

**EXAMINING THE USE OF DYNAMIC CAPABILITIES FOR STRATEGY
IMPLEMENTATION IN NAMIBIA'S CONSTRUCTION INDUSTRY**

A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT

OF THE REQUIREMENTS FOR THE DEGREE OF

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ABSTRACT

The purpose of the study was to examine the use of dynamic capabilities for strategy implementation in the construction industry. Furthermore, the study examined the relationship between dynamic capability constructs and strategy implementation processes. The research adopted a descriptive correlation quantitative design. An online questionnaire was used to collect data from a randomly selected sample of 129 construction companies that are registered with the municipality of Swakopmund. Data was analysed using Microsoft excel 2020 and Statistical Packaging for the Social Sciences software (SPSS) version 28. Findings from the study suggest that transformation is the most used dynamic capability, followed by seizing then sensing. Furthermore, it was found that there is a positive linear correlation between dynamic capabilities and strategy implementation processes. Moreover, the study established a strategy implementation concept that suggests that 24% effort should be invested in sensing, 39% in seizing and 37% in transformation to implement strategy through using dynamic capabilities in the construction industry of Swakopmund. The study recommended that construction companies in Swakopmund should use dynamic capabilities as an enabler for strategy implementation however, taking cognisance of the effort required for every aspect of dynamic capability.

Key words: Dynamic capabilities, Strategy implementation, Construction companies, Dynamic capabilities, Linear relationship, Correlation.

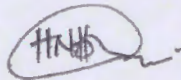
DECLARATION

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DEDICATION

First and foremost, I give thanks to the Almighty God for blessing me with the knowledge, strength, and a supporting family. Secondly, I would like to thank the Namibia Business School for according me the opportunity to study with them and the support they have given me throughout the study. Finally, I would like to thank all my friends and family who supported me throughout the thesis.

This paper is dedicated to my first born Peyavali Valedictorian Hashili.

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LIST OF ACRONYMS AND ABBREVIATIONS

CRP:	Centre for Research and Publications
e.g:	Example
EVM:	Earned Value Management
GDP:	Gross Domestic Product
RBV:	Resource Based View
SMEs:	Small and Micro Enterprise
SPSS:	Statistical Packaging for the Social Sciences software
UNAM:	University of Namibia
WBS:	Work Breakdown Structure

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CHAPTER 1: INTRODUCTION

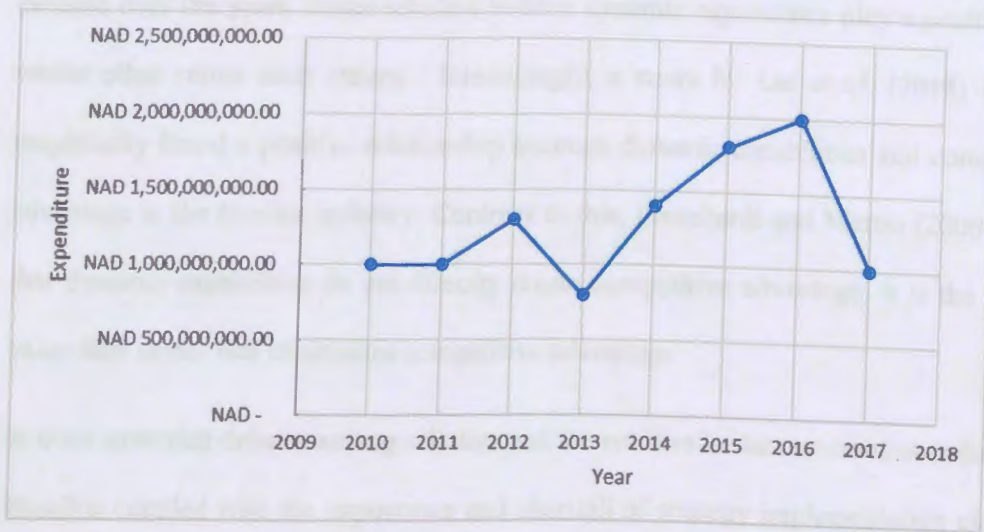
1.1 Background of the study

Strategy formulation and execution are the major phases of strategy planning (Lee, 2018). Globally, researchers and strategists discuss strategy formulation comprehensively compared to strategy implementation. A study by the British Academy of Management (2013) uncovered that only 40% of administrators appraised their companies as being fruitful at strategy execution. Strategy implementation is crucial in the construction industry which is dynamic and is observed to be highly competitive over time (Nghinomenwa, 2020; Karlsson & Nilsson, 2016).

In Namibia, the construction industry is highly fragile due to its dependency on government expenditure as the government has been reducing and increasing infrastructure expenditure intensely. According to Namibia Statistics Agency (2018) as seen in figure 1-1, in the first quarter of the years 2010 and 2011, government's real expenditure on construction was about 1 billion Namibian dollars. In the year 2012, the expenditure rose to about 1.3 billion Namibian dollars. In the following year, the expenditure decreased to about 800 million Namibian dollars. In the years 2014, 2015 and 2016, the expenditure increased to about 1.4, 1.8 and 2 billion Namibian dollars respectively. Finally, the expenditure decreased to 700 million in the year 2017 and increased to about 1 billion Namibian dollars in the year 2018.

Figure 1.1 below shows Namibian government expenditure on the construction industry between the year 2009 and 2018.

Figure 1-1. Government expenditure on construction projects over time



Source: Namibia Statistics Agency (2018)

In addition to the fragility brought about by the dependence relationship, the industry is dominated by Chinese construction companies and this puts pressure on the local companies therefore there is a need for mechanisms to ensure competitive edge. A study by Hallick and Buys (2012) remarks that Chinese construction companies dominate the construction industry, this has a negative impact on local Small and Micro Enterprises (SMEs) in Namibia. Furthermore, the findings from the study (Hallick & Buys, 2012) accuses some of the Chinese construction companies of not complying with national tender regulations. The construction industry is a dynamic and highly competitive environment and therefore requires tested mechanisms to navigate, one of those mechanisms that could be used are dynamic capabilities.

Proposed by Teece and Pisano (1994), the dynamic capabilities framework constitute principles used to integrate, construct and reconfigure inside and outside competencies to

address a rapidly changing environment. The role of dynamic capabilities has been highly debated over the years. Some scholars believe dynamic capabilities play a positive role whilst others refute such claims. Interestingly, a study by Liu et al. (2018) in Asia empirically found a positive relationship between dynamic capabilities and competitive advantage in the tourism industry. Contrary to this, Eisenhardt and Martin (2000) argue that dynamic capabilities do not directly create competitive advantage, it is the unique value they create that establishes competitive advantage.

In these unsettled debates among scholars and the realities in the construction industry of Namibia coupled with the importance and shortfall of strategy implementation globally, scholars in Namibia appear to be silent on the use of dynamic capabilities. This study aims to examine the use of dynamic capabilities for strategy implementation in Namibia's construction industry with specific reference to companies operating in Swakopmund.

1.2 Statement of the problem

The Namibian construction industry is highly dynamic and is becoming more competitive over time (Nghinomenwa, 2020). According to the Construction Industries Federation of Namibia (2017), the industry is highly dependent on government contracts, consequently, it is challenging for all companies to broaden their markets and discover alternative sources of income in times of capital expenditure budget cuts. In the same press statement, the Construction Industries Federation of Namibia is observed urging the government to reserve construction contracts for local firms.

Dynamic capabilities are a framework used to integrate, construct and reconfigure inside and outside competences to address fragile business environments such as Namibia's construction industry. As a matter of fact, a study by Liu et al. (2018) concluded that

competitive advantage could be achieved through implementing dynamic capabilities framework in strategic management in Indonesia. However, there are few studies on the use of dynamic capabilities for strategy implementation in the construction industry, let alone, Namibia's construction industry.

Without empirical evidence on the use of dynamic capabilities in the construction industry, the Construction Industries Federation of Namibia's view on finding alternative sources of income may appear to be misleading. Moreover, this knowledge gap may facilitate misleading policy interventions from government to assist the construction industry.

Using a quantitative approach, the study seeks to examine the use of dynamic capabilities framework in Namibia's construction industry. Furthermore, the study seeks to investigate the relationship between dynamic capability constructs and strategy implementation processes in the construction industry of Namibia.

1.3 Objectives of the study

The general objective of the study is to examine the use of dynamic capabilities in the construction industry of Namibia. The specific objectives of the study are:

- To examine the extent to which dynamic capabilities are used in Namibia's construction industry
- To examine the relationship between dynamic capability constructs and strategy implementation processes
- To determine how construction companies, use dynamic capabilities for strategy implementation in Namibia

1.4 Hypotheses of the study

The core assumption of the study is that dynamic capabilities can enhance organisational agility, which in return assists with strategy implementation. Dynamic capabilities constitutes of integration, construction and reconfiguration of company resources to ensure competitive advantage. Strategy implementation also constitute of a number of variables (Staffing, Resource development, Structuring, allocating resources, Policy and procedures, Best practices, Information and operating systems, Reward and incentives, Corporate culture and Internal leadership) that could be used to aid as indicators of strategy implementation. The study sought to comprehend the relationship between dynamic capabilities and strategy implementation variables. Specifically, the study examines how dynamic capabilities influence strategy implementation variables. Based on the findings from the study by Liu et al. (2018), the study presumes that the relationship between dynamic capabilities and strategy implementation is positive and linear. Thus, the study hypotheses are:

- H_0 : The use of dynamic capabilities (sensing, seizing and transforming) does not have a positive-linear relationship with strategy implementation processes (staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership).
- H_A : The use of dynamic capabilities (sensing, seizing and transforming) has a positive-linear relationship with strategy implementation processes (staffing, organisational capabilities, supportive organisational structure, resource

allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership).

1.5 Significance of the study

Although strategy implementation is much more important than strategy formulation, there is little research done in strategy implementation (British Academy of Management, 2013). Findings from this study will assist in bridging the gap that exist in research in the area of strategy implementation globally. The study will also ignite the much-needed academic debate around strategy implementation and dynamic capabilities in the construction industry. This study could be used by scholars to further comprehend the relationship between dynamic capabilities and strategy implementation as this is currently unknown. The construction industry being a key pillar for the realisation of vision 2030 in Namibia, the empirical evidence from the study can assist construction companies in implementing their strategies more effectively and endure the dynamic construction industry. This will develop the construction companies and contribute to the economy and infrastructural development of the country. Moreover, the empirical evidence from the study could be used by government to assist with policy intervention in the construction industry.

1.6 Limitation of the study

The study was executed at a time of the Covid-19 pandemic and this limited the study in the data collection phase as respondents were reluctant to participate due to the fear of contracting the virus. To mitigate this, an online data collection instrument was used. Furthermore, self-administered questionnaires are designed to allow anyone (who may not

be suitable) to respond. Since the study was directed to middle to upper management personnel (Directors), it was critical that they respond. To reduce the likelihood of anyone else answer the questionnaire, the questionnaire explicitly requested for middle to upper management personnel (Directors) to respond.

1.7 Delimitation of the study

This research was limited to construction companies that are registered with the Swakopmund the Swakopmund municipality only. However, similarities in the industry across the country would allow the results from this study to be generalizable to the entire construction industry of Namibia. The data analysis of the research was limited to simple linear regression and excluded multiple linear regression as the objective of the study was to analyse the relationship between two variables at a time. Moreover, the correlation analysis was done with Pearson's R only and not any other method. The study specifically targeted middle to upper management personnel of the construction companies in Swakopmund and not any other personnel in those companies.

1.8 Summary of the chapter

In summary, this chapter articulated the background of the study and presented a comprehensive problem statement that premise the study. In addition, the study objectives and hypotheses were presented in this chapter. Moreover, the study significance, limitations and delimitations were discussed. Centre to the study is that the construction industry is fragile and static. This necessitates the use of dynamic capabilities for strategy implementation. Therefore, the main objective of the study is to examine the use of dynamic capabilities for strategy implementation. The study outcomes have the potential

to benefit the government, construction companies and other scholars. Finally, the study scope is limited to construction companies in Swakopmund.

Chapter 1 captures the essence of undertaking this study. In addition, the chapter justifies the need for this study and framed the study scope by explaining what the study aims to achieve. In addition, the chapter revealed the limitations encountered during the execution of the study and delineated the study content. This chapter will explore literature relevant to this study. This is done in survey previous work done on the subject, compare past discoveries, establish essential methodologies used and explore the scope of concepts (Ghoshasthita, 2016). Furthermore, reviewing past literature provides a reputation of similar work.

1.1 Theoretical framework

On the one hand, it would appear that any firm is generally in business for profit maximization. This is argued by the profit maximization theory which suggests that profit is the main objective of every business and it is necessary for the survival of the firm. However, Leland and Gorton (1998) questioned the application of this theory in oligopoly markets. They questioned the need to maximize profits in a market where one company can influence prices directly (Dankler & Grottel, 1998). The situation is much worse in a monopoly market. As a result of this dispute, Dankler and Grottel (1998) suggested to expand the firm's emphasis to the utility value of the shareholder. In fact, it is argued that the real value of the firm to the owner is in the utility the owner receives from the firm and profit maximization is merely a proxy or utility maximization. The construction industry is quite competitive and as such would not fail to argue that it does not maximize its profit.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Chapter 1 captured the essence of undertaking this study. Inter alia, the chapter justified the need for this study and framed the study scope by stipulating what the study aims to achieve. In addition, the chapter narrated the limitation encountered during the execution of the study and delimited the study content. This chapter will explore literature relevant to this study. This is done to survey previous work done on the subject, compare past discoveries, emphasize essential methodologies used and enhance the scope of concepts (Benacherine, 2016). Furthermore, reviewing past literature prevents a repetition of similar work.

2.2 Theoretical framework

On the onset, it would appear that any firm is generally in business for profit maximisation. This is argued by the profit maximisation theory which suggests that profit is the core concern of every business and it is necessary for the survival of the firm. However, Dierker and Groda (1996) questioned the application of this theory in oligopoly markets. They questioned the need to maximise profit in a market where one company can influence prices directly (Dierker & Gonda, 1996). The situation is much worse in a monopoly market. As a result of this dispute, Dierker and Groda (1996) suggested to expand the firm's existence to the utility value of the shareholder. In this, it is argued that the real value of the firm to the owner is in the utility the owner acquires from the firm and profit maximisation is merely a proxy to utility maximisation. The construction industry is quite competitive and as such would not befit to allege that it does not function on profit

maximisation. The construction industry is in perfect competition hence the theoretical base for the study on profit leans on the profit maximisation theory.

There are a number of business theories that attempts to explain the principle of strategic management. One such theory is Frederick Taylor's Scientific Management theory. Published at the beginning of the 19th century, Taylor's philosophy focused on the conviction that making individuals work as hard as they may, was not as efficient as optimising the way the work was done (Taylor, 2018). Although impactful in business productivity, Taylor's theory articulates little about strategic management thus irrelevant to this study. The work of renowned thinkers such as Henry Mintzberg, Michael Porter and Igor Ansoff moved closer to strategic planning than that of Taylor. Mintzberg's work focuses much on the ingenuity of creating managers able to execute strategy. For instance, Mintzberg (2009) argues that strategy implementation requires a manager that can manage and yet be a leader to implement strategy. The work of Mintzberg (2009) states little about navigating the business environment. Moreover, this kind of approach to business is threatened by the agency problem that is articulated by the agency theory, in that managers could have conflicting interests with that of the owner of the business. However, Mintzberg (2009) theories of managing may be useful in creating human capacity for strategy implementation which is merely a portion of this study.

