

The role of entrepreneurial orientation in enabling corporate entrepreneurship in Namibian companies

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ABSTRACT

Scholars and business leaders discourse on the importance of “unleashing the entrepreneurial potential” of organisations includes getting rid of controls and restrictions on entrepreneurial behaviour (Pinchot & Pellman, 1999:125). The global business environment is changing exponentially, fast becoming ever more competitive, which dictates that entrepreneurial activity is growing in prominence, allowing for the survival and future competitiveness of corporates. At organisation level, the ability to innovate continually and engage in an ongoing process of entrepreneurial action has become the source of competitive advantage, with the dearth of entrepreneurial intent and orientation being the perfect ingredient for failure (Kuratko, 2009).

This study provided quantitative first-hand empirical support for academic and practical claims of the role entrepreneurial orientation (EO) played in supporting corporate entrepreneurship (CE) in an emerging market context. The conceptual model, shaped from the work of Urban and Wood (2015), intended to contribute to the body of knowledge providing both researchers and organisations alike the foundation to examine the relationship between EO and CE. The integrated framework of CE allowed for a broad overview of the relationship with EO.

A sample of 500 corporate employees was drawn from various corporate employers in Namibia. The findings were established based on three hypotheses. The first hypothesis was supported, as the study found that the higher the level of EO, in terms of the innovativeness dimension, the greater the level of CE in terms of opportunity recognition. The second hypothesis stated that the higher the level of EO, in terms of the risk-taking dimension, the greater the level of CE in terms of opportunity recognition. The study found a negative and insignificant impact of risk-taking on opportunity recognition; the hypothesis was not supported. The third hypothesis found that the higher the level of EO, in terms of the pro-activeness dimension, the greater the level of CE in terms of opportunity recognition.

CE theory endures to advance and improve (Zahra, Randerson, & Fayolle, 2013), and although existing studies have enriched the knowledge of the relationship between EO and CE, a serious research gap was identified. This research investigated the roles played by both constructs in a developing market context, with the intention of providing a more comprehensive picture of how EO affects CE, as the study's main research question. To sum up, whichever form CE takes; it is fundamental and imperative that creating value is observed as the key driver in the pursuit of ongoing competitive advantage.

DECLARATION

I, Dino Ballotti, declare that this research report is my own work, apart from acknowledgement as indicated in the text and references. It is submitted in partial fulfilment of the requirements for the degree Master of Management in Entrepreneurship and New Venture Creation. It has not been submitted before, in whole or part, for any degree at any university or tertiary education institution.



Dino Ballotti

Signed at WINDHOEK, NAMIBIA

On the 28th day of February 2020

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“Have the courage to follow your heart and intuition.

They somehow know what you truly want to become”, Steve Jobs.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Namibia ranked 96 out of 126 countries in the World Intellectual Property Organisation's innovation ranking (WIPO, 2019). This rather uninviting statistic provided not only context to, but also a setting for this study, which aimed to understand the role entrepreneurial orientation (EO) had to play in corporate entrepreneurship (CE) in a large Namibian company. Kahn (2018) argued that innovation is still elusive in many of today's organisations. Large organisations need to understand that this term is not new or radical (Kuratko, Covin, & Hornsby, 2014), but rather an introduction of something new, or a new means of doing something (Merriam-Webster, 2017). CE is considered the strategic approach of supporting innovation and regeneration within organisations that are both forward thinking and progressive (Goldsby, Kuratko, Bishop, Kreiser & Hornsby, 2018). Moreover, the pursuit of innovation in established firms is fundamental in enabling the maximisation of company resources and opportunities, which is considered the basis of CE (Kuratko & Audretsch, 2013).

For the purpose of this study, CE included two key constructs; first, strategic renewal that addresses organisational regeneration with the pursuit of opportunities, and second, opportunity recognition that pertains to how individuals recognise opportunities through alertness and networks. CE is at its strongest when leaders and decision-makers not only foster a culture of entrepreneurship (Kraus, Breier, Jones & Hughes, 2019), but also encapsulate innovation, risk-taking, and pro-activeness, all conceptualised by the term EO. These three dimensions infuse the decision-making styles and go hand in hand to enhance the organisations EO. EO also refers to the strategic initiatives a firm uses to both recognise and introduce new ventures (Covin & William, 2019).

Furthermore, this study is important in a Namibian context as it provides an empirical analysis of primary data centred on the CE activity. The most recent

Namibia Statistics Agency (2017) report of unemployment states that it stands at an overwhelming 34 per cent, which is argued by many to be inaccurate and closer to 50 per cent of the population. A real need for boosted corporate growth and expansion, resulting in much needed job creation, is required to avoid socio-economic problems (Ramos-Mejía, Franco-Garcia & Jauregui-Becker, 2017). Addressing socio-economic problems in unique ways is what distinguishes organisations from its competitors (Zhou, Gao & Zhao, 2017). For this study to achieve its purpose, a discussion around resource-based theory, stakeholder theory, opportunity-based theory, and psychological theory, and their application to EO in enabling CE is discussed in Chapter 2, from which the hypotheses were formulated outlining the relationships. The study's results, in Chapters 4 and 5 are explained by means of empirical findings in a large Namibian private sector framework.

