependent variable (comprised of storytelling; strategic metaphors; strategic narratives (shadowing, ante-narratives) as opposed to Prospection frameworks and tools (1) which includes scenario planning (visioning, backcasting); sense-making; and strategic maps). Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative frameworks and tools” could be selected. The regression statistics are depicted in Table 80 below.

Table 80 – Regression results for prospection frameworks and tools (2)

Prospection 2				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.040	0.045	0.076	0.182 ***
Ext_dynamics	-0.016	-0.081	-0.062	-0.102
Process_dynamics		0.294 *	0.218 **	0.171
Pref_Trad			-0.070	-0.073
Pref_Creative			0.295 *	0.151
Strategic_options				0.352 **
Int_Imp				-0.359 *
Market_Analysis				0.109
Alt_Frameworks				0.178
R ²	0.002	0.080	0.169	0.289
ΔR ²	0.002	0.078	0.089	0.120
F (p value)	0.104 (-0.901)	2.775 (-0.045)	3.831 (-0.003)	4.064 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics did not statistically significantly contribute to the regression model ($F(2,97) = 0.104$, $p > 0.1$) and accounted for 0.2% of the variation in “prospection frameworks and tools (2)”.

Introducing “process for identifying and responding to changing dynamics” explained an additional 7.8% of variation in “prospection frameworks and tools (2)” and this change in R² was statistically significant ($F(3,96) = 2.775$, $p < 0.05$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” revealed a small (standardised Beta = 0.294) statistically significant positive relationship with “prospection frameworks and tools (2)” keeping the other variables in the model constant.

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 8.9% of the variation in “prospection frameworks and tools (2)” and this change in R² was statistically significant ($F(5,94) = 3.831$, $p < 0.01$) according to the ANOVA test for this model. Both “process for identifying and responding to changing dynamics” (standardised Beta = 0.218) and “preference for creative and lateral thinking frameworks” (standardised Beta = 0.295) yielded small statistically significant positive relationships with “prospection frameworks and tools (2)”.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 12% of the variation in “prospection frameworks and tools (2)” and this change in R^2 was statistically significant ($F(9,90) = 4.064, p < 0.001$) according to the ANOVA test for this model. Internal dynamics yielded a small (standardised Beta = 0.182) statistically significant positive relationship with “prospection frameworks and tools (2)” in the tenth percentile ($p = 0.081$), while “strategic options/choice frameworks and tools” yielded a moderate (standardised Beta = 0.352) statistically significant positive relationship and “internal implementation frameworks and tools” yielded a moderate (standardised Beta = -0.359) statistically significant negative relationship.

When all nine independent variables were included in stage four of the regression model, external dynamics, “process for identifying and responding to changing dynamics”, “preference for traditional frameworks and tools”, “preference for creative and lateral thinking frameworks”, “market analysis frameworks and tools” and “alternative frameworks and tools” were not statistically significant predictors of “prospection frameworks and tools (2)”. The strongest statistically significant predictor of “prospection frameworks and tools (2)” were “strategic options/choice frameworks and tools” and “internal implementation frameworks and tools”. Together, the nine independent variables accounted for 28.9% of the variance in “prospection frameworks and tools (2)”. The relationships are depicted in Figure 58 below.

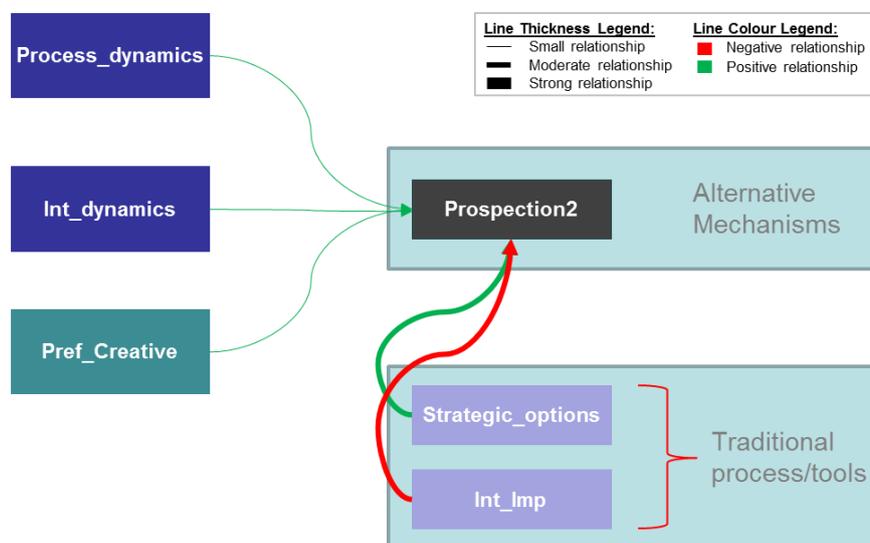


Figure 58 - Prospection frameworks and tools (2) regression relationships

6.4.3.15 Evaluation and validation options

A hierarchical multiple regression was conducted with “evaluation and validation options” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “alternative Frameworks and Tools” can be selected. The regression statistics are in Table 81 below.

Table 81 – Regression results for evaluation and validation options

Eval_Options				
Independent Variable	Model 1	Model 2	Model 3	Model 4
Int_dynamics	-0.313 *	-0.155 ***	-0.138 ***	-0.159 ***
Ext_dynamics	0.132	0.014	-0.039	-0.017
Process_dynamics		0.543 *	0.431 *	0.285 *
Pref_Trad			0.254 *	0.154 ***
Pref_Creative			0.313 *	0.245 *
Strategic_options				0.089
Int_Imp				0.157
Market_Analysis				0.152 ***
Alt_Frameworks				-0.027
R ²	0.097	0.361	0.482	0.533
ΔR ²	0.097	0.264	0.122	0.051
F (p value)	5.240 (-0.007)	18.250 (0.000)	17.702 (0.000)	11.545 (0.000)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model (F (2,98) = 5.240, p<0.01), but only accounted for 9.7% of the variation in “evaluation and validation options”. Internal dynamics revealed a moderate (standardised Beta = -0.313) statistically significant negative relationship.

Introducing “process for identifying and responding to changing dynamics” explained an additional 26.4% of variation in “evaluation and validation options” and this change in R^2 was statistically significant ($F(3,97) = 18.250, p < 0.001$) according to the ANOVA test for this model. “Process for identifying and responding to changing dynamics” revealed a strong (standardised Beta = 0.543) statistically significant positive relationship while internal dynamics yielded a small (standardised Beta = -0.155) statistically significant negative relationship with “evaluation and validation options” in the tenth percentile ($p = 0.079$).

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 12.2% of the variation in “evaluation and validation options” and this change in R^2 was statistically significant ($F(5,95) = 17.702, p < 0.001$) according to the ANOVA test for this model. Internal dynamics revealed a small statistically (standardised Beta = -0.138) significant negative relationship in the tenth percentile ($p = 0.086$), with “preference for traditional frameworks and tools” yielding a small (standardised Beta = 0.254) statistically significant positive relationship and both “process for identifying and responding to changing dynamics” (standardised Beta = 0.431) and “preference for creative and lateral thinking frameworks” (standardised Beta = 0.313) yielding moderate statistically significant positive relationships.

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 5.1% of the variation in “evaluation and validation options” and this change in R^2 was statistically significant ($F(9,91) = 11.545, p < 0.001$) according to the ANOVA test for this model. Both “process for identifying and responding to changing dynamics” (standardised Beta = 0.285) and “preference for creative and lateral thinking frameworks” (standardised Beta = 0.245) yielded small statistically significant positive relationships with “evaluation and validation options”. Internal dynamics yielded a small (standardised Beta = -0.159) statistically significant negative relationship with “evaluation and validation options” in the tenth percentile ($p = 0.059$). “Preference for traditional frameworks and tools” (standardised Beta = 0.154; $p = 0.066$) and “market analysis

frameworks and tools” (standardised Beta = 0.152; $p=0.089$) both yielded small statistically significant positive relationships with “evaluation and validation options” in the tenth percentile.

When all nine independent variables were included in stage four of the regression model, external dynamics, “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools” and “alternative frameworks and tools” were not statistically significant predictors of “evaluation and validation options”. The strongest significant predictor of “evaluation and validation options” was “process for identifying and responding to changing dynamics”. Together, the nine independent variables accounted for 53.4% of the variance in “evaluation and validation options”. The relationships are depicted in Figure 59 below.

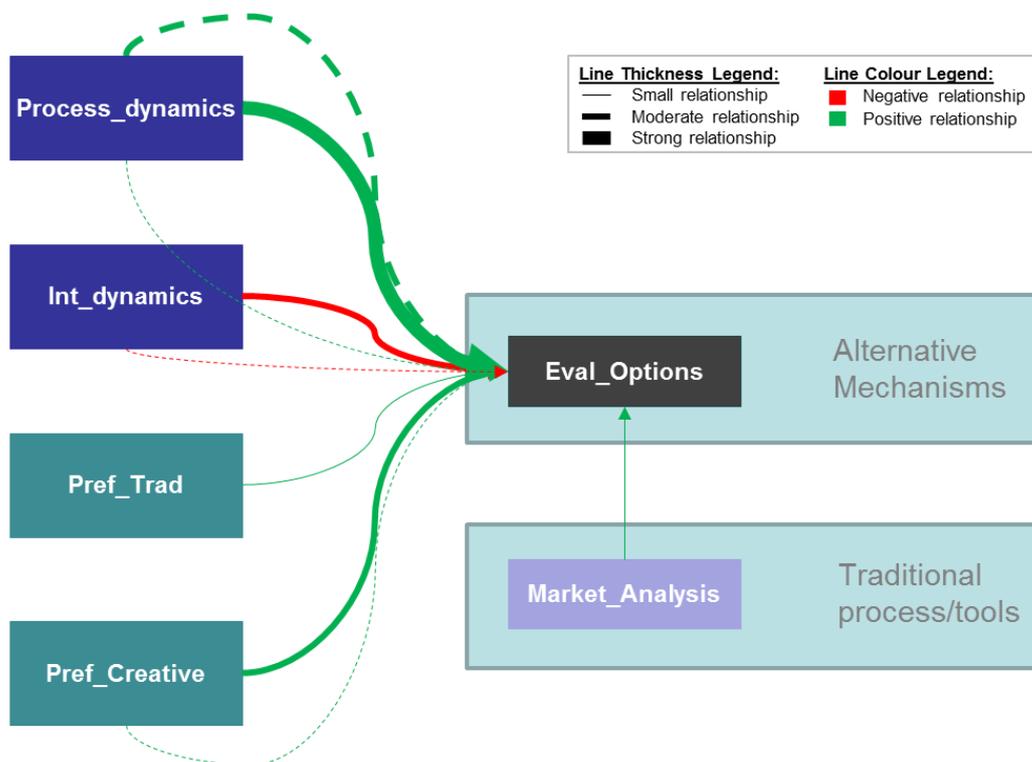


Figure 59 - Evaluation and validation options regression relationships

6.4.3.16 Creative and adaptive strategy enablers

A hierarchical multiple regression was conducted with “creative and adaptive strategy enablers” as the dependent variable. Internal dynamics and external dynamics were entered at the first stage of the regression. “Process for identifying and responding to changing dynamics” was entered at stage two; “preference for

traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” at stage three; and “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” at stage four. Strategic intelligence process, strategic intelligence outcomes, “strategic synthesis and insight generation process”, “strategic synthesis and insight generation enablers”, “interpretation frameworks and tools”, “prospection frameworks and tools (1)”, “prospection frameworks and tools (2)” and “evaluation and validation options” were added in stage five.

The variables were entered in this order as it seemed chronologically plausible due to internal and external dynamics needing to be acknowledged and assessed before “evaluation and validation options” could be selected. The regression statistics are depicted in Table 82 below.

Table 82 – Regression results for creative and adaptive strategy enablers

Creative_Enablers					
Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Int_dynamics	0.091	0.084	0.096	0.147	0.167
Ext_dynamics	0.186 ***	0.191 ***	0.181 ***	0.204 ***	0.225 **
Process_dynamics		-0.022	-0.068	-0.115	-0.202
Pref_Trad			0.051	0.073	0.003
Pref_Creative			0.150	0.094	-0.113
Strategic_options				0.170	-0.030
Int_Imp				-0.204	-0.167
Market_Analysis				0.218 ***	0.122
Alt_Frameworks				-0.111	-0.166
Strat_Int_process					-0.066
Strat_Int_Outcome					0.035
Synt_Int_Process					0.236 ***
Synt_Int_Enablers					0.165
Interpretation					0.083
Prospection1					0.051
Prospection2					0.172
Eval_Options					0.260 ***
R ²	0.050	0.051	0.071	0.134	0.314
△R ²	0.050	0.000	0.020	0.063	0.180
F (p value)	2.570 (-0.082)	1.711 (-0.170)	1.433 (-0.219)	1.551 (-0.142)	2.210 (-0.009)

Note: Standardised Beta-coefficients are presented. *p<0.01, **p < 0.05, ***p < 0.1

The hierarchical multiple regression revealed that at stage one (model 1), internal dynamics and external dynamics contributed to the regression model in the tenth percentile ($p=0.082$); ($F(2,97) = 2.570, p < 0.1$) and accounted for 5% of the variation in “creative and adaptive strategy enablers”. External dynamics revealed a small (standardised Beta = 0.186) statistically significant positive relationship with “creative and adaptive strategy enablers” in the tenth percentile ($p=0.070$).

Introducing “process for identifying and responding to changing dynamics” resulted in no variation in “creative and adaptive strategy enablers” and this change in R^2 was not statistically significant ($F(3,96) = 1.711, p > 0.1$) according to the ANOVA test for this model. External dynamics revealed a small (standardised Beta = 0.191) statistically significant positive relationship with “creative and adaptive strategy enablers” in the tenth percentile ($p=0.071$).

Adding the variables “preference for traditional frameworks and tools” and “preference for creative and lateral thinking frameworks” to the regression model explained an additional 2% of the variation in “creative and adaptive strategy enablers” and this change in R^2 was not statistically significant ($F(5,94) = 1.433, p > 0.1$) according to the ANOVA test for this model. External dynamics revealed a small (standardised Beta = 0.181) statistically significant positive relationship with “creative and adaptive strategy enablers” in the tenth percentile ($p=0.095$).

The addition of “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools” and “alternative frameworks and tools” explained an additional 6.3% of the variation in “creative and adaptive strategy enablers” and this change in R^2 was not statistically significant ($F(9,90) = 1.551, p > 0.1$) according to the ANOVA test for this model. Both external dynamics (standardised Beta = 0.204; $p=0.065$) and “market analysis frameworks and tools” (standardised Beta = 0.218; $p=0.075$) revealed a small statistically significant positive relationship with “creative and adaptive strategy enablers” in the tenth percentile.

The addition of strategic intelligence process, strategic intelligence outcomes, “strategic synthesis and insight generation process”, “strategic synthesis and insight generation enablers”, “interpretation frameworks and tools”, “prospection frameworks

and tools (1)”, “prospection frameworks and tools (2)” and “evaluation and validation options” explained an additional 18% of the variation in “creative and adaptive strategy enablers” and this change in R^2 was statistically significant ($F(17,82) = 2.210, p < 0.05$) according to the ANOVA test for this model. External dynamics yielded a small (standardised Beta = 0.225) statistically significant positive relationship with “creative and adaptive strategy enablers”. Both “strategic synthesis and insight generation process” (standardised Beta = 0.236; $p = 0.083$), and “evaluation and validation options” (standardised Beta = 0.260; $p = 0.081$) yielded a small statistically significant positive relationship with “creative and adaptive strategy enablers” in the tenth percentile.

When all seventeen independent variables were included in stage five of the regression model, internal dynamics, “process for identifying and responding to changing dynamics”, “preference for traditional frameworks and tools”, “preference for creative and lateral thinking frameworks”, “strategic options/choice frameworks and tools”, “internal implementation frameworks and tools”, “market analysis frameworks and tools”, “alternative frameworks and tools”, strategic intelligence process, strategic intelligence outcomes, “strategic synthesis and insight generation enablers”, “interpretation frameworks and tools”, “prospection frameworks and tools (1)” and “prospection frameworks and tools (2)” were not statistically significant predictors of “creative and adaptive strategy enablers”. The strongest statistically significant predictor of “creative and adaptive strategy enablers” was external dynamics. Together, the seventeen independent variables accounted for 31.3% of the variance in “creative and adaptive strategy enablers”. The relationships are depicted in Figure 60 below.

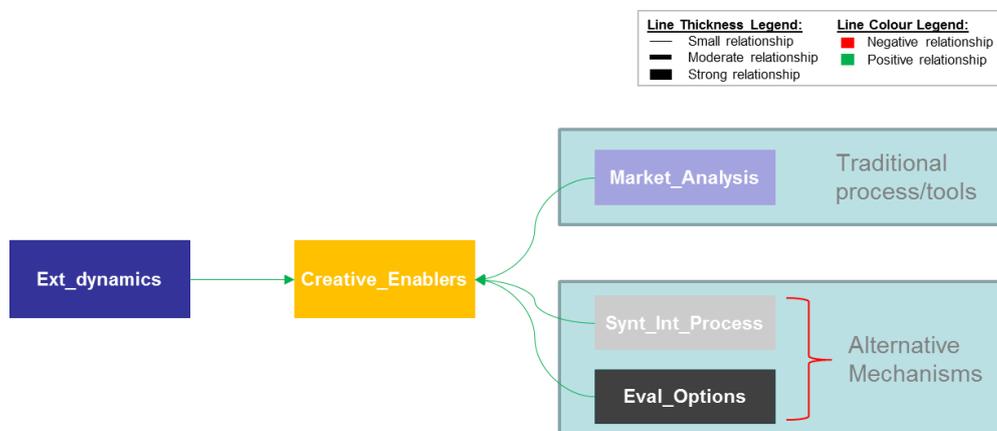


Figure 60 - Creative and adaptive strategy enablers regression relationships

6.4.4 Cluster analysis

In addition to determining whether any relationships exist between the factors in the regression analysis, a Two Step Cluster Analysis was run to reveal the natural groupings or clusters within the data set. This was important to inform the alignment or preference for certain factors as input to determining the use of strategic thinking within South African organisations of different sizes.

Two clusters were found based on the 21 input features or fields, with the cluster quality chart indicating that the overall model quality is “Fair” (average silhouette = 0.3), as depicted in Figure 61 below.

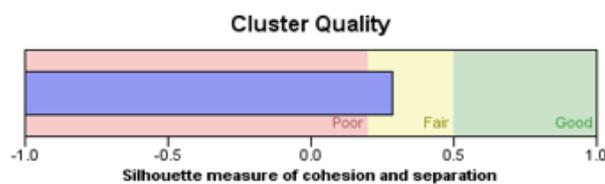


Figure 61 – Cluster quality

The cluster profiles are sorted from left to right based on the cluster size and are ordered 2 and 1. Cluster 2 consists of 57.0% of the organisations while cluster 1 consists of 43.0% of the organisations. The cluster means suggest that the clusters are well separated. The predictor importance shows strategic options/choice frameworks and tools (strategic_options/ factor 4) as being the most important variable and creative and adaptive strategy enablers (creative_enablers/ factor 18) being the least in creating cluster groupings. The 10 most important predictors are highlighted in Figure 62 below.

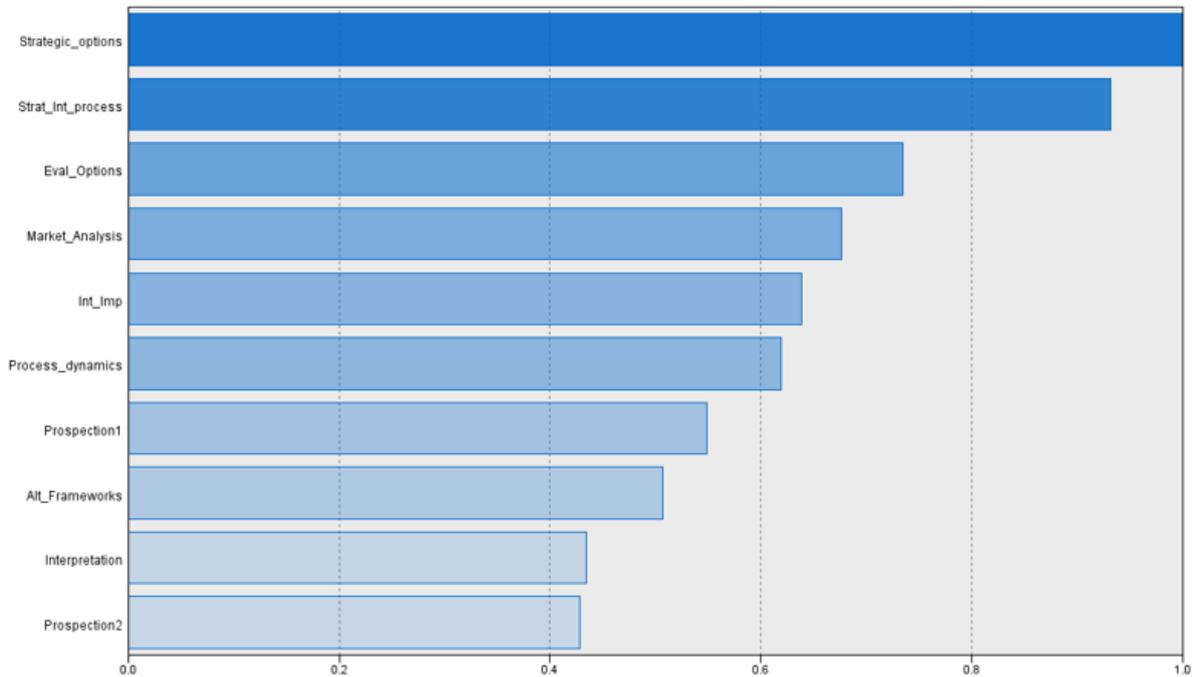


Figure 62 - Predictor importance (most to least important)

Cluster 2, are mainly participants from organisations with fewer than 200 employees (52.6%) and who selected “Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability” from “Consider your understanding of strategy” (Section 2, Question 2.2.1) and “Crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” from “Consider your understanding of the process of how strategy is crafted” (Section 2, Question 2.2.2). The variable means in cluster 2 are all lower than cluster 1, except for internal dynamics (int_dynamics) which has a marginally higher means than cluster 1.

Members of Cluster 1 mainly participants from organisations with more than 1000 employees (60.5%) and who selected “Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” from “Consider your understanding of strategy” (Section 2, Question 2.2.1) and “Crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change.” from “Consider your understanding of strategy” (Section 2, Question 2.2.2).

The variable means in cluster 1 were higher than cluster 2. Alignment across the variables was as follows:

- A strong alignment was noted based on significant differences (>1.0) with the variables: strategic options/choice frameworks and tools (strategic_options/ factor 4); strategic intelligence process (strat_int_process/ factor 10); market analysis frameworks and tools (market_analysis/ factor 6); internal implementation frameworks and tools (int_imp/ factor 5); process for identifying and responding to changing dynamics (process_dynamics/ factor 3); prospection frameworks and tools (prospection 1/ factor 15); alternative frameworks and tools (alt_frameworks/ factor 7); interpretation frameworks and tools (interpretation/ factor 14); prospection frameworks and tools (prospection 2/ factor 16).
- A moderate alignment was noted in smaller differences (0.5 - 0.99), but still higher, with the variables: evaluation and validation options (eval_options/ factor 17); strategic synthesis and insight generation process (synt_int_process/ factor 12); preference for creative and lateral thinking frameworks (pref_creative/ factor 9) and strategic intelligence outcomes (strat_int_outcome/ factor 11).
- A weak alignment was noted in small differences (<0.5) with variables: strategic synthesis and insight generation enablers (synt_int_enablers/ factor 13); preference for traditional frameworks and tools (pref_trad/ factor 8); external dynamics (ext_dynamics/ factor 1) and creative and adaptive strategy enablers (creative_enablers/ factor 18).

6.5 Qualitative Findings: Interview Analysis

6.5.1 Description of interviews

As part of this research study, several interviews were conducted with members of top level management concerned with strategy, academics in the field of strategy and consultants in this field. Five of the interviewees were managing directors, directors or executive corporate specialists in their respective organisations, with one a senior manager responsible for the development of strategy.

The primary aim of the interviews was to explore, in-depth, the extent to which strategic thinking is practiced in South African organisations, to establish a concrete basis for arriving at conclusions on strategic thinking and adaptive strategy. By incorporating interviews into the research to assist in explaining and interpreting the qualitative findings, a thorough sequential validation of the quantitative findings was undertaken. To this extent, the interviews contributed to and improved the understanding of how adaptive strategy is crafted within South African organisations and how strategic thinking is used and applied by the subject-matter experts and their organisations, or within industries.