Porter (1980) expounded profoundly on strategic planning. Through his model known as "Porters five forces", he argues that the objective of the strategist is to recognize and handle a competitive environment by specifically looking at competitors, or to contemplate a broader perspective that competes against the organisation. With this approach, he developed a framework that identified five threats posed by competitive

rivalry, powerful buyers, powerful suppliers, potential new entrants, and substitute products. The collective quality of the forces decides the ultimate benefit potential within the industry (Porter, 1980). Porter's work was not spared of criticisms by other authors. Speed (1989) argues that the choice of the forces appears to be self-assertive and besides that Porter provides no suggestion of how to operationalise any investigation based on these forces. Furthermore, Goyal (2020) criticizes Porter's model of being inconsiderate of other factors such as whether the industry is emerging or mature, high tech or low tech, regulated or unregulated. Finally, the model is static and gives a picture of the wider industry at some point in the past and may be valuable for creating short-term strategy, but in the modern-day, that is contorted by dynamism and consistent changes since the model does not give any extra advantage (Andrew, 2018).

Established in the 1940s, the game theory by John von Neumann and Oskar Morgenstern is a relevant theoretical pillar to this study. Game theory is a hypothetical system for conceiving social circumstances among competing players (Busu, 2018). Basically, a tool used to comprehend the behaviour and reactions of different players in one system. Deutsch (1954) likens the theory to patterns of conduct which were started in a few encounter of social life but which as it were within the innocuous shape of diversions can be carried to completion. In further simplification, Deutsch (1954) compares the theory to a game of chess where in spite of the fact that one cannot wage private war and murder their opponent (competitors), one is able to play chess and checkmate their ruler; and the craftsmanship of deceiving others beneficially is more securely polished first within the diversion of poker than in legislative issues or financial life.

The game theory serves this study in two forms. In the first form, it narrates the construction industry's environment as an opponent to the firms that operate in it. Namibia's construction industry's dependence on government expenditure in particular (Nghinomenwa, 2020; Karlsson & Nilsson, 2016; Sutrisna, Pellicer, Torres-Machi, & Picornell, 2018). Secondly, the theory speaks to the need to treat the industry as a game that may require flexibility to respond to the ever changing business and competitive environment (Deutsch, 1954).

2.3 The construction industry and strategy implementation

The construction industry is easily affected by external factors but especially economic ones. For instance, earlier in the global financial crisis, the Spanish construction industry has been considered one of the foremost dynamic segments within the Spanish economy in terms of both job creation and production: from 2.7 million employees and an income of 371.0 billion Euros in 2007 to 0.97 and 101.3 individually in 2015; this implies a diminish of 64% in employment and 73% in production (SEOPAN, 2016). In 2009, the gross value of construction work performed by primary contractors was HK\$ 100.9 billion, which diminished from HK\$ 133 billion in 1998 moreover, the contribution of the construction industry to the overall Gross Domestic Product (GDP) diminished considerably since 1997, from 5.1% in 1997 to 3.1% in 2008 (Tan, Shen, & Langston, 2012). The major reason for this diminish is the financial turmoil in Asia in late 1997, and to a small degree, the recent global financial crisis.

Namibia's construction industry is not exempted from these economy turbulences. In fact, from the year 2015 to the second quarter of the year 2018, the Namibian government's real value expenditure on construction has decreased immensely. In the year 2017 and

2018, the Namibian government spent N\$ 900 000 000, N\$ 750 000 000, N\$ 950 000 000 and N\$ 300 000 000 in the last two quarters of 2017 and the first two quarters of 2018 respectively (Namibia Statistics Agency, 2018). These fluctuating expenditures pose a business risk to companies operating in Namibia's construction industry; more especially in how they would implement their business strategies in this dynamic environment.

In managing turbulent, complex, uncertain and dynamic circumstances, the Earned Value Management (EVM) has developed as a strong apparatus in supporting project managers and is considered as one of the major project administration apparatus that encapsulates the foremost crucial standards of project management in practice (Sutrisna, Pellicer, Torres-Machi, & Picornell, 2018). According to Marshall, Ruiz and Bredillet (2008), past research has illustrated a moderately solid relationship between EVM and project victory as well as the critical commitment of EVM's Work Breakdown Structure (WBS) and S-Curve to the formation and organization of project contracts. However, EVM merely assists with project implementation which is an important point of discussion in this research. The research aims to extend the investigations in the area of overall business strategy implementation.

A study by Ball, Farshchi and Grilli (2010), downplays the value of strategy in the construction industry. The study attributes the realisation of competitive advantage in the construction industry to managerial efficiency only. Strategists Porter (1980) and Mintzberg (2009) vehemently condemn views such as that of Ball, Farschchi and Grilli (2010) in their defence, they question the worth of managerial efficiency in the absence of a vision and strategic objectives that would serve as tools to lead the company to the desired destination.

Despite the different views by different scholars, their studies do not link the construction industry, strategy implementation and dynamic capabilities. Despite the fact that the three concepts could be used intercreatively to ensure success of construction companies in navigating the turbulent environment (Pamulu, 2010).

2.4 Strategy implementation

Strategy formulation is generally considered as the exclusive domain of senior administration since it rewards inventiveness – the foremost respected and esteemed of all intellectual pursuits (Raffoni, 2016). By comparison, compelling execution of strategy seldom gets as much acclaim or regard. However, experienced administrators recognise that the foremost inventive and well-crafted visions and strategic plans are futile in case they cannot be translated into action. According to a study by British Academy of Management (2013), only 40% of directors evaluated their companies as being productive at strategy execution. Much of the existing insightful work on strategy execution centres on components that either catalyse or deter the infusion of strategy into the organization (Merkus, Willems, & Veenswijk, 2019; British Academy of Management, 2013). Although not in support of this study, a handful authors (Merkus, Willems, & Veenswijk, 2019; Zaidi, Zawawi, Nordin, & Ahnuar, 2018; British Academy of Management, 2013) have attempted to contribute in the area of strategy implementation. British Academy (2013) merely created a comprehensive hybrid model of strategy execution by fundamentally analysing existing strategy execution models based on their likenesses and contrasts.

The study by Merkus, Willems and Veenswijk (2019) takes an interesting approach of performativity. Contrary to most of the strategy models that assume that a strategy needs

a conducive internal business environment to prosper, this study concludes that the strategy could be a tool to shape the internal business environment.

All the studies above merely commented on strategy implementation as a topic. However, few studies attempt to articulate dynamic capabilities as an enabler for strategy implementation. Moreover, there appear to be a dearth of studies that speaks to the topic of strategy implementation in the Namibian construction industry which is observed to be becoming highly competitive as it contracts due to reduced government expenditure and foreign competition (Nghinomenwa, 2020). The study aims to complement these knowledge gaps which could be valuable to companies in Namibia's construction industry.

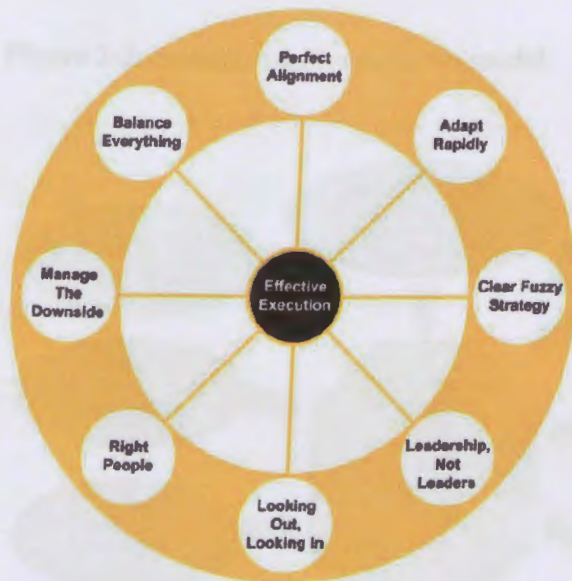
2.4.1 Strategy implementation models and processes

There are a number of models with different constructs that attempts to explain the method of implementing a strategy successfully. Without necessarily forming a model, a study by Matich and Zheltenkov (2020) identifies three constructs which are pivotal to strategy implementation, a) Ensuring consistency between the company's innovation technique and its progressing innovation exercises (Consistency), Advancement of devices and methods for collecting and analysing data around existing and future technologies (Advanced methods) and Development of communications at different levels of the organization between representatives, directors and administration of the company (Communication).

Figure 2-1 indicates that the winning framework for organisational excellence consists of nine common components for long-term victory for strategy execution: effective execution, perfect alignment, adapting rapidly, clear and fuzzy strategy, leadership not

leaders, looking out and looking in, right people, managing the downside and balancing everything (Cocks, 2010).

Figure 2-1 Cock's model for strategy implementation

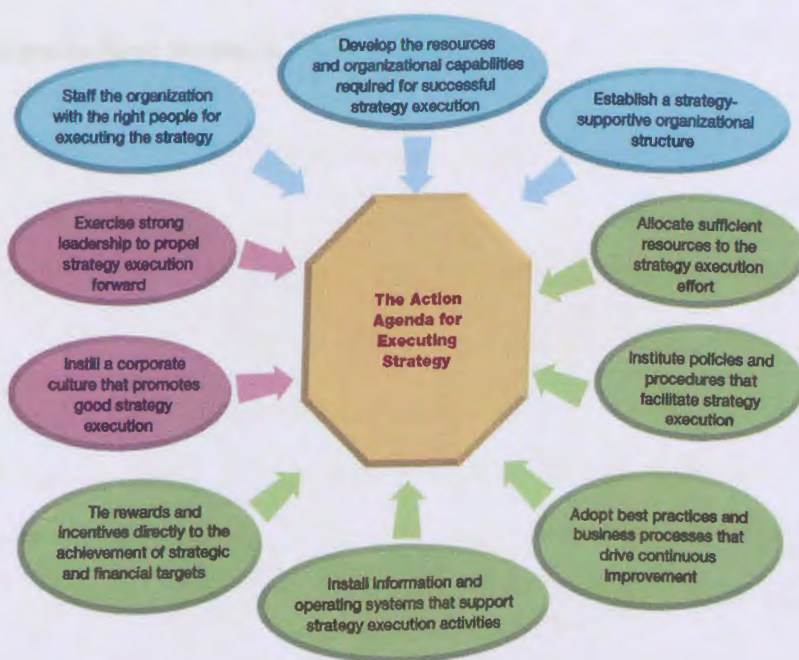


Source: Cocks (2010)

Figure 2-2 indicates another model on strategy execution which is quite comprehensive. This model identifies 10 principal components that are critical to strategy execution: staffing the organization with managers and employees capable of executing the strategy well, developing the resources and organizational capabilities required for successful strategy execution, creating a strategy-supportive organizational structure, allocating sufficient resources (budgetary and otherwise) to the strategy execution effort, instituting policies and procedures that facilitate strategy execution, adopting best practices and business processes to drive continuous improvement in strategy execution activities, installing information and operating systems that enable company personnel to carry out

their strategic roles proficiently, tying rewards and incentives directly to the achievement of strategic and financial targets, instilling a corporate culture that promotes good strategy execution, exercising the internal leadership needed to propel strategy implementation forward (Thompson, Peteraf, Gamble, & Strickland, 2016).

Figure 2-2. Strategy implementation model



Source: Thompson, Peteraf, Gamble and Strickland (2016)

The constructs written by Cocks (2010) represents old literature. Moreover, the constructs are superficial as they are limited and fail to capture strategy execution comprehensively. The constructs presented by Matich and Zheltenkov (2020) are much more recent than those presented by Cocks (2010). Besides that, they are much more comprehensive than those of Cocks (2010) thus, they capture strategy execution better. However, when contrasting the model by Matich and Zheltenkov (2020) with that of Thompson, Peteraf,

Gamble and Strickland (2016), the latter model is much more comprehensive than the former although the former is much more recent. To ensure the study is comprehensive yet based on reasonable recent literature, the study adopted the model by Thompson, Peteraf, Gamble and Strickland (2016).

For the purposes of this study it is imperative to unpack the variables of the processes contained in the model by Thompson, Peteraf, Gamble and Strickland (2016). Table 2-1 unpacks these processes.

Process	Definition
Identifying the organization's strengths and weaknesses	Identifying the organization's strengths and weaknesses, and determining the organization's competitive advantage
Structuring the organization	Establishing lines of authority and reporting relationships
Resource allocation	A manager's capacity to control the amount of resources allocated to various organizational activities
Identifying products and processes	The company's ability to create and update existing products
Adopting new products	Developing, testing, and selling new products and services
Industry information and operating results	Monitoring performance management systems and business
Research and innovation	Researching products based on their business performance
Creating a corporate culture	Shared values, beliefs, attitudes, and behaviors that influence the organization's actions and decisions
Expanding financial resources	Using financial resources to enhance the organization's performance
Industry	

Source: Thompson, Peteraf, Gamble and Strickland (2016)

Table 2-1. Strategy implementation processes

Process	Meaning
Staffing the organisation	Putting together a solid management group, and recruiting and retaining workers with the required experience, specialized abilities, and intellectual capital.
Acquiring, developing, and strengthening the resources and capabilities	Collecting the required assets, creating proficiencies in performing strategy-critical value chain exercises, and overhauling the company's capabilities to coordinate changing market conditions and client desires.
Structuring the organization	Establishing lines of authority and reporting relationships
Resource allocation	A company's capacity to marshal the assets required to bolster unused key activities incorporates a major effect on the methodology execution handle.
Instituting policies and procedures	The company's ability to review and update existing policies
Adopting best practices	Benchmarking against other companies and adopting what they do good
Installing information and operating systems	Strengthening information management systems and facilities
Rewards and incentives	Rewarding employees based on their individual performance
Instilling a corporate culture	Shared values, ingrained attitudes, and company traditions that determine norms of behaviour, accepted work practices, and styles of operating.
Exercising internal leadership	Being at the forefront of achieving the strategic initiatives

Source: Thompson, Peteraf, Gamble and Strickland (2016)

2.5 Relationship between dynamic capabilities and strategy implementation

The theory of resource-based view (RBV) clarifies firm competitive advantage through the uniqueness, uncommon and imitable assets that the firm created which leads the growth of the firm. Apart from that, the RBV merely clarifies the firm's competitive advantage within the static environment and this has to be a confinement, particularly when the firm exists in a rapidly changing market environment (Samsudin & Ismail, 2019). On the other hand, the theory of dynamic capabilities clarifies the firm's competitive advantage from the viewpoint of dynamic and rapidly-moving environment. Compared to RBV, dynamic capabilities has received much consideration from the global business researcher since the 1990s (Eisenhardt & Martin , 2000). Managing in a global business showcase has diverse environmental background, and in order for the firm to manage with these contrasts, the firm ought to create particular capabilities and continuous learning (Eisenhardt & Martin , 2000; Samsudin & Ismail, 2019). Furthermore, it is vital for the firm to stay relevant and competitive within the market particularly when conducting business external of the domestic nation.

Proposed by Teece and Pisano (1994), dynamic capabilities framework constitute of principles used to integrate, construct and reconfigure inside and outside competences to address a rapid and dynamic environment. The role of dynamic capabilities has been a topic of dispute over a long time. Some scholars believe they play a positive role whilst other refute such claims. Although specifically in the tourism industry, a study in Asia empirically found a positive relationship between dynamic capabilities and competitive advantage (Liu et al. (2018). Contrary to this, Eisenhardt and Martin (2000) argue that

dynamic capabilities do not directly create competitive advantage, it is the unique value they create that forms competitive advantage. Nonetheless, this study leans more on the findings by Liu et al. (2018) by assuming that there is a direct relationship between dynamic capabilities and strategy implementation.