1.2 Theoretical discussions on EO in enabling CE

This section aims to examine the potential of EO in enabling CE, through theoretical frameworks such as Jay Barney's research based theory, David McClelland's psychological theory, Peter Drucker's opportunity based theory, and Edward Freeman's stakeholder theory.

Barney (1991) developed the resource-based view of the firm; this theory was designed to understand the organisations' performance against that of competitors in similar business environments and with the same resources at hand. The key consideration behind this theory is how the organisation is able to utilise both tangible and intangible assets effectively and to its competitive advantage, with fundamental uniqueness (Alvarez & Barney, 2007) This perspective focuses on uniqueness in the organisation and EO, rather than spending the most money.

The psychologically based theory derived from McClelland (1965) advanced the theory of entrepreneurship with specific attention to the intellectual and emotional drivers of entrepreneurially orientated individuals. He hypothesised

that entrepreneurs possess a need for achievement that inspires their activity, creativity, and confidence, which drives entrepreneurial behaviour.

Drucker (1985) advanced the opportunity-based theory, which explained that entrepreneurs do not cause change but rather exploit the opportunities that the change creates. A key hypothesis in his theory is that entrepreneurs recognise opportunities created by change, above the problems they face.

The final theory considered for this study was Edward Freeman's stakeholder theory, which argues that an organisation should create value for all stakeholders, and not only the shareholders. A key challenge is trying to determine how much priority leaders should give to the various stakeholders; equal attention among all stakeholders is not possible and leads to methodological approaches in understanding stakeholder salience (Clarkson, 1988).

These four theories intend to synthesise the working cohesion of senior managers in large private companies, and understand the dynamics involved when considering established theories that are all relevant to EO enhancing the agenda in the CE domain in Namibia. The theoretical routes originate from the fundamentals of CE, which consider themes such as utilising assets to the firm's competitive advantage, the need for achievement from the intrapreneur, the ability to exploit opportunities that come with a changing environment, as well as the value addition created for all stakeholders of the enterprise. These factors constituted the need for the above-mentioned theories.

1.3 Motivation for Study and Problem Statement

According to Thornberry (2001), many large companies are seeking ways of reinventing or revitalising their entrepreneurial roots. Large companies with their economies of scale, hierarchy, and bureaucracy often lack EO; however, an applied focus on CE can aid the struggling Namibian economy, which has recorded 12 negative quarters of GDP, according to the Namibia Statistics

Agency (2017). Namibia is faced with a shrinking economy; it is now smaller than at the end of 2015.

1.3.1 Problem statement

In the face of lack of innovation in large Namibian companies (GERA, 2018) there are three key measurements and dimensions of EO, namely; pro-activeness, innovation and risk-taking that remain fundamental in establishing an impact on CE and the prevailing attitude towards it (Roxas & Chadee, 2013). Lack of innovation has negatively affected creativity (Lassen & Nielsen, 2009), which has affected organisational growth and job creation. Research conducted by Lassen and Nielsen (2009) supported the idea that the success of CE is heavily reliant on the organisation's competence and ability to continuously balance exploration of the future through creative destruction and exploitation of the present from controlled adaptation. Structural and contextual ambidexterity supports the creation of balance. Corporate Namibia requires a paradigm shift in the importance of an entrepreneurial attitude if it is to remain relevant. By embarking on a study that investigated the need for an entrepreneurial culture could define the model needed to assist Namibian corporates to enhance their EO.

1.4 Research Purpose

This study provided contributions to the EO and CE literature. It intended to add to the existing and current body of knowledge by using a research instrument aimed at management in large, private sector Namibian companies, and tested the various links between CE and EO. The study intended to test a detailed degree of approach between the model variables, as well as the strength of means to increase the overall CE activity. This study was context specific with an in-depth focus on large Namibian companies, using the Deloitte 'best company to work for' benchmark of organisations having 500 or more employees considered large. Due to the small populous of Namibia, according to the World Population Review (2019), there are an estimated 2 490 000 inhabitants in Namibia. This number does not give enough scope to provide a

sector specific analysis and therefore this study utilised various sectors of the economy. The Namibian context is under-researched as an emerging market (Blackburn & Smallbone, 2008), which placed great importance on the contribution this study could make. Urban (2013) puts forward an observation of neglect of African organisational studies, with a focus instead on Western literature.

1.4.1 Sub-aims of the study

- To establish the effect of the levels of EO innovativeness on the perceived importance of CE initiatives in Namibia.
- To establish the effect of the levels of EO risk-taking on the perceived importance of CE initiatives in Namibia.
- To establish the effect of the levels of EO pro-activeness on the perceived importance of CE initiatives in Namibia.

1.4.2 Research question

What role does EO play in enabling CE in large Namibian companies?