To achieve this aim, the interview schedule was structured into four core areas directly aligned to the study's research objectives:

- Dynamics affecting business environment
- Understanding of organisational strategy
- Development of organisational strategy and
- Strategic thinking approach to creative and adaptive strategy development.

Several questions were aligned to each focus area, with the interviewer prompting interviewees using focused questions that encouraged open discussions. Interviews were scheduled for an hour each and ranged from thirty minutes to an hour based on interviewer availability. All interviewees answered all questions.

As described in Chapter 5, a thematic content analysis was conducted per focus area and question to allow the researcher to look for and identify common and recurring themes found within the collected data.

6.5.2 Description of findings

6.5.2.1 Dynamics affecting business environment

The first section of the interview schedule focused on understanding the dynamics which affect the South African business environment. Three questions were designed to prompt interviewees:

- **Primary external dynamics affecting the South African business environment**

Economic factors were provided as the most prevalent and impactful external dynamic to affect the South African business environment. Primary focus extended to the global recession; commodities downturn; restrained GDP growth; exchange rate depreciation; interest rates and limited foreign direct investment. This narrative was clearly illustrated by an interviewee: “we possibly are going to go into a severe recession as a South African economy, which poses to be a really scary thought.”

Legal and regulatory uncertainty was the second most common area mentioned, in terms of regulatory uncertainty, policy making and civil law; with a direct focus on the enforceability of contracts. In addition, interviewees highlighted the dire state of local politics, mentioning the lack of confidence in political leadership and the increasing number of political level mistakes. Several interviewees raised social/demographic concerns focused on the lack of depth in the local talent pool; limited employee skills and unemployment.

To a lesser extent, mention was made of environmental factors (drought and water shortages; climate change); competition (difficulty in forecasting competitive challenges); and technological factors (pace of disruptive technology change and implicit need to embrace technology).

- **Internal organisational dynamics influencing the validity and execution of organisational strategy**

Two broad categories of internal organisational dynamics raised by interviewees related to cultural and process dynamics.

From a cultural perspective, attention was drawn to the hierarchical and power based corporate environment, often driven by a political agenda. Organisational acceptance and buy-in to the organisational strategy; and leadership communication, perception of how the business or strategy is performing, hindsight bias, strength, execution and accountability were determined to be prominent cultural dynamics influencing the development and execution of corporate strategy.

Secondly, interviewees identified the need for a credible and known process for the development and execution of organisational strategy, as current processes were often viewed as a "tick box exercise", part of a top-down inflexible strategy, and often executed by stakeholders with limited strategy development and execution capabilities, experience and skills.

Crucially, it was commented that organisational perception of its internal and external environment should be bolstered by methods for systematic self and external environment awareness.

- **Ease with which South African organisations adapt to a radically changing and uncertain global business environment**

Interviewee consensus highlighted that South African organisations can and do adapt to changes in the environment. However, the majority of organisations struggle and are forced to adapt reluctantly.

It is important to note that a single interviewee suggested South African organisations do not easily adapt at all, due to: the homogeneous nature of the South African economy which is primarily resource and import based and consumption driven; the geographic location of the country limiting strategic options; the hierarchical power based society; while organisational strategy is often seen as set in stone and is not dynamic. In addition, a common thread among interviewees was the addition of environmental factors which limit South African organisations. A stifling legal and regulatory environment, global competition, as well as a consumption driven economy were all highlighted as stumbling blocks to local success.

Through the discussions it was highlighted that South African organisations that often struggle are traditionalist, bureaucratic, change resistant with top-down inflexible strategies which do not support ambiguity. This results in execution in a non-planned manner or forced adaptability. In addition, it was suggested that organisations struggle due to limited flexibility in their strategy-making approach, risk averse cultures, limited core capabilities, and limited resources.

Organisations who succeed are often those with greater resilience, an entrepreneurial (forward thinking) attitude and culture, with no legacy constraints (whether it be their culture, their attitudes or their infrastructure). To ensure success, it was commented that organisations should embrace adaptability, agility, flexibility, and responsive innovation combined with interconnectedness and local relevance.

6.5.2.2 Understanding of organisational strategy

The second section of the interview schedule focused on understanding organisational strategy; understanding why strategies are not successful and identifying the enablers of successful strategy development. Three questions were designed to prompt interviewees:

- **Understanding the concept “Strategy”**

Two alternative views were identified in this question.

The first view identified strategy as being a formally articulated “guideline that will shape the planning and execution of a company for a defined period”, outlined as an “approach to setting out and meeting a particular purpose or goal or mission”. The strategy’s focus is on how to move the business to the next level, linked to practical plans and a budget to guide investment and spending to meaningfully meet that outcome. This strategy is frequently defined in boardrooms.

The second view identified strategy as an “informed response”, as being about choices and options “given the context in which you find yourself in or expect to find yourself in” by “dynamically and elastically adjusting to changes in the environment; presenting a goal that you want to in the end attain and then defining a way or method of how you can attain that goal”. An “approach that then meets the requirements that make sure you can survive”...“given the context in which you find yourself in or expect to find yourself in”.

- **Why organisations’ strategies are not successful**

The common reasons for strategic failure included: pure bad luck; missed

opportunities; stupid error; systematic organisational problems; rigid strategy (not flexible/agile); and legacy constraints.

The most common threads through the various narratives was that organisations lack credible strategy-making processes or tools; having a limited understanding of strategy; limited strategy development experience/skills and a lack of execution discipline. In addition, common biases result in distorted views of reality.

Systematic problems are exuberated by limited core capabilities and resources; ineffective leadership communication and ineffective "selling" of strategy to the organisation, resulting in annual processes becoming tick box exercises creating a top-down rigid and inflexible strategy with restricted applicability and relevance to the local market.

- **Enablers of successful strategy development**

The most common enablers for the development of a successful strategy include the use of a credible and known strategy-making approach (as expressed by “Rigour, analytical rigour, and process elements, so we have a believable, repeatable structure”) supported by input providing a holistic integrated view of the organisation and its environment; involving and executed by the right people with the appropriate strategy experience / skills (explained by “The right strategist for a company is subjective to the company” and “a diverse team supplied by diverse input...from which they take a big enough set of factors into account and their ability to create alternatives”).

The strategy should undergo an evaluation and validation process (as articulated by “Developing strategy, is testing it, simulating it as opposed to looking at a theoretical model, implementing it and then it crashes. Rather look at it in a safe environment and fix the mistakes before its implemented”) in order to develop an achievable strategic intent and a well-defined execution plan with stakeholder buy-in and commitment.

6.5.2.3 Development of organisational strategy

The third section of the interview schedule focused on understanding how organisations craft organisational strategy. Three questions were designed to prompt interviewees:

- **How should organisations develop and manage strategy?**

Again, two divergent views arose from the narrative. The first highlighted that a strategy should be developed and managed in a deliberate manner, following a two speed approach with a formal analytical process/model (a three to five-year strategy) supported by an annual forecasting or issue management refresh.

Alternatively, an emergent approach to strategy development was suggested; guided by an iterative process which is experimental, flexible, adaptive, evolutionary, and event driven. As one interviewee expressed this:

“Life just changes too quickly. - emergent is the way to go. You need to experiment almost and discover as opposed to having this rigid strategy, you need to be flexible as things change so that you can remain relevant, discover something we need to adapt; but on the other hand I think there needs to be some direction - You don't want to change your processes on a daily basis - build rigour into the process to have direction and check points, so that it's not a haphazard thing.”

Commonly interviewees suggested that a holistic or synergistic, credible and known process should be followed, supplemented by triggers to highlight environmental or assumption changes.

- **Should organisations strategies have an overarching strategic style?**

In general, interviewees believed that organisations should remain adaptive and that there is no one-size-fits-all strategy or strategic style for all organisations. Organisational culture, a credible process and buy-in determine the style of the organisation's overall strategic style.

Critically, it was suggested by all the interviewees that a meta-strategy or

style, or alternatively a hybrid portfolio of strategies could add value to an organisation due to the different scenarios it could find itself in; the stage of its lifecycle; or in cases where an organisation is composed of many parts which require distinguishing strategies to direct success in synergy with the overall organisational style.

- **Should organisations make use of external consultants?**

The consensus on whether organisations should make use of external consultants was overwhelmingly positive. However, the rationale for the use of external consultants focused greatly on the external consultants providing critical and constructive criticism on the organisations internally developed strategy since “you can’t mark your own work” and “A good prince surrounds himself with smarter advisers”. By providing objective insight or viewpoints, or by playing a devil’s advocate role, external consultants can perform a valuable role in terms of ensuring quality robust strategies.

Strong emphasis was on maintaining internal ownership, with external consultants providing support in well-defined focus areas (ring-fenced). Alternative areas of value creation include unbiased facilitation of the strategy process; providing guidance through specialist knowledge and ideation on direction, by providing holistic and alternative insights on external trends, cross industry opportunities or transferable ideas.

6.5.2.4 Strategic thinking and creative and adaptive strategy development

- **Have standard/traditional strategy-making approaches become outdated and unsuitable in the current business environment?**

The general consensus held that the standard/traditional strategy-making approaches often taught have become outdated and unsuitable to the radically changing business environment, especially in the South African environment. This view held that the approaches were far too rigid, with a distinct need to adapt and become more elastic.

A second perspective suggested that overall approaches have not become irrelevant, but depending on the type of business, they could be found to be

academically correct. In many cases, it was suggested that organisations may simply not execute the approaches often enough and are therefore often not responsive enough to changes in the business environment.

In addition, it was suggested that the standard/traditional strategy-making approaches apply in certain contexts - low unpredictability, low malleability - "but once you move outside of that domain and increasingly most companies find themselves outside of that, then new techniques are required".

Classical approaches provide a "core to work from" but strategists need to "apply different concepts that go beyond the traditional concept of strategy". Overall rationale emphasised that South Africa is unique, with a unique corporate culture; hence new approaches must allow for greater systems thinking, identification of black swan events and a dynamic process with triggers that identify changes to the environment for the said approaches to remain valuable.

- **Are South African organisations' strategies creative and adaptive or built to "fit" for the business environment?**

The common theme as to whether South African organisations' strategies are creative and adaptive or built to "fit" for the business environment was that, in general, strategies are creative and adaptive. However, this is industry dependent, with examples of both, as there is "not a one size fits all" approach in the South African business environment. The alternative view was adamant that South African organisation's strategies are indeed creative and adaptive, and if they were not "those companies would not exist today".

It is essential to note the consensus which suggests that South African organisations are "paralysed", "punch drunk" and "reactionary", resulting in an environment that is change resistant and often forced into adaptation to changing circumstances.

Creativity and innovation are identified as being vital but difficult with many organisations simply mimicking each other, and the question was raised as to whether success is "done by design". Successful organisations are often identified by their innovative, "breaking out of the mould", ability and their ability to develop an eco-system of partners.

- **Creativity and adaptability as a critical element in the development of organisational strategy**

Creativity and adaptability were identified by all interviewees as being critical in the development of organisational strategy.

Creativity should be used for insight generation due to the inherent unpredictability of the environment. Flexibility was viewed as highly relevant; however, if you [the organisation] maintain "too much adaptability, then you are carrying unnecessary cost". In addition, it was suggested that creativity be structured and focused because if you [the organisation] have "a bunch of very creative people running all over the reservation going off their head, you are not getting any constructive output either".

- **Current understanding or awareness of a strategic thinking approach to strategy development**

In response to this question, all interviewees indicated they possessed a limited awareness of strategic thinking as an approach to strategy development.

Following the provision of a definition of the concept, identifying primary components, interviewees acknowledged an awareness of the underlying components but added that they had never seen an "end-to-end recipe" describing how the concept would work.

They highlighted the need for an evolutionary and adaptable structure, including "pattern detection in order to shape the future and predict what is going to happen tomorrow and arrive at a desired outcome", but were cautious about the definition of "intuition" as this was often misconstrued as

"gut feel" which is frequently inaccurate.

In addition, the provision of an "end-to-end recipe" was important as an organisation "needs structure to the point that it gives a strategy which can be justified - specific steps and even though the steps you keep on repeating and repeating - rigidity lies in documenting that and validating that and testing then it is non-linear, fluid and creative - learning takes place and it is captured so you can reference back to the process itself to justify the results or recommendations."

- **Will such an approach have merit or do you have an alternative suggestion?**

Following the previous question, interviewees were prompted on whether a strategic thinking approach would have merit. The overall consensus was one of agreement; however, several caveats were identified: a credible and known process with triggers was required to provide an integrated holistic view of South African complexity. This would allow organisations to "fix many of the holes" identified with current approaches. In addition, the need was mentioned for an informed and receptive audience, with the requisite emotional intelligence, to accept a revised approach.

- **Is strategic planning still the optimal approach to follow in strategy development, or can it be supplemented or replaced by strategic thinking?**

Interviewees were divided in their response to this question, while maintaining the commonly held belief that strategic planning is not the optimal approach to follow in strategy development. Half of the interviewees concluded that a strategic thinking approach was a valid alternative to a strategic planning approach, if appropriate to the nature of the strategy being developed and the context in which the organisation finds itself. It should lead to an achievable strategic intent and well defined output/strategy through following a credible and known process.

The other half suggested that strategic thinking could supplement strategic

planning, dependent on organisational needs and context. This would assist in proving the feasibility of the approach until the requisite experience is developed, as cautioned by the following statement: “if you want to move from one to the other overnight, you are just going to get so much resistance because you need to get creativity back into people - prove the results and benefits”.

6.5.3 Description of the identified themes

Following the codification and reporting of findings per focus area, dominant codes from all focus areas were organised into seventeen sub-themes and aligned to six overarching themes which evolved through the coding process. Each of the six themes is described here.

6.5.3.1 Divergent thinking defines the strategy-making continuum

This theme provides an understanding that strategy, its development and articulation is distributed across a divergent spectrum of thinking and processes; wherein strategy is viewed as being both purposive and adaptive as well as emerging and creative. Three sub-themes are highlighted in Table 83 below.

Table 83 – Theme 1: Divergent thinking still defines the strategy-making continuum

Theme	Sub-Theme	Codes
Divergent thinking still defines the strategy-making continuum	Strategy is either "formally articulated" or a "particular way of thinking"	Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives. Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability
	Strategy can be deliberate or emergent	Deliberate Emergent
	Creativity and adaptability is embedded but with limited awareness of strategic thinking as an approach	South African organisation’s strategies are creative and adaptive Limited awareness of a strategic thinking

The first articulates that strategy is either "formally articulated" or a "particular way of

thinking", providing insight into the diverse approaches to strategy. Interviewees suggest that strategy is:

"...a guideline that will shape the planning and execution of a company for a defined period..."

"...about dynamically and elastically adjusting to changes in the environment; presenting a goal that you want to in the end attain and then defining a way or method of how you can attain that goal..."

The second sub-theme expands the approach by suggesting that strategy might be deliberate or emergent:

"Life just changes too quickly. - emergent is the way to go. You need to experiment almost and discover as opposed to having this rigid strategy, you need to be flexible as things change so that you can remain relevant, discover something we need to adapt; but on the other hand I think there needs to some direction - you don't want to change your processes on a daily basis - build rigour into the process to have direction and check points, so that it's not a hap-hazard thing."

The third sub-theme clarifies that creativity and adaptability are embedded within South African organisations, but stakeholders have inadequate awareness of strategic thinking as an approach.

6.5.3.2 South African business environment challenges

Theme two emphasises that South African organisations are faced by an array of external and global business environment challenges, as well as challenges that are unique to South Africa. The prolonged exposure to and mismanagement of the challenges result in fatigue and forced reactionary adaptation. Three sub-themes are highlighted in Table 84 below.

Table 84 - Theme 2: South African business environment challenges

Theme	Sub-Theme	Codes
South African business environment challenges	External dynamics affect the business environment	Economic Legal and Regulatory Social/Demographic Political Environmental Competition Technological
	Unique environmental factors hinder South African organisations	Consumption Driven Economy Geographic Location Global Competition Homogeneous Market Socio-Economic Requirements Stifling Legal and Regulatory Environment Environment Change Resistant South Africa is Unique South African Approach
	Environmental fatigue forces reactionary adaptation	Ambiguity Forced Adaption Mimicry Not Planned Paralysed Punch Drunk Reactionary Unpredictability

The first sub-theme highlights the varying external dynamics that affect the business environment. The second sub-theme identifies the unique environmental factors that hinder South African organisations:

“...homogeneous nature of the South African economy which is still largely resource based.”

“...very hierarchical power based society and organisational strategy is very often seen as set in stone and is not dynamic...”

“Import based, consumption driven economy as opposed to a production economy.”

The third sub-theme alludes to the view that environmental fatigue forces reactionary

adaptation by South African organisations:

“I think in general South African companies are to a certain extent paralysed by what is happening in both the global economy and in the way that the local enabling environment is not conducive to rapid change.”

“We all wait and when we are forced, then we respond; we will rather just shelve all the great ideas and then if we are pushed, we'll adapt.”

“Punch drunk, they are in this lifeless mode whereby if the signals are strong enough then they will just adapt to that.”

6.5.3.3 Sources of strategic collapse

The third theme identified that strategic collapse or failure is loosely attributed to misfortune, unforeseeable circumstances and an organisation's fault or error. The latter is attributed to systematic internal problems, which include fundamental limitations in capabilities, skills and resources, including basic approach, process and execution problems. Two sub-themes are emphasised in Table 85 below.

Table 85 - Theme 3: Sources of strategic collapse

Theme	Sub-Theme	Codes
Sources of strategic collapse	Bad luck and organisational error result in strategic failure	Pure Bad Luck Missed Opportunities Stupid Error Systematic Problems Rigid Strategy (Not Flexible/Agile) Legacy Constraints
	Systematic problems plague organisations	Lack of Credible Process/Tools and Poor Execution Lack of Discipline Limited Strategy Experience / Skills Limited Understanding of Strategy Tick Box Exercise Top-down Inflexible Strategy Top-down Strategy Development Limited Core Capabilities Limited Resources

The two sub-themes are substantiated by the following quotes:

"Pure bad luck"

"...you didn't do something you should have done or you did do something you shouldn't have done."

"They have a distorted view of reality and they don't necessarily have a proper appreciation of how the world might evolve."

"...strategies are not defined to be flexible and agile for changing external factors or changing internal factors, so they are not able to respond in an agile way."

"There is a discipline associated with good strategy execution."

6.5.3.4 An enabling organisational culture

The fourth theme clarifies that the successful crafting and execution of strategy in an organisation are dependent on an enabling organisational culture which promotes collective acceptance, ownership and strategic leadership. Three sub-themes are highlighted noted in Table 86 below.

Table 86 – Theme 4: An enabling organisational culture

Theme	Sub-Theme	Codes
An enabling organisational culture is critical for crafting and executing strategy	Mind-sets and behaviours hinder strategy development and execution	Attitudes Bias Bureaucratic Change Resistant Culture Hierarchy and Power Mind-set and Behaviours Political Agenda Risk Averse Culture Risk Averse Investment Traditionalist
	Acceptance and ownership by the organisation is critical	Buy-in Commitment Emotional Intelligence Focused Mind-sets and Behaviours Informed and Receptive Audience Internal Ownership Involvement Organisational Acceptance Organisational Culture Organisational Perception Unique Corporate Culture
	Leadership traits must be embedded for strategic success	Leadership Accountability Leadership Buy-in Leadership Execution Leadership Hindsight Bias Leadership Perception Leadership Strength Ineffective "Selling" of Strategy Ineffective Communication

The first sub-theme identifies that mind-sets and behaviours hinder strategy development and execution:

"South Africa is a very hierarchical power based society and organisational strategy is very often seen as set in stone and is not dynamic, which makes it very difficult for organisations to react dynamically and elastically to changing environmental factors."

The second sub-theme points out that acceptance and ownership by the

organisation of its strategy and associated development process is crucial:

“If your people do not believe in the whole idea of what you are saying in terms of your strategy, it is not going to work.”

The third theme expounds the view that leadership traits must be embedded for strategic success:

"Strength of the leadership team needs to be associated and aligned with developing common goals and strategy and then driving them through to execution and accountability."

6.5.3.5 An evolved strategic paradigm is required

The fifth theme is defined in line with the view that successful strategy crafting and execution require a paradigm which needs to embrace a hybridised approach in which new principles need to be created, for the purpose of developing strategies to meet the challenges in the business environment. Three sub-themes are emphasised in Table 87 below.

Table 87 – Theme 5: An evolved strategic paradigm is required

Theme	Sub-Theme	Codes
An evolved strategic paradigm is required	Hybridised strategy	Hybrid Portfolio of Strategy Industry Dependent Meta-Strategy/Style No One Size Fits All Shaping Strategy
	Revised Strategy Principles	Adaptability Adaptable Structure Adaptive Agility Breaking out of the Mould Complexity Creativity for Insight Generation Eco-system of Partners Entrepreneurial (Forward Thinking) Evolutionary Experimental Flexibility Innovative Interconnectedness Intuition Local Relevance Resilience Responsive Synergistic Valuable
	Open Collaboration provides ideas, insight and opportunities	Alternative Insights Critical Constructive Criticism Cross Industry Opportunities / Transferable Ideas Devil's Advocate Direction External Trends Facilitation Guidance Holistic View Ideation Objective Insight/Viewpoint Specialist Knowledge Unbiased Value Creation Well Defined Focus (Ring-fenced)

The first sub-theme alludes to the ideal state of having a hybridised strategy to guide strategy development across the organisation. The second sub-theme suggests that there are revised strategy principles that need to be integrated into approaches to the crafting of strategy to enable success in an uncertain environment:

“...guys are building ecosystems of partners around them and kicking the daylight out of the competition...”

“...you need to be flexible as things change so that you can remain relevant.”

“You need to experiment and discover...”

“...you need creativity to generate insights. Insights are imperative for a good strategy and adaptability because of the inherent unpredictability in the environment.”

The third sub-theme provides support for the rationale of open collaboration with external consultants and other stakeholders in order to provide cross industry ideas, insight and opportunities:

“A good prince surrounds himself with smarter advisers.”

“...you always need an external party to give you information, or give you different insights, to challenge you, to challenge you against your own strategy to make sure that that is the right strategy.”

“Sometimes when you are too much in something you don't see out of the box.”

“I think there is value in consultants bringing in specialist knowledge and bringing in wider experience because when you are in an organisation, as much as I have said you need the helicopter view.”

6.5.3.6 Alternative mechanisms for crafting strategy

Theme six clarifies that the successful crafting of strategy needs to consist of alternative mechanisms which include: design elements which steer credible processes, systematic processes which monitor internal and external dynamics and measures of achievable strategic intent. Theme six comprises three sub-themes

which are indicated in Table 88 below.

Table 88 - Theme 6: Alternative mechanisms for crafting strategy

Theme	Sub-Theme	Codes
Alternative mechanisms for crafting strategy	Design elements guide credible processes to craft strategy	Annual Forecasting/Issue Management/Refresh Black Swan Credible and Known Process Customised Strategy Approach Dimensions Clarified Done by Design Evaluation and Validation Process (Simulation/Testing) Event driven Formal analytical process/model Holistic Integrated view of Organisation and Environment Holistic View Integrated Holistic View Iterative process Pattern Detection Recipe Structured Focused Creativity Systems Thinking Triggers
	Systematic processes for monitoring internal and external threats and opportunities is critical as input to crafting strategy	Organisational Environment Awareness Organisational Self Awareness Limited Organisational Environment Awareness Limited Self Awareness
	Measures of achievable strategic intent	Achievable Strategic Intent Applicability Relevance Strategic Intent Well Defined Execution Plan Well Defined Output/Strategy

The first sub-theme comprises design elements to guide credible processes for crafting strategy:

"...a believable, repeatable structure..."

"There should be a trigger in the organisation."

"Sense and capabilities to say there is a need to change direction..."

"Something that will hit you off balance."

"...simulating in a safe environment and fix the mistakes before its implemented, keep on testing."

The second sub-theme describes the critical necessity of having systematic processes for understanding and monitoring internal and external threats and opportunities as input for crafting strategy:

"How they are informed about today and tomorrow."

"...not a big enough set of factors has been taken into account..."

"A good understanding of your environment and your extraneous factors like sell factors, competitive intensity, in what you are trying to do and in your business model."

"Current capabilities, strengths and weaknesses, the skills and organisation has, the history of where it is coming from and what sector it is from..."

The third sub-theme draws attention to the measures of achievable strategic intent:

"...strategy with a definitive aim and purpose can actually result in achievement."

6.6 Conclusion

Chapter 6 discussed the findings arrived at by several analytical methods applied to both the quantitative and qualitative data that were collected from respondents by means of a questionnaire and interviewees by utilising an interview schedule.