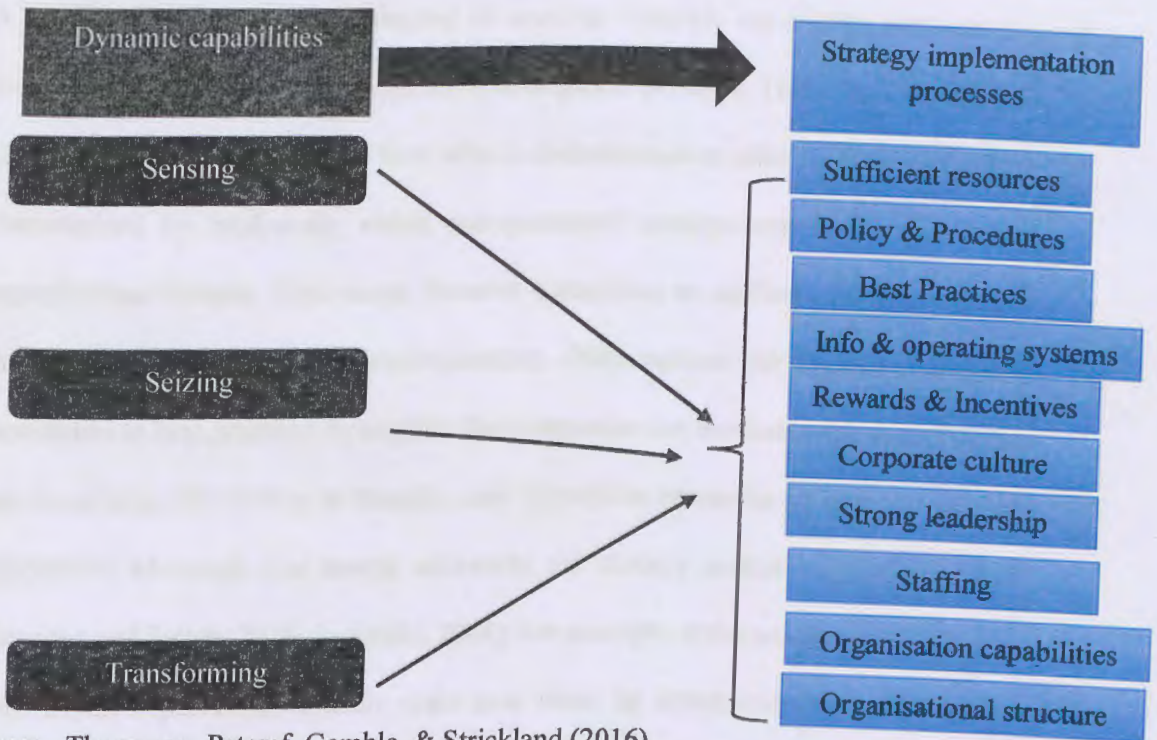
Sensing is one of the constructs of dynamic capabilities which plays a pivotal role in organisational development. This aspect of dynamic capabilities can be likened to the ability of sniffing possessed by some animals. In this aspect, the business prepares itself to perceive possible opportunities and threats (Busu, 2018). This study adopts this understanding of sensing.

Seizing is also another construct of dynamic capabilities. It entails mobilizing company resources to capture value from the opportunities identified in the sensing phase (Busu, 2018). This study adopts this understanding of seizing.

Transformation is the last phase of applying dynamic capabilities. This entails realigning the company's internal processes to harness the opportunities under seizure (Busu, 2018). This study adopts this understanding of transformation.

2.6 Effect of dynamic capabilities constructs on strategy implementation processes (Conceptual framework)

Figure 2-3, Conceptual model



Source: Thompson, Peteraf, Gamble, & Strickland (2016)

Figure 2-3 depicts the conceptual model for the study. Primarily, the study sought to comprehend the relationship between dynamic capabilities and strategy implementation processes. Literature informs that the construction industry is fragile thus dynamic (SEOPAN, 2016; Tan, Shen, & Langston, 2012; Namibia Statistics Agency, 2018). Literature also informs that dynamic capability is pivotal to a dynamic or unstable business environment (Samsudin & Ismail, 2019; Liu et al. (2018). The strategy implementation model by Thompson, Peteraf, Gamble and Strickland (2016) present an action plan to strategy implementation with 10 constructs : sufficient resources, policy and

procedures, best practices, information and operating systems, rewards and incentives, corporate culture, strong leadership, staffing, organisation capabilities, and organisational structure.

A number of scholars have attempted to associate dynamic capabilities with strategy implementation processes. Although not with empirical evidence, Teece, Peteraf, and Leih (2016) suggest that firms should have what is characterised as solid dynamic capabilities characterized by profoundly viable entrepreneurial management teams and strong organizational designs. This relates dynamic capabilities to staffing and organisational structure processes of strategy implementation. Other authors link the use of dynamic capabilities to best practices by arguing that companies use methods such as replication and knowledge brokering to transfer, and recombine resources in order to achieve competitive advantage that would ultimately aid strategy execution (Hansen, 2012; Hargadon and Sutton, 2016; Szulanski, 2018). For example, at the premier product design firm, IDEO, supervisors routinely make new items by information brokering from a assortment of past design ventures in many businesses and from numerous clients (Hargadon & Sutton, 2016). Furthermore, Burgelman (1994) relates dynamic capabilities to resource allocation by stating that resource allocation routines are utilized to disseminate rare assets such as capital and manufacturing resources from central focuses inside the chain of command.

In as far as the relationship between sensing and strategy implementation processes is concerned, scholars such as Ahmady, Mehrpour and Nikooravesh (2016) are more specific by signifying the importance of bench marking company structure with industrial standards. This in essence is linking sensing to company structure. In addition, other

scholars such as Lee (2018) claim that they found a positive relationship between organisational leadership and company performance. All these studies discuss the use of dynamic capabilities in conducting business in general. Further, none of these studies relates the variables under discussion using quantitative methods. Moreover, there are few studies that discuss dynamic capabilities in relation to the construction industry (Pamulu, 2010). Therefore, the need to investigate the use of dynamic capabilities in the construction industry is essential.

2.7 Summary of the chapter

In essence, this chapter discussed relevant literature that helps to highlight previous work related to the research topic and further expands the research gap. In this chapter, the theoretical framework was thoroughly discussed and a conceptual framework formulated. The chapter dissected literature in the three key areas which are the construction industry, strategy implementation processes and dynamic capabilities. Literature indicates that the construction industry is quite fragile thus, construction companies need tools to navigate these dynamisms. Moreover, literature points to the fact that there is little done on the use of dynamic capabilities for strategy implementation. Finally, literature seems to suggest that strategy implementation could be enhanced by the use of dynamic capabilities.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Research methodology entails the systematic approach of solving the research problem. This chapter outlines the approach, research methods and techniques used to realise the research objectives. This includes aspects such as research philosophy, research design, study population, research sample instruments used, procedures and how data was analysed. The chapter also articulate ethical considerations made in the study.

3.2 Research philosophy

The term 'paradigm' is described as basic collection of convictions shared by researchers, a set of understandings about how issues are to be understood, how the world is seen and hence methods employed in conducting investigations (Rahi, 2017). Rahi (2017) further identified Pragmatism, Constructivism, Advocacy and Positivism as the four major research paradigms. Unlike the other three research paradigms, Positivism takes a unique position of claiming the truth of issues to be objective. This paradigm holds a deterministic logic that causes likely decide the results (Krebs, 2008). In subsequent years, positivism has been criticised for use in management sciences as it holds strong assumptions that may not be realistic for management sciences (Khaldi, 2017). Moreover, Khaldi (2017) submits that positivism cannot be used as a paradigm for inductive approaches to research. As a result, philosophers introduced a lighter version of positivism called post positivism. Unlike positivism, this philosophy assumes that knowledge is conjectural, i.e. even if data, knowledge and reasoning shapes knowledge, it is impossible to find absolute truth about phenomena. Moreover, the post positivists will follow an inductive strategy supporting subjective assessment unlike the positivists (Khaldi, 2017).

According to Woiceshyn and Daellenbach (2018), inductive research includes moving from the specific to the general, as when making experimental observations around a few phenomenon of intrigue and shaping concepts and speculations based on them. However, philosophers tend to view inductive research as deficient by itself and often recommend including deductive foundations.

This research intends to find the empirical objective truth on the use of dynamic capability and the relationship between dynamic capabilities and strategy implementation processes in Namibia's construction industry. By design, the study leaned more on the post positivism research paradigm. It was assumed that the truth to the relationship between dynamic capabilities and strategy implementation processes is objective and empirical evidence collected in this study were used to determine these relationships. The study adopted an inductive research approach with hypothetic-deductive research foundations.

3.3 Research design

There are three main categories of research designs a) qualitative, b) quantitative and c) mixed methods. It is well understood that qualitative research designs are used by constructivist researchers whereas, post positivist researchers use quantitative designs (Krebs, 2008). Furthermore, Krebs (2008) states that researchers from the pragmatism world views are likely to use mixed methods research designs. Just like how positivists believe that the truth is universal and objective, quantitative methods aim to find objective empirical findings (Daniel , 2016). Moreover, Daniel (2016) submits that time saving and generalisability of findings are some of the advantages of a quantitative design approach.

3.4 Research approach

This study seeks to find empirical evidence on the use of dynamic capabilities and to examine the relationship between dynamic capabilities and strategy implementation processes. This, substantiated by the worldview from which the research emanates from and the advantages of quantitative studies assisted in adopting a quantitative research approach. Thus, the study used a quantitative research approach. To be specific, the research adopted a descriptive correlational survey as a research design. This approach was best suited to describe the research findings and to examine the relationship between the research constructs.

3.4 Population

Bless and Highson-Smith (2013) defines a population as a set of elements that the research centres upon and to which the obtained results ought to be generalised. More technically, McBurney (2001) states that a population is the totality of people, occasions, association units, case records or other sampling units with which the research issue is concerned. This study aimed to understand how Namibian owned construction companies are using dynamic capabilities. Moreover, the study aimed to study the relationship between dynamic capabilities and strategy implementation constructs. Over the years, Swakopmund has become home to many construction companies due to the number of national developmental projects such as railway rehabilitation, roads construction, pipeline construction and harbour expansion. This makes the town one of the best to execute a study targeting the construction industry. Thus, the study population was 210 construction companies that are registered with the Swakopmund municipality.

3.5 Sampling

3.5.1 Sampling method

For studies that aim to find objective findings about a certain population, random sampling is the appropriate method (Daniel, 2016). Random sampling is undertaken correctly when every element in a population has an equal chance of being chosen for the sample. This study aimed to find the objective truth about the relationship between strategy implementation processes and dynamic capabilities. To find this objective truth, simple random sampling method was used to select the participants.

3.5.1 Sample size

Whereas a sample is that parcel of the population from which the research subjects are selected, sampling is the process of selecting these research subjects (Rossiter, 2014). A list of 210 Namibian construction companies operating in Swakopmund was obtained from the Municipality of Swakopmund. A sample size was calculated using Slovin's formula as indicated below.

Equation 3-1. Slovin's sample size formula:

$$\text{Slovin's formula: } n = \frac{N}{(1 + Ne^2)}$$

Where: n = sample size

N = Population size

e = Margin on error

$$\frac{210}{(1 + 210 \times 0.05^2)}$$

= 137 participants

Using a population size of 210 companies and a margin of error of 5%, a sample size of 137 companies was calculated to be adequate for the study.

3.5.2 Sampling frame

According to Bless and Highson-Smith (2013) sampling frame is the actual set of units from which a sample has been drawn: in the case of a simple random sample, all units from the sampling frame have an equal chance to be drawn and to occur in the sample. The sampling frame for this study was all construction companies that met the following requirements:

- Registered with the Swakopmund municipality
- Provided their email addresses to the Swakopmund municipality
- Provided their contact numbers to the Swakopmund municipality
- In possession of a fitness certificate from Swakopmund municipality

3.5.3 Sampling procedures

The following procedures were used to select the research participants:

- A list of construction companies was obtained from Swakopmund municipality
- The list was loaded in Microsoft excel
- Microsoft excel formulas were used to select 137 companies randomly from a list of 210 companies.

137 companies were randomly selected from a population of 210 companies and questionnaires were distributed to their middle to upper management personnel.

3.6 Research Instruments

A research instrument refers to the mechanism used to collect data. The study used a self-administered questionnaire as a research instrument. Inter alia, self-administered questionnaires are suitable because they can reach a large and dispersed population at low cost, collect data from a large study area that is generalizable to the population and affording privacy to the respondents (Williamson, 2014). Moreover, Williamson (2014) further opines that questionnaires are less intrusive than interviews thus convenient, they also prevent interviewer biasedness and collects data which is easily analysed. The questionnaires suitability and benefits above formed the bases for choosing a questionnaire as a research instrument. Particularly the first suitability which alludes to reaching a large portion of the population. A large number of respondents was critical to the design of this study.

3.6.1 Validity

According to Schaik (2005) validity alludes to the degree to which an empirical measure precisely reflects the concept it is expecting to measure. There are number of validities that the research needs to consider when conducting a study, these inter alia includes content and construct validity.

Content validity

Content validity refers to the extent to which the items on a test are fairly representative of the entire domain the test seeks to measure. To ensure content validity of the research instrument, research constructs in the conceptual framework were formulated using literature from renowned expert authors in the field of strategy implementation. In addition, the conceptual framework was approved by experts in the field of strategic

planning. The steps taken in this study to ensure content validity is recommended by Schaik (2005) which he refers to as “jury opinion” in his literature.

Construct validity

According to Daniel (2016), construct validity is the extent to which the measure behaves in a way consistent with theoretical hypotheses and represents how well scores on the instrument are indicative of the theoretical construct. To ensure construct validity, a comprehensive conceptual framework that was informed by theoretical framework was established. The conceptual framework narrates the logic behind the interrelations of the research constructs. In addition to this, a pilot study which entailed distributing the questionnaire to 25 of the potential respondents was conducted from 21 September 2021 to 4 October 2021. Of the 25, 17 respondents submitted the questionnaire with comments and suggestions that were incorporated in the final questionnaire.

3.6.2 Reliability

The reliability of a measurement procedure is the stability or consistency of the measurement. As suggested by Schaik (2005), the following measures were enforced to ensure reliability of the research instrument.

- All constructs were clearly defined in the conceptual framework
- A ratio Likert scale with 5 and 6 levels of measurement were used to capture accurately the relationship between the research constructs
- A pre-test was completed to test the instrument prior to final data collection
- Bulleted and numbered lists were discouraged

3.7.2 Research variables

The study entailed examining the relationship between dynamic capabilities and strategy implementation. For dynamic capabilities sensing, seizing and transforming were used as independent variables whereas for strategy implementation processes staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership. The independent variables were tested against the dependent variables using a five and six point Likert scale depending on the variables under examination.

3.7 Research procedures

Research procedures outlines the logic of steps and highlights milestones that were used to conduct the research. Below follow the procedures undertaken to execute the study in the construction industry:

- Firstly, an ethics clearance certificate was obtained from University of Namibia's (UNAM) Centre for Research and Publications (CRP).
- A research permission letter was also obtained from the Director of Namibia Business School (NBS).
- Following the established channels, a list of construction companies was obtained from the Swakopmund municipality from the manager of Health Services & Solid Waste Management.
- Before the actual study was done, a pilot study was undertaken to test the reliability of the research instrument from 21 September 2021 to 4 October 2021.

- Thereafter, a link to access the online questionnaire was sent to the 207 potential respondents of which only 137 responded. Responses from the respondents were stored safely on an online cloud storage which only the researcher had access to.
- Data collected will be disposed of by deleting all the files containing responses in the year 2026.

3.8 Data analysis

The aim of the study was to examine the relationship between dynamic capabilities and strategy implementation processes using statistical approach. Data obtained from the respondents was captured in automatically captured CSV file. This data was then processed to be compatible with the Statistical Package for Social Sciences (SPSS) software. Before linear analysis was done, the data was cleared of linear assumptions by ensuring outliers fall within the recommendations. Moreover, the interdependency was ensured by using Watson Durban's coefficient.