1.5 Definition of Terms

- *CE*: There are numerous definitions from peer reviewed academic scholars on the term CE, for the purpose of this study the definition of Sharma and Chrisman (1999) was used in defining the term. They indorsed CE as the process of creation of new organisations or instigation, regeneration, or innovation in association within existing organisations. Urban (2013) confirmed this by advancing that CE represents an organisation's effort towards entrepreneurship as an over-arching strategic approach.
- *EO*: Covin and Slevin (1991) defined EO as the willingness to innovate in varied conditions in a market, taking risks, exploring new product offerings and services, as well as being pro-active. Organisational

factors, as defined by Laforet (2016), determine what settings are considered relevant, and managing perceptions of what is important and what is unimportant.

- *Intrapreneur*: Pinchot (1978) defined entrepreneurs who work within corporations as a new class of intra-corporate entrepreneurs and thus created the term intrapreneur. It is understood that if an organisation wishes be more innovative, it is required to identify, develop and empower its intrapreneurs. Bogers and West (2013) advocated that innovation includes searching, enabling, filtering, and acquiring; each category having its own specific set of mechanisms and conditions.

1.6 Significance of the Study

This study intended to contribute to an under-researched emerging market context (Blackburn & Smallbone, 2008); further emphasized by Urban (2013) who confirmed that a lack of literature in an African organisational context is prominent. To understand the relationship between EO and CE, a thorough examination of an emerging market, Namibia, was undertaken. Urban and Wood (2015) sought to establish the significance of opportunity recognition behaviour and the motivation for employees when involved and engaged in CE, and suggested potential research where individuals and organisations can focus on network structures in opportunity recognition. Building on the shoulders of giants, this study sought to address this research gap, not only investigating opportunity recognition, but also CE in strategic renewal. The three key measures of EO, namely innovation, risk-taking, and pro-activeness were used to provide a link to both opportunity recognition and strategic renewal. Past research in the field of EO and effective CE, undertaken by Dess and Lumpkin (2005), encouraged future research to look beyond economic outcomes when measuring EO, into the value relationships that can be exploited through the network theories model. This was undertaken in this study.

1.7 Delimitations of the study

This study concentrated on large corporate employers in Namibia, including empirical studies of organisations regarding growth in relation to the generation of job opportunities, as well as employment growth. Manso (2017) posited that large organisations are the backbone of sustainable job creation. This study excluded SMEs and focused solely on corporate entrepreneurship; therefore, organisations with employees of 500 or more. There was no restriction on business age, turnover, or specific industry sector.

1.8 Assumptions

“Assumptions are so basic that, without them, the research problem itself could not exist” (Leedy & Ormrod, 2010:62). The first assumption was that all the respondents had an impartial view on this study, which was supported by all respondents consenting to the study, not partaking under any duress, and having the option to withdraw from the study at any time. A second assumption was that all respondents had a fair understanding of the questions posed. This assumption was supported by all respondents being employed as full time employees and having to go through aptitude tests upon formal employment with their respective organisations. A further assumption was that all respondents were honest with their feedback and understood that the data collection was confidential, and that participation was without fear of victimisation or discrimination.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In this chapter, literature in the field of CE and innovation through an organisations' intrapreneurial mind-set is reviewed. Organisations that wish to engage in successful CE require the key facets of EO. On the various literature reviewed, hypotheses were formed.

Khan and Khandaker (2016) suggested that all successful organisations be referred to as organic organisations, being dynamic and flexible with a focus on innovation (Larsen, 2002). Namibia, rather small in population, with just under 2.5 million inhabitants (Namibia Statistics Agency, 2017), and with a low ranking in terms of innovation, ranked 96 out of 126 countries surveyed finds itself in a conundrum where the inability to truly innovate and renew itself in large organisations remains a challenge (WIPO, 2019). Fostering EO in large Namibian organisations should be considered critical if a culture of creative destruction and innovation is to prevail (Schumpeter, 1934). Adopting a research-based theory, psychological theory, opportunity-based theory, and stakeholder theory with fundamental focus on opportunity recognition and strategic renewal would lead to diversity as the common attribute of this research.

Boone, Lokshin, Guenter, and Belderbos, (2019) contended that an organisation immersed in an entrepreneurial culture will engage in innovation, embark on uncertain opportunities, and is first to advance pro-active approaches and innovations. Not all measurements and dimensions of EO are mandatory for organisations to be successful; it is a framework for the foundation of intrapreneurship. Entrepreneurship drives innovation and technical change and generates economic growth (Schumpeter, 1934). Prior research has brought about a debate on whether the dimensions of EO are independent or can co-exist (Covin & Slevin, 1989). Studies such as that of Khandwalla (1987), confirmed that high-tech industries had a stronger relationship between risk-taking, innovation, and pro-activeness due to the

uncertainty of this sector specific environment. More recent studies (Wales, 2016) analysed and synthesised key research on the topic of EO, building on Covin and Slevin (1989) and looking at a variety of perspectives on the manifestation of EO as independent dimensions as well as conceptualisation, which facilitates knowledge accumulation. Wales (2016) confirmed that