Descriptive statistics were used to inform a discussion of the variables in the questionnaire, depicted visually and through a tabulation of the variables by their mean and standard deviation scores to gain greater insight. Following the extraction of descriptive statistics for each of the variables, an exploratory factor analysis was conducted to reduce the variables into factor subsets. The factors identified were analysed by conducting a multiple regression analysis to determine whether

relationships exist between them. Cross tabulations, factor mean distribution, Kruskal-Wallis and cluster analysis were conducted to develop and define relationships, influences, and natural groupings or clusters within the data set.

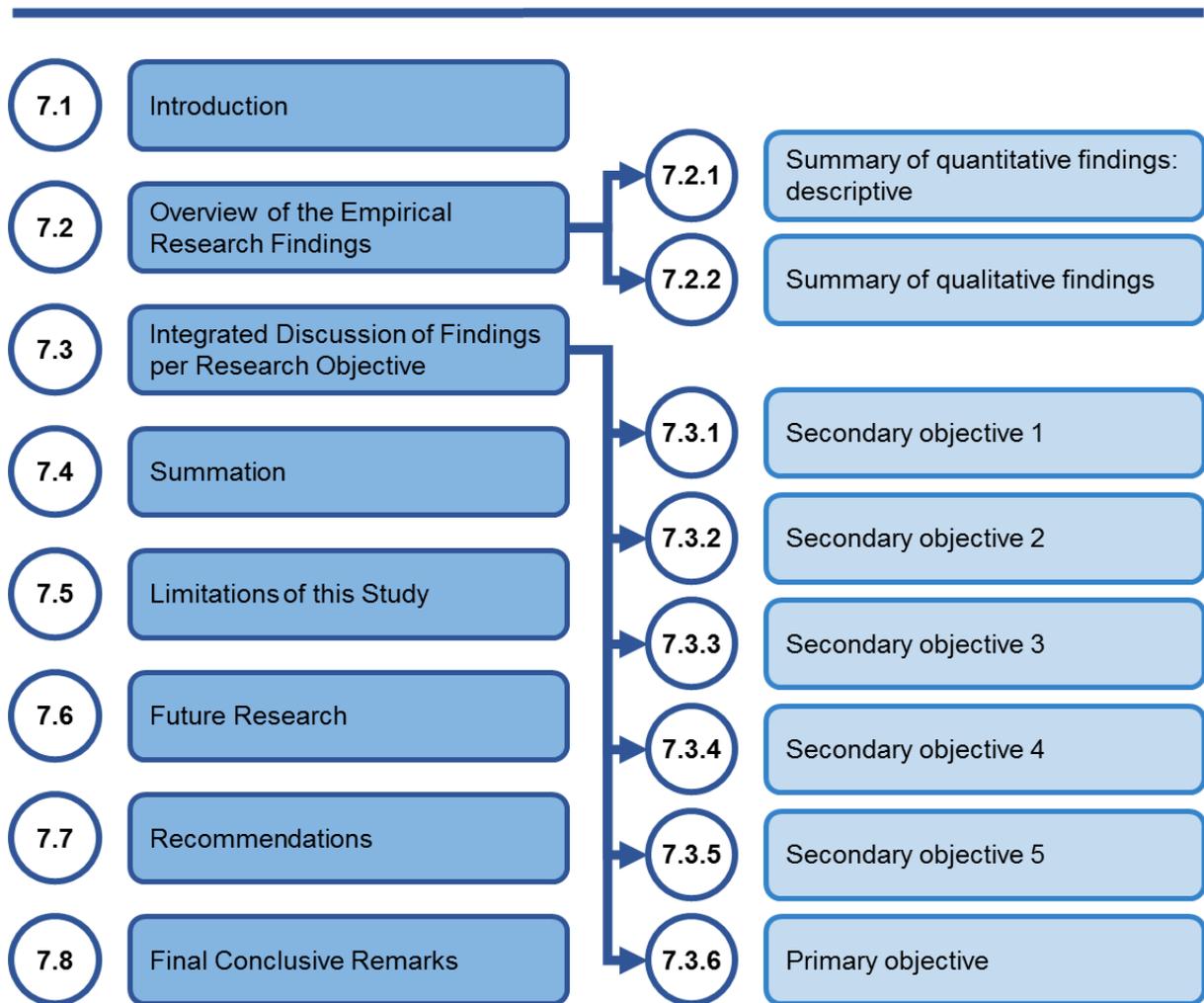
Qualitative analysis was conducted on interview transcripts to explore the extent to which strategic thinking is practiced in South African organisations, to establish a concrete basis for making conclusions on strategic thinking and adaptive strategy. The interviews contributed to and improved the researcher's understanding of how adaptive strategy is crafted within South African organisations and how strategic thinking is used and applied.

The following chapter synthesises all the findings identified in Chapter 6, combined with the literature study undertaken in Chapters 2 to 4, in order to meet the research objectives.

Chapter 7

Conclusion

Chapter 7 Conclusion



“If I have seen further it is by standing on the shoulders of Giants.”

– *Isaac Newton*

7.1 Introduction

To recapitulate, an organisation, a social community as part of a larger ecosystem, must continuously consider and understand the integrated nature of its relationships, connectedness and context in order to achieve maximum sustainability while framing and crafting its strategy (Capra, 1998:3).

To underpin the crafting of strategy, organisations have traditionally utilised strategic management, underpinned by rational strategic planning, to contemplate the complexity of wicked problems, organisational systems and global problems (Camillus, 2008:100; Robledo, 2013:1).

However, the rate of change across the present radically evolving and complex business environment requires organisations not only to be creative, but also adaptable to changing conditions. In addition to being flexible, several paradigm shifts force organisations to exploit emerging business opportunities inside and outside of their historical boundaries (Amsteus, 2011:64; Sull, 2009:80; Mintzberg, 1994:107).

To remain relevant and compete successfully, organisations must facilitate creativity to create a base for rethinking strategic outcomes within and beyond themselves (Bilton and Cummings, 2010:37). It has been suggested that, as an alternative to rational strategic planning, a strategic thinking approach, framed by the first principles of strategy, is required for the crafting of creative and adaptive strategy (Amsteus, 2011:64; Mintzberg, 1994:107).

As noted, this research proposes that a strategic thinking approach can be designed to deliver a creative and adaptive organisational strategy.

While strategic thinking is not a new concept within academic literature (Bonn, 2005:338; Cravens, Piercy and Baldauf, 2009:31-49; Liedtka, 2005:73-76; O’Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116), a creative and adaptive approach to strategy-making, using the concepts provided for within the

strategic thinking sphere, has not been comprehensively documented nor integrated into standard organisational processes.

The purpose of this study was to investigate the extent to which strategic thinking is used by organisations in order to determine commonly used tools, elements (essential or characteristic part of existing frameworks or methods) and mechanisms (an established process, framework or method comprised of several elements working together) as inputs into the conceptualisation of a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy. In addition, this study attempted to identify the extent to which internal and external organisational dynamics impact the development and execution of strategy in order to strengthen the robustness of a strategy-making approach.

To achieve the purpose of the study, several broad research questions were explored and aligned to research objectives – as outlined in Chapter 1 sections 1.3 to 1.5 – and highlighted in Figure 63 below.

The steps listed below were undertaken to address these questions and fulfil the objectives as well as to gain the required insight by following a two phased, sequential explanatory mixed methods approach:

- An extensive literature study (Chapters 2 to 4) was performed to acquire a detailed theoretical foundation
- A survey, conducted with the use of an in-depth questionnaire specifically developed for the purpose of this study
- Semi-structured qualitative interviews were held to gain detailed understanding of the subject matter and identify common perceptions and experiences in order to develop high-level, overarching themes.

The two research instruments were structured into sections; each focused on gathering data to support the answering of a research objective. The research objectives, and the corresponding research instrument sections are presented in Figure 63 below.

Broad Research Questions	Primary Research Objective	Secondary Research Objectives	Research Instrument	
			Questionnaire	Interview Schedule
Research Question 1: What are the key principles underpinning the concept of strategy? Research Question 4: If a rational strategic planning approach is no longer optimal, do commonly used tools and elements exist which should be embedded into a revised conceptual strategic thinking strategy-making approach?	To develop a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment	Objective 1: To determine the utilisation of strategic thinking within South African organisations	Section 2: Approach to crafting strategy	Focus 2: Understanding of organisational strategy
Research Question 2: Do strategy-making approaches, underpinned by rational strategic planning, allow organisations to easily adapt to a radically changing and uncertain global environment, or have these approaches become outdated and unsuitable to the new reality?		Objective 3: To investigate the best practice elements of strategic thinking and rational strategic planning		Focus 3: Development of organisational strategy
Research Question 5: Do alternative mechanisms for crafting a creative and adaptive strategy exist, and can they be embedded into a strengthened strategic thinking strategy-making approach?		Objective 2: To determine the organisational dynamics which impact on development and execution of organisational strategy	Section 1: Factors affecting the business environment	Focus 1: Dynamics affecting business environment
Research Question 3: Is the rational strategic planning approach to strategy-making still the optimal approach to follow for strategy-making, or can it be replaced or supplemented by a strategic thinking strategy-making approach?		Objective 5: To determine the extent to which South African organisations' strategies are creative and adaptive rather than developed to "fit" the changing business environment		
		Objective 4: To investigate alternative mechanisms for the crafting of a creative and adaptive organisational strategy	Section 3: Mechanisms for crafting a creative and adaptive strategy	Focus 4: Strategic Thinking approach to Creative and adaptive strategy development
		Objective 5: To determine the extent to which South African organisations' strategies are creative and adaptive rather than developed to "fit" the changing business environment	Section 4: Understanding the development of creative and adaptive strategy	Focus 4: Strategic Thinking approach to Creative and adaptive strategy development

Figure 63 – Mapping of the research objectives to the research instrument section

Figure 64 below depicts the structure of this chapter following the sequential explanatory mixed methods design outlined in Chapter 5.

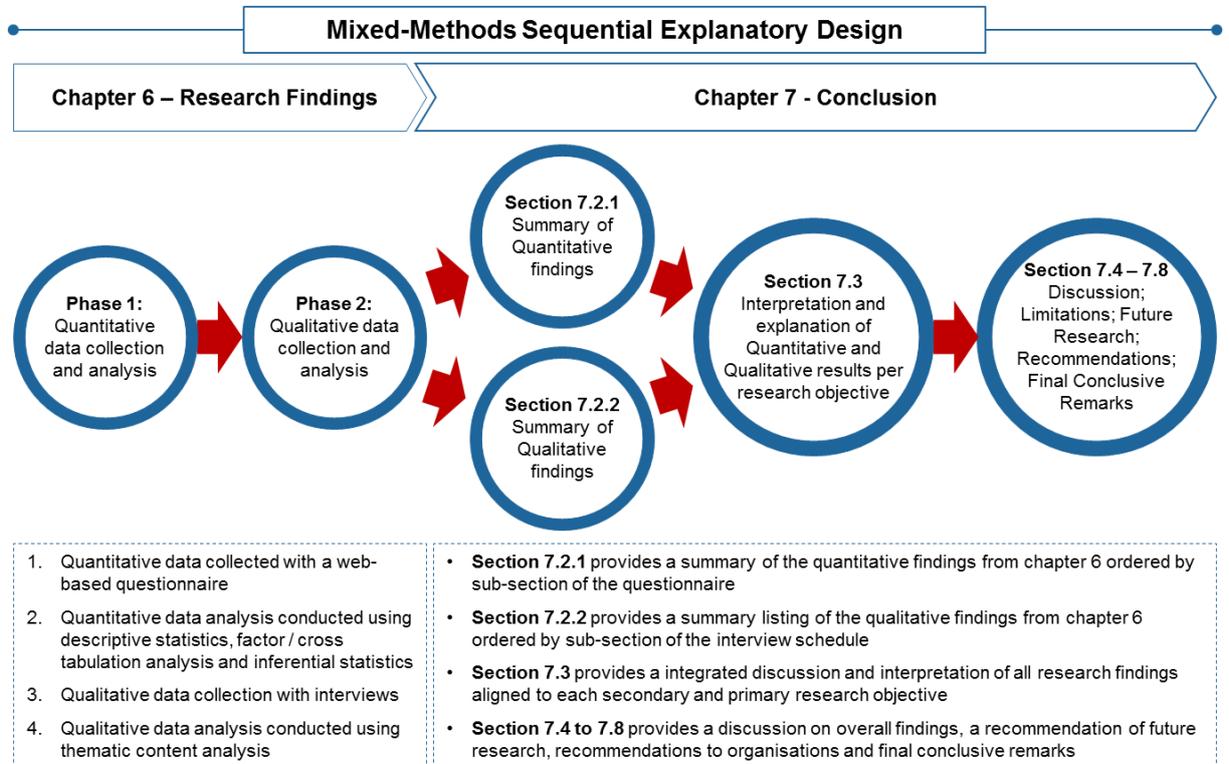


Figure 64 – Chapter 7 outline and structure

Chapter 6 reported the results of both the quantitative and qualitative data from the first and second phases. A summarised list of result findings, in sequential order: first the quantitative findings and then the qualitative, ordered by instrument section is provided in section 7.2 below.

Following the sequential summary of the result findings in section 7.2, this chapter integrates and weaves a narrative using both sets of findings, in order to answer the research objectives. All findings are interpreted and explained in order to synthesise the conclusions in a theme-by-theme or construct-by-construct basis per research objective and outline future research and recommendations.

7.2 Overview of the Empirical Research Findings

Chapter 6 provided a robust and detailed analysis of the results of each question. As a reminder of the empirical findings of each question, a concise summary of the descriptive findings of each is provided below. Following this, each finding will be explored in section 7.3, in relation to the research objectives.

7.2.1 Summary of quantitative findings: descriptive

Table 89 below contains a high-level summary of the quantitative results described in Chapter 6, section 6.2. In addition, the following four sections provide a listing of the questionnaire findings, aligned to its sectional structure.

Table 89 – Concise summary of quantitative findings: descriptive

Questionnaire section	Conclusion	Reference
Section 1: Factors affecting the business environment	Organisations are aware of their internal and external challenges and believe that these have impacted the development and execution/implementation of their strategy in the past five years. In addition, organisational strategies are believed to be sound, regardless of limited capabilities	Section 6.2.2
Section 2: Approach to crafting strategy	Organisations generally prefer traditional analytical frameworks and tools rather than tools that enable lateral thinking and creativity. In addition, tools that challenge conventional wisdom, enable lateral thinking and creativity are viewed as beneficial	Section 6.2.3
Section 3: Mechanisms for crafting creative and adaptive strategy	Generally, organisations do execute alternative mechanisms for crafting strategy and recognise their value. However, organisations do not provide managers with comprehensive input to decision-making and do not make extensive use of synthesis and insight generation frameworks or models, or formalised evaluation and validation methodologies	Section 6.2.4
Section 4: Understanding the development of creative and adaptive strategy	Creative and adaptive approaches, and their enablers, are viewed as critical for the development of organisational strategy	Section 6.2.5

7.2.1.1 Section 1: Factors affecting the business environment

The purpose of section 1, Part 2 of the questionnaire was to understand the factors affecting the business environment of the respondent's organisation. Based on the results provided, discussed in section 6.2.2, the results suggest that:

- Respondents, when considering the changing external dynamics of the business environment, view economic, political and competition factors as having a high level of uncertainty and high impact on the sustainability of their organisations. Furthermore, they consider technological, legal and social factors to be low uncertainty and high impact areas; while demographic and environmental factors are considered to be low uncertainty low impact areas
- Respondents, in general, view their organisation's strategy as being sound

- They believe that organisations do correctly interpret strategic insight
- They felt organisations respond slowly to strategic insight
- They agree that organisations struggled with the execution of strategy
- They consider that mind-sets and behaviours impact an organisation's strategy
- They believe that organisations struggle with limited capabilities, which hinder their strategy
- They view organisational culture as an integral element to successful strategy
- They consider that lack of organisational communication hinders strategy
- Respondents felt that the development of their strategy was impacted by external organisational dynamics in the past five years
- They expressed the feeling that the development of their strategy had been impacted by internal organisational dynamics in the past five years
- They felt that external organisational dynamics impacted the organisation's execution/implementation of its strategy in the past five years
- They expressed the view that internal organisational dynamics impacted the organisation's execution/implementation of its strategy in the past five years
- Fewer than half of organisations have a systematic process for monitoring external threats and opportunities in place
- The majority of respondents felt their organisations systematically act on external threats and opportunities
- The majority of respondents felt their organisation actively considers how to manage uncertainty.

The results clearly indicate that organisations are aware of the internal and external challenges to their business, and believe that these have impacted the development and execution/implementation of their strategy in the past five years. However, they draw attention to the belief that their organisational strategies are sound, regardless of limited capabilities.

7.2.1.2 Section 2: Approach to crafting strategy

The purpose of section 2, Part 2 of the questionnaire was to gain an understanding of the approaches used by respondents' organisations to craft strategy. The results

obtained, discussed in section 6.2.3, indicate that:

- Half of the respondents opined [that] “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives”, while the remaining respondents believe “strategy is articulated by facilitating ‘a particular way of thinking’ which emphasises intent, enables creativity, strategic thinking and adaptability”
- The majority agreed that “crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities”; while the remaining respondents believe the “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change”
- The most commonly used traditional frameworks or tools are financial analysis (80%); customer segmentation and value analysis (64%); SWOT analysis (63%); functional capability and resource analysis (60%); and value chain analysis (55%)
- The most rarely or never used traditional frameworks or tools include: blue ocean identification (45%); s-curve analysis (50%) and Porter's five forces analysis (44%)
- The two most commonly used alternative frameworks or tools identified were trend analysis (50%) and forecasting and key success factor analysis (38%).
- The most rarely or never used alternative frameworks or tools identified were the AQAL model (Integral theory) (55%); VRIO (value, rarity, imitability, and organisation) (53%); unique competing space analysis (43%); and open foresight (39%)
- Respondents still prefer traditional analytical frameworks and tools
- They focused extensively on financial modelling
- They believe their organisations do not extensively use tools that enable lateral thinking and creativity
- Generally, respondents prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts

- Generally, they find tools that enable lateral thinking and creativity to be more beneficial than traditional analytical tools, methods or models

The results provide a dichotomous view of the approaches used by respondents' organisations to craft strategy, and suggest that organisations generally prefer traditional analytical frameworks and tools rather than those that enable lateral thinking and creativity. In addition, tools that challenge conventional wisdom, enable lateral thinking and creativity were viewed as beneficial.

7.2.1.3 Section 3: Mechanisms for crafting creative and adaptive strategy

The purpose of section 3, Part 2 of the questionnaire was to facilitate an understanding of the mechanisms (an established process, framework or method comprised of several elements working together) used by respondents' organisations for crafting creative and adaptive strategy. Based on the results obtained, discussed in section 6.2.4, the findings suggest that:

- The majority of organisations have a strategic intelligence process in place
- The majority of respondents do fuse business intelligence, competitive intelligence and knowledge management (to create strategic intelligence) for use in decision-making
- Respondents felt that organisations do not provide managers with comprehensive input to decision making
- Generally, respondents considered that managers use strategic intelligence as an input in their strategy-making
- Respondents credited their organisations with using strategic intelligence to assist managers make better, fact-based decisions
- They consider strategic intelligence as critical to enhancing the strategy-making process
- Respondents were of the view that the use of strategic intelligence leads to competitive advantage
- They believe strategic issues are predominantly explored to find deeper structure and insight
- They believe that, in general, information is interpreted to create forward views and to generate plausible future worlds

- They were of the view that the generation of strategic insight is guided by intuition
- Respondents agreed that formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge
- The three most commonly used synthesis and insight generation frameworks or models were scenario planning (visioning, backcasting) (43%); strategic maps (37%) and sense-making (28%)
- The most rarely or never used synthesis and insight generation frameworks or models were playscripts (64%); modalities of thinking (metaphorical, dialectic, spatial, social modalities, poetic) (57%); embodied metaphors (53%); and futures wheels (51%)
- Respondents expressed the feeling that organisations evaluate and validate strategic options after strategy formulation
- The majority of respondents felt their organisations evaluate and validate strategic options to understand any unforeseen risks and their effect on the organisation
- The majority of them do evaluate and validate strategic options to gain acceptance across the organisation for their strategy
- Respondents believe their organisation's strategic options go through a validation process to ensure that they are actionable, acceptable and feasible to the organisation
- Fewer than half of the respondents agreed that their organisation had developed an internal evaluation methodology to screen strategic options
- Responses indicated that few organisations make use of game theory.

The results allowed the researcher to conclude that generally, organisations do execute the alternative mechanisms identified and recognise the value of these alternative mechanisms for crafting creative and adaptive strategy. However, organisations do not provide managers with comprehensive input to decision-making and do not make extensive use of synthesis and insight generation frameworks or models or formalised evaluation and validation methodologies.

7.2.1.4 Section 4: Understanding the development of creative and adaptive strategy

The purpose of section 4, Part 2 of the questionnaire was to obtain an understanding of the activities related to the development of creative and adaptive strategy undertaken by the respondent's organisation. In terms of the results obtained, discussed in section 6.2.5, the findings suggest that:

- A perfect split between agreement and disagreement was obtained from respondents when they were queried on whether traditional strategy-making approaches have become outdated and unsuitable to the new business reality
- Respondents believe that creative and adaptive approaches could lead to the successful development of organisational strategy within changing environments
- They felt that an environment of communication, open collaboration, open relationships and creativity is required for the development of an adaptive strategy
- They believe that creativity and adaptability is critical in the development of organisational strategy
- The majority of respondents hold the belief that their organisation's strategy is creative and adaptive in the changing business environment; however, a large number of respondents believe there could be an improvement
- In general, respondents do not believe that South African organisations' strategies are creative and adaptive to the changing business environment.

While interviewees were reluctant to confirm whether traditional strategy-making approaches have become outdated and unsuitable to the new business reality, the results allowed the researcher to conclude that creative and adaptive approaches, and their enablers, are viewed as critical for the development of organisational strategy.

7.2.2 Summary of qualitative findings

Table 90 below provides a high-level summary of the qualitative results described in Chapter 6, section 6.5.2. In addition, the following four focus areas provide a listing

of the interview schedule findings, aligned to the structure of the interview schedule.

Table 90 – Concise summary of qualitative findings

Interview schedule focus	Conclusion	Reference
Focus 1: Dynamics affecting business environment	External and internal organisation dynamics negatively impact organisations; however, while South African organisations can and do adapt to a radically changing and uncertain global business environment, many struggle and are reluctantly forced to adapt	Section 6.5.2.1
Focus 2: Understanding of organisational strategy	A clear dichotomy in strategy definition exists and reasons for strategic failure can be allocated between human error and method error while critical enablers of success include a well-formed and executed strategy-making approach	Section 6.5.2.2
Focus 3: Development of organisational strategy	Two approaches to develop and manage strategy exist: a formal and deliberate one and an iterative emergent one. In addition, organisations must be proactive and adaptive and allow external consultants to provide value by critiquing internally designed strategies	Section 6.5.2.3
Focus 4: Strategic thinking approach to creative and adaptive strategy development	Standard/traditional strategy-making approaches have become outdated and unsuitable to the radically changing business environment, while creativity and adaptability have become critical elements for strategy development but limited awareness of alternative strategy-making approaches exists	Section 6.5.2.4

7.2.2.1 Focus 1: Dynamics affecting business environment

The purpose of the first section of the interview schedule was to investigate the dynamics which affect the South African business environment. In the light of the feedback received and discussed in section 6.5.2.1, the findings suggest that:

- Interviewees felt that the primary external dynamics affecting the South African business environment were economic instability and legal and regulatory uncertainty
- They identified culture and process dynamics as the two most prevalent internal organisational dynamics that influence the validity and execution of organisational strategy

- Interviewee consensus emphasised that South African organisations can and do adapt to a radically changing and uncertain global business environment. However, the majority of organisations struggle and are reluctantly forced to adapt.

The feedback indicates that internal and external dynamics impact organisations, and suggests that while South African organisations can and do adapt to a radically changing and uncertain global business environment, many struggle and are reluctantly forced to adapt.

7.2.2.2 Focus 2: Understanding of organisational strategy

The purpose of the second section of the interview schedule was to focus on the understanding of organisational strategy; understanding why strategies are not successful and identifying the enablers of successful strategy development. In terms of the feedback received and discussed in section 6.5.2.2, the findings suggest that:

- Interviewees identified strategy as either a formally articulated guideline focused on a greater purpose, goal or mission or, alternatively, as a dynamically and elastically adjusting, informed response based on the context in which the organisation finds itself
- They believe that the most common reasons for strategic failure included: pure bad luck; missed opportunities; stupid error; systematic organisational problems; rigid strategy (not flexible/agile) and legacy constraints
- Interviewees felt that the critical enablers of successful strategy development include: the use of a credible and known strategy-making approach; a holistic integrated view of the organisation and its environment; resources with the appropriate strategy experience / skills; an evaluation and validation process; and a well-defined execution plan with stakeholder buy-in and commitment.