Before testing the strength of the relationship between the study variables, there was a need to establish the nature of the relationship between the variables. For variables that were found to have a direct positive relationship, Pearson's correlation coefficient (Pearson's R) was used to assess the strength of the relationship between the variables.

To further analyse the relationship, the linear regression was used to determine the slope of the linearity that exists between the variables. Wegner (2013) suggests statisticians could also use the t-test to validate the originality of the relationship between the variables. i.e., to assess whether the effect on the dependent variable is genuinely caused by the independent variable. This rules out the probability of the occurrence being merely by chance. For this study, the t-test was used to validate this.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents and discusses the findings from the field data. In this chapter, the findings are integrated with existing literature to make sense of the data and the results presented. Firstly, the research demographics are presented, followed by the discussion of findings in order of the study objectives. Finally, the chapter presents the concept that construction companies could use to harness competitive advantage using dynamic capabilities as an enabler for strategy implementation.

4.2 Respondent demographics

This section presents the results of the respondents' demographics.

Table 4-1. Response rate table

Distributed questionnaire	Received questionnaire	Response rate
137	129	94%

Source: Primary data

Table 4-1 indicates the response rate from the study. Of the 137 questionnaires that were distributed, 129 were completed and submitted to the researcher. This indicates a response rate of 94%. This response is acceptable in research. For a population of 210 companies, the 129 returned questionnaire indicates a sample size that constitute 61% of the entire population. This is adequate representation of the population.

Research has shown that young people are more likely to implement new concepts compared to the elderly (Rahi, 2017). It was therefore necessary to understand the age

distribution of the research respondents. Table 4-2 indicates the age distribution of the research respondents.

Table 4-2. Age groups

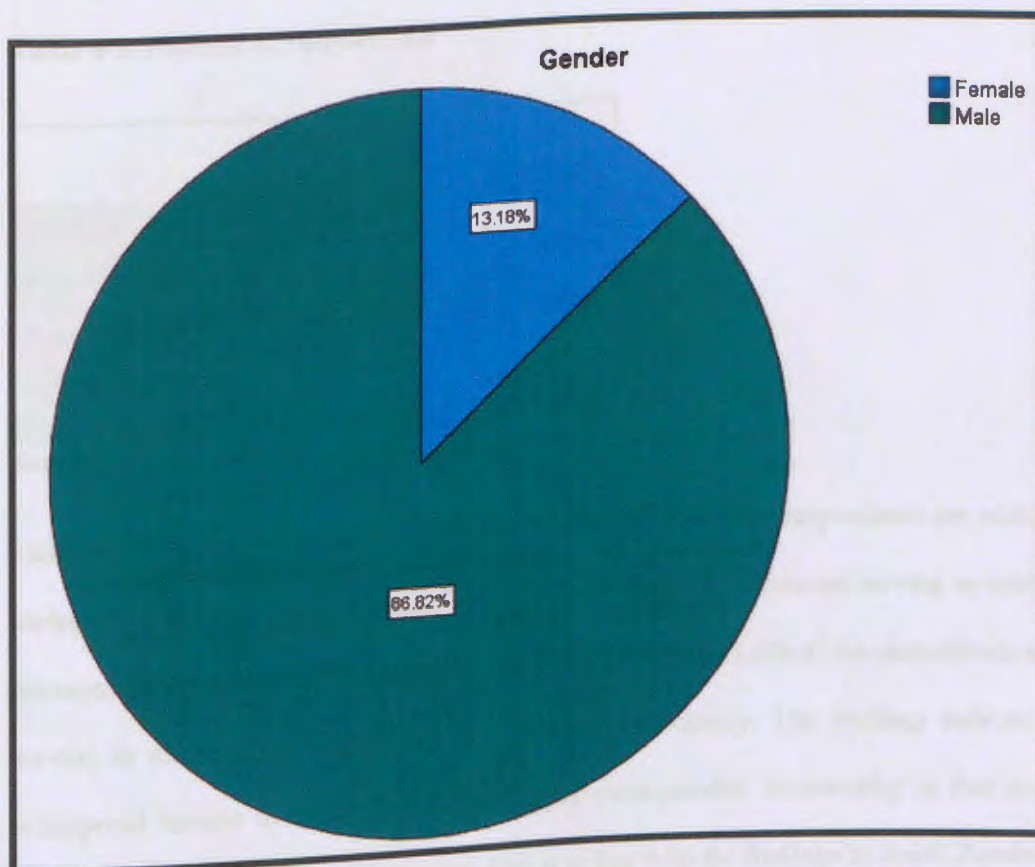
Age	Age	
	N	%
25 years and below	2	1.60%
25 - 35 years	21	16.30%
36-46 years	32	24.80%
46-55 years	55	42.60%
56 years and above	19	14.70%
Total	129	100%

Source: Primary data

Of the 129 respondents, 2 respondents are below the age of 25, 21 respondents are aged between 25 and 35 years, 32 respondents are aged between 36 and 46 years, 55 respondents are aged between 46 and 55 years and 19 respondents are aged above 56 years. This outcome shows that senior positions in most of the Namibian construction companies are occupied by the older age group compared to the younger Namibians. This is expected as the construction industry requires accumulated expertise to operate effectively (Ball, Farshchi, & Grilli, 2010).

Over the years, research has shown that the construction industry is male dominated. It is also believed that more men occupy strategic positions in companies compared to women (Lee, 2018). It was thus, necessary to gauge whether this is the same in the construction industry.

Figure 4-1. Gender distribution of respondents



Source: Primary data

Table 4-1 illustrates the gender distribution of the research respondents. Of the 129 respondents, 17 were females and 112 were males. This culminates to 13.2% female and 86.6% male respondents. This validates the findings by Zaidi, Zawawi, Nordin, and Ahnuar (2018) in which they claim that the construction industry is male dominated.

However, policy interventions in Namibia aimed at empowering women will probably change this skew proportions in the years to come (Namibia Statistics Agency, 2018).

Key to the study was the position of the respondents as this informed the researcher of the reliability of the outcomes given that the study targeted the middle to upper management personnel of the construction companies.

Table 4-3. Position of respondents

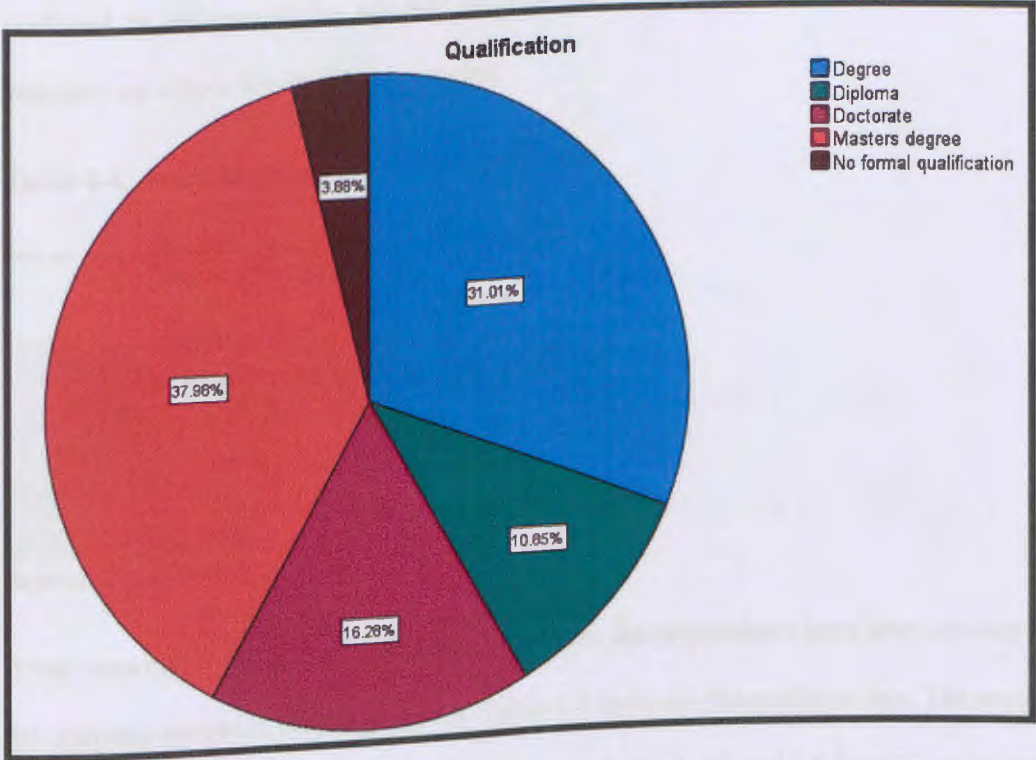
	Position	
	N	%
Director	21	16.3%
Middle Manager	39	30.2%
Senior Manager	34	26.4%
Sole owner	15	11.6%
Strategist	20	15.5%

Source: Primary data

Table 4-3 indicates the position of the respondents. 30.2% of the respondents are middle managers of the construction companies. 26.4% of the respondents are serving as senior managers in the construction companies. 16.3%, 15.5% and 11.6% of the respondents are serving as directors, strategists and sole owners respectively. The findings indicate a widespread sample over the middle and upper management. Noteworthy is that only 15.5% of the respondents are strategists. This is in line with the findings by Zaidi, Zawawi, Nordin and Ahnuar (2018) in which they claim that strategy is a relatively recent discipline therefore the few numbers of strategists in many companies. It is also worth noting the small response from the Sole owners, this is perhaps because most construction companies are share held to spread the huge business risk involved in operating in the industry (Pamulu, 2010).

Research has shown that the level of qualification has an impact on the use of theoretical frameworks such as dynamic capabilities. As such, it was necessary to study the qualification set possessed by the respondents.

Figure 4-2. Qualification of respondents



Source: Primary data

Figure 4-2 indicates the qualification distribution of the respondents. Generally, most of the respondents are formally educated with only 3.9% without formal education. The industry is under the leadership of highly educated personnel with 38% of them owning a Master's degree and 16.3% of them owning a doctor of philosophy (PhD). These outcomes are in conflict with the findings by Hallick and Buys (2012) in which they claim that the Namibian construction is under the stewardship of young and moderately educated employees. This discrepancy may be because the study was undertaken in the year 2010

and the industry has grown since then. Finally, 31% and 10.9% of the respondents are in possession of a degree and diploma respectively.

The years served by the respondent in the company plays a role in understanding the companies strategic position and how it is influenced by other factors. It was therefore profound to understand the number of years the respondents have been serving the company on whose behalf they responded.

Table 4-4. Years of respondent at the company

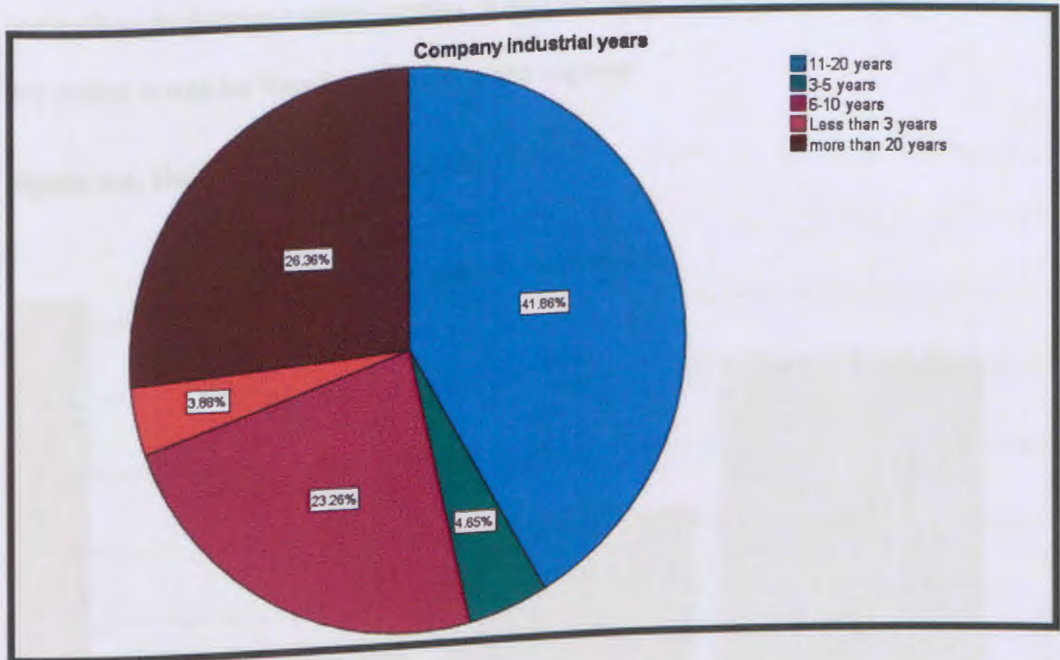
Years at company		
	N	%
11-20 years	36	27.9%
3-5 years	15	11.6%
6-10 years	51	39.5%
Less than 3 years	4	3.1%
more than 20 years	23	17.8%

Source: Primary data

It was essential to understand the number of years the respondents have been serving at the company on which they respond for. Table 4-4 indicates the results of this. The results indicate a fairly experienced respondent group. Of which 52 and 36 have been at their respective companies for 6 to 10 and 11-20 years respectively. 15 and 4 of the respondents have 3 to 5 and less than 3 years respectively.

It was pivotal to the study to gauge the companies' industrial experience. Scholars have argued that experience has a role to play in organisational learning therefore it has the potential to affect how companies choose to implement their strategies (Merkus, Willems, & Veenswijk, 2019). The study therefore required respondents to indicate their companies industrial experience.

Figure 4-3. Company industrial experience



Source: Primary data

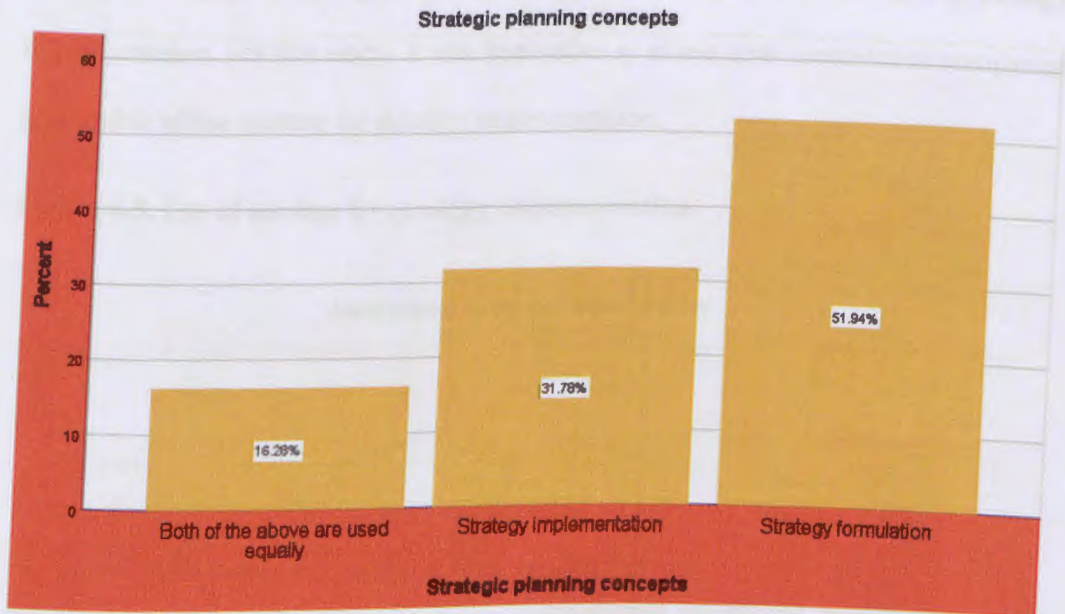
Besides the number of years' respondents have been serving in their companies, it was also important to audit the number of years the companies have been operating in the construction industry. Table 4-3 displays the result. Generally, the results are reflecting middle to highly experienced companies with 41.6% of them having served in the industry for 11 to 20 years. Further, 34 of the companies have served in the construction industry for more than 20 years. Finally, 30, 6 and 5 of the companies have served in the industry for 6 to 10 years, 3 to 5 years and less than 3 years respective.

4.3 Use of dynamic capabilities

The first objective of the study aims to examine the extent to which dynamic capabilities are used in Namibia's construction industry. This section presents findings from the study on the latter objective.

Research has shown that most companies focus mostly on formulating strategy in comparison to strategy implementation. It was therefore empirical to investigate whether this notion is true for Namibia's construction industry.

Figure 4-4. Use of dynamic capabilities



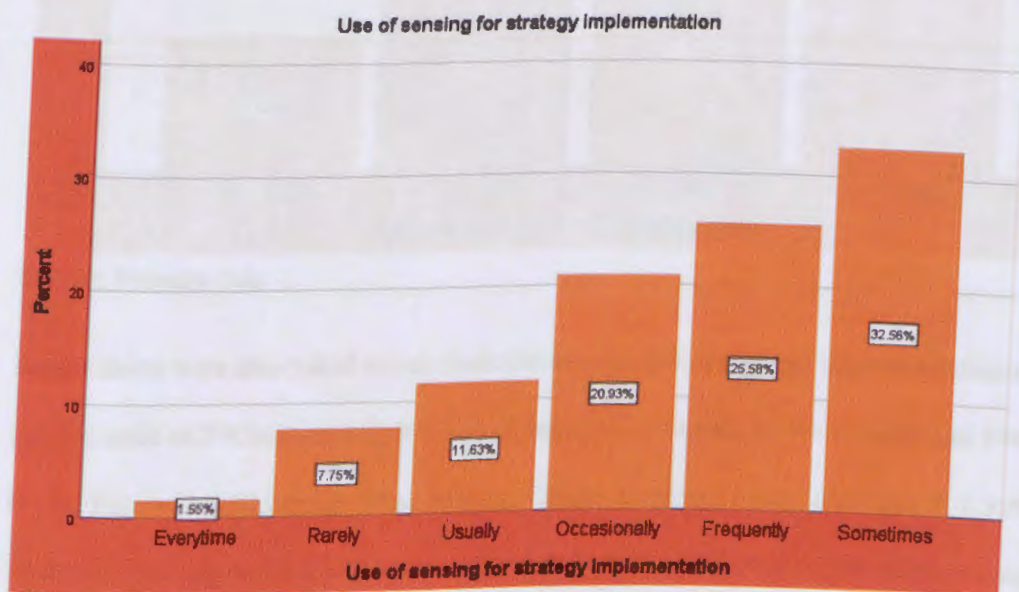
Source: Primary data

When asked to choose which of the strategic planning tool they use the most, the results are as indicated in figure 4-4. As observed, 51.94% of the respondents indicated that they focus more on strategy formulation. Moreover, 31.78% respondents agreed that they concentrate on strategy implementation and 16.28% claim to concentrate on both strategy implementation and strategy formulation. Interestingly, these results replicate with minor discrepancy the results by a study that uncovered that only 40% of administrators appraised their companies as being fruitful at strategy execution (British Academy of Management, 2013). This discussion has been controversial over the years. Researchers

have argued that it is ideal for management of companies to focus more on strategy implementation as opposed to strategy formulation (Matich & Zheltenkov, 2020). This outcome is therefore a cause of concern.

Sensing is the first construct of dynamic capabilities. There are few studies that examine the use of sensing for strategy implementation despite its potential influence to strategy implementation. For this study, it was imperative to assess how construction companies in Namibia utilise sensing for strategy implementation.

Figure 4-5. Use of sensing for strategy implementation

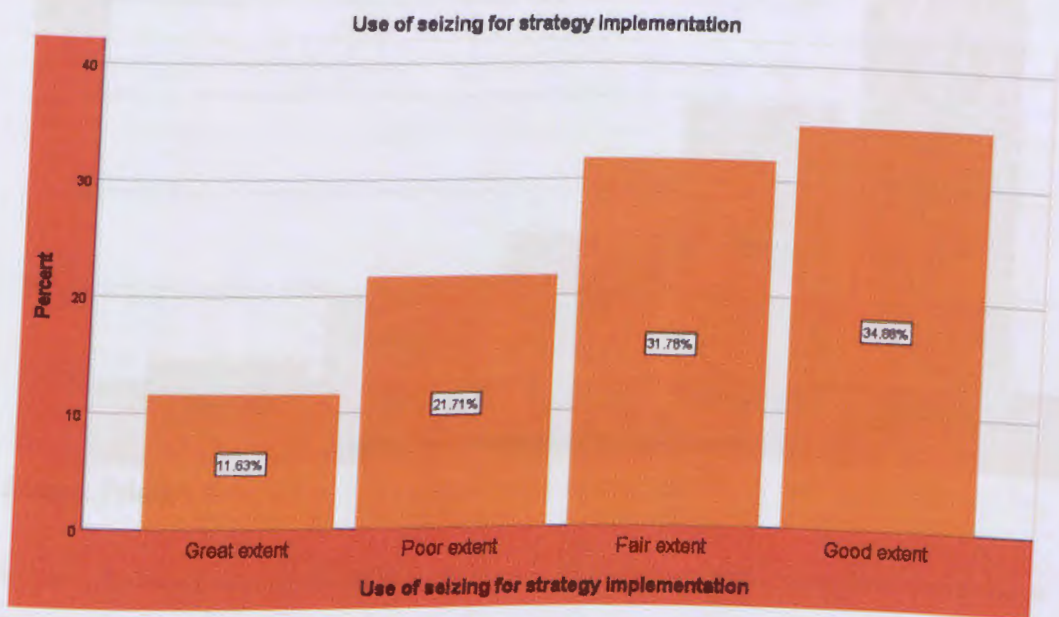


Source: Primary data

When asked how they would rate the frequency use of sensing as a strategy implementation tool on a scale of 1 =Rarely, 2=Occasionally, 3=Sometimes, 4=Frequently, 5=Usually and 6=Every time. Figure 4-5 illustrates the results of this question. Interestingly, only 1.55% indicated that they use sensing every time. Most of the respondents indicated that they use sensing sometimes (32.56%) and frequently

(25.58%). Other respondents indicated that they use sensing as a strategy implementation tool occasionally (20.93%), usually (11.63%) and rarely (7.75%).

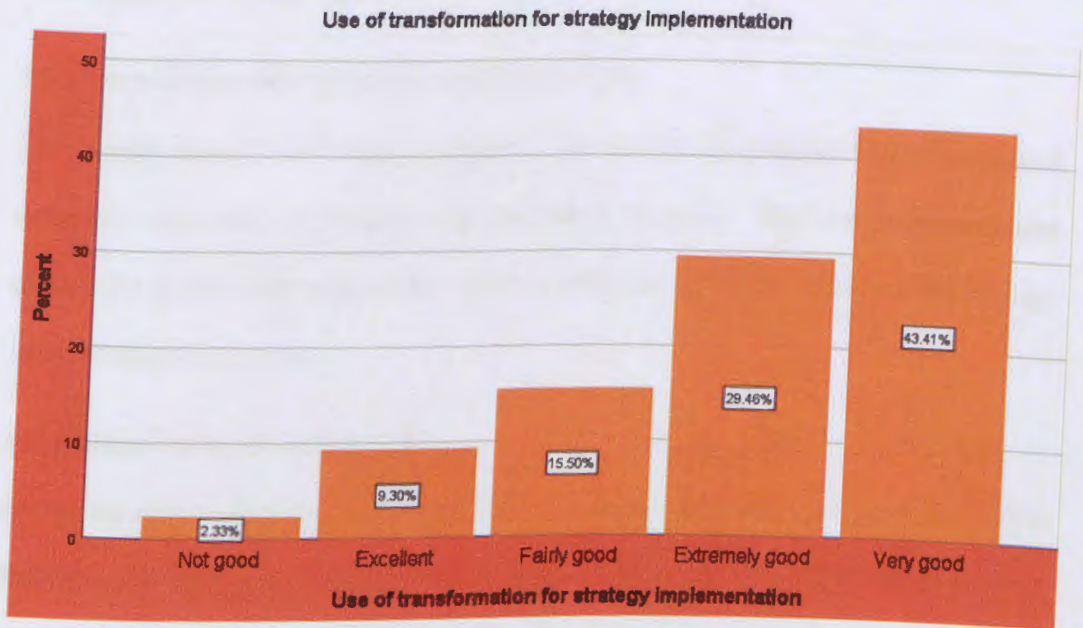
Figure 4-6. Use of seizing for strategy implementation



Source: Primary data

Respondents were also asked to rate their use of seizing as a strategy implementation tool using a scale of 5=Great extent, 4=Good extent, 3=Fair extent, 2= Poor extent and 1=Not at all. Figure 4-6 illustrates these results. Unlike sensing (Every time use = 1.55%), 11.63% of the respondents indicated that they use seizing to a great extent. Whereas most of the respondents indicated that they use seizing as strategy implementation tool to a good extent (34.88%), many of the respondents also indicated that they use it to a fair extent (31.78%). A fair number of respondents indicated that they use seizing to a poor extent (21.71%). Surprisingly, none of the respondents indicated that they did not use seizing as a strategy implementation tool.

Figure 4-7. Use of transformation for strategy implementation



Source: Primary data

When asked to rate their use of transformation as a strategy implementation tool using a scale of 1 = Not good, 2 = Fairly good, 3 = Very good, 4 = Extremely good and 5 = Excellent. Figure 4-7 indicates these results. About 80% of the respondents indicated that they use transformation extensively with the following percentages; (Excellent = 9.3%, Extremely good = 29.46% and Very good = 43.41%). Only 15.50% and 2.33% of the respondents indicated that they use transformation fairly good and not good respectively.

4.4.1 Joint analysis

From the results in figure 4-5, 4-6 and 4-7, it can be observed that most of respondents use transformation the most, followed by seizing then sensing. This according to Matich and Zheltenkov (2020) is the ideal model for strategy implementation where they argue

that the strategy implementation (transformation) should be accorded more effort than strategy formation (sensing).

4.5 Correlation and regression model analysis

The second objective of the study aimed to examine the relationship between dynamic capability constructs and strategy implementation processes. This section presents and discuss the results of the relationship between dynamic capability constructs and strategy implementation processes

4.5.1 Linear analysis assumptions

Before the relationships between the variables could be examined, the regression models that were used were first cleared of the linear analysis assumptions. This section presents the results of the linear analysis assumptions of the data that was analysed. The models were tested for outliers and interdependency of observations. An outlier is an observation that is significantly different from the others in the dataset that in most cases represent a wrongly recorded data. For this test, the residual statistic was used. It is recommended that the data set has a minimum and maximum of -3.29 and 3.29 residual statistic respectively (Khaldi, 2017). For the interdependency of observations, the Durban Watson was used, it was ensured that all the models had a Durban Watson between more than 1 and not exceeding 3.

Table 4-5. Linear analysis assumptions (Sensing and strategy implementation processes)

Model assumptions				
Independent variable	Dependent variable	Residual statistics		Durban Watson
		Min	Max	
Sensing	Staffing	-2.969	2.101	1.144
	Resource development	-2.738	1.868	1.251
	Organisational structure	-3.103	3.032	1.431
	Resource allocation	-3.056	2.654	1.05
	Policy and Procedures	-3.116	2.631	1.139
	Best practices	-3.133	1.938	0.872
	Information and operating systems	-2.934	2.036	1.099
	Rewards and incentives	-3.103	2.09	0.896
	Corporate culture	-2.97	1.55	1.274
	Internal leadership	-2.833	2.07	0.761

Source: Primary data

Table 4-5 illustrates the minimum and maximum residual statistics for sensing and strategy implementation constructs. As seen in the data set, the models all fall within the acceptable range (-3.29 and 3.29) with the lowest value of -3.133 and a maximum value of 3.032. The model was also tested for independence of observation before. The Durban Watson of the data set also fall well within the limits (1 and 3). This means that that all the models were suitable for a linear analysis.

Table 4-6. Linear analysis assumptions (Seizing and strategy implementation processes)

Model assumptions (Seizing)				
Independent variable	Dependent variable	Residual statistics		Durban Watson
		Min	Max	
Seizing	Staffing	-2.085	1.514	1.667
	Resource development	-1.951	2.898	1.737
	Organisational structure	-2.648	2.476	1.585
	Resource allocation	-2.362	2.473	1.966
	Policy and Procedures	-2.057	2.302	1.962
	Best practices	-2.061	2.259	1.599
	Information and operating systems	-1.892	1.706	1.697
	Rewards and incentives	-2.23	2.219	1.632
	Corporate culture	-2.466	1.506	2.085
	Internal leadership	-1.973	1.871	1.87

Source: Primary data

Table 4-6 indicates the minimum and maximum residual statistics for seizing and strategy implementation constructs. As seen in the data set, the models all fall within the acceptable range (-3.29 and 3.29) with the lowest value of -2.648 and a maximum value of 2.898. The model was also tested for independence of observation before. The Durban Watson of the data set also fall well within the limits (1 and 3). This means that that all the models were suitable for a linear analysis.

Table 4-7. Linear analysis assumptions (Transformation and strategy implementation processes)

Model assumptions (Transforming)				
Independent variable	Dependent variable	Residual statistics		Durban Watson
		Min	Max	
Seizing	Staffing	-2.224	2.574	1.7
	Resource development	-1.772	1.966	1.668
	Organisational structure	-2.671	1.527	1.968
	Resource allocation	-1.756	1.986	2.032
	Policy and Procedures	-1.844	1.623	1.71
	Best practices	-2.06	2.095	1.891
	Information and operating systems	-3.282	1.464	1.871
	Rewards and incentives	-1.418	1.582	2.06
	Corporate culture	-2.64	2.358	2.017
	Internal leadership	-2.11	1.89	2.109

Source: Primary data

Table 4-7 displays the minimum and maximum residual statistics for seizing and strategy implementation constructs. As observed in the data set, the models all fall within the acceptable range (-3.29 and 3.29) with the lowest value of -3.282 and a maximum value of 2.574. The model was also tested for independence of observation before. The Durban Watson of the data set also fall well within the limits (1 and 3). This means that that all the models were suitable for a linear analysis.

4.5.2 Correlation and regression analysis (Individual models)

The previous section cleared the regression models of the linear assumptions. This means that the data collected can be used for linear analysis. For regression analysis, the linear equation was used. For correlation analysis, Pearson's correlation coefficient was used. This section presents the regression and correlation analysis results.

Equation 4-1 Pearson's correlation coefficient

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{[n\sum x^2 - (\sum x)^2] \times [n\sum y^2 - (\sum y)^2]}}$$

Where: r = the sample correlation coefficient
 x = the values of the independent variable
 y = the values of the dependent variable
 n = the number of paired data points in the sample

Source: Wegner (2013)

Equation 4-2. Linear equation

$$\hat{y} = b_0 + b_1x$$

Where: x = values of the independent variable
 \hat{y} = estimated values of the dependent variable
 b_0 = y -intercept coefficient (where the regression line cuts the y -axis)
 b_1 = slope (gradient) coefficient of the regression line

Source: Wegner (2013)

As alluded by the conceptual framework, the dynamic capabilities are sensing, seizing and transforming whereas the strategy implementation processes are; staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising internal leadership.