The feedback suggests that although interviewees have a clear understanding of the concept strategy, a clear dichotomy in definition exists. In addition, reasons for strategic failure can be allocated between human and method error while critical enablers of success include a well-formed and executed strategy-making approach.

7.2.2.3 Focus 3: Development of organisational strategy

The purpose of the third section of the interview schedule was focused on understanding how organisations craft organisational strategy. In the light of the feedback received and discussed in section 6.5.2.3, the findings indicate that:

- Interviewees proposed that organisations should develop and manage strategy in one of two ways, depending on the environment where they find themselves: Firstly, a deliberate approach, following a two speed approach with a formal analytical process/model supported by an annual forecasting or issue management refresh. Alternatively, an emergent approach; guided by an iterative process which is experimental, flexible, adaptive, evolutionary, and event driven
- Interviewees believed that organisations should remain adaptive by developing an overarching hybrid strategic style; leading the organisation through the different scenarios it could find itself in
- They believe organisations should make use of external consultants to provide critical and constructive criticism of the organisation's internally developed strategy

The feedback outlines that two approaches to develop and manage strategy exist: a formal and deliberate approach and an iterative emergent approach. In addition, organisations must be proactive and adaptive and allow external consultants to provide value by critiquing internally designed strategies.

7.2.2.4 Focus 4: Strategic thinking approach to creative and adaptive strategy development

The purpose of the fourth section of the interview schedule was to investigate the awareness of strategic thinking and creative and adaptive strategy development. In line with the feedback received and discussed in section 6.5.2.4, the findings suggest that:

- In general, interviewees believed that the standard/traditional strategy-making approaches have become outdated and unsuitable to the radically changing business environment, especially in the South African environment

- They felt that South African organisations' strategies are creative and adaptive rather than built to "fit" for business environment; but this was dependent on the industry
- Interviewees view creativity and adaptability as a critical element in the development of organisational strategy
- They have a limited awareness of strategic thinking as an approach to strategy development but believed such an approach would have merit – if a credible and known process, with triggers, was designed to provide an integrated holistic view of the complexity of the South African environment
- Interviewees do not view strategic planning as the optimal approach to follow in strategy development, and advocated that it could be supplemented or replaced by strategic thinking

The feedback indicates that interviewees believe that the standard/traditional strategy-making approaches have become outdated and unsuitable to the radically changing business environment. They outline creativity and adaptability as critical elements for strategy development, identify their limited awareness of strategic thinking, but acknowledge the advantage such an approach could have over rational strategic planning.

7.3 Integrated Discussion of Findings per Research Objective

The first part of this chapter provided a sequential summary of the quantitative and qualitative findings drawn from the empirical results (section 7.2), obtained from respondents to the survey questionnaire and interview schedule. In isolation, the sequential summary provides much insight; however, the *findings should be understood and explored in relation to the research objectives*.

To answer the latter, quantitative and qualitative findings were interpreted and explained by weaving a narration of conclusions in a theme-by-theme or construct-by-construct basis per secondary research objective, culminating in the proposed conceptual approach presented in response to the primary research objective. Each secondary objective provides insight into the development of the primary objective as shown in Figure 65 below.

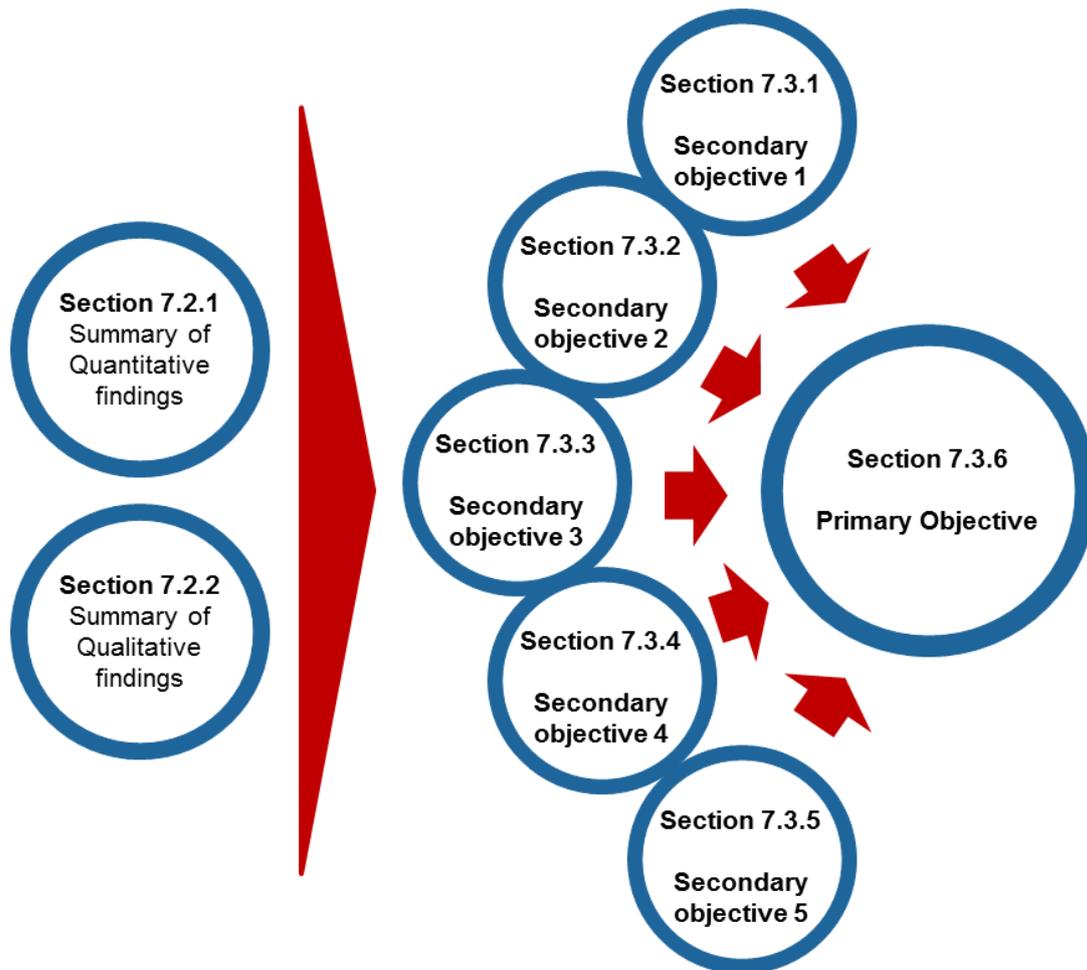


Figure 65 – Compilation and presentation of the research objectives

The research objectives are discussed individually, focusing on the secondary objectives first, in order to provide direction for the answering of the primary objective:

7.3.1 Secondary objective 1: Use of strategic thinking within South African organisations

A seminal definition of strategic thinking outlines it as “a particular way of thinking” that focuses on a systems perspective, is intent-focused, enables creativity and intelligent opportunism, thinking in time and is hypothesis-driven, following an iterative, non-linear approach to define how events are linked and to identify the roles of actors and parties outside the traditional corporate boundaries (Liedtka, 2005:73-76). Strategic thinking embraces creative and holistic, intuitive synthesis of key triggers to outline a sustainable competitive advantage and strategic intent (Mintzberg, 1994:108; Waters, 2011:115).

To determine the use of strategic thinking within South African organisations, questions were posed regarding an understanding or awareness of strategic thinking as an approach to strategy development; and the current approach and process utilised to craft strategy.

Survey respondents, as part of the quantitative study, were questioned by being provided two alternative strategy-making approaches as statements which describe how organisations understand strategy. A clear dichotomy in understanding was evident, with half of respondents aligning with “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” which describes a rational strategic planning approach; while the remaining respondents believe “strategy is articulated by facilitating ‘a particular way of thinking’ which emphasises intent, enables creativity, strategic thinking and adaptability” thereby describing a strategic thinking approach.

The demographics of the majority of respondents who selected “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” showed that they are employed by an organisation with more than 1000 employees; hold a senior or executive management position and commonly have completed a Master’s degree (not MBA / MBL) or a MBA / MBL.

By way of comparison, of those who selected “strategy is articulated by facilitating ‘a particular way of thinking’ which “emphasises intent, enables creativity, strategic thinking and adaptability”, the majority are employed by an organisation with fewer than 200 employees; held a middle management or a senior or executive management position and hold an Honours degree or a Doctorate.

A second set of statements delved further to determine the process of how strategy is crafted within organisations. Two alternatives were provided from which respondents could choose. Fewer respondents believe the “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change”, referring to a rational strategic planning strategy-making process; as opposed to the majority of respondents who felt that “crafting of strategy follows an iterative process of divergence and convergence,

combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities”, thereby describing a strategic thinking strategy-making process.

The demographics of the respondents who selected “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” showed they are employed by an organisation with more than 1000 employees; have obtained a middle management or senior or executive management position, and hold a Honours degree or Master’s degree (not MBA / MBL), or a MBA / MBL.

By comparison, of the majority of respondents who selected “crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” are employed by an organisation with fewer than 200 employees; hold a senior or executive management position and hold an Honours degree, Master’s degree or an MBA / MBL or a doctorate.

Furthermore, in the half of the respondents who selected the first statement, “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives”, the large majority selected “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change”.

Alternatively, of the other half who selected the second statement, “strategy is articulated by facilitating ‘a particular way of thinking’ which emphasises intent, enables creativity, strategic thinking and adaptability” a sizeable majority selected “crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities”.

In summary, and inferred from the above description, one can identify that:

- Respondents who are employed by an organisation with more than 1000 employees and commonly have completed a Master's degree or a MBA / MBL, undertake a formalised rational strategic planning strategy-making approach and process for the crafting of strategy, thereby stifling creativity.
- Alternatively, those employed by an organisation with fewer than 200 employees, hold a higher proportion of senior level positions, have attained a higher proportion of doctorates than those who selected the alternative statement, and undertake a strategic thinking strategy-making approach and process.

Interviewees, as part of the qualitative study, were questioned in a similar manner regarding their current understanding or awareness of a strategic thinking approach to strategy development. In response to this question, all interviewees indicated they have a limited awareness in this respect. However, following the provision of a definition of the concept, identifying primary components, interviewees suggested an awareness of the underlying components, but added that they had never seen an “end-to-end recipe” describing how the concept would work.

By querying respondents concerning their understanding of strategy, it became clear that strategy as well as its development and articulation is still distributed across a divergent spectrum of thinking and processes and is viewed as being both purposive and adaptive as well as incipient and creative.

Importantly, findings indicate that the standard/traditional strategy-making approaches and rational strategic planning are no longer the optimal approaches to follow in strategy development and have become outdated and unsuitable to the radically changing South African business environment.

Crucially, while findings suggest a limited awareness of strategic thinking as an approach to strategy development, there is a belief, as evidenced by respondents' replies, that such an approach would have merit. The said findings – that many respondents and interviewees undertake a form of strategic thinking as a strategy-making approach and process – indicated that their restricted awareness, merely of traditional tools, techniques and frameworks, limits them.

Findings suggest strategic thinking could either supplement or replace rational strategic planning if a credible and known process, with triggers, was designed to provide an integrated and holistic view of South African business complexity. This view holds that many traditional approaches were far too rigid with a distinct need to adapt and become more elastic. However, the limited new approaches to defining strategy that have recently been created stifle the true potential of strategy.

Findings highlight the need for an evolutionary and adaptable structure, including "pattern detection in order to shape the future and predict what is going to happen tomorrow and arrive at a desired outcome". In addition, the provision of an "end-to-end recipe" is important as an organisation "needs structure to the point that it gives a strategy which can be justified."

Classical approaches can be viewed as providing a "core to work from" but strategists need to "apply different concepts that go beyond the traditional concept of strategy". Overall, the emergent perception emphasised that South Africa is unique, with a distinctive corporate culture, and that, to remain valuable, new approaches must allow for greater systems thinking, identification of black swan events and a dynamic process with triggers that identify changes to the environment.

In conclusion, while there is limited awareness of strategic thinking as an approach to strategy development, there is a belief that such an approach would have merit.

7.3.2 Secondary objective 2: Organisational dynamics which impact on development and execution of organisational strategy

Organisations and the strategies that guide them are constantly influenced by complexity and uncertainty as a result of the changing business environment. Research findings indicate that the majority of organisations have had the development and execution / implementation of their strategy affected by external and internal dynamics over the past five years.

Importantly, integrated findings suggest that, not only do South African organisations face external and global business environment challenges, they are impacted by several challenges unique to this country.

As illustrated in part of the quantitative results in section 6.2.2.1, the primary external

dynamics identified by survey respondents as impacting on development and execution of organisational strategy include: economic, political and competition factors, any and all of which create an environment with a high level of uncertainty that could have a high impact on the sustainability of South African organisations.

In support, interviewees in the qualitative study identified the primary external dynamics affecting the South African business environment as economic instability, legal and regulatory uncertainty as well as lack of political leadership. Economic focus extended to the global recession; commodities downturn; restrained GDP growth; exchange rate depreciation; interest rates and limited foreign direct investment; all with the ability to depress consumer spending and limit organisational income and market growth. Furthermore, legal and regulatory uncertainty is of utmost concern to organisations, particularly policy making and civil law; with a direct focus on the enforceability of contracts – the core enabler of ethical business conduct and successful trade. This, combined with the dire state of local politics, has created an environment that lacks confidence in political leadership, resulting in limited foreign direct investment and international confidence.

Both survey respondents and interviewees identified social factors to be low uncertainty but high impact areas. Both groups felt that increasing social/demographic stagnation compounds the difficulty of enabling success due to the lack of depth in the South African talent pool, as a result of limited employee skills and rampant unemployment.

It must be noted that slight differences in opinion may be gleaned from the above discussion. Survey respondents identified competition as one of the top three organisational dynamics, while interviewees felt competition was a business norm and only highlighted this as a concern due to the difficulty in forecasting competitive challenges. In addition, survey respondents considered legal and regulatory dynamics to be a low uncertainty but high impact area, while interviewees emphasised this as a primary external dynamic due to the uncertain nature of political influence on the legislative environment, affecting business trade.

Fascinatingly, both the quantitative and qualitative findings identified technological dynamics as being of lower importance; however, the pace of disruptive

technological changes and the implicit need to embrace technology were underlined. To a lesser extent, mention was made of environmental (drought and water shortages; climate change) factors, considered to be low uncertainty low impact areas.

Qualitative findings indicate that unique environmental factors hinder South African organisations. While global competition is extensive, the socio-economic requirements and stifling legal and regulatory environment, combined with the country's geographic location, have created a homogeneous market and consumption driven economy: this generates a unique change-resistant business environment requiring a South African approach to navigate it.

However, the prolonged exposure to this environment and, critically, the mismanagement of the resultant challenges have created organisational fatigue and forced reactionary adaptation. Organisations are viewed as being "punch drunk" and paralysed by the ambiguity of the environment, resulting in slow, reactionary or unplanned mimicry.

From an internal dynamic perspective, quantitative findings indicate that respondents view their organisations' strategy as being sound and believe they do correctly interpret strategic insight but felt that they respond slowly to strategic insight and struggled with the execution of their strategy.

The quantitative findings provided insight into the hindrances impacting organisational strategy. Survey respondents believe mind-sets and behaviours impact an organisation's strategy and that the latter struggle with limited capabilities, all of which hinder their strategy. They view organisational culture as an integral element of successful strategy and believe that limited organisational communication hinders strategy.

It is important to note that there was a statistically significant difference between small and large organisations as compared to medium sized organisations (organisation size, as previously explained, was divided into three groups: 1=<200, 2=200–1000 and 3=>1000) with respect to three statements regarding internal dynamics influencing the participants' reports on the state of strategy within their respective organisations. Medium sized organisations' respondents, more than their

peers from smaller and larger organisations, consider that they (medium sized organisations) respond slowly to strategic insight and exhibit a stifling culture and limited communication, both of which hinder their strategy.

Corroborating these quantitative findings, interviewees identified culture and process dynamics as the two most prevalent elements of internal organisational dynamics that influence the validity and execution of organisational strategy.

Culturally, South African organisations are viewed as being a hierarchical and power based corporate environment, often driven by a political agenda. Prominent cultural dynamics influencing the development and execution of corporate strategy in South African organisations were identified as overall organisational acceptance and buy-in to the organisational strategy and leadership traits of limited communication, as well as a warped perception of how their business or strategy is performing, including its strength, execution and accountability and hindsight bias.

Importantly, qualitative findings suggest the need for a credible and known process for the development and execution of organisational strategy. Current processes are often viewed as a "tick box exercise", part of a top-down inflexible strategy and often executed by stakeholders who possess limited strategy development and execution capabilities, experience and skills.

Significantly, it was commented that organisations' perception of their internal and external environment should be bolstered by methods for systematic self and external environment awareness.

In conclusion, the integrated findings again clearly indicate that organisational dynamics impact the development and execution of organisational strategy and should be considered as critical inputs to the development of an approach for the delivery of a creative and adaptive organisational strategy.

7.3.3 Secondary objective 3: Best practice elements of strategic thinking and rational strategic planning

An extensive analysis of literature on strategy-making approaches culminated in the identification of rational strategic planning and strategic thinking tools, individual elements forming an essential or characteristic part of existing frameworks or

methods and mechanisms, outlined by established processes, frameworks or methods. Each of these were compiled into the quantitative survey instrument to allow the research to identify the most commonly used or popular elements of strategic thinking and rational strategic planning.

The focus of this objective was to determine whether best practice elements exist that should be embedded into a revised conceptual strategic thinking strategy-making approach.

Best practice elements of rational strategic planning

An important quantitative finding provided by empirical results indicates that respondents still prefer traditional analytical frameworks and tools as well as focusing extensively on financial modelling. However, by a small majority, some respondents find tools that enable lateral thinking and creativity more beneficial than traditional analytical tools, methods or models, and prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts. Conversely, findings indicate that organisations do not extensively use tools that enable lateral thinking and creativity.

These quantitative findings are corroborated in results from the survey questions focused on determining the most commonly used rational strategic planning frameworks and tools. Findings indicate that the most commonly used traditional frameworks or tools are financial analysis (80%); customer segmentation and value analysis (64%); SWOT analysis (63%); functional capability and resource analysis (60%) and value chain analysis (55%). On the other hand, the most seldom or never used traditional frameworks or tools include: blue ocean identification (45%); s-curve analysis (50%) and Porter's five forces analysis (44%).

While the result determined that financial analysis is the most commonly used rational strategic planning tool, it must be noted how poorly the remaining tools performed, considering they are often identified as the most popular tools for use in rational strategic planning (Fleisher and Bensoussan, 2003; Fleisher and Bensoussan, 2007; Pugh and Bourgeois, 2011).

While rational strategic planning frameworks and tools still provide value, a review of

literature suggests that a more dynamic toolset is required to anticipate future direction in changing environments. Several alternative strategic analysis frameworks and tools, developed to provide synthesis and insight into trends, patterns and multiple perspectives were identified and included in the survey questionnaire.

Based on the quantitative findings, the two most commonly used alternative frameworks or tools identified were trend analysis (50%) and forecasting and key success factor analysis (38%). Furthermore, the most rarely or never used alternative frameworks or tools identified were the AQAL model (integral theory) (55%); VRIO (value, rarity, imitability, and organisation) (53%); unique competing space analysis (43%); and open foresight (39%).

Detailed analysis of the quantitative survey results indicates that while a large proportion of respondents advised that they never or rarely use the alternative frameworks and tools identified, a significant number answered that they were unsure of their use within their organisations. Both of these findings suggest a lack of awareness or knowledge of the alternative frameworks and tools available and their corresponding benefits.

Furthermore, quantitative findings indicated that fewer than half of the organisations have a systematic process for monitoring external threats and opportunities in place. However, the majority of respondents felt their organisations do act systematically on external threats and opportunities and actively consider how to manage uncertainty.

To complement the quantitative findings provided by the descriptive statistics analysed above, several forms of inferential statistics were undertaken to determine whether any critical constructs or patterns of interaction would emerge amongst the variables. The following factors of interest emerged and proved critical for the analysis of the **best practice elements of rational strategic planning**:

- **Process for identifying and responding to changing dynamics (process_dynamics).** This factor comprises three variables and focuses on whether the organisation has a process in place for identifying and responding to changing internal organisational and external market dynamics.

- **Strategic options/choice frameworks and tools (strategic_options).** This factor consists of seven variables identified as traditional frameworks and tools focused on providing an organisation with strategic options or choices.
- **Internal implementation frameworks and tools (int_imp).** This factor comprises three variables identified as traditional frameworks and tools used for internal organisational analysis or implementation of strategy.
- **Market analysis frameworks and tools (market_analysis).** This factor includes two variables identified as traditional frameworks and tools utilised for market analysis.
- **Alternative frameworks and tools (alt_frameworks).** This factor is composed of eight variables identified as alternative frameworks and tools used to craft strategy.
- **Preference for traditional frameworks and tools (pref_trad).** This factor consists of two variables identified as identifiers for displaying a preference for using traditional frameworks and tools within the organisation.
- **Preference for creative and lateral thinking frameworks and tools (pref_creative).** This factor comprises three variables identified as indicating a preference for creative and lateral thinking frameworks and tools for use during the crafting of strategy.

Based on a **factor correlation analysis** several factors indicate a **moderate to strong positive** correlation to each other (see Figure 66 below).

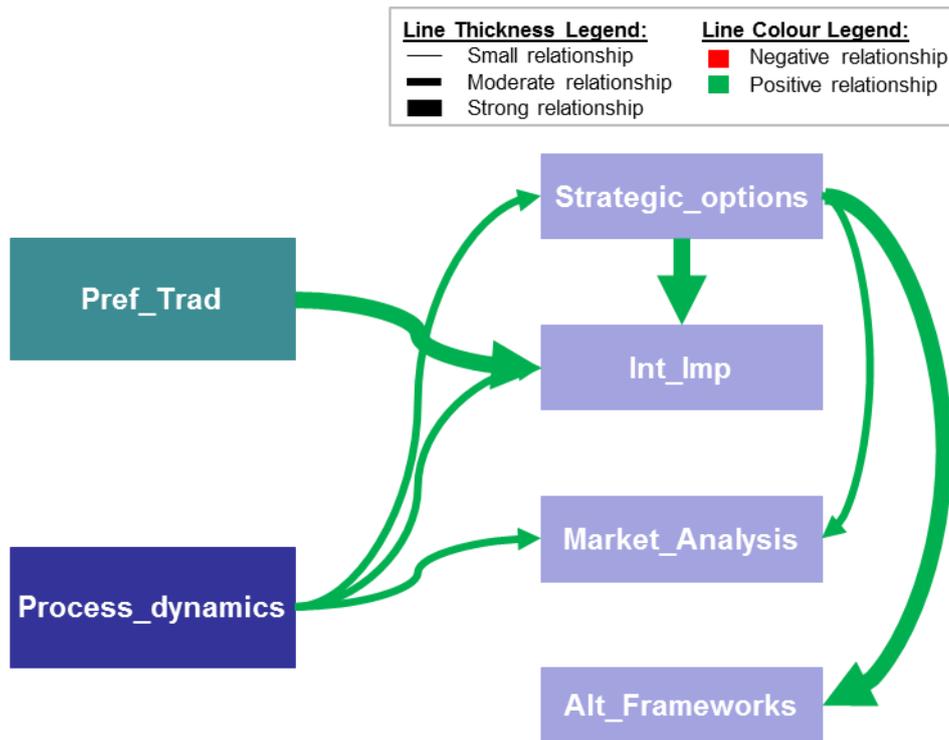


Figure 66 – Best practice rational strategic planning elements with moderate to strong positive factor correlations

Corroborating the quantitative findings of the descriptive analysis, factor correlation findings indicate that organisations which demonstrate a strong preference for traditional frameworks and tools (pref_trad) commonly utilise internal implementation frameworks and tools (int_imp). A vital internal implementation tool for these organisations is financial analysis.

Furthermore, factor correlation findings indicate that organisations which embedded a process for identifying and responding to changing dynamics (process_dynamics) do so with a broad collection of internal implementation (int_imp), market analysis (market_analysis) and strategic options/choice frameworks and tools (strategic_options).

In addition, a strong positive correlation was identified between the use of strategic options/choice frameworks and tools (strategic_options) with internal implementation frameworks and tools (int_imp) and alternative frameworks and tools (alt_frameworks). In addition, strategic options/choice frameworks and tools (strategic_options) display a further moderate positive correlation with market analysis frameworks and tools (market_analysis).

The **regression analysis** further corroborates the findings, indicating **small to strong positive** regression relationships (see Figure 67 below).

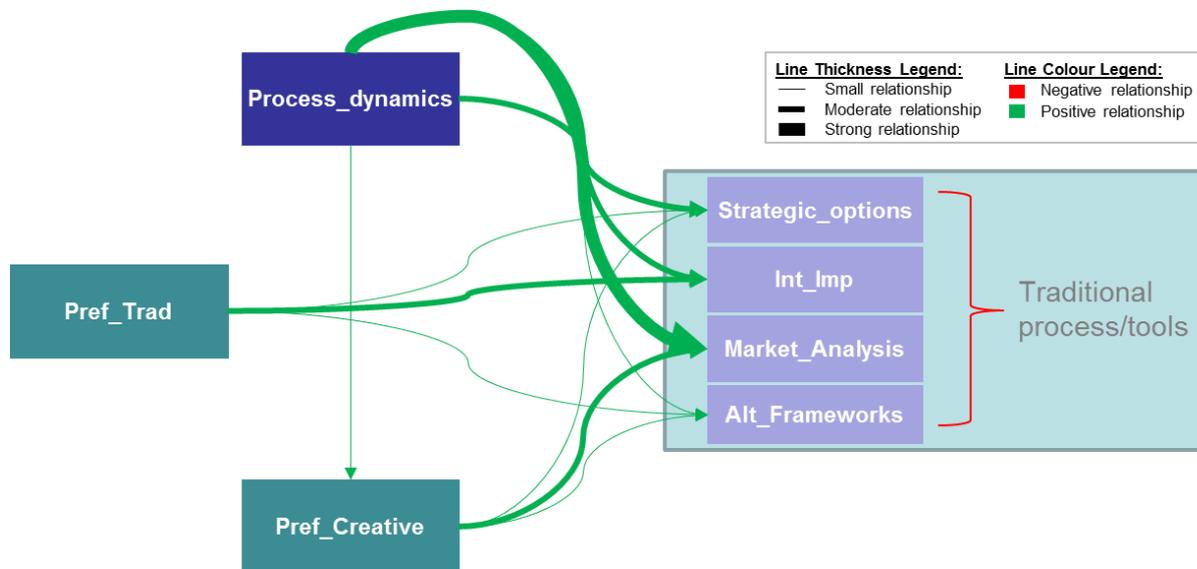


Figure 67 – Best practice rational strategic planning elements with small to strong positive regression relationships

Preference for traditional frameworks and tools (pref_trad) demonstrates a moderate statistically significant positive relationship to internal implementation frameworks and tools (int_imp), while demonstrating a small statistically significant positive relationship with strategic options/choice frameworks and tools (strategic_options) and alternative frameworks and tools (alt_frameworks).

Alternatively, organisations which prefer creative and lateral thinking frameworks and tools (pref_creative) demonstrate a moderately significant positive relationship with market analysis frameworks and tools (market_analysis), and a small statistically significant positive relationship with strategic options/choice frameworks and tools (strategic_options) and alternative frameworks and tools (alt_frameworks).

A process for identifying and responding to changing dynamics (process_dynamics) demonstrates a small statistically significant positive relationship with a preference for creative and lateral thinking frameworks and tools (pref_creative). In addition, organisations which implement a process for identifying and responding to changing dynamics (process_dynamics) demonstrate a strong statistically significant positive relationship with market analysis frameworks and tools (market_analysis), a moderate statistically significant positive relationship to strategic options/choice

frameworks and tools (strategic_options), as well as internal implementation frameworks and tools (int_imp), and a small statistically significant positive relationship to alternative frameworks and tools (alt_frameworks).

Furthermore, respondents who consider that “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” and believe the “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” demonstrate a higher preference for traditional frameworks and tools (pref_trad), internal implementation frameworks and tools (int_imp), strategic options/choice frameworks and tools (strategic_options), a process for identifying and responding to changing dynamics (process_dynamics) and market analysis frameworks and tools (market_analysis) than those respondents who consider strategy to be “articulated by facilitating ‘a particular way of thinking’ which emphasises intent, enables creativity, strategic thinking and adaptability” and believe “crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities”; they show a higher preference for creative and lateral thinking frameworks (pref_creative).

When considering the factors in terms of the size of the organisation, small organisations show a high preference for creative and lateral thinking frameworks (pref_creative) compared to medium and large organisations which indicate a significantly higher preference for traditional frameworks and tools (pref_trad). In addition, large organisations demonstrate a high preference for internal implementation frameworks and tools (int_imp), strategic options/choice frameworks and tools (strategic_options), and market analysis frameworks and tools (market_analysis).

The quantitative findings clearly indicate a difference in the best practice elements of rational strategic planning utilised by different sized organisations and respondents:

- Large organisations, and respondents who are associated with rational strategic planning, have a preference for traditional frameworks and tools (pref_trad) and make strong use of internal implementation frameworks and

tools (int_imp) but also of strategic options/choice frameworks and tools (strategic_options), and market analysis frameworks and tools (market_analysis).

- Smaller organisations, and respondents who associate themselves more with strategic thinking, have a higher preference for creative and lateral thinking frameworks (pref_creative), which in turn indicates a limited preference for traditional frameworks and tools.
- Minimal use is made of alternative frameworks and tools (alt_frameworks); however, there is a correlation with the use of strategic options/choice frameworks and tools (strategic_options).
- Findings suggest that a process for identifying and responding to changing dynamics (process_dynamics) enhances the use of creative and lateral thinking frameworks (pref_creative) and serves as an important input to strategic options/choice frameworks and tools (strategic_options), internal implementation frameworks and tools (int_imp) and market analysis frameworks and tools (market_analysis).

Best practice elements of strategic thinking

While strategic thinking is not a new concept within academic literature (Bonn, 2005:338; Cravens, Piercy and Baldauf, 2009:31-49; Liedtka, 2005:73-76; O'Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116), very little development has been undertaken to develop standardised organisational processes with clearly defined elements.

Best practice elements of rational strategic planning according to the quantitative study were identified and outlined above.

Furthermore, to understand the **best practice process and elements of strategic thinking**, a comprehensive literature review of the construct was undertaken in Chapter 3 section 3.2.4. Based on this review, several common elements have been identified and consolidated below as the best practice elements of strategic thinking.

Four elements should be considered as overarching drivers (Bonn, 2005:338; Cravens, Piercy and Baldauf, 2009:31-49; Liedtka, 2005:73-76; O'Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116):

1. A systems perspective

A systems thinking mental model of the organisation's value chain and ecosystem is required to view the organisation as a holistic system integrating several parts into a single whole.

2. Thinking in time

Imagining a new future requires clarity concerning the past.

3. Internal and external stakeholder participation

Participation and input from all internal and external stakeholders should be sought to provide a holistic understanding of the context within which the organisation exists.

4. Flexible inputs

To be able to respond flexibly and responsively to changes in customer demands and market requirements requires prompt adaptation to changing conditions. Flexible inputs are structured in terms of four categories: flexible technology; flexible people; flexible structures and flexible systems and processes.

In addition, the following elements would drive the execution of a strategic thinking process (Bonn, 2005:338; Cravens, Piercy and Baldauf, 2009:31-49; Liedtka, 2005:73-76; O'Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116):

5. Articulation of strategic questions

Scoping and articulating strategic questions is a critical element of the strategic thinking process; each question is triggered by trends, events or changes within the organisation's internal or external environment and addresses problems or challenges of strategic relevance.

Following the alignment of the questions, framing of the issues is required. High-level questions comprise multiple components, with framing assisting in clustering issues into manageable components. Issues are broken down into subordinate parts to the level where strategic responses need to be generated.

6. Hypothesis driven strategic analysis

Strategic thinking is a hypothesis-driven process, performing the sequential activities of hypothesis generation and testing through iterative cycles. Hypothesis generation focuses on the creative question of “what if...?”, while hypothesis testing critically evaluates by asking “If..., then...?” This approach guides relevant data requests, while the sequential and iterative nature induces the exploration of new ideas in response to strategic questions.

Strategic analysis serves three purposes: it breaks down the strategic questions and issues into constituent parts and identified triggers; it establishes the basis of parts to guide insight and it provides a framework for generating the bigger picture required for strategy formulation.

7. Creative sense-making and strategic insight

Creativity enables the use of information and experience to decipher new combinations of previously unconnected features locked within old structures, patterns, concepts and perceptions in order to develop value enhancing and useful products, services, ideas, procedures or processes.

Sense making deconstructs and reconstructs reality so as to create insight into the strategic problem or challenge at hand. It provides an understanding of how events are linked, the roles of actors and parties within complex relationships; all against an unclear backdrop of multiple possible realities. Sense making is the process, while insights are the outcome of the process informing the strategic questions.

8. Strategy formulation

Strategies are formed on the basis of the bigger picture emerging from generated strategic insight. The picture is often incomplete, but based on well tested and probed assumptions, allowing the organisation to rethink the unique competing space identified for value creation.

The output of the formulation solves strategic problems, conceptualises the intent for the future, and disrupts alignment to conceptual models so as to

provide competitive advantage, agility, and adaptability in the face of uncertainty.

9. Evaluation of strategic options

Following the development of several strategic options, the evaluation of the options undertakes to determine the suitability of the option based on its appropriateness, desirability and feasibility.

10. Strategic intent

Strategic intent steers long-term direction across all organisational stakeholders, outlines their competitive position and conveys three messages: a sense of direction, a sense of discovery and a sense of destiny. A strong sense of organisational strategic intent provides a common identity, guides appropriate decisions and courses of action and inspires individual imagination.

11. Intelligent opportunism

Strategic intent provides focus, while intelligent opportunism guides the ability to recognise and seize any opportunities that are presented in a rapidly changing environment. By enabling this capability or openness to new experiences, the organisation acquires room to adapt without relying solely on top management's foresight.

As previously stated, although the integrated findings in section 7.3.1 indicate restricted awareness of strategic thinking as an approach to strategy development, there is a common belief that such an approach would have merit.

While little clarity was provided in the qualitative findings by interviewees on specific strategic thinking frameworks and best practice elements, they indicated that creativity and adaptability are viewed as critical elements for the development of organisational strategy. Further input was provided on suggested design elements required for the development of a credible process. Firstly, a process should consist of an event driven, end-to-end recipe which combines systems thinking with triggers and pattern detection to develop an integrated holistic view of the organisation and

environment. It should be supported by a systematic process for monitoring internal and external threats and opportunities. In addition, the organisation should undertake formal analysis and provide a process of evaluation and validation which integrates simulation and testing. The approach must output an achievable and relevant strategic intent that directs an execution plan.

In conclusion, the integrated findings presented above indicate that best practice elements of strategic thinking do exist and can be embedded together with best practice rational strategic planning elements into a revised conceptual strategic thinking strategy-making approach.

7.3.4 Secondary objective 4: Alternative mechanisms for the crafting of a creative and adaptive organisational strategy

To support the crafting of such a strategy, an extensive literature review was conducted to identify whether any alternative tools or individual elements which form an essential or characteristic part of existing frameworks or methods and mechanisms, outlined by established processes, frameworks or methods exist and are recognised by experts within the field.

The literature review identified three alternative mechanisms for supporting the crafting of strategy: enhanced strategic input and analysis through strategic intelligence, synthesis and insight generation and the evaluation and validation of strategic options.

Organisations must have strategically relevant information available to their management at all times. To this extent, quantitative findings indicate that the majority of organisations have set a **strategic intelligence** process in place and do fuse business intelligence, competitive intelligence and knowledge management (to create strategic intelligence) for use in decision-making.

Generally, respondents felt that their organisations use strategic intelligence to assist managers make better, fact-based decisions and that managers do utilise strategic intelligence as an input in their strategy-making, but that their organisations do not provide their managers with comprehensive input for decision making.

Importantly, respondents consider strategic intelligence as critical to enhancing the

strategy-making process and believe that the use of strategic intelligence leads to competitive advantage.

In terms of **strategic synthesis and insight generation**, quantitative respondents believe strategic issues are predominantly explored by their organisations to uncover deeper structure and insight and that, in general, information is interpreted to create forward views as well as to generate plausible future worlds.

Overall, respondents believe that the generation of strategic insight is guided by intuition, and agreed that formal and methodical dialogue fosters interaction between stakeholders to create new shared knowledge.

Interestingly, while respondents indicate that they perform synthesis and insight generation, quantitative findings suggest that few organisations make thorough use of synthesis and insight generation frameworks or models for strategy development. With very low usage, the three most commonly used synthesis and insight generation frameworks or models are scenario planning through visioning and backcasting (43%); strategic maps (37%); and sense-making (28%). The most rarely or never used synthesis and insight generation frameworks or models were playscripts (64%); modalities of thinking (metaphorical, dialectic, spatial, social modalities, poetic) (57%); embodied metaphors (53%); and futures wheels (51%).

When considering **evaluation and validation of strategic options**, quantitative respondents felt that their organisations evaluate and validate strategic options after strategy formulation, in order to understand any unforeseen risks and their effect on the organisation and to gain acceptance across the latter for their strategy. The intention of ensuring that their organisations' strategic options go through a validation process, is to ensure that the options are actionable, acceptable and feasible to the organisation. However, fewer than half of the respondents acknowledged that they have developed an internal evaluation methodology to screen strategic options and very few make use of game theory to select the best option from several options, by considering the perspective of competitors, collaborators and stakeholders.

To complement the quantitative findings provided by the descriptive statistics analysed above, several forms of inferential statistics were undertaken to determine whether any critical constructs or patterns of interaction emerge amongst the

variables. Of interest, the following factors emerged and proved essential for the determination of **alternative mechanisms** for the crafting of a creative and adaptive organisational strategy:

- **Preference for traditional frameworks and tools (pref_trad).** This factor comprises two variables determined to be identifiers for displaying a preference for using traditional frameworks and tools within the organisation.
- **Preference for creative and lateral thinking frameworks and tools (pref_creative).** This factor comprises three variables identified as indicating a preference for creative and lateral thinking frameworks and tools for use during the crafting of strategy.
- **Process for identifying and responding to changing dynamics (process_dynamics).** This factor consists of three variables and focuses on whether the organisation has a process for identifying and responding to changing internal organisational and external market dynamics.
- **Strategic intelligence process (strat_int_process).** This factor comprises four variables that describe the strategic intelligence process used by an organisation.
- **Strategic intelligence outcomes (strat_int_outcome).** This factor consists of two variables identified as describing the outcomes of utilising strategic intelligence.
- **Strategic synthesis and insight generation process (synt_int_process).** This factor contains two variables that describe the strategic synthesis and insight generation process.
- **Strategic synthesis and insight generation enablers (synt_int_enablers).** This factor comprises two variables which describe the enablers for strategic synthesis and insight generation.
- **Interpretation frameworks and tools (interpretation).** The six variables included in this factor are interpretation frameworks and tools used for exploring and unpacking the past and current reality while crafting creative and adaptive strategy.

- **Prospection frameworks and tools (prospection1 and prospection2).** These two factors both contain three variables each identified as prospection frameworks and tools used for unpacking and exploring future worlds or direction during the crafting of creative and adaptive strategy.
- **Evaluation and validation options (eval_options).** This factor includes six variables identified as ways of conducting the evaluation and validation of strategic options.
- **Creative and adaptive strategy enablers (creative_enablers).** This factor comprises three variables identified as enablers required for crafting creative and adaptive strategy.

Based on a **factor correlation analysis**, several factors indicate a **moderate to strong positive** relationship to each other (see Figure 68 below).

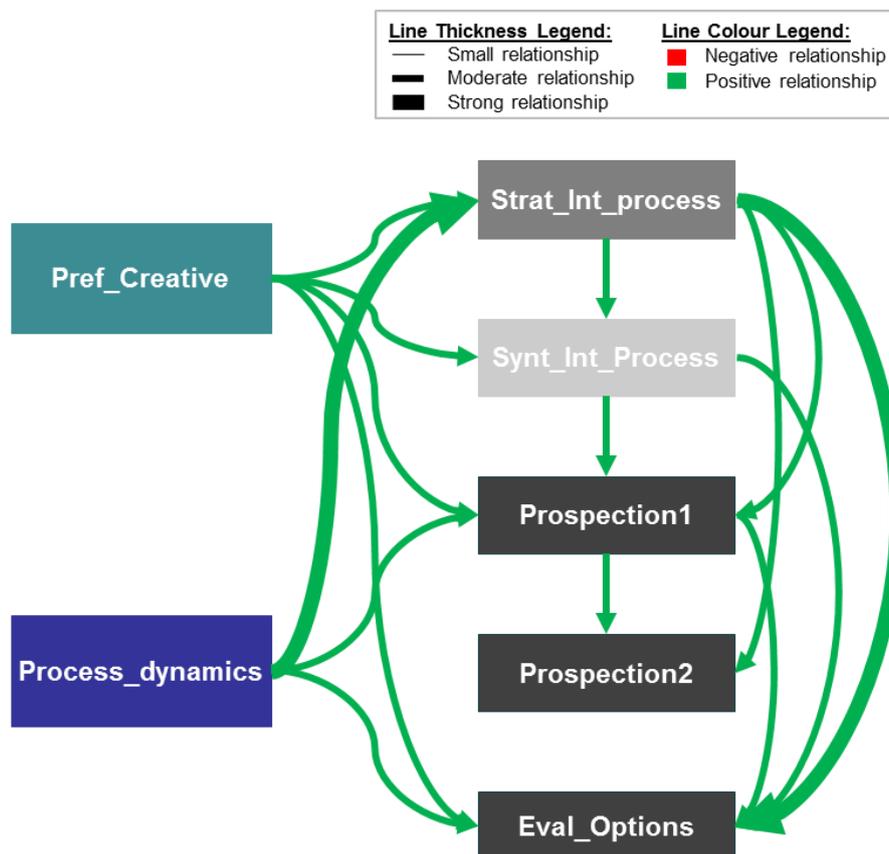


Figure 68 – Alternative mechanisms with moderate to strong positive factor correlations

Corroborating the quantitative findings of the descriptive analysis: factor correlation findings indicate that organisations which demonstrated a preference for creative and lateral thinking frameworks and tools (pref_creative) implement and utilise

(identified through a moderate positive correlation): a strategic intelligence process (strat_int_process); a strategic synthesis and insight generation process (synt_int_process); prospection frameworks and tools (prospection1); and methods for the evaluation and validation of strategic options (eval_options).

Factor correlation findings illustrate that organisations which embed a systematic process for identifying and responding to changing dynamics (process_dynamics) show a strong positive correlation with actively implementing and utilising a strategic intelligence process (strat_int_process) and indicate a moderate positive correlation with the usage of prospection frameworks and tools (prospection1), and methods for the evaluation and validation of strategic options (eval_options).

Organisations that actively implement and utilise a strategic intelligence process (strat_int_process) indicate a strong positive correlation in their usage of evaluation and validation of strategic options (eval_options) while further showing a moderate positive correlation to their usage of a strategic synthesis and insight generation process (synt_int_process), and prospection frameworks and tools (prospection1 and prospection2).

In addition, organisations that actively implement and utilise a strategic synthesis and insight generation process (synt_int_process) also made use of prospection frameworks and tools (prospection1), and methods for the evaluation and validation of strategic options (eval_options); while organisations that actively implemented and utilised prospection frameworks and tools (prospection1) do so with prospection frameworks and tools (prospection2), and methods for the evaluation and validation of strategic options (eval_options).

The **regression analysis** further corroborates the findings, indicating **small to strong positive** regression relationships (see Figure 69 below).

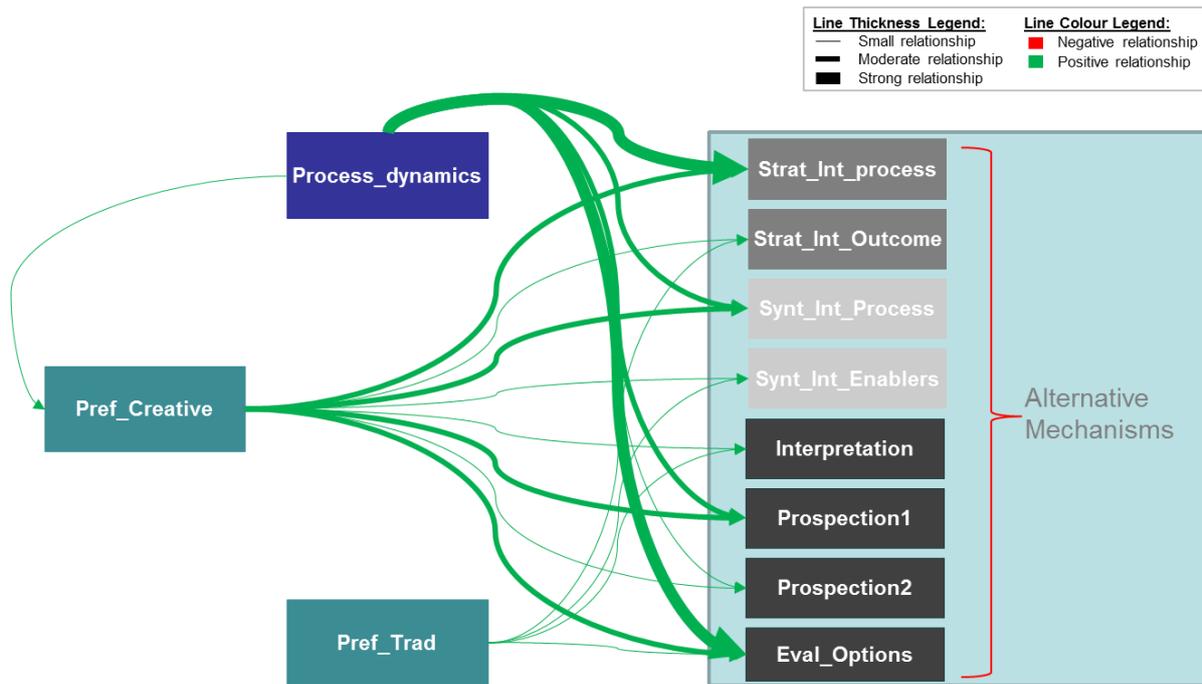


Figure 69 – Alternative mechanisms with small to strong positive regression relationships

A preference for creative and lateral thinking frameworks and tools (*pref_creative*) demonstrates a moderate statistically significant positive relationship to strategic intelligence process (*strat_int_process*); strategic synthesis and insight generation process (*synt_int_process*); prospection frameworks and tools (*prospection1*) and evaluation and validation options (*eval_options*). In addition, a preference for creative and lateral thinking frameworks and tools (*pref_creative*) demonstrates a small statistically significant positive relationship with strategic intelligence outcomes (*strat_int_outcome*); strategic synthesis and insight generation enablers (*synt_int_enablers*); interpretation frameworks and tools (*interpretation*); and prospection frameworks and tools (*prospection2*).

On the other hand, preference for traditional frameworks and tools (*pref_trad*) just demonstrates a small statistically significant positive relationship with strategic intelligence outcomes (*strat_int_outcome*); strategic synthesis and insight generation enablers (*synt_int_enablers*); interpretation frameworks and tools (*interpretation*) and evaluation and validation options (*eval_options*). The relationship with strategic intelligence outcomes (*strat_int_outcome*) and strategic synthesis and insight generation enablers (*synt_int_enablers*) establishes that those who have a preference for traditional frameworks and tools (*pref_trad*) agree that strategic

intelligence and strategic synthesis and insight generation do provide benefits to the organisation; however, they do not necessarily implement the two processes actively.

The process for identifying and responding to changing dynamics (process_dynamics) demonstrates a small statistically significant positive relationship with a preference for creative and lateral thinking frameworks and tools (pref_creative). In addition, organisations which implement a process for identifying and responding to changing dynamics (process_dynamics) exhibit a strong statistically significant positive relationship to strategic intelligence process (strat_int_process) and evaluation and validation options (eval_options); a moderate statistically significant positive relationship with strategic synthesis and insight generation process (synt_int_process) and prospection frameworks and tools (prospection1) as well as a small statistically significant positive relationship with prospection frameworks and tools (prospection2).

Furthermore, quantitative respondents who consider that “strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives” and believe the “crafting of strategy follows a formal analytical process to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change” demonstrate a strong preference for traditional frameworks and tools (pref_trad), and a strong preference for prospection frameworks and tools (prospection1) and evaluation and validation options (eval_options).

By comparison, respondents who consider strategy to be “articulated by facilitating ‘a particular way of thinking’ which emphasises intent, enables creativity, strategic thinking and adaptability” and believe “crafting of strategy follows an iterative process of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities” show a stronger preference for creative and lateral thinking frameworks (pref_creative), strategic intelligence process (strat_int_process) and strategic synthesis and insight generation process (synt_int_process).