Table 4-8. Correlations analysis and regression model results (Sensing and strategy implementation processes)

Independent Variable	Dependent Variable	Pearson Correlation	Slope	Remarks
1. Sensing	Staffing	.455**	0.517	Positive linear relationship
2. Sensing	Organisational capabilities	.404**	0.303	Positive linear relationship
3. Sensing	Supportive organisational structure	.505**	0.534	Positive linear relationship
4. Sensing	Resource allocation	.367**	0.428	Positive linear relationship
5. Sensing	Instituting policies and procedures	.266**	0.437	Positive linear relationship
6. Sensing	Adopting best practices	.466**	0.535	Positive linear relationship
7. Sensing	Installing information and operating systems	.439**	0.514	Positive linear relationship
8. Sensing	Rewards and incentives	.337**	0.398	Positive linear relationship
9. Sensing	Instilling a corporate culture	.463**	0.520	Positive linear relationship
10. Sensing	Exercising the internal leadership	.402**	0.451	Positive linear relationship

Source: Primary data

Table 4.8 indicates the Pearson's Correlation Coefficient (Pearson's R) and the slope between sensing and strategy implementation processes. Generally, the study found a strong linear correlation between sensing and strategy implementation processes. The study also found a linear relationship between sensing and strategy implementation processes. These findings are consistent with the findings made by a study in Asia (Liu et al., 2018).

This study also found that sensing correlates strongest with supportive organisational structure with a Pearson's R of 0.505. This means that sensing moves the strongest in coordination with supportive organisational structure. Like elsewhere, this is expected as many organisations would bench mark their structures with other company structures within the same industry. Moreover, this correlation conforms to the descriptive findings

of a study by Ahmady, Mehrpour and Nikooravesh (2016) that signifies the importance of bench marking company structure with industrial standards. Adopting best practices was found to correlate quite strongly with sensing with a Pearson's R of 0.466 as well. This finding is logical since a company has to sense the business environment to adopt good practices being done elsewhere (Hansen, 2012; Hargadon & Sutton, 2016; Szulanski, 2018). Other variables that were found to have a strong relation with sensing are: staffing, instilling a corporate culture, installing information and operating systems, organisational capabilities and exercising internal leadership. Whereas the correlation between sensing and the following variable is justified to be high: staffing, instilling a corporate culture, installing information and operating systems given that companies scout competent employees from other companies, may adopt good a corporate culture from other companies and may replicate technologies from other companeis as well. The strong correlation between sensing and internal processes is peculiar. As the finding suggests, internal leadership as an organisations' internal arrangement as such is not expected to be influended by auditing the external environment (sensing) (Merkus, Willems, & Veenswijk, 2019).

On the other hand, correlation between sensing and instituting policies and procedures, rewards and incentives, and resource allocation were found to be weaker in comparison to other strategy implementation processes with a Pearson's R of 0.266, 0.337 and 0.367 respectively. This is probably because they are not directly influenced by sensing. As argued by Busu (2018), the weak correlation between these variables could probably be ascribed to instituting policies and procedures, rewards and incentives, and resource allocation are internal organisational processes whereas sensing is an audit into the

external environment. Although the correlation is weak in comparison to the other variables, it is strong enough to imply a significant effect.

Table 4-9. Correlations analysis and regression model results (Seizing and strategy implementation processes)

Independent Variable	Dependent Variable	Pearson Correlation	Slope	Remarks
1. Seizing	Staffing	0.692	0.800	Positive linear relationship
2. Seizing	Organisational capabilities	0.645	0.462	Positive linear relationship
3. Seizing	Supportive organisational structure	0.691	0.781	Positive linear relationship
4. Seizing	Resource allocation	0.736	0.835	Positive linear relationship
5. Seizing	Instituting policies and procedures	0.716	0.786	Positive linear relationship
6. Seizing	Adopting best practices	0.646	0.773	Positive linear relationship
7. Seizing	Installing information and operating systems	0.666	0.599	Positive linear relationship
8. Seizing	Instilling a corporate culture	0.633	0.725	Positive linear relationship
9. Seizing	Tying rewards and incentives	0.661	0.657	Positive linear relationship
10. Seizing	Exercising the internal leadership	0.773	0.844	Positive linear relationship

Source: Primary data

Table 4.9 illustrates the Pearson's Correlation Coefficient (Pearson's R) and the slope between seizing and strategy implementation processes. Generally, the study found a strong linear correlation between sensing and strategy implementation processes. The study also found a linear relationship between sensing and strategy implementation processes. These findings are consistent with the findings made by a study in Asia (Liu et al., (2018).

The strongest correlation with seizing was found to be in exercising internal leadership with a Pearson's R of 0.773. This probably implies seizing business opportunities as internal leaders fulfil their role. Findings by Lee (2018) alludes to the significance of this

relationship by claiming a positive relationship between organisational leadership and company performance which is confirmed by this study.

This study also found the relationship between resource allocation and instituting policy and procedures, and seizing to be among the strongest with a Pearson's R of 0.736 and 0.716 respectively. These findings are not peculiar as companies need to allocate resources to harness business opportunities and strengthen internal processes to assist with seizing new opportunities. The resource based view theory speaks to the above (Andrew, 2018).

Furthermore, this study found a strong correlation between seizing and the following strategy implementation processes as follows; staffing = 0.692, organisational capabilities = 0.645, supportive organisational structure = 0.691, adopting best practices = 0.646, installing information and operating systems = 0.666, tying rewards and incentives = 0.633 and instilling a corporate culture = 0.661. Although not as strong as resource allocation, instituting policies and procedures, and exercising the internal leadership, the correlation is adequately strong to imply a noticeable effect. In fact, the correlation is almost as strong as other variables. These results are an indication of how critical seizing is to strategy implementation in comparison to sensing.

Table 4-10. Correlations analysis and regression model results (transformation and strategy implementation processes)

Independent Variable	Dependent Variable	Pearson Correlation	Slope	Remarks
1. Transforming	Staffing	0.734	0.797	Positive linear relationship
2. Transforming	Organisational capabilities	0.570	0.369	Positive linear relationship
3. Transforming	Supportive organisational structure	0.663	0.599	Positive linear relationship
4. Transforming	Resource allocation	0.674	0.742	Positive linear relationship
5. Transforming	Instituting policies and procedures	0.759	0.733	Positive linear relationship
6. Transforming	Adopting best practices	0.577	0.577	Positive linear relationship
7. Transforming	Installing information and operating systems	0.595	0.582	Positive linear relationship
8. Transforming	Tying rewards and incentives	0.709	0.678	Positive linear relationship
9. Transforming	Instilling a corporate culture	0.686	0.666	Positive linear relationship
10. Transforming	Exercising the internal leadership	0.738	0.837	Positive linear relationship

Source: Primary data

Table 4.10 indicates the Pearson's Correlation Coefficient (Pearson's R) and the slope between transforming and strategy implementation processes. Generally, the study found a strong linear correlation between sensing and strategy implementation processes. The study also found a linear relationship between sensing and strategy implementation processes. These findings are consistent with the findings made by a study in Asia (Liu et al., 2018).

The study found that transforming correlate strongest with instituting policies and procedures with a Pearson's R of 0.759. According to Thompson, Peteraf, Gamble, and Strickland (2016) targeted policy intervention are pivotal to strategy implementation. In other words, policy intervention is pivotal to strategy implementation. The strong

correlation between transforming and instituting policies and procedures is therefore supported by the sentiments of Thompson, Peteraf, Gamble, and Strickland (2016).

Although not as strong as instituting policies and procedures, the study also found a strong correlation between transforming and Staffing, Tying rewards and incentives, and Exercising the internal leadership with a Pearson's R of 0.734, 0.709 and 0.738 respectively. This means that transforming the company will influence staffing and, rewards and incentives. This strong correlation is expected when companies are experiencing a transformation, they would ordinarily hire staff members to assist with leading the company to execute the new transformation. Moreover, companies will ordinarily also introduce rewards and incentives to expedite the transformation (Merkus, Willems, & Veenswijk, 2019).

Equally, though not as strong as the latter mentioned variables, the study found a strong correlation between transforming and the following variables as follow: organisational capabilities = 0.570, supportive organisational structure = 0.663, resource allocation = 0.674, adopting best practices = 0.577, installing information and operating systems = 0.595, and instilling a corporate culture = 0.686. None of the above findings are peculiar.

4.5.3 Hypothesis testing

This section presents the findings on testing the hypotheses that are assumed in this study.

The hypotheses are:

- H_0 : The use of dynamic capabilities (sensing, seizing and transforming) does not have a positive-linear relationship with strategy implementation processes (staffing, organisational capabilities, supportive organisational structure, resource

allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership).

As discussed in the previous section, there is a strong positive linear correlation between dynamic capabilities as strategy implementation processes. The sample evidence is therefore not strong enough to support the null] hypothesis.

- H_A: The use of dynamic capabilities (sensing, seizing and transforming) has a positive-linear relationship with strategy implementation processes (staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership).

The study found strong sample evidence in support of the alternative hypothesis. Therefore, it is probably true that dynamic capabilities can influence strategy implementation processes positively.

4.5.3 Correlations and regression analysis (Intergrated models)

After the analysis of the individual linear models in the previous section, it was necessary to formulate an integrated concept which provides a holistic view of the effect of dynamic capability constructs on strategy implementation as a whole. Table 4-11 indicates the average results of all the models (Sensing, Seizing and Transforming).

Table 4-11. Correlation and linear analysis (integrated model)

	Sensing	Seizing	Transformation
Average Pearson' R	0.410	0.686	0.671
Average Slope	0.464	0.726	0.658
Percentage Pearson's R	23	39	38
Percentage Slope	25	39	36
Average percentage (Pearson's R and Slope)	24	39	37

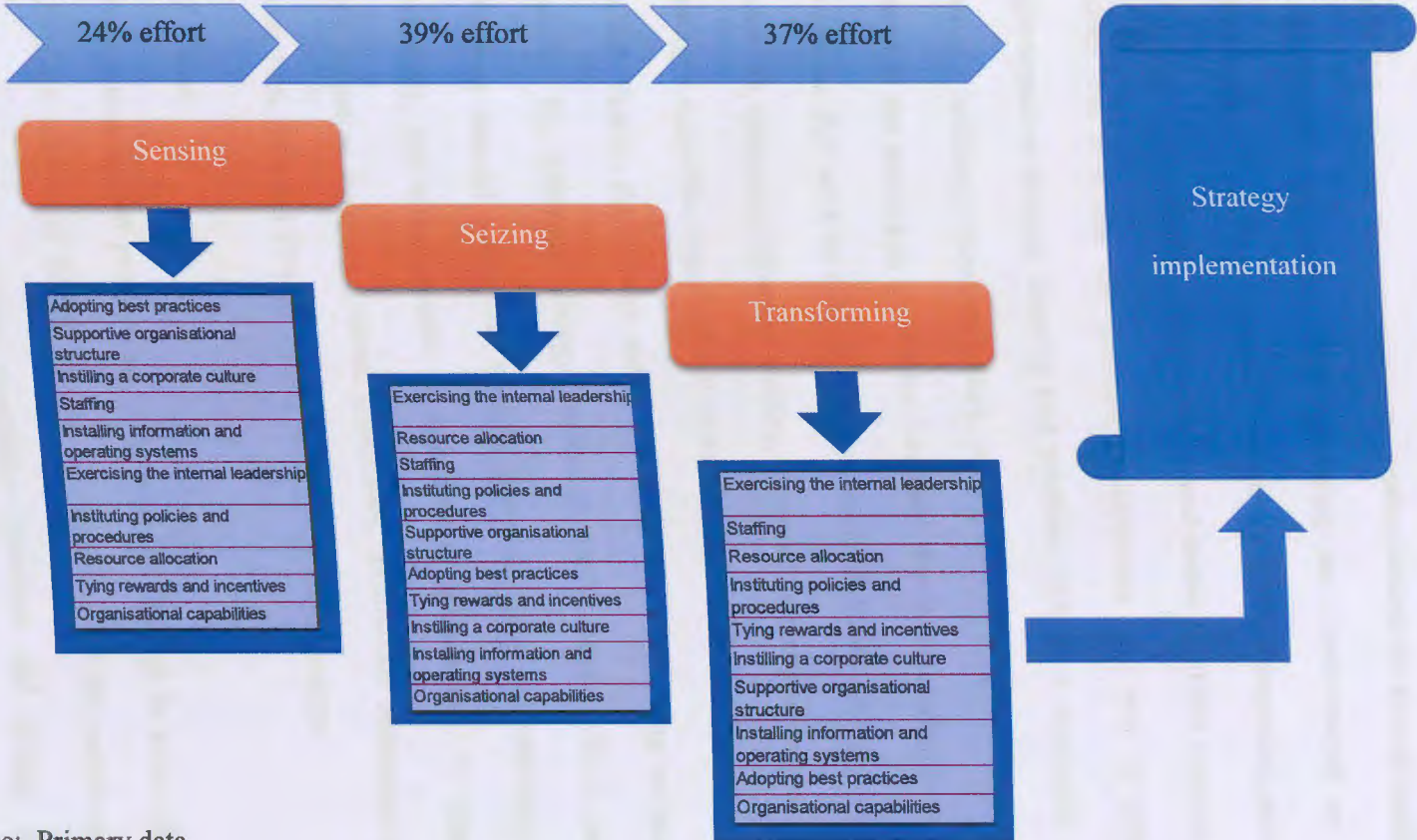
Source: Primary data

These averages summarise how each dynamic capability affects strategy implementation processes. On average the combined effect of sensing on strategy implementation processes is 24% and that of seizing and transforming is 39% and 37% respectively. These percentages are derived from the average combination of Pearson's R results and the slope. In brief, the results seem to suggest that seizing affects strategy implementation processes the most, followed by transformation and then sensing. These results indicate that more work must be invested in seizing and transformation compared to sensing. Surprisingly, these results replicate with small discrepancy the result in section 4.4 wherein respondents were requested to rate the use of each dynamic capability.

4.6 Strategic use of dynamic capabilities for strategy implementation

The previous section analysed the correlation and linearity between dynamic capability constructs and strategy implementation processes. As it is the third objective of the study, this section aims to create a strategic concept that could be used by Namibian construction companies to improve strategy implementation by using dynamic capabilities as an enabler. This section used data from the previous section as input.

Figure 4-8. Strategic concept for strategy implementation using dynamic capabilities



Source: Primary data

Figure 4-8 indicates the generated value creation concept for strategy implementation by using dynamic capabilities. Sensing, seizing and transformation are the strategy implementation constructs. Beneath them are strategy implementation processes in order of linearity and correlation with the respective dynamic capability construct. The concept implies that it is best for construction companies who wish to enhance strategy implementation through adopting best practices such as: a supportive organisational structure, instilling a corporate culture, staffing and installing information and operating system to use sensing as an enabler. Similarly, the concept suggests that it is best for companies that wish to enhance strategy implementation through exercising internal leadership, allocating resources, staffing, instituting proper policies and procedures, and creating a supportive organisational structure to use seizing business opportunities as an enabler. Finally, the concept seems to suggest that by focusing on transforming the business, the following strategy implementation processes will be best improved: exercising internal leadership, staffing, resource allocation, instituting policies and procedures, and tying rewards to incentives to performance. To enhance strategy implementation by using dynamic capabilities, construction companies are advised to invest 24%, 39% and 37% on sensing, seizing and transformation.

4.7 T-test

The previous section provides an analysis of the findings in terms of the Pearson's correlation coefficient which informs the researcher of the nature and strength of relationship between dynamic capabilities constructs and strategy implementation processes. Furthermore, the section confirms the linearity between dynamic capability constructs and strategy implementation processes. This section subjects the study results

to a t-test to confirm whether the effect on the dependent variable is indeed caused by the independent variable.

4.7.1 Testing philosophy

This test aims to establish whether the effect of dynamic capabilities on strategy implementation processes is proportional to the use of the dynamic capability constructs.

If this is the case, then it is expected that the mean difference between the two variables under scrutiny are equivalent to 0. Thus, the Null and Alternative hypothesis are as follow:

Null Hypothesis; $H_0: \mu_1 - \mu_2 = 0$

Alternative Hypothesis $H_0: \mu_1 - \mu_2 \neq 0$

Where;

μ_1 = Mean of independent variables

μ_2 = Mean of dependent variables

The testing was done as follow:

Testing method: Matched pair sample t-test

Confidence level: 90% at 10% significance level.

4.7.2 Hypothesis testing analysis

Table 4.12 indicates the results for the t-test conducted between sensing as an independent variable and strategy implementation processes as a dependent variable.

Table 4-12. T-test results (Sensing and Strategy implementation processes)

		Paired Samples Test						Significance		
		Paired Differences				t	df	One-Sided p	Two-Sided p	
		Mean	Std. Deviation	Std. Error Mean	90% Confidence Interval of the Difference					
					Lower	Upper				
Pair 1	1. Sensing - Staffing	.279	1.262	.111	.095	.463	2.511	128	.007	.013
Pair 2	2.Sensing - Organisational capabilities	.884	1.401	.123	.679	1.088	7.164	128	<.001	<.001
Pair 3	3. Sensing - Supportive organisational structure	.171	1.167	.103	.000	.341	1.660	128	.050	.099
Pair 4	4. Sensing - Resource allocation	.008	1.253	.110	-.175	.191	.070	128	.472	.944
Pair 5	5. Sensing - Instituting policies and procedures	.124	1.323	.116	-.069	.317	1.065	128	.144	.289
Pair 6	6. Sensing - Adopting best practices	.194	1.287	.113	.006	.382	1.710	128	.045	.090
Pair 7	7. Sensing - Installing information and operating systems	.264	1.202	.106	.088	.439	2.490	128	.007	.014
Pair 8	8. Sensing - Tying rewards and incentives	-.047	1.430	.126	-.255	.162	-.369	128	.356	.712
Pair 9	9. Sensing - Instilling a corporate culture	.357	1.185	.104	.184	.529	3.419	128	<.001	<.001
Pair 10	10. Sensing - Exercising the internal leadership	.287	1.232	.109	.107	.467	2.643	128	.005	.009

Source: Primary data

From table 4-12, it can be observed that the t-statistics denoted as “t” in the table all fall out of the lower and upper ranges apart from that of resource allocation. The following conclusion is therefore drawn:

Statistical conclusion 1: Reject H_0 at the 10% level of significance. The sample evidence is strong enough to reject H_0 in favour of H_1 at a significance level of 0.10. The alternative hypothesis is therefore probably true for the mean difference of sensing and the following variables: staffing, organisational capabilities, supportive organisational structure, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership.

Statistical conclusion 2: Accept H_0 at the 10% level of significance. The sample evidence is not strong enough to reject H_0 in favour of H_1 at a significance level of 0.10. The null hypothesis is therefore probably true for the mean difference of sensing and resource allocation.

Interpretation of conclusions: For the following variables :Staffing, Organisational capabilities, Supportive organisational structure, Instituting policies and procedures, adopting best practices, Installing information and operating systems, Rewards and Incentives, Instilling a corporate culture and Exercising the internal leadership, this study did not find strong evidence to suggest that the rate at which companies in the construction industry use sensing as a strategy implementation tool is equivalent to the effect on the strategy implementation processes.

For resource allocation, the study found that there is a chance that the rate at which sensing is used in the construction industry will have the same effect on allocating resources in construction companies.

Table 4.13 indicates the results for the t-test conducted between seizing as an independent variable and strategy implementation processes as dependent variables.

(Table 4.13 content is extremely faint and illegible)

Table 4-13. T-test results (Seizing and Strategy implementation processes)

		Paired Samples Test						Significance		
		Paired Differences		Std. Error Mean	90% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
		Mean	Std. Deviation		Lower	Upper				
Pair 1	1. Seizing - Staffing	-.140	.778	.069	-.253	-.026	-2.037	128	.022	.044
Pair 2	2. Seizing - Organizational capabilities	.403	1.108	.098	.242	.565	4.133	128	<.001	<.001
Pair 3	3. Seizing - Supportive organizational structure?	-.085	.839	.074	-.208	.037	-1.155	128	.125	.250
Pair 4	4. Seizing - Resource allocation	-.295	.795	.070	-.410	-.179	-4.211	128	<.001	<.001
Pair 5	5. Seizing - Instituting policies and procedures	-.178	.861	.076	-.304	-.053	-2.352	128	.010	.020
Pair 6	6. Seizing - Adopting best practices	-.465	.857	.075	-.590	-.340	-6.161	128	<.001	<.001
Pair 7	7. Seizing - Installing information and operating systems	-.101	.818	.072	-.220	.019	-1.399	128	.082	.164
Pair 8	8. Seizing - Tying rewards and incentives	-.380	.877	.077	-.508	-.252	-4.921	128	<.001	<.001
Pair 9	9. Seizing - Instilling a corporate culture	.101	.779	.069	-.013	.214	1.469	128	.072	.144
Pair 10	10. Seizing - Exercising the internal leadership	-.047	.860	.058	-.143	.050	-.801	128	.212	.425

Source: Primary data

From table 4-13, it can be observed that the t-statistics denoted as “t” in the table all fall out of the lower and upper limits. The following conclusion is therefore drawn:

Statistical conclusion 1: Reject H_0 at the 10% level of significance. The sample evidence is strong enough to reject H_0 in favour of H_1 at a significance level of 0.10. The alternative hypothesis is therefore probably true for the mean difference of seizing and the following variables: staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership.

Interpretation of conclusions: For the following variables :staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership, this study did not find strong evidence to suggest that the rate at which companies in the construction industry use seizing as a strategy implementation tool is equivalent to the effect on the strategy implementation processes.

Table 4.14 indicates the results for the t-test conducted between seizing as an independent variable and strategy implementation processes as dependent variables.

Table 4-14. T-test results (Transforming and Strategy implementation processes)

		Paired Samples Test					Significance			
		Paired Differences			90% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper				
Pair 1	1. Transforming - Staffing	-.093	.805	.071	-.210	.024	-1.313	128	.096	.192
Pair 2	2. Transforming - Organisational capabilities	.597	1.176	.104	.425	.768	5.765	128	<.001	<.001
Pair 3	3. Transforming - Supportive organizational structure?	.093	.814	.072	-.026	.212	1.297	128	.098	.197
Pair 4	4. Transforming - Resource allocation	-.419	.797	.070	-.535	-.302	-5.962	128	<.001	<.001
Pair 5	5. Transforming - Instituting policies and procedures	-.202	.722	.064	-.307	-.096	-3.170	128	<.001	.002
Pair 6	6. Transforming - Adopting best practices	-.302	.932	.082	-.438	-.166	-3.684	128	<.001	<.001
Pair 7	7. Transforming - Installing information and operating systems	.171	.867	.076	.044	.297	2.234	128	.014	.027
Pair 8	8. Transforming - Tying rewards and incentives	-.256	.742	.065	-.364	-.148	-3.913	128	<.001	<.001
Pair 9	9. Transforming - Instilling a corporate culture	-.047	.799	.070	-.163	.070	-.661	128	.255	.510
Pair 10	10. Transforming - Exercising the internal leadership	-.031	.706	.062	-.134	.072	-.499	128	.308	.619

Source: Primary data

From table 4-14, it can be observed that the t-statistics denoted as "t" in the table all fall out of the lower and upper limits. The following conclusion is therefore drawn:

Statistical conclusion 1: Reject H_0 at the 10% level of significance. The sample evidence is strong enough to reject H_0 in favour of H_1 at a significance level of 0.10. The alternative hypothesis is therefore probably true for the mean difference of transforming and the following variables: staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership.

Interpretation of conclusions: For the following variables: staffing, organisational capabilities, supportive organisational structure, resource allocation, instituting policies and procedures, adopting best practices, installing information and operating systems, rewards and incentives, instilling a corporate culture and exercising the internal leadership, this study did not find strong evidence to suggest that the rate at which companies in the construction industry use transformation as a strategy implementation tool is equivalent to the effect on the strategy implementation processes.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the discussion, provides recommendations and concludes the study in line with the objectives of the research. The chapter also identifies areas for future research.

5.2 Discussion summary

The aim of the study was to examine the use of dynamic capabilities for strategy implementation in construction companies in Swakopmund. Furthermore, the study endeavoured to investigate the relationship between dynamic capabilities and strategy implementation processes.

Use of dynamic capabilities for strategy implementation

In investigating the use of dynamic capabilities for strategy implementation, the study found that most of the construction companies use seizing more than transformation. The study also found that construction companies use sensing the least. These findings are in line with the proposed methodology by Matich and Zheltenkov (2020).

The relationship between dynamic capabilities and strategy implementation

In studying the relationship between dynamic capability constructs and strategy implementation processes, generally, the study found a strong positive linear relationship. These findings conform to the findings by Liu et al. (2018) from a similar study undertaken in Asia.

Specifically, the study found that sensing affects the following variables the most: 1. adopting best practices, 2. supportive organisational structure, 3. instilling a corporate culture, 4. staffing, 5. installing information and operating systems. According to Ahmady, Mehrpour, and Nikooravesh (2016), the relationship between sensing and adopting best practices is expected to be strong as companies audit their business environment for benchmarking.

Furthermore, the study established that seizing correlates strongest with the following variables: 1. exercising the internal leadership, 2. resource allocation, 3. staffing, 4. instituting policies and procedures, 5. supportive organisational structure. This probably implies that leadership is required to seize business opportunities as is the finding by Lee (2018) where he found a strong relationship between company performance and organisational leadership.

Finally, the study found that transformation affects the following strategy implementation processes the most: 1. exercising the internal leadership, 2. staffing, 3. resource allocation, 4. instituting policies and procedures, 5. tying rewards and incentives. Yet again, leadership comes first in transforming the organisation. These findings have been anticipated by Thompson, Peteraf, Gamble, and Strickland (2016).

Strategy to use dynamic capabilities for strategy implementation

In the final results, the study designed a strategy implementation technique using dynamic capabilities as an enabler. This concept suggests that 24% effort should be invested in sensing, 39% in seizing and 37% in transforming.

Despite the strong linear positive correlation between dynamic capabilities and strategy implementation processes, the results from the t-test indicate that it could not verify at 90% confidence level that the effect on strategy implementation could be attributed to dynamic capabilities alone. This is perhaps because strategy implementation is a complex practice and other variables that may not have been part of this study could have contributed.

5.3 Recommendations

In light of the findings from the study, the following recommendations are submitted to improve strategy implementation by using dynamic capabilities:

Contrary to the current practice, there should be a strong focus on strategy implementation than strategy formulation.

There is a need to improve exercising internal leadership, resource allocation, staffing of the organisation with employees, instituting policies and procedures, and to establish a supportive organisational structure, use seizing as an enabler.

In addition, there is also a need to improve exercising internal leadership, staffing the organisation, resource allocation, instituting policies and procedures, tying rewards and incentives to performance, use transformation as an enabler.

Furthermore, there is a need to enhance adopting best practices, establishing a supportive organisational structure, instilling a good corporate culture, staffing the organisation with personnel, and installing information and operating systems, use sensing as enabler.

Finally, there is a need to use dynamic capabilities as an enabler for strategy implementation, invest 24% effort in sensing, 39% in seizing and 37% in transforming the organisation.

5.3 Conclusion

The essence of the study was to examine the use of dynamic capabilities for strategy implementation. The first objective of the study was to examine the extent to which construction companies in Swakopmund utilise dynamic capabilities for strategy implementation. The second objective of the study was to examine the relationship between dynamic capability constructs and strategy implementation processes. The last objective of the study was to determine how construction companies in Swakopmund could use dynamic capabilities for strategy implementation.

In studying the use of strategy implementation processes and dynamic capabilities in the construction industry, the findings from the research discovered that construction companies in Swakopmund focus more on strategy formulation than strategy implementation. In addition, the study discovered that most of the construction companies use dynamic capabilities in the following order; 1. transformation, 2. seizing and 3. sensing.

In studying the relationship between strategy implementation processes and dynamic capability constructs, the study found that strategy implementation processes correlate strongest with seizing, followed by transformation and weakest with sensing. Specifically, the study found that seizing affects strategy implementation processes in the following order (Greatest to least); 1. exercising the internal leadership, 2. resource allocation, 3. staffing, 4. instituting policies and procedures, 5. supportive organisational structure, 6.

adopting best practices, 7. tying rewards and incentives, 8. instilling a corporate culture, 9. installing information and operating systems, 10. organisational capabilities. Similarly, the study found that transformation affects strategy implementation processes in the following order; 1. exercising the internal leadership, 2. staffing, 3. resource allocation, 4. instituting policies and procedures, 5. tying rewards and incentives, 6. instilling a corporate culture, 7. supportive organisational structure, 8. installing information and operating systems, 9. adopting best practices, 10. organisational capabilities. Finally, the study found that sensing affects strategy implementation processes in the following order; 1. adopting best practices, 2. supportive organisational structure, 3. instilling a corporate culture, 4. staffing, 5. installing information and operating systems, 6. exercising the internal leadership, 7. instituting policies and procedures, 8. resource allocation, 9. tying rewards and incentives, 10. organisational capabilities.

In formulating a concept that could be used by construction companies to better implement their business strategies by using dynamic capabilities, the study found that it would be best if they invest 24% of their effort in sensing the business environment, 39% on seizing business opportunities and 37% on transforming their businesses to pursue business opportunities.

5.4 Areas for future research

As is the case with any other study, this study was hindered by a number of limitations. Firstly, the study was executed at a time of the Covid-19 pandemic and this limited the study in the data collection phase as respondents were reluctant to participate due to the fear of contracting the virus. Furthermore, self-administered questionnaires were designed to allow anyone (who may not be suitable) to respond. Since the study was directed to the

middle to upper management of the construction companies, it was critical that it was them that filled in the questionnaire. To ensure that the questionnaire was responded by middle to upper management personnel, the questionnaire explicitly stated that it was directed to these group of personnel.

Research being an ongoing endeavour, future studies could focus on expanding the scope of the study to the entire construction industry of Namibia. In terms of methodology, future studies could also use multiple regression in place of simple regression to have a holistic view of how variables interrelate. Finally, future studies could focus on determining the cause of failure of the variables to pass the t-test.

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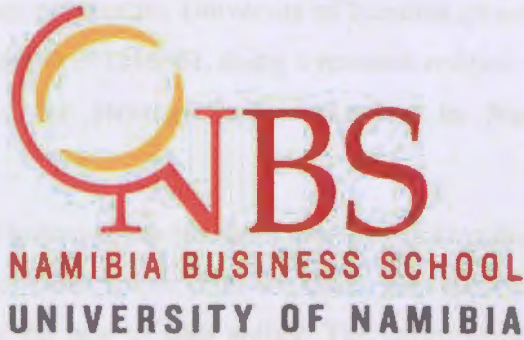
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NAME : HOSEA HASHOLI
NOF LEVEL : 3
PROGRAM : MASTER OF BUSINESS STRATEGY
SUPERVISOR : DR P. SIWADI

QUESTIONNAIRE

Title: Examining the use of dynamic capabilities for strategy implementation in Namibia's construction industry

Appendix A – Research questionnaire



FACULTY OF ECONOMICS AND MANAGEMENT SCIENCES

DEPARTMENT OF BUSINESS MANAGEMENT

NAME : HOSEA HASHILI
NQF LEVEL : 9
PROGRAM : MASTER OF BUSINESS STRATEGY
SUPERVISOR : DR P. SIWADI

QUESTIONNAIRE

Title: Examining the use of dynamic capabilities for strategy implementation in Namibia’s construction industry

QUESTIONNAIRE

The researcher is a student from the University of Namibia (Namibia Business School), student registration number **201210951**, doing a research entitled: **Examining the use of dynamic capabilities for strategy implementation in Namibia's construction industry.**

You are kindly invited to answer the questions below by ticking the applicable answer and writing in the space provided below. You are kindly requested to answer the questions freely and honestly to the best of your ability. The information will be used only for academic purposes and will be treated with utmost confidentiality. The information will assist the government and construction companies in making informed decisions. Your cooperation is greatly appreciated.