Respondents displayed very strong and similar affinities for creative and adaptive strategy enablers (creative_enablers), strategic intelligence outcomes (strat_int_outcome) and strategic synthesis and insight generation enablers (synt_int_enablers), while demonstrating a weaker but similar affinity for prospection frameworks and tools (prospection2) and interpretation frameworks and tools (interpretation).

When considering the factors in terms of the size of the organisation, small organisations reveal a high preference for creative and lateral thinking frameworks (pref_creative) compared to medium and large organisations which indicate a significantly higher preference for traditional frameworks and tools (pref_trad). In addition, large organisations display a high preference for evaluation and validation options (eval_options) and strategic intelligence process (strat_int_process) in the tenth percentile (10% level).

The quantitative findings clearly indicate a difference in the alternative mechanisms preferred by respondents and different sized organisations:

- Overall, the preference for creative and lateral thinking frameworks and tools (pref_creative) is a strong indicator for the use of all alternative mechanisms, with a strong preference for strategic intelligence process (strat_int_process); strategic synthesis and insight generation process (synt_int_process); prospection frameworks and tools (prospection 1); and evaluation and validation options (eval_options).
- Large organisations exhibit a preference for traditional frameworks and tools (pref_trad) and are more likely to implement formalised processes in their organisations.
- Smaller organisations and respondents who associate themselves more with strategic thinking display a higher preference for creative and lateral thinking frameworks (pref_creative), which in turn indicates a stronger preference for alternative mechanisms.
- Findings suggest that the use of a process for identifying and responding to changing dynamics (process_dynamics) enhances the use of creative and lateral thinking frameworks (pref_creative); serves as an important indicator of

the use of alternative mechanisms; and serves as an input to the strategic intelligence process (strat_int_process), strategic synthesis and insight generation process (synt_int_process), prospection frameworks and tools (prospection 1 and 2), and evaluation and validation options (eval_options).

Qualitative findings provided by interviewees clarified that the successful crafting of strategy should comprise alternative mechanisms which include: design elements which guide credible, systematic processes which monitor internal and external dynamics and measures of achievable strategic intent. The identified design elements which steer a credible process for crafting strategy were identified as: a customisable end-to-end analytical recipe with dimensions clarified; event and trigger driven forecasting and issue management with pattern detection; iterative, structured and focused creativity; a holistic integrated systems thinking view of the organisation and environment as well as an evaluation and validation process.

In conclusion, the findings indicate that alternative mechanisms for crafting a creative and adaptive strategy do exist, are known by strategy practitioners and can be embedded into a strengthened strategic thinking strategy-making approach.

7.3.5 Secondary objective 5: The extent to which South African organisations' strategies are creative and adaptive rather than developed to fit the changing business environment

The quantitative empirical results indicate that the majority of survey respondents believe that their organisation's strategy is creative and adaptive in the said environment. However, a large number of respondents believed there could be an improvement. The same respondents, who are predominantly employees of organisations, do not believe that South African organisations' strategies are creative and adaptive in this environment.

Conversely, qualitative findings from interviewees comprising the strategy consultants and academics, held the view that South African organisations' strategies are creative and adaptive rather than built to "fit" the business environment, but this was dependent upon the particular industry. A view offered was that South African organisational strategies are indeed creative and adaptive, so that if they were not, "those companies would not exist today".

While qualitative findings suggest that creativity and adaptability are embedded within South African organisations, creativity and innovation are identified as being critical but difficult, with many organisations simply mimicking each other – questioning whether success is "done by design".

Common consensus, based on the qualitative findings, suggests that South African organisations are "paralysed", "punch drunk" and "reactionary" due to organisational dynamics and environmental factors which limit them, resulting in an environment that is change resistant.

While South African organisations can and do adapt to a radically changing and uncertain global business environment, they are often forced into adapting to changing circumstances. The said organisations that struggle are often traditionalist, bureaucratic and change resistant with limited flexibility in their strategy-making approach, risk averse cultures, limited core capabilities and limited resources.

Interviewees believe that organisations which succeed are often those with greater resilience, an entrepreneurial (forward thinking) attitude and culture, with no legacy constraints (whether it be their culture, their attitudes or their infrastructure). Successful organisations are often identified by their innovative, "breaking out of the mould" ability, and their ability to develop an eco-system of partners.

Integrated findings overwhelmingly indicate that creativity and adaptability are viewed as key elements for the development of organisational strategy and could lead to its successful development of organisational strategy within rapidly changing environments. Importantly, an environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy. In addition, findings suggest organisations should embrace adaptability, agility, flexibility, and responsive innovation, combined with interconnectedness and local relevance.

In conclusion, integrated findings suggest that South African organisations' creativity and adaptability cannot be generalised; South African organisations' can and do adapt to a radically changing and uncertain global business environment, however are often forced into adapting to changing circumstances by their environment.

7.3.6 Primary objective: Proposed conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment

To support the development of a conceptual strategic thinking approach, several focal points were identified through the literature review which offered guidance for the development of the instruments on which respondents and interviewees provided feedback.

Instruments focused on gaining a clear understanding of the core principles underpinning the concept of strategy, including clarification of the reasons why organisations' strategies are not successful; the sources of strategic collapse and the organisational dynamics which impact on development and execution of organisational strategy. In addition, the enablers of successful strategy development were defined, with the rationale for a strategic thinking approach delineated. Combined, these points, integrated on a theme-by-theme or construct-by-construct basis, illuminate the requirements for the said strategic thinking approach.

7.3.6.1 Deeper understanding of organisational strategy

As noted, strategy, at its core, is about winning (Tovstiga, 2010:4; Olsen and Gray, 2011:3). How an organisation is successfully led to win, is an often debated topic.

Two alternative views were identified in the discussions with interviewees in the qualitative study.

The first considered strategy as being a formally articulated "guideline that will shape the planning and execution of a company for a defined period" and was outlined as an "approach to setting out and meeting a particular purpose or goal or mission". The focus of this view of strategy is placed on how to move the business to the next level, linked to practical plans and a budget which directs investment and spending to fulfil that outcome meaningfully.

The alternative view suggests that strategy is an "informed response", illuminating the choices and options "given the context in which you find yourself in or expect to find yourself in" by "dynamically and elastically adjusting to changes in the

environment; presenting a goal that you want to in the end attain and then defining a way or method of how you can attain that goal". It is an "approach that then meets the requirements that make sure you can survive"..."given the context in which you find yourself in or expect to find yourself in".

Quantitative survey respondents were questioned in a similar manner by being provided with two alternative statements describing how organisations understand strategy. Responses indicated a definite dichotomy in understanding, where half of the respondents aligned themselves with "strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives" which describes a rational strategic planning approach, while the remaining respondents concurred with "strategy is articulated by facilitating 'a particular way of thinking' which emphasises intent, enables creativity, strategic thinking and adaptability", thereby describing a strategic thinking approach.

From the above, it was evident that divergent thinking still defines the strategy-making continuum. However, irrespective of the description of strategy, organisations' strategies are still often unsuccessful.

In the qualitative results, interviewees variously identified the common reasons for strategic failure which were discussed earlier. Furthermore, various systematic problems were identified. These were considered above.

In addition, the quantitative findings discussed in section 7.3.2 indicate that organisational dynamics impact the development and execution of organisational strategy. Critically, integrated findings suggest that South African organisations are impacted by several challenges unique to this country.

7.3.6.2 Enablers of successful organisational strategy

As summarised in the literature review in section 2.5, several diverse views were identified, culminating in an articulation of the first principles of strategy, with a key focus on creating a competitive advantage by developing an adaptive, creative and dynamic strategy-making approach and process. The identified features included: strategic anticipation, navigational leadership, agility, resilience, open collaboration, predictive learning, creativity and originality, innovation and entrepreneurship.

In corroboration, and without being prompted, interviewees in the qualitative study independently suggested that an evolved strategic paradigm is required and articulated several strategy principles that relate directly to the first principles of strategy identified in the literature. According to them, strategy should be adaptive, agile, evolutionary, innovative, resilient, responsive, synergistic and valuable. Strategy should enable organisations to break out of the existing mould; simplify complexity; use creativity for insight generation; and enable interconnectedness through an eco-system of partners. Strategy should be entrepreneurial (forward thinking), experimental, flexible and enabling of an adaptable structure with local relevance.

Enablement of these first principles requires a revised paradigm to support successful strategy crafting and execution. A hybrid approach must be embraced for developing strategies that meet the challenges found in the business environment. Such a strategy must enable the shaping of strategy across the organisation by defining a meta-strategy or style to direct the organisation's business portfolio and lifecycle.

Importantly, integrated findings indicate that the successful crafting and execution of strategy in an organisation is dependent upon an enabling organisational culture that promotes collective acceptance, ownership and strategic leadership. Traditional, bureaucratic mind-sets and behaviours must be realigned to allow organisations to react dynamically and elastically to changing environmental factors. Internal organisational acceptance, buy-in and ownership must be fostered. Leadership traits of accountability, strength, communication and buy-in must be embedded for strategic success. Organisational bias and negative perception must be negated through effective communication.

In addition, integrated findings articulate the need for a cultural environment enabling open collaboration with internal and external stakeholders to provide access to cross-industry ideas, insight and opportunities. Organisations must embrace and pursue constructive criticism, specialist knowledge and objective insights provided by external consultants and those able to play the role of devil's advocate: all this, while simultaneously maintaining internal ownership of the construction and development of their organisational strategy.

7.3.6.3 Crafting strategy

Integrated findings suggest the existence of divergent views in understanding how organisations develop and manage strategy. One view stresses that a strategy should be developed and managed in a deliberate manner, following a two speed approach with a formal analytical process/model (a three to five-year strategy) supported by an annual forecasting or issue management refresh.

An alternative view, an emergent approach to strategy development, was suggested; guided by an iterative process which is experimental, flexible, adaptive, evolutionary, and event driven.

Interviewees outlined the need for a holistic or synergistic, credible and known process, supplemented by triggers to highlight environmental or assumption changes. In addition, it was agreed that the strategy should undergo an evaluation and validation process in order to develop an achievable strategic intent and a well-defined execution plan with stakeholder buy-in and commitment.

Importantly, integrated findings indicate that the standard/traditional strategy-making approaches and rational strategic planning are far too rigid and do not cater for the suggested requirements outlined above, nor the first principles – and therefore no longer represent the optimal approach to follow in strategy development. While it is suggested that rational strategic planning will perform perfectly well in certain environments of stability, a common belief, noted already, holds that it has become outdated and unsuitable, especially for the South African environment.

These findings are in line with the literature comparison of strategic planning and strategic thinking against the first principles of strategy (considered in Chapter 3, section 3.3) which conclude that rational strategic planning finds itself limited in its ability to meet the requirements of the first principles without changes to its elements and process (see Table 91 below).

Table 91 - Comparison of strategic planning and strategic thinking against first principles of strategy aligned to research findings

First Principle	Rational Strategic Planning	Proven by research findings	Strategic Thinking	Proven by research findings
Strategic anticipation	Limited and only within its environment	Limited ability to support first principle	Yes	Embedded design element
Navigational Leadership	Limited	Limited ability to support first principle	Yes	Embedded design element
Agility	Limited	Limited ability to support first principle	Yes	Embedded design element
Resilience	Limited	Limited ability to support first principle	Yes	Embedded design element
Open collaboration	Limited	Limited ability to support first principle	Yes	Embedded design element
Predictive learning	Limited	Limited ability to support first principle	Yes	Embedded design element
Creativity and originality	Limited	Limited However, findings ability to support first principle	Yes	Embedded design element
Innovation	Limited	Limited ability to support first principle	Yes	Embedded design element
Entrepreneurism	Limited	Limited ability to support first principle	Yes	Embedded design element

Despite integrated findings indicating restricted awareness of strategic thinking as an approach to strategy development, there is a common belief that such an approach would have merit. While many respondents and interviewees (as indicated in the quantitative and qualitative results in sections 7.3.3 and 7.3.4) undertake a form of strategic thinking as a strategy-making approach and process, findings clearly illustrate they are confined by their awareness which is limited to traditional tools, techniques and frameworks.

While minimal clarity was provided on specific strategic thinking frameworks, integrated findings overwhelmingly indicated that creativity and adaptability are viewed as critical elements for the development of organisational strategy and are able to lead to the successful development of organisational strategy within rapidly changing business environments.

In order to support the development of a strategic thinking approach for the delivery of creative and adaptive organisational strategy, the answers in the qualitative interviews offered input on the design elements of a credible process, including a

systematic progression to monitor internal and external dynamics and measures of achievable strategic intent.

The qualitative answers provided by interviewees identified several design elements. Importantly, a customised strategy approach must be viewed as credible, with a clear process and individual dimensions well clarified. The approach must provide an end-to-end recipe combining systems thinking and structured, focused creativity and design. The iterative process must be event driven, enabled by triggers and pattern detection, and provide an integrated, holistic view of the organisation and environment generated by systematic processes for monitoring internal and external threats and opportunities. This process must furthermore undertake formal analysis and furnish a method of evaluation and validation through simulation and testing. The approach must output an achievable and relevant strategic intent that guides an execution plan.

7.3.6.4 Consolidating organisational dynamics, best practice and available alternative mechanisms

Detailed analysis of the organisational dynamics which impact on development and execution of organisational strategy (section 7.3.2), best practice elements of strategic thinking and rational strategic planning (section 7.3.3) and the alternative mechanisms for the crafting of a creative and adaptive organisational strategy (section 7.3.4) has been undertaken. The integrated analysis illustrated and discussed the most important dynamics and elements that need to be considered when constructing a conceptual strategic thinking approach.

Combining the quantitative regression relationships into a single depiction (see Figure 70 below) resulted in clarity on the relationships between internal (int_dynamics) and external (ext_dynamics) organisational dynamics, preference for traditional frameworks and tools (pref_trad), preference for creative and lateral thinking frameworks and tools (pref_creative) and the best practice rational strategic planning elements and alternative mechanisms.

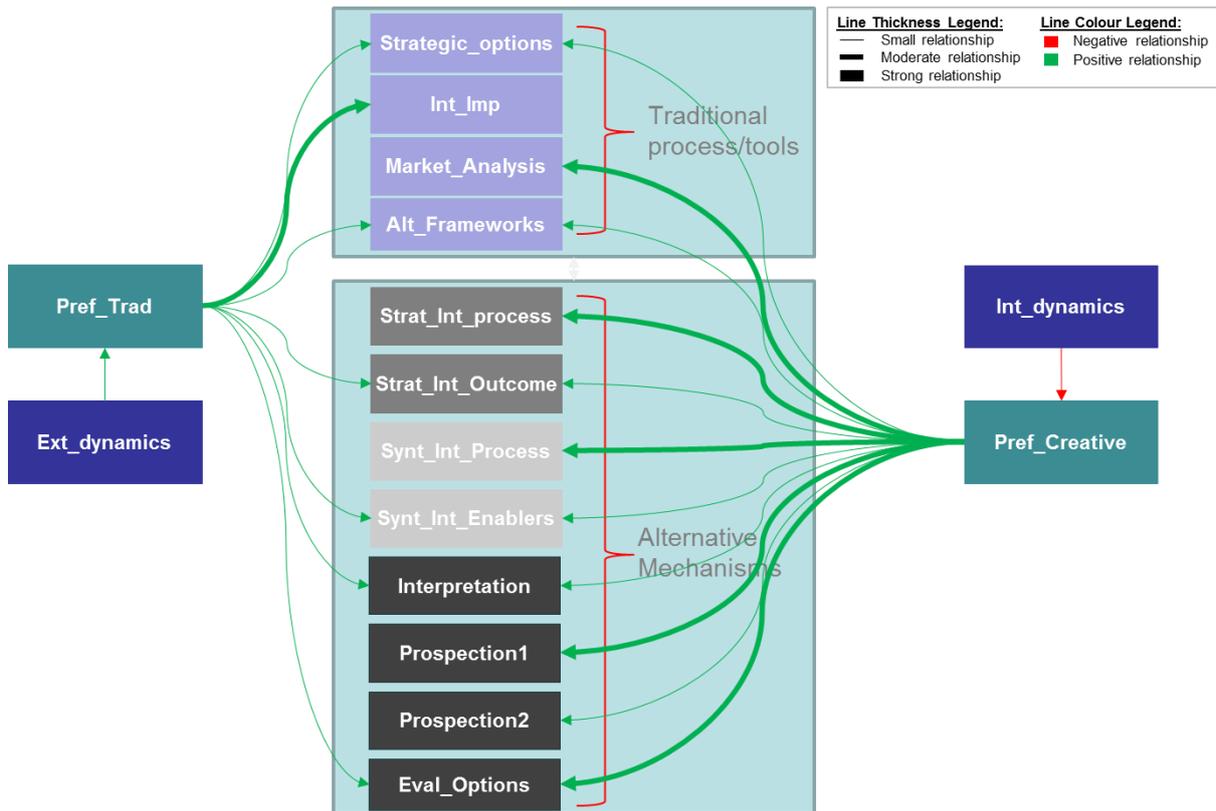


Figure 70 – Comparison of the two different preferences for frameworks and tools with small to moderate positive regression relationships

External organisational dynamics (ext_dynamics) demonstrates a small statistically significant positive relationship to preference for traditional frameworks and tools (pref_trad). This relationship suggests that the higher the impact and uncertainty of the external business environment, the stronger the preference of organisations for traditional frameworks and tools. Alternatively, internal organisational dynamics (int_dynamics) demonstrates a small statistically significant negative relationship to preference for creative and lateral thinking frameworks and tools (pref_creative), suggesting that the higher the impact of internal dynamics on the organisation, the more the latter's preference for creative and lateral thinking frameworks and tools decreases. These two relationships unmistakably indicate that the greater the impact of organisational dynamics, the greater the propensity to use traditional frameworks and tools which are conventionally aligned to hierarchical and power based corporate environments displaying limited creativity and adaptability.

Organisations with a preference for traditional frameworks and tools (pref_trad) further illustrate a strong penchant for internal implementation frameworks and tools

(int_imp) together with a slight preference for strategic options/choice frameworks and tools (strategic_options), alternative frameworks and tools (alt_frameworks) interpretation frameworks and tools (interpretation) and evaluation and validation options (eval_options).

Organisations exhibiting a preference for creative and lateral thinking frameworks and tools (pref_creative) commonly make use of the majority of the traditional processes and tools as well as alternative mechanisms. However, there is a strong penchant for market analysis frameworks and tools (market_analysis), strategic intelligence processes (strat_int_process), strategic synthesis and insight generation processes (synt_int_process), prospection frameworks and tools (prospection1) and evaluation and validation options (eval_options). In addition, these organisations make use of strategic options/choice frameworks and tools (strategic_options), alternative frameworks and tools (alt_frameworks), interpretation frameworks and tools (interpretation) and prospection frameworks and tools (prospection2). There is a minimal interest in internal implementation frameworks and tools (int_imp).

In addition, all organisations share a common understanding of the value added by the outcomes of strategic intelligence (strat_int_outcome) and the formalised intuition and interaction fostered by strategic synthesis and insight generation enablers (synt_int_enablers).

The process for identifying and responding to changing dynamics (process_dynamics) as depicted in **the regression relationships** in Figure 71 below, has been identified as a crucial best practice element.

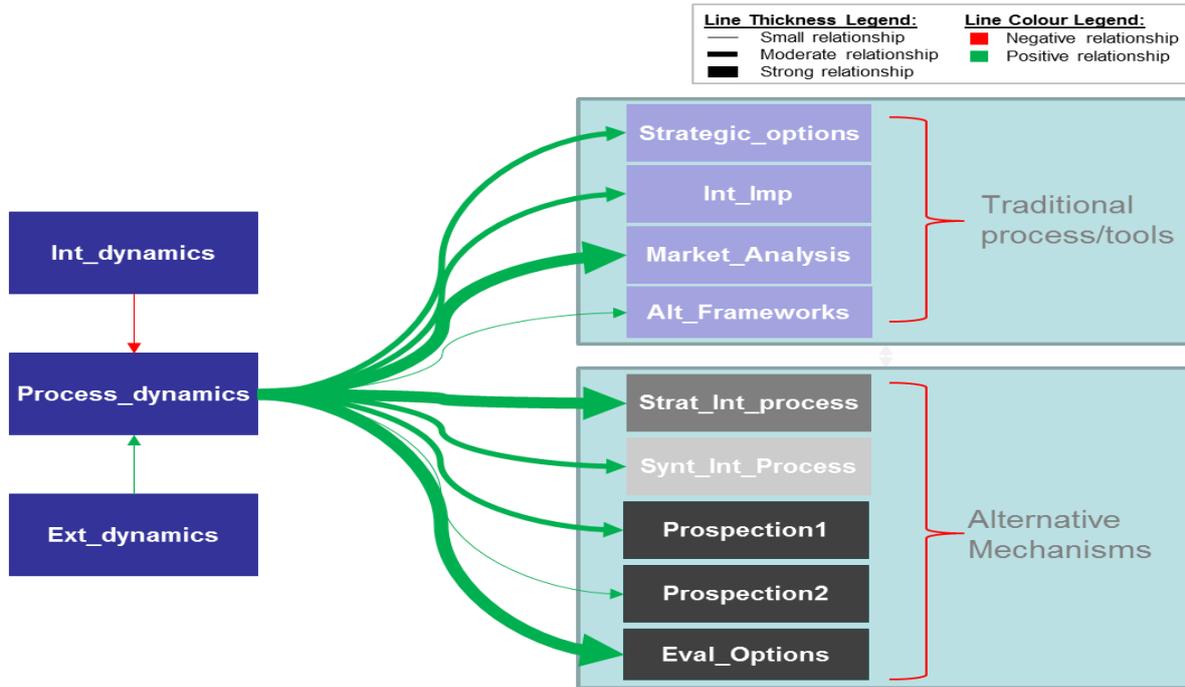


Figure 71 – Process for identifying and responding to changing dynamics with small to strong positive regression relationships

The process for identifying and responding to changing dynamics (process_dynamics) implementation by organisations has been proven to be impacted negatively by disruptive internal dynamics and positively by an increase in external organisational dynamics (ext_dynamics). This demonstrates the value in enabling organisations to identify and prepare for external market challenges, but clearly requires a stable, collaborative and supportive organisational culture.

Organisations that implement a process for identifying and responding to changing dynamics (process_dynamics) make strong use of the majority of the traditional processes and tools and alternative mechanisms as well as of market analysis frameworks and tools (market_analysis), strategic intelligence processes (strat_int_process) and evaluation and validation options (eval_options).

A comparison of the quantitative regression relationships between external organisational dynamics (ext_dynamics), internal organisational dynamics (int_dynamics) traditional processes and tools, and the alternative mechanisms is illustrated in Figure 72 below.

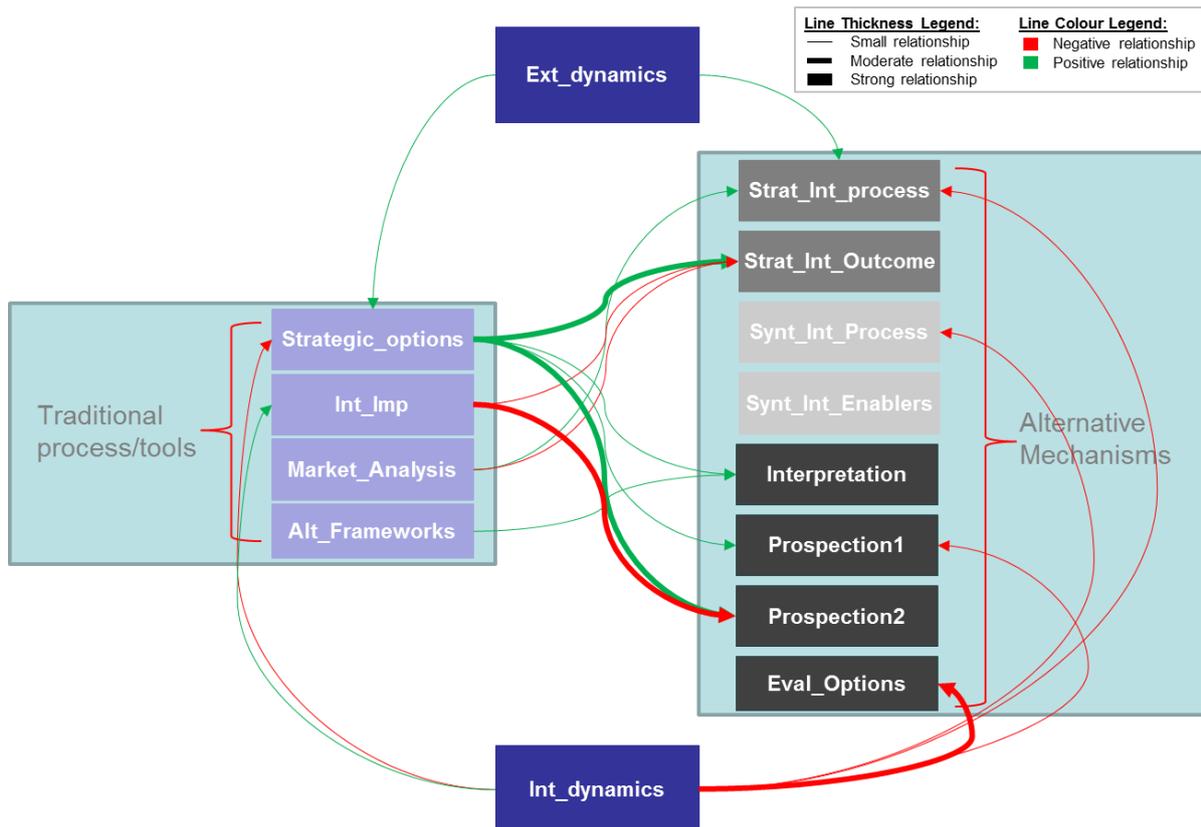


Figure 72 – Frameworks and tools with small to moderate positive and negative regression relationships

The external organisational dynamics (ext_dynamics) demonstrates a small statistically significant positive relationship with strategic options/choice frameworks and tools (strategic_options) and strategic intelligence process (strat_int_process), illustrating the organisations' interest in exploring and collecting information on market dynamics.

In contrast, internal organisational dynamics (int_dynamics) demonstrates a small statistically significant negative relationship to strategic options/choice frameworks and tools (strategic_options), strategic intelligence process (strat_int_process), strategic synthesis and insight generation process (synt_int_process) and prospection frameworks and tools (prospection1) while displaying a moderate statistically significant negative relationship with evaluation and validation options (eval_options) and a small statistically significant positive relationship to internal implementation frameworks and tools (int_imp). These findings suggest that unhealthy internal organisational dynamics inhibit the ability of an organisation to successfully use and implement exploratory tools, thereby confining the organisation

to traditional internal implementation frameworks and tools such as financial analysis.

Internal implementation frameworks and tools (int_imp) and market analysis frameworks and tools (market_analysis) indicate a small statistically significant negative relationship with strategic intelligence outcomes (strat_int_outcome) while, in addition, internal implementation frameworks and tools (int_imp) exhibit a moderate statistically significant negative relationship to prospection frameworks and tools (prospection2).

On the other hand, strategic options/choice frameworks and tools (strategic_options) demonstrate positive relationships with strategic intelligence outcomes (strat_int_outcome), interpretation frameworks and tools (interpretation), and prospection frameworks and tools (prospection1 and prospection2). Market analysis frameworks and tools (market_analysis) display a small statistically significant positive relationship to strategic intelligence process (strat_int_process); and alternative frameworks and tools (alt_frameworks), a small statistically significant positive relationship with interpretation frameworks and tools (interpretation).

The quantitative regression findings presented above, indicate the high impact which internal (int_dynamics) and external (ext_dynamics) organisational dynamics have on the organisation's preference for traditional frameworks and tools (pref_trad), preference for creative and lateral thinking frameworks and tools (pref_creative) and their implementation of a process for identifying and responding to changing dynamics (process_dynamics). In the same manner, internal (int_dynamics) and external (ext_dynamics) organisational dynamics are identified as influencing the use of best practice elements and alternative mechanisms. In addition, several traditional processes and tools affect the use of alternative mechanisms for crafting a creative and adaptive strategy.

7.3.6.5 Outlining the proposed conceptual strategic thinking approach

The primary objective of this research was to develop a conceptual strategic thinking approach for the delivery of creative and adaptive organisational strategy to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment. To support this objective, a thorough literature

review was conducted and two research instruments were developed and executed. Findings, integrated by weaving a narrative, outlined in the above discussion, were gleaned from the initial theoretical research and strengthened by empirical research.

With the initial conceptualisation and best practice gleaned from the theoretical research covered in the literature review, chapters and supported by several influential authors (Bonn, 2005:338; Cravens, Piercy and Baldauf, 2009:31-49; Liedtka, 2005:73-76; O'Shannassy, 1999:15-22; Tovstiga, 2010:15; Waters, 2011:116) the conceptual approach was derived in direct response to the findings from the research study itself, thereby inherently addressing the concerns and suggestions of South African organisational respondents and interviewees. Consolidated, this input guided the design of the conceptual strategic thinking approach framework for the delivery of a creative and adaptive organisational strategy.

The formalised conceptual strategic thinking approach framework for the delivery of creative and adaptive organisational strategy is presented in Figure 73 below.

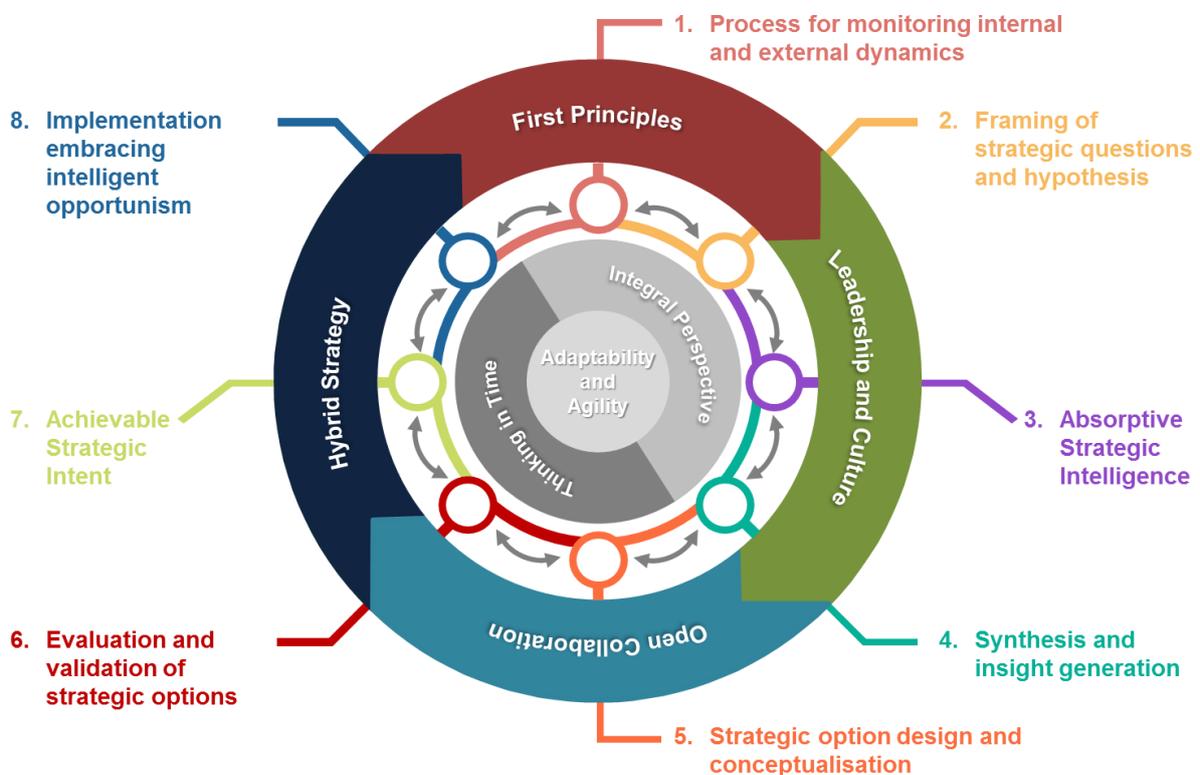


Figure 73 – Strategic thinking approach framework (Source: own compilation)

The strategic thinking approach framework proposes a practical yet creatively

methodical technique for the crafting and delivery of creative and adaptive organisational strategy.

The given framework depicts the supporting enablers, attributes and key activities that guide this process in the said environment. To support an understanding of each component of the strategic thinking approach framework, each enabler, attribute and activity is outlined below with supporting tools.

The outer loop of the given framework outlines the four critical enablers for the successful crafting of creative and adaptive organisational strategy. Each enabler feeds into the following one and is a prerequisite for the next; creating a base for the subsequent one to build on. Each is described below:

- **First Principles**

Organisations exist to deliver on their purpose. To assist them to achieve success, several principles have been arrived at as a basis for the crafting of strategy in order to respond to the challenges faced by the said organisations. Each principle expresses a core characteristic required for success in the changing environment and must be built into the mind-sets and behaviours of all organisational stakeholders as well as, importantly, carried through the crafting of the organisation's strategy into its strategic intent and the implementation thereof. The first principles include: strategic anticipation, navigational leadership, agility, resilience, open collaboration, predictive learning, creativity and originality, innovation and entrepreneurship (for further elaboration, see literature review section: 2.5; research findings section: 6.5.3.5; conclusion section: 7.3.6.2, 7.3.6.3).

- **Leadership and Culture**

An enabling organisational culture which promotes collective acceptance, ownership and strategic leadership is imperative for organisations to react dynamically and elastically to changing environmental factors. Internal organisational acceptance, buy-in and ownership must be fostered. Leadership traits of accountability, strength and buy-in must be embedded for strategic success. Effective leadership communication must deliver the

organisational narrative and provide inspiration for achieving the strategic intent (for further elaboration see literature review section: 2.2.4, 2.4.2, 2.5; research findings section: 6.2.2, 6.4.2.1, 6.5.2.1, 6.5.3.4; conclusion section: 7.2.2.1, 7.3.2, 7.3.6.2).

- **Open Collaboration**

Organisations must foster a culture that undertakes open collaboration with internal and external stakeholders to ensure access to cross-industry ideas, insights, opportunities and a holistic sense of the context of the business environment. They must enable interconnectedness through an eco-system of partners. Internal and external sharing of insight and context provides greater autonomy in the face of uncertainty. Organisations must embrace and pursue constructive criticism, specialist knowledge, and objective insights to guide the construction, development and execution of their organisational strategic intent (for further elaboration see literature review section: 2.5, 3.2.4.1; research findings section: 6.3.1.9, 6.5.3.5; conclusion section: 7.2.1.4, 7.3.5, 7.3.6.2).

- **Hybrid Strategy**

Whether found in traditional markets or in dynamic, innovative markets, organisations must gain competitive advantage from responding to signals faster than competitors. While the level of adaptability, creativity and influence required will differ, to create sustainable advantage in a rapidly changing business environment an organisation should hold several states simultaneously, or exist in a form of strategic superposition.

To achieve this, a hybrid strategy enables the shaping of strategy across the organisation by defining a meta-strategy or style to direct the organisation's business portfolio through the different scenarios it could find itself in. Overall strategy should be aligned to its growth and maturity lifecycle to ensure adaptability and success within the economic conditions of its industry. However, an adaptive advantage will allow its business units or functions to manage with iterative experimentation within diverse or fast-changing environments (for further elaboration see literature review section: 2.4.2;

research findings section: 6.5.2.3, 6.5.3.5; conclusion section: 7.2.2.3, 7.3.6.2).

The inner circle of the strategic thinking approach framework outlines the strategic thinking attributes required to frame the organisation's way of thinking. Each attribute adds a different dimension to the organisation's mind-set to enable it to successfully craft creative and adaptive strategy, and is described below:

- **Adaptability and Agility**

Organisations must be able to shape or adapt, and demonstrate agility to move rapidly and flexibly to opportunities, threats or changing conditions. Agility increases the speed of movement, exploitation, and industry leadership to be disruptive, while ensuring surprise through concealment and deception. Organisations need financial, operational, portfolio and organisational agility to direct technology, people, structures, and systems and processes to support new directions (for further elaboration see literature review section: 2.5, 4.2; research findings section: 6.2.5, 6.3.1.9, 6.5.3.1, 6.5.3.5; conclusion section: 7.2.1.2, 7.2.1.4, 7.2.2.4, 7.3.5).

- **Integral Perspective**

A systems thinking perspective, providing a helicopter view, is suggested in literature as an integrator of knowledge of the interdependencies between the internal and external environment, providing multiple viewpoints of vertical and horizontal linkages across the ecosystem.

To enhance systems thinking to better understand the complex organisational environment, the integral theory provides a creative approach which challenges conventional wisdom by recognising the relationship among the parts, while developing a balanced and integrated whole of the organisation guided by the community and external environment within which it resides. The integral theory makes use of a four-quadrant model, referred to as AQAL ("All Quadrants, All Levels") used to analyse social phenomena, such as organisations and the living systems they comprise and reside in (i.e. individual, team, business unit, organisation, industry, national economy,

global system). This enables one to view organisations as nested systems, represented as a complex strata of holons rather than networks of individual parts. The integral theory synthesises, integrates and provides multiple perspectives, while remaining inclusive by providing a map to guide the organisation within a complex reality to enable competitive advantage (for further elaboration see literature review section: 3.2.4.1, 4.3.1; research findings section: 6.5.3.5, 6.5.3.6; conclusion section: 7.3.3, 7.3.6.3).

- **Thinking in Time**

Clarity regarding and insight into the past allows for the imagining of a new future. To command the future, organisational memory and broad historical context must facilitate pattern recognition in past events, encouraging a deeper appreciation for the myriad of factors affecting the organisation (for further elaboration see literature review section: 3.2.4.1; research findings section: 6.5.2, 6.5.3.6; conclusion section: 7.3.1, 7.3.3).

The end-to-end closed loop comprises the eight interconnecting activities of the strategic thinking approach framework. Each activity provides input into the next, and feedback to the previous. The interactive and synergistic nature of the said loop activities enables experimentation and aids the evolution of the organisation's narrative. Each activity step is described below:

- 1. Process for monitoring internal and external dynamics**

Organisational dynamics affect the development and execution of organisational strategy. To leverage changing dynamics, organisations must systematically act on external threats and opportunities bolstered by methods for systematic self- and external environment- awareness, and actively consider how to manage uncertainty by continuously reviewing their perception of the internal and external environment.

To enable this, organisations must implement a process for monitoring internal and external dynamics. This process will assimilate diverse sources of internal, business, market, political, technological, environmental and social information.

As critical inputs to the crafting of organisational strategy, organisations must identify and formalise appropriate indicators or triggers (internal or external to the organisation) of trends, black swan events or changes within the organisation's internal or external environment. The triggers should highlight changes in the competitive environment; shifts in the organisation's external competitive environment; alterations in internal dynamics and changes in the organisation's strategic boundary conditions (for further elaboration see literature review section: 3.2.4.1; research findings section: 6.2.2; conclusion section: 7.2.1.1, 7.3.3, 7.3.4).

2. Framing of strategic questions and hypothesis

The process for monitoring internal and external dynamics is initiated by triggers that provide input to the scoping and articulating of strategic questions. The latter are formulated to address problems or challenges of strategic relevance and could involve multiple components. To simplify the questions for further analysis and hypothesis generation, question components must be framed by clustering issues into manageable parts. The components or issues must be broken down into subordinate parts to which strategic responses need to be generated.

Following a hypothesis-driven process, strategic issues must undergo an iterative and sequential cycle of hypothesis generation and testing; asking "what if...?" followed by an evaluation by asking "If..., then...?" allowing an exploration of new ideas in response to the identified strategic questions (for further elaboration see literature review section: 3.2.4, 3.2.4.1; research findings section: 6.2.3, 6.5.3.6; conclusion section: 7.3.1, 7.3.3).

3. Absorptive strategic intelligence

While the process for monitoring internal and external dynamics assimilates diverse sources of information based on pre-defined triggers, the strategic intelligence process, with information at its foundation, consolidates the data by fusing business intelligence, competitive intelligence and knowledge management (to create strategic intelligence) for use in decision-making.

Strategic intelligence is critical to the strategy-making process as it provides managers with comprehensive input to make better, fact-based decisions. Formalising the strategic intelligence process by means of a strategic intelligence system allows for the collection, organising, processing and communicating of intelligence. Three types of strategic intelligence must be focused on: defensive intelligence oriented toward avoiding surprises; passive intelligence focused on benchmark data for objective evaluation of the organisation in terms of its competition; and offensive intelligence used to identify opportunities.

The strategic intelligence process incorporates strategic analysis as a multidisciplinary combination of scientific and informal processes to identify, derive correlations and evaluate trends, patterns and performance gaps based on input data.

To support strategic analysis, traditional analytical frameworks and tools can be used; however, tools that enable lateral thinking and creativity are more beneficial as they challenge conventional wisdom by recognising the relationship among the parts in order to anticipate future direction in changing environments.

Best practice and commonly used traditional analytical frameworks and tools include: strategic options/choice frameworks and tools (swot analysis; value chain analysis); market analysis frameworks and tools (customer segmentation and value analysis) while internal implementation frameworks and tools can be used as support mechanisms (financial analysis; functional capability and resource analysis).

To bring greater strategic intelligence into the organisation, newer approaches should be used. While this research indicates that they are not yet commonly used, several well-known alternative frameworks and tools include: open foresight; opportunity-response framework; key success factor analysis; vrío (value, rarity, imitability, and organisation) framework; unique competing space analysis; trend analysis and forecasting; and emerging issue analysis.

Strategic intelligence and its underlying strategy analysis should contribute

formidable intelligence, while the use of several frameworks to support the analysis may provide great insight if appropriately selected and applied (for further elaboration see literature review section: 3.2.4.1, 4.3.2; research findings section: 6.2.4, 6.3.1, 6.4.3; conclusion section: 7.2.1.3, 7.3.4, 7.3.6.4).

4. Synthesis and insight generation

Strategic synthesis and insight generation allows organisations to explore strategic questions to find deeper structure and insight. Synthesis of strategic intelligence will create forward views and generate plausible future worlds. The generation of strategic insight is guided by intuition and supported by formal and methodical dialogue so as to enable interaction between stakeholders to create new, shared knowledge.

Enabled by creativity, organisations must use information and experience to decipher new combinations of previously unconnected aspects locked within old structures, patterns, concepts and perceptions in order to develop value enhancing and useful products, services, ideas, procedures or processes.

Synthesis and insight generation encompasses two complementary processes: interpretation and prospection:

- *Interpretation* interrogates strategic issues in great depth by exploring available data to find deeper structure and insight. Interpretation frameworks and tools include: causal layered analysis, cross impact analysis, embodied metaphors, futures wheels, modalities of thinking (metaphorical, dialectic, spatial, social modalities, poetic), and playscripts
- *Prospection* enhances the interpreted information to create forward views, thereby generating plausible future worlds. Prospection frameworks and tools include: scenario planning (visioning, backcasting), strategic maps, storytelling, strategic metaphors, and strategic narratives (shadowing, ante-narratives).

Strategic synthesis and insight requires sense making. Sense making enables the development of coherence and order within an unclear backdrop of

multiple possible realities. Sense making deconstructs and reconstructs reality to create insight into the strategic problem or challenge at hand. Sense making provides an understanding of how events are linked; roles of actors and parties within complex relationships, all against an unclear backdrop of multiple possible realities. Sense making is the process, while insights are the outcome of the process informing the strategic questions (for further elaboration see literature review section: 3.2.4.1, 4.2, 4.3.3; research findings section: 6.2.4, 6.3.1, 6.4.3; conclusion section: 7.2.1.3, 7.3.4, 7.3.6.2, 7.3.6.4).

5. Strategic option design and conceptualisation

Strategies are designed and conceptualised by unpacking and reengineering the generated strategic insight. Using creative design thinking, the bigger picture emerges, based on well tested and probed assumptions, allowing the organisation to rethink the unique competing space identified for value creation.

Strategic options solve strategic problems, conceptualise intent for the future, and disrupt alignment with conceptual models so as to provide competitive advantage, agility and adaptability in the face of uncertainty (for further elaboration see literature review section: 3.2.4.1; conclusion section: 7.2.1.3, 7.3.3, 7.3.4, 7.3.6.4).

6. Evaluation and validation of strategic options

Following the development of several strategic options, organisations must evaluate the options to identify any unforeseen risks and their effect on the organisation and validate them to determine their suitability based on appropriateness, desirability and feasibility.

Organisations must develop an internal evaluation methodology to screen strategic options and could make use of game theory to select the best option from several, by considering the perspectives of competitors, collaborators and stakeholders.

In addition, in order to stimulate thinking and dialogue to enhance creative tension and commitment, to ensure the validity of the generated intent, a

number of stress or pressure tests could be used to assess how the system will function under several performance variables and constraints.

The evaluation of future strategy will require criteria to be developed to clarify all aspects required for consideration: whether assumptions have been reality checked, all uncertainties and risks considered and whether areas that could heavily influence the strategy are flagged for continuous monitoring (for further elaboration see literature review section: 3.2.4.1, 4.3.4; research findings section: 6.2.4, 6.3.1, 6.4.3, 6.5.2, 6.5.3; conclusion section: 7.2.1.3, 7.2.2.2, 7.3.3, 7.3.4, 7.3.6.3, 7.3.6.4).

7. Achievable strategic intent

As the output of the strategic thinking approach, strategic intent must guide long-term direction across all organisational stakeholders, outline the organisation's competitive position and strategically convey the three concrete and achievable messages: a clear sense of direction, a sense of discovery, and a sense of destiny.

A strong sense of organisational strategic intent will provide the organisation and its stakeholders with a common identity. Not only does this assist appropriate decisions but also informs the correct course of action and, vitally, inspires individual imagination to drive further adaptability, agility and creativity (for further elaboration see literature review section: 2.2.4, 3.2.4.1; research findings section: 6.5.2, 6.5.3; conclusion section: 7.3.1, 7.3.3, 7.3.6.4).

8. Implementation embracing Intelligent Opportunism

The crafted strategic intent will provide the organisation with a clear focus on the intended leadership position in order to ensure that it is implemented as expected. If this is broken down into criteria, objectives and plans, the organisation will be able to clearly chart and measure its future progress.

Crucially, organisations must embrace intelligent opportunism to sharpen their ability to recognise and seize any opportunities that are presented in the rapidly changing environment. By enabling all employees with this capability,

or openness to new experiences, the organisation will obtain room to adapt without relying solely on top management's foresight (for further elaboration see literature review section: 3.2.4, 3.2.4.1; conclusion section: 7.3.1).

In conclusion, the strategic thinking approach framework proposed and described above incorporates both the requirements and design elements identified by theoretical research and strengthened by empirical research. Each component uses its inventive and proactive nature to enable a revised world view of internal and external threats and opportunities. This entrepreneurial and creative synthesis encourages informal learning, through internalisation and comprehension. By creating new perspectives and unique combinations, achievable strategic intent and future value is generated for organisational stakeholders to ensure success, through gaining competitive advantage, in a radically changing, uncertain and complex business environment.

7.4 Summation

The research findings have shown that organisations, and their strategies, are constantly impacted by the changing business environment. Not only do South African organisations face ever changing external business dynamics, they are impacted by several challenges unique to South Africa.

Constant and prolonged exposure to changing dynamics has resulted in organisational fatigue and forced reactionary adaptation. "Punch drunk" and paralysed to the ambiguity of the environment, organisations find themselves responding slowly to change through unplanned mimicry. This is corroborated by the general belief that South African organisations' strategies are not creative and adaptive in the changing business environment. Conversely, findings suggest organisations believe their own strategy is creative and adaptive, but believe there is room for improvement.

Findings note that while South African organisations can and do adapt to a radically changing and uncertain global business environment, they are often forced into adapting to changing circumstances. South African organisations that often struggle are found to be traditionalist, bureaucratic, change resistant; constrained by limited flexibility in their strategy-making approach, risk adverse cultures, limited core

capabilities, and limited resources.

Alternatively, organisations, viewed as being successful embed resilience, an entrepreneurial (forward thinking) attitude and culture, and have no legacy constraints (whether it be their culture, their attitudes or their infrastructure). In addition, these organisations are innovative, "breaking out of the mould"; and develop an eco-system of partners.

These findings are aligned to the first principles of strategy outlined in the literature review in section 2.5. The first principles include: strategic anticipation, navigational leadership, agility, resilience, open collaboration, predictive learning, creativity and originality, innovation, and entrepreneurship. The first principles are corroborated by empirical findings which overwhelmingly indicate that an environment of communication, collaboration, open relationships and creativity is required for the crafting of an adaptive strategy. In addition, findings suggest organisations should embrace adaptability, agility, flexibility, and responsive innovation combined with interconnectedness and local relevance.

Furthermore, it has become clear that strategy, its development and articulation is still distributed across a divergent spectrum of thinking and processes whereby strategy is viewed as being both purposive and adaptive as well as incipient and creative.

A clear dichotomy in understanding of strategy-making approaches was uncovered, with half of the respondents aligning with "strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives" which describes a rational strategic planning approach; while the remaining respondents believe "strategy is articulated by facilitating "a particular way of thinking" which emphasises intent, enables creativity, strategic thinking and adaptability" thereby describing a strategic thinking approach.

Importantly, empirical findings support the academic view that the standard / traditional strategy-making approaches and rational strategic planning is no longer the optimal approach to follow in order to craft strategy. Furthermore, results illustrate that traditional approaches are outdated and unsuitable to the radically

changing business environment, especially in the South African environment.

However, findings indicate that there is still a strong preference for traditional analytical frameworks and tools; focusing extensively on financial modelling; and that organisations do not extensively use tools that enable lateral thinking and creativity. However, it is believed by respondents, that tools that enable lateral thinking and creativity are more beneficial than traditional analytical tools, methods or models; and organisations do prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts.

As identified and explored previously, organisations are constrained by their awareness of solely traditional tools, techniques and frameworks and never or rarely use the alternative frameworks and tools. In addition, organisations suffer from limited insight into the research being conducted by academic institutions.

As noted, the alternative to rational strategic planning: a strategic thinking approach to crafting strategy, is not well known. However, it was clarified that there is recognition and awareness of its primary components, but limited insight into an “end-to-end recipe” describing how the concept would work. Irrespective of the limited awareness of strategic thinking as an approach to strategy development, there is belief that such an approach would have merit.

Findings suggest strategic thinking could either supplement or replace rational strategic planning; if a credible and known process is designed.

To support the design of a revised strategic thinking approach; this research undertook an extensive literature analysis and empirical study of strategy-making approaches, using both qualitative and quantitative data gathering techniques to culminate in the identification of best practice rational strategic planning and strategic thinking frameworks, tools and alternative mechanisms.

With interest it was noted that there was a difference in the result findings provided by smaller organisations, compared to those of larger organisations. Small organisations show a high preference for creative and lateral thinking frameworks compared to medium and large organisations who indicate a significantly higher preference for formalised processes and traditional frameworks and tools, such as internal

implementation frameworks and tools. Findings suggest that a process for identifying and responding to changing dynamics enhances the use of creative and lateral thinking frameworks. In addition, a preference for creative and lateral thinking frameworks and tools is a strong indicator for the use of all alternative mechanisms.

Consolidating the findings from the research study, a strategic thinking approach framework has been proposed. Each component of the framework uses its inventive and proactive nature to enable a revised world view of internal and external threats and opportunities by encouraging entrepreneurial and creative synthesis. This will enable organisations to create new perspectives and unique combinations; define achievable strategic intent and generate future value for organisational stakeholders to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment.

7.5 Limitations of this Study

To ensure accuracy and optimal results, the research study was conducted following a predefined research methodology and adhered to the highest standards, as outlined in the delimitations and assumptions defined in Chapter 1.

However, certain limitations must be noted:

- The sensitive nature of the research subject-matter hampered the willingness by organisations and their respective representatives to participate
- The overall response rate was constrained and small relative to the population, but was sufficient to allow for comprehensive statistical analyses
- It is noted in Chapter 5, that several rounds of content review were conducted on each interview transcript; with the initial review performed by an independent analyst from the University of Pretoria to provide an unbiased view of the contents' primary messages. However, the potential did exist for observer bias and error during the interpreting of the interviews
- The research study focused on studying the strategy-making approaches followed within South African environments. Due to this, the generalisability of the findings to other contexts could be limited.

7.6 Future Research

The research study resulted in the identification of several areas which could be further researched. The areas identified are:

- Organisations are limited by their awareness only of traditional tools, techniques and frameworks; they never or rarely use the alternative frameworks and tools; and have limited insight into the research being conducted by academic institutions. This finding indicates that most approaches are integrated into organisational processes through the academic training of employees. Further research should be conducted to ascertain how best organisations and universities might collaborate to incorporate new methods into organisations.
- The research has concluded with the development of a conceptual strategic thinking approach framework for the delivery of creative and adaptive organisational strategy to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment. Further research should be conducted by implementing and testing the framework as a case study within an organisation.
- In addition, further research could be undertaken to test the feasibility of the proposed conceptual strategic thinking approach framework in geographies other than South Africa.

7.7 Recommendations

The in-depth analyses undertaken to develop a strategic thinking approach to the delivery of a creative and adaptive strategy, has resulted in the identification of the following recommendations:

- Organisations should improve the creativity and adaptability of their strategy
- They should place greater emphasis on expanding their knowledge of alternative strategy-making approaches and recognise the value of alternative mechanisms for crafting creative and adaptive strategy
- Organisations which still prefer traditional analytical frameworks and tools should embrace tools that enable lateral thinking and creativity

- They should make certain they embed a systematic process for monitoring external threats and opportunities
- They should strive to provide managers with comprehensive input to decision-making
- They should make sure that culture and process dynamics do not influence the validity and execution of their organisational strategy
- Organisations should ensure that leadership is shown to embrace the organisation's strategy and actively communicate the strategy to all stakeholders.

7.8 Final Conclusive Remarks

In the seminal work of Liedtka (2005:73-76) strategic thinking was identified as “a particular way of thinking” focusing on a systems perspective, is intent-focused, enables creativity and intelligent opportunism, thinking in time and is hypothesis-driven following an iterative, non-linear approach to define how events are linked and identify the roles of actors and parties outside the traditional corporate boundaries (Liedtka, 2005:73-76). Strategic thinking was identified as embracing creative and holistic, intuitive synthesis of key triggers to outline a sustainable competitive advantage and strategic intent (Mintzberg, 1994:108; Waters, 2011:115).

Furthermore, a strategic thinking approach as described has been framed for the crafting of creative and adaptive strategy, as opposed to its alternative: rational strategic planning (Amsteus, 2011:64; Mintzberg, 1994:107).

The limited guidelines regarding how to implement a strategic thinking construct, have constrained the use of a strategic thinking approach for the development of creative and adaptive strategy.

The aim of this study was therefore to develop a conceptual strategic thinking framework for the delivery of strategy in this kind of business environment.

To achieve this, a pragmatic philosophy guided the research to allow for the integration of different perspectives. The research followed a mixed methods approach to research design, to answer the research questions and objectives. The

pragmatic approach enabled the consideration of multiple realities.

Guided by this research approach, this study investigated and suggested that a strategic thinking approach exists as an alternative to rational strategic planning. The study identified that strategic thinking is not commonly used by organisations – predominantly due to a lack of awareness. It was concluded that internal and external organisational dynamics exert a large impact on the development and execution of strategy.

The study identified the most commonly used best practice tools and elements, of both strategic thinking and rational strategic planning, including several alternative mechanisms to assist with the development of a creative and adaptive approach to strategy-making. Thereby it strengthened the foundations of the strategic thinking construct and developed a conceptual strategic thinking approach for the delivery of a creative and adaptive organisational strategy to ensure success, through competitive advantage, in a radically changing, uncertain and complex business environment.

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Appendices

Appendix A – Questionnaire



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Economic and
Management Sciences

Informed consent for participation in an academic research study

Dept. of Business Management

A STRATEGIC THINKING APPROACH TO THE DELIVERY OF A CREATIVE AND ADAPTIVE STRATEGY

Research conducted by:

Mr. J-P. Kruger (11266938)
Cell: 082 888 8393

Dear Respondent

You are invited to participate in an academic research study conducted by J-P Kruger, a Doctoral student from the Department of Business Management at the University of Pretoria.

The primary aim of this research is to explore the extent to which strategic thinking is practiced in South African organisations, through the use of strategic intelligence and adaptive strategy. The focus is on developing a conceptual framework for the understanding of adaptive strategy that is used in uncertain and complex environments.

The purpose of this questionnaire is to establish a concrete basis for making conclusions on strategic thinking and adaptive strategy. Your organisation has consequently been selected for inclusion in this study, the results which will undoubtedly contribute to and improve the understanding of how adaptive strategy is crafted within South African organisations and how strategic thinking is used and applied.

Please note the following:

- The personal and organisational information gathered in this questionnaire will be used for group profiling purposes and will be generalised in research findings. The information will therefore be treated as confidential and no organisation specific information will be divulged.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than **20** minutes of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my supervisor, Dr Rachel Maritz at Rachel.Maritz@up.ac.za if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

Respondent's signature

Date

PART 1

ORGANISATIONAL AND PERSONAL INFORMATION:

Please enter the appropriate details or tick the correct option:

1.1 Name of your Organisation:

.....

1.2 Number of Employees:

Less than 200

200 – 1000

More than 1000

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

1.3 Geographical Exposure of operations (Please tick all blocks that are applicable):

Region	Active	Region	Active
South Africa	<input type="checkbox"/>	Europe	<input type="checkbox"/>
Africa	<input type="checkbox"/>	Asia	<input type="checkbox"/>
Northern America	<input type="checkbox"/>	Oceania (inc. Australia and New Zealand)	<input type="checkbox"/>
Latin America and the Caribbean	<input type="checkbox"/>		<input type="checkbox"/>

1.4 Business sector:

Private sector

State-owned Company

Government/ Public sector

Academia

Non-Profit Organisation

<input type="checkbox"/>

1.5 Industry sector:

Basic Materials

Business Support Services

Consumer Goods

Consumer Services

Education

Financials

Health Care

Industrials

Oil & Gas

Technology

Telecommunications

Other - Please specify:

.....

<input type="checkbox"/>

1.6 Position/level within organisation:

Senior and Executive management	<input type="checkbox"/>
Middle management	<input type="checkbox"/>
Lower level management	<input type="checkbox"/>
Non-managerial	<input type="checkbox"/>
Internal Consultant (on behalf of corporate entity surveyed)	<input type="checkbox"/>
External Consultant (on behalf of private consulting firm)	<input type="checkbox"/>
Academic	<input type="checkbox"/>

1.7 Period within organisation:

Less than 5 years	<input type="checkbox"/>
Between 5 and 10 years	<input type="checkbox"/>
More than 10 years	<input type="checkbox"/>

1.8 Functional Area of Involvement

Finance	<input type="checkbox"/>
Human Resources	<input type="checkbox"/>
Information Technology	<input type="checkbox"/>
Logistics	<input type="checkbox"/>
Operations	<input type="checkbox"/>
Research and development	<input type="checkbox"/>
Sales and Marketing	<input type="checkbox"/>
Strategy	<input type="checkbox"/>

1.9 Highest level of education:

Doctorate	<input type="checkbox"/>
Master's degree (Not MBA/MBL)	<input type="checkbox"/>
MBA/MBL	<input type="checkbox"/>
Honours degree	<input type="checkbox"/>
Bachelor's degree	<input type="checkbox"/>
Post Matric National diploma / certificate	<input type="checkbox"/>
Matric	<input type="checkbox"/>
Lower than Matric	<input type="checkbox"/>

1.10 What types of formal strategy training have you undertaken (Tick all options that are applicable possible):

A full subject as part of a degree programme	<input type="checkbox"/>
A full subject as part of a post graduate degree programme	<input type="checkbox"/>
A sub-unit of a subject as part of a degree programme	<input type="checkbox"/>
A sub-unit of a subject as part of a post graduate degree programme	<input type="checkbox"/>
As part of a diploma or certificate programme	<input type="checkbox"/>
As part of a free online course (Coursera, Stanford, Harvard, MIT, etc.)	<input type="checkbox"/>
In-house training at my organisation	<input type="checkbox"/>
On the job training	<input type="checkbox"/>
Other - Please specify:	<input type="checkbox"/>
.....	

PART 2

SECTION 1: FACTORS AFFECTING THE BUSINESS ENVIRONMENT:

EXTERNAL DYNAMICS:

Consider the changing external dynamics of the business environment. Rate the current level of uncertainty and potential impact on the sustainability of your organisation with regard to each area listed below using a scale of 1 to 5, where 1 equals “no” and 5 equals “extreme or critical”:

1	2	3	4	5
No	Low	Moderate	High	Extreme / Critical

Change dynamic	Uncertainty					Don't Know	Impact on your organisation				
	No		Extreme				No		Critical		
	1	2	3	4	5		1	2	3	4	5
2.1.1	Political										
2.1.2	Economic										
2.1.3	Social										
2.1.4	Technological										
2.1.5	Legal										
2.1.6	Environmental										
2.1.7	Demographic										
2.1.8	Competition										
2.1.9	Other - Please specify:										

INTERNAL DYNAMICS:

Please indicate to what extent you agree with the current state of strategy in your organisation on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
2.1.10	Our strategy is flawed.					
2.1.11	We misinterpret strategic insight.					
2.1.12	We respond slowly to strategic insight.					
2.1.13	We struggle with the execution of our strategy.					
2.1.14	Mind-sets and behaviours hinder our strategy.					
2.1.15	Limited organisational capabilities hinder our strategy.					
2.1.16	Organisational culture hinders our strategy.					
2.1.17	Organisational communication hinders our strategy.					

Please indicate to what extent you agree with the following statements on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

		1	2	3	4	5
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
2.1.18	<u>External</u> organisational dynamics have impacted the organisation's <u>development</u> of its strategy in the past five years.					
2.1.19	<u>Internal</u> organisational dynamics have impacted the organisation's <u>development</u> of its strategy in the past five years.					
2.1.20	<u>External</u> organisational dynamics have impacted the organisation's <u>execution/implementation</u> of its strategy in the past five years.					
2.1.21	<u>Internal</u> organisational dynamics have impacted the organisation's <u>execution/implementation</u> of its strategy in the past five years.					
2.1.22	We have a systematic process for <u>monitoring</u> external threats and opportunities.					
2.1.23	We systematically <u>act</u> on external threats and opportunities.					
2.1.24	We actively consider how to manage <u>uncertainty</u> in our organisation.					

SECTION 2: APPROACH TO CRAFTING STRATEGY:

2.2.1 Consider your understanding of strategy. Select one statement from the two alternatives listed that you believe best describes your organisation’s *strategy-making approach*:

Strategy is formally articulated through a statement of purpose (such as mission and vision) outlining the organisational objectives.	
Strategy is articulated by facilitating “a particular way of thinking” which emphasises intent, enables creativity, strategic thinking and adaptability.	

2.2.2 Consider your understanding of the process of how strategy is crafted. Select one statement from the two alternatives listed that you believe best describes your organisations *strategy-making approach*:

Crafting of strategy follows a <u>formal analytical process</u> to define an organisation’s plans for achieving its mission, based on quantitative analysis and understanding of external elements that influence it, in order to direct future change.	
Crafting of strategy follows an <u>iterative process</u> of divergence and convergence, combined with creative thinking to explore innovative new ideas, hypotheses, strategic questions and opportunities.	

2.2.3 Traditional analytical frameworks and tools used within organisations for strategy development:

Please indicate the frequency of your organisation’s use of the following traditional analytical frameworks and tools to support the crafting of strategy on a scale of 1 to 6, where 1 equals unsure and 6 equals very often.

1	2	3	4	5	6
Unsure	Never	Rarely	Sometimes	Often	Very Often

		1	2	3	4	5	6
a	Balanced Scorecard or Outcomes Approach						
b	Blue Ocean Identification						
c	Competitor Profiling						
d	Customer Segmentation and Value Analysis						
e	Financial Analysis						
f	Functional Capability and Resource Analysis						
g	Macro-environmental (PESTLE) Analysis						
h	Porter Five Forces (Industry) Analysis						
i	S-Curve (Technology, Experience, Product Life Cycle) Analysis						
j	Scenario and Simulation Analysis						
k	SWOT Analysis						
l	Value Chain Analysis						

m Other – Please list:

2.2.4 Alternative frameworks and tools used within organisations for strategy development:

Please indicate the frequency of your organisation's use of the following alternative frameworks to support the crafting of strategy on a scale of 1 to 6, where 1 equals unsure and 6 equals very often.

1	2	3	4	5	6
Unsure	Never	Rarely	Sometimes	Often	Very Often

		1	2	3	4	5	6
a	AQAL model (Integral theory)						
b	Emerging issue analysis						
c	Key success factor analysis						
d	Open Foresight						
e	Opportunity-response framework						
f	Trend analysis and forecasting						
g	Unique competing space analysis						
h	VRIO (value, rarity, imitability, and organisation) framework						

i Other – Please elaborate:

.....

Please indicate to what extent you agree with the following statements regarding your organisation's use of frameworks and tools to support the development of strategy on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
2.2.5	We prefer traditional analytical frameworks and tools (see Q 2.2.3) that simplify, compartmentalise and illustrate concepts into clear, concise depictions of reality.					
2.2.6	We focus extensively on financial modelling.					
2.2.7	We extensively use tools that enable lateral thinking and creativity.					
2.2.8	We prefer frameworks and tools which challenge conventional wisdom by recognising the relationship among the parts.					
2.2.9	We find tools that enable lateral thinking and creativity more beneficial than traditional (see Q 2.2.3) analytical tools, methods or models.					

SECTION 3: MECHANISMS FOR CRAFTING CREATIVE AND ADAPTIVE STRATEGY:

Please indicate to what extent you agree with the following statements regarding your organisation's **Strategic Intelligence activities** on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

Definition: *Strategic intelligence is defined as "the aggregation of the various types of intelligentsia, creating a synergy between business intelligence, competitive intelligence and knowledge management to provide value-added information and knowledge toward making organisational strategic decisions".*

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
2.3.1	Our organisation has a Strategic Intelligence process in place.					
2.3.2	We fuse our Business Intelligence, Competitive Intelligence and Knowledge Management (to create Strategic Intelligence) for use in decision-making.					
2.3.3	Our organisation provides managers with access to a single source of information that provides a comprehensive perspective on internal and external organisational dynamics and trends.					
2.3.4	Managers use Strategic Intelligence as an input in their strategy-making.					
2.3.5	Strategic Intelligence assists managers to make better, fact-based decisions.					
2.3.6	Strategic Intelligence is critical to enhancing our strategy-making process.					
2.3.7	The use of Strategic Intelligence leads to competitive advantage.					

Please indicate to what extent you agree with the following statements regarding **strategic synthesis and insight generation** on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
2.3.8	Strategic issues are explored to find deeper structure and insight.					
2.3.9	We interpret information to create forward views and to generate plausible future worlds.					
2.3.10	The generation of strategic insight is guided by intuition.					
2.3.11	Formal and methodical dialogue <u>fosters interaction</u> between stakeholders to create new shared knowledge.					

2.3.12 Synthesis and insight generation frameworks or models used within organisations for strategy development:

Please indicate the frequency of your organisation's use of the following frameworks or models to support the crafting of strategy on a scale of 1 to 6, where 1 equals unsure and 6 equals very often.

1	2	3	4	5	6
Unsure	Never	Rarely	Sometimes	Often	Very Often

		1	2	3	4	5	6
a	Causal layered analysis						
b	Cross impact analysis						
c	Embodied metaphors						
d	Futures wheels						
e	Modalities of thinking (Metaphorical, Dialectic, Spatial, Social Modalities, Poetic)						
f	Playscripts						
g	Scenario planning (visioning, backcasting)						
h	Sense-making						
i	Storytelling						
j	Strategic maps						
k	Strategic metaphors						
l	Strategic narratives (Shadowing, Ante-narratives)						

m Other – Please elaborate:

.....

Please indicate to what extent you agree with the following statements regarding the evaluation and validation of strategic options on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
2.3.13	We evaluate and validate strategic options after strategy formulation.					
2.3.14	We evaluate and validate strategic options to understand any unforeseen risks and their effect on our organisation.					
2.3.15	We evaluate and validate strategic options to gain acceptance across the organisation for our strategy.					
2.3.16	Our strategic options go through a validation process to ensure that they are actionable, acceptable and feasible to the organisation.					
2.3.17	We have developed an internal evaluation methodology to screen strategic options.					
2.3.18	We use Game theory to select the best option from several options, by considering the perspective of competitors, collaborators and stakeholders.					

SECTION 4: UNDERSTANDING THE DEVELOPMENT OF CREATIVE AND ADAPTIVE STRATEGY:

Please indicate to what extent you personally agree with the following statements regarding your organisation's strategy activities on a scale of 1 to 5, where 1 equals strongly disagree and 5 equals strongly agree.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
2.4.1	Traditional strategy-making approaches have become outdated and unsuitable to the new reality.					
2.4.2	Creative and adaptive approaches can lead to the successful development of organisational strategy within changing environments.					
2.4.3	An environment of communication, collaboration, open relationships and creativity is required for the development of an adaptive strategy.					
2.4.4	Creativity and adaptability is critical in the development of organisational strategy.					
2.4.5	<u>My</u> organisation's strategies are creative and adaptive in the changing business environment.					
2.4.6	In general <u>South African</u> organisations' strategies are creative and adaptive in the changing business environment.					

PART 3

Personal Details of Person Completing the Questionnaire:

3.1 Name:

3.2 Contact Number:

3.3 E-mail Address:

3.4 Further Comments or Questions regarding the topic or questionnaire:

.....
.....
.....
.....
.....

ALL THE INFORMATION YOU PROVIDE WILL BE TREATED IN THE STRICTEST CONFIDENCE.

Thank you for taking the time to complete this questionnaire. If you have any queries please do not hesitate to contact J-P Kruger by telephone on 082 888 8393 or by email at jp@kruger.is

Thank you for your effort in answering this questionnaire.

Appendix B – Interview Schedule



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Economic and
Management Sciences

TO WHOM IT MAY CONCERN

RE: DOCTORAL STUDENT (JP KRUGER) REQUEST FOR INTERVIEW

As part of his doctoral studies, Mr J-P Kruger will be conducting **interviews** with top level management concerned with strategy, academics in strategy and consultants in strategy. The primary aim of this research is to explore the extent to which strategic thinking is practiced in South African organisations, through the use of strategic intelligence and adaptive strategy. The focus is on developing a conceptual framework for the understanding of adaptive strategy that is used in uncertain and complex environments.

The purpose of this interview is to establish a concrete basis for making conclusions on strategic thinking and adaptive strategy. Your organisation has consequently been selected for inclusion in this study, the results which will undoubtedly contribute to and improve the understanding of how adaptive strategy is crafted within South African organisations and how strategic thinking is used and applied.

The interview will be based on the open-ended questions within the attached interview schedule.

Please note the following:

- The personal and organisational information gathered in this questionnaire will be used for group profiling purposes and will be generalised in research findings. The information will therefore be treated as **confidential** and no organisation specific information will be divulged.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- The interview will last **20-30 minutes**. Your time is really appreciated!
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact the study supervisor, Dr Rachel Maritz at Rachel.Maritz@up.ac.za if you have any questions or comments regarding the study.

Your support and participation is highly appreciated.

Regards,

Mr. J-P. Kruger

Cell: [082 888 8393](tel:0828888393) and email: jp@kruger.is

A STRATEGIC THINKING APPROACH TO THE DELIVERY OF A CREATIVE AND ADAPTIVE STRATEGY	
Focus Areas	Specific areas to be addressed in the questions
Pre-interview Research: Profile of Respondent	<ul style="list-style-type: none"> • Position of Respondent. • Timeframe within position. • Academic and professional qualifications.
Dynamics affecting business environment	<ol style="list-style-type: none"> 1. What do you perceive as the primary external dynamics affecting the South African business environment? 2. What internal organisational dynamics influence the validity and execution of organisational strategy? 3. Can South African organisations easily adapt to a radically changing and uncertain global business environment?
Understanding of organisational strategy	<ol style="list-style-type: none"> 4. What is your understanding of the concept “Strategy”? 5. Why are organisations strategies not successful? 6. What do you believe enables the successful development of a strategy?
Development of organisational strategy	<ol style="list-style-type: none"> 7. How do you believe organisations should <i>develop</i> and <i>manage</i> strategy: <ul style="list-style-type: none"> ○ What should the renewal timeframes be? ○ Should strategies be developed ad-hoc or consistently? ○ Should strategies be emergent or deliberate? ○ What strategy-making approach? 8. Should organisations strategies have an overarching strategic style? (Classical; adaptive; shaping; visionary (predicable env.); survival). 9. Should organisations make use of external consultants (to identify the possible limitations of these in terms of structured formal strategy development methods)?
Strategic Thinking approach to Creative and adaptive strategy development	<ol style="list-style-type: none"> 10. Considering the internal and external factors affecting the business environment, do you believe that the standard / traditional strategy-making approaches taught have become outdated and unsuitable? 11. Do you believe South African organisation’s strategies are creative and adaptive or built to “fit” for business environment? 12. Do you believe creativity and adaptability is critical in the development of organisational strategy? 13. What is your current understanding or awareness of a strategic thinking approach to strategy development? 14. Will such an approach have merit or do you have an alternative suggestion? 15. Considering this revised approach is strategic planning still the optimal approach to follow in strategy development, or can it be supplemented or replaced by strategic thinking?