Q.No	Description	Scale
1	Position: Head of the following best describe your position in the company	1 = Owner/owner 2 = Executive 3 = Senior Manager 4 = Middle Manager 5 = Specialist
2	Education: Highest qualification of your degree	1 = Certificate 2 = Diploma 3 = Degree 4 = Honours 5 = Postgraduate 6 = No formal qualifications
3	Years of service: How long the participant has worked for the company	1 = Less than 3 years 2 = 3-5 years 3 = 6-10 years 4 = 11-15 years 5 = More than 15 years
4	Years of practice: How long the participant has worked in the construction industry	1 = Less than 3 years 2 = 3-5 years 3 = 6-10 years 4 = 11-20 years 5 = More than 20 years

SECTION A: GENERAL INFORMATION

Please indicate your choice by ticking the appropriate box.

	Variable	Description	Code
1	Gender	Gender of participant	1=Male 2=Female 3. Others
2	Age	Age of participant	1=25 and below 2=25-35yrs 3=36-46yrs 4=46-55yrs 5=56 and above
3	Position	Which of the following best describe your position in the company	1 = Sole owner 2 = Director 3 = Senior Manager 4. Middle Manager 5. Strategist
3	Qualification	Highest qualification of participant	1 = Certificate 2 = Diploma 3 =Degree 4 =Masters 5 =Doctorate 6 = No formal qualification
4	Years of service	How long the participant has been with the company	1 =less than 3years 2 = 3-5years 3 = 6-10years 4=11-20 years 5=more than 20 years
5	Years of practise	How long is your company in the construction industry	1 =less than 3years 2 = 3-5years 3 = 6-10years 4=11-20 years 5=more than 20 years

1	Staffing	To what extent does your firm identify business opportunities that would help the organization to get managers and employees capable of executing your business strategy well?	5=Great extent 4=Good extent 3=Fair extent 2=Poor extent 1=Not at all
		How effective is this with equipping the organisation with managers and employees that are capable of strategy implementation?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
2	Resource development	How frequent does your firm identify business opportunities that would help with developing the resources required for successful strategy implementation?	1 =Rarely 2=Occasionally 3=Sometimes 4=Frequently 5=Usually 6=Every time
		How good is this with developing the resources required for successful strategy implementation?	1 = Not good 2 =Fairly good 3= Very good 4= Extremely good 5= Excellent
3	Organisational structure	To what extent do you agree/disagree with the following statement? “Identifying business opportunities can help with creating a strategy-supportive organizational structure.”	5=Strongly agree 4=Agree 3=Neutral 2=Disagree 1=Strongly disagree
		How good is this with creating a strategy-supportive organizational structure.	1 =Poor 2 =Fair 3= Good 4=Very good 5=Excellent
4	Resource allocation	How does your firm prioritise seeking business opportunities that would help with allocating sufficient resources for strategy implementation?	1 =Not a priority 2=Low priority 3=Medium priority 4=High priority 5=Essential
		How effective is this with allocating sufficient resources for strategy implementation?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective

5	Policy and Procedures	To what extent does your firm identify business opportunities that would help with instituting policies and procedures that facilitate strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How effective is this with instituting policies and procedures that facilitate strategy implementation.	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
6	Best practices	To what extent does your firm prefer identifying business opportunities that would help with adopting best practices that would drive continuous improvement in strategy implementation activities?	5=Greatly prefer 4=Prefer 3=Fairly Prefer 2=Somewhat prefer 1=Do not prefer
		How much influence does this have on adopting best practices to drive continuous improvement in strategy implementation activities?	1 =1–20% Little influence 2 =21–40% Fair influence 3=41–60% Moderate influence 4=61–80% High influence 5=81–100% Very high influence
7	Information and operating systems	How frequent does your firm identify business opportunities to help with installing information and operating systems that enable company personnel to carry out their strategic roles proficiently?	5= Very frequent 4=More frequent 3=Fairly frequent 2= Poorly frequent 1=Not frequent
		How helpful is this with installing information and operating systems that enable company personnel to carry out their strategic roles proficiently?	1 =Not helpful 2 = A little helpful 3= Helpful 4= Very helpful 5= Extremely helpful
8	Rewards and incentives	To what extent does your firm identify business opportunities to help with tying rewards and incentives directly to the achievement of strategic and financial targets?	5=Great extent 4=Good extent 3=Fair extent 2= Poor extent 1=Not at all

		How effective is this with tying rewards and incentives directly to the achievement of strategic and financial targets.	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
9	Corporate culture	To what extent does your firm identify business opportunities to help with instilling a corporate culture that promotes good strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2= Poor extent 1=Not at all
		How helpful is this with instilling a corporate culture that promotes good strategy implementation?	1 =Not helpful 2 = A little helpful 3= Helpful 4= Very helpful 5= Extremely helpful
10	Internal leadership	Your firm identifies business opportunities to help with exercising the internal leadership needed to propel strategy implementation forward?	5=Strongly agree 4=Agree 3=Neutral 2=Disagree 1=Strongly disagree
		How effective is this with exercising the internal leadership needed to propel strategy implementation forward?	1 = Not effective 2 = Slightly effective 3= Effective 4= Very effective 5= Extremely effective

SECTION B: DYNAMIC CAPABILITIES

	Variable	Description	Code
1	Dynamic capabilities	Does your firm use the theory of dynamic capabilities?	3=Yes 2=No 1 = Maybe
2	Strategic planning	Which of the following strategic planning concepts does your firm concentrate more on?	1= Strategy formulation 2=Strategy implementation
3	Sensing	Your firm identifies opportunities in relationship to the entire construction industry of Namibia for strategy implementation?	1 =Rarely 2=Occasionally 3=Sometimes 4=Frequently 5=Usually 6=Every time

4	Seizing	To what extent does your firm mobilise resources to harness new opportunities that have been identified for strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2= Poor extent 1=Not at all
5	Transforming	How good is your firm with realigning its strategy implementation programs in line with new opportunities that it needs to explore?	1 = Not good 2 =Fairly good 3= Very good 4= Extremely good 5= Excellent

SECTION C: STRATEGY IMPLEMENTATION PROCESSES AND SENSING BUSINESS ENVIRONMENT

1	Developing for tomorrow	How well does your firm develop for tomorrow?	1=Very good 2=Fairly good 3=Very good 4=Extremely good 5=Excellent
2	Appropriated resources	To what extent do you appropriate resources to help you achieve your strategy implementation?	1=Strongly agree 2=Agree 3=Disagree 4=Strongly disagree
3	Aligning resources	How good is your firm at aligning resources to help you achieve your strategy implementation?	1=Very good 2=Good 3=Fair 4=Very poor 5=Excellent
4	Business objectives	How clear are the objectives underlying your strategy implementation?	1=Very clear 2=Clear 3=Somewhat clear 4=Not clear 5=Excellent
5	Business objectives	How aligned is the strategy implementation process with your business objectives?	1=Very aligned 2=Aligned 3=Somewhat aligned 4=Not aligned 5=Excellent

1	Staffing	To what extent does your firm mobilise resources to help with staffing the organization with managers and employees capable of executing your business strategy well?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How effective is this with staffing the organization with managers and employees capable of executing the strategy well?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
2	Resource development	How frequent does your firm mobilise resources that would help with developing the assets that are required for successful strategy implementation?	1 =Rarely 2=Occasionally 3=Sometimes 4=Frequently 5=Usually 6=Every time
		How good is this with developing the resources required for successful strategy implementation?	1 = Not good 2 =Fairly good 3= Very good 4= Extremely good 5= Excellent
3	Organisational culture	To what extent do you agree/disagree with the following statement? “mobilising resources can help with creating a strategy-supportive organizational structure.”	5=Strongly agree 4=Agree 3=Neutral 2=Disagree 1=Strongly disagree
		How good is this with creating a strategy-supportive organizational structure?	1 =Poor 2 =Fair 3= Good 4=Very good 5=Excellent
4	Resource allocation	How does your firm prioritise mobilising resources to help with allocating sufficient resources that are required for strategy implementation?	1 =Not a priority 2=Low priority 3=Medium priority 4=High priority 5=Essential
		How effective is this with allocating sufficient resources for strategy implementation?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective

5	Policy and Procedures	To what extent does your firm mobilise resources that would help with instituting policies and procedures that facilitate strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How effective is this with instituting policies and procedures that facilitate strategy implementation?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
6	Best practices	How does your firm prefer mobilising resources to help with adopting best practices that would drive continuous improvement in strategy implementation activities?	5=Greatly prefer 4=Prefer 3=Fairly Prefer 2=Somewhat prefer 1=Do not prefer
		How does this influence adopting best practices to drive continuous improvement in strategy implementation activities?	1 =1–20% Little influence 2 =21–40% Fair influence 3=41–60% Moderate influence 4=61–80% High influence 5=81–100% Very high influence
7	Information and operating systems	How frequent does your firm mobilise resources to help with installing information and operating systems that enable company personnel to carry out their strategic roles proficiently?	5= Very frequent 4=More frequent 3=Fairly frequent 2= Poorly frequent 1=Not frequent
		How helpful is this with installing information and operating systems that enable company personnel to carry out their strategic roles proficiently?	1 =Not helpful 2 = A little helpful 3= Helpful 4= Very helpful 5= Extremely helpful
8	Rewards and incentives	To what extent does your firm mobilise existing and new resources to help with tying rewards and incentives directly to the achievement of strategic and financial targets?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all

		How effective is this with tying rewards and incentives directly to the achievement of strategic and financial targets?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
9	Corporate culture	To what extent does your firm mobilise resources to help with instilling a corporate culture that promotes good strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How helpful is this with instilling a corporate culture that promotes good strategy implementation?	1 =Not helpful 2 = A little helpful 3= Helpful 4= Very helpful 5= Extremely helpful
10	Internal leadership	Your firm mobilise resources to help with exercising the internal leadership needed to propel strategy implementation forward?	5=Strongly agree 4=Agree 3=Neutral 2=Disagree 1=Strongly disagree
		How effective is this with exercising the internal leadership needed to propel strategy implementation forward?	1 = Not effective 2 = Slightly effective 3= Effective 4= Very effective 5= Extremely effective

11. What other strategy implementation processes besides the ones mentioned above do you believe have a significant influence in sensing business opportunities for better strategy implementation?

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SECTION D: STRATEGY IMPLEMENTATION PROCESSES AND SEIZING BUSINESS OPPORTUNITIES

11. What other strategy implementation processes besides the ones mentioned above do you believe have a significant influence in seizing business opportunities for better strategy implementation?

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SECTION E: STRATEGY IMPLEMENTATION PROCESSES AND TRANSFORMING BUSINESS OPPORTUNITIES

1	Staffing	To what extent does your firm realign its strategy implementation programs to help with staffing the organization with managers and employees capable of executing your business strategy well?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How effective is this with staffing the organization with managers and employees capable of executing the strategy well?	1 =1-20% effective 2 =21-40% effective 3=41-60% effective 4=61-80% effective 5=81-100% effective
2	Resource development	How frequent does your firm realign its strategy implementation programs to develop organizational capabilities required for successful strategy implementation?	1 =Rarely 2=Occasionally 3=Sometimes 4=Frequently 5=Usually 6=Every time
		How good is this with developing the resources required for successful strategy implementation?	1 = Not good 2 =Fairly good 3= Very good 4= Extremely good 5= Excellent
3	Organisational culture	To what extent do you agree/disagree with the following statement? "Your firm realign its strategy implementation programs to help with creating a strategy-supportive organizational structure?"	5=Strongly agree 4=Agree 3=Neutral 2=Disagree 1=Strongly disagree

		How good is this with creating a strategy-supportive organizational structure?	1 =Poor 2 =Fair 3= Good 4=Very good 5=Excellent
4	Resource allocation	Your firm prioritise realigning its strategy implementation programs to help with allocating sufficient resources for strategy implementation?	1 =Do not prioritise 2=Low priority 3=Medium priority 4=High priority 5=Essential
		How effective is this with allocating sufficient resources for strategy implementation?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
5	Policy and Procedures	To what extent does your firm realign its strategy implementation programs to help with instituting policies and procedures that facilitate strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How effective is this with instituting policies and procedures that facilitate strategy implementation?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
6	Best practices	To what extent does your firm prefer realigning its strategy implementation programs to help with adopting best practices that would drive continuous improvement in strategy implementation activities?	5=Greatly prefer 4=Prefer 3=Fairly Prefer 2=Somewhat prefer 1=Do not prefer
		How much influence does this have on adopting best practices to drive continuous improvement in strategy implementation activities?	1 =1–20% Little influence 2 =21–40% Fair influence 3=41–60% Moderate influence 4=61–80% High influence

			5=81–100% Very high influence
7	Information and operating systems	How frequent does your firm realign its strategy implementation programs to help with installing information and operating systems that enable company personnel to carry out their strategic roles proficiently?	5= Very frequent 4=More frequent 3=Fairly frequent 2= Poorly frequent 1=Not frequent
		How helpful is this with installing information and operating systems that enable company personnel to carry out their strategic roles proficiently?	1 =Not helpful 2 = A little helpful 3= Helpful 4= Very helpful 5= Extremely helpful
8	Rewards and incentives	To what extent does your firm realign its strategy implementation programs to help with tying rewards and incentives directly to the achievement of strategic and financial targets?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How effective is this with tying rewards and incentives directly to the achievement of strategic and financial targets?	1 =1–20% effective 2 =21–40% effective 3=41–60% effective 4=61–80% effective 5=81–100% effective
9	Corporate culture	To what extent does your firm realign its strategy implementation programs to help with instilling a corporate culture that promotes good strategy implementation?	5=Great extent 4=Good extent 3=Fair extent 2=poor extent 1=Not at all
		How helpful is this with instilling a corporate culture that promotes good strategy implementation?	1 =Not helpful 2 = A little helpful 3= Helpful 4= Very helpful 5= Extremely helpful

10	Internal leadership	Your firm realign its strategy implementation programs to help with exercising the internal leadership needed to propel strategy implementation forward?	5=Strongly agree 4=Agree 3=Neutral 2=Disagree 1=Strongly disagree
		How effective is this with exercising the internal leadership needed to propel strategy implementation forward?	1 = Not effective 2 = Slightly effective 3= Effective 4= Very effective 5= Extremely effective

11. What other strategy implementation processes besides the ones mentioned above do you believe have a significant influence in transforming the business to better implement its strategy?

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THANK YOU FOR YOUR PARTICIPATION

APPENDIX B – Similarity report

Document Information

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APPENDIX C – Edit certificate

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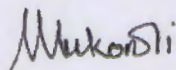
To whom it may concern

LANGUAGE EDITING – Hosea Kondjeni Hashili

This letter serves to confirm that a MASTER'S IN BUSINESS ADMINISTRATION MANAGEMENT STRATEGY entitled EXAMINING THE USE OF DYNAMIC CAPABILITIES FOR STRATEGY IMPLEMENTATION IN NAMIBIA'S CONSTRUCTION INDUSTRY was submitted to me for language editing.

The thesis was professionally edited and track changes and suggestions were made in the document. The research content or the author's intentions were not altered during the editing process and the author has the authority to accept or reject my suggestions.

Yours faithfully



Dr. JOSEPH NAMUTUNGIKA MUKOROLI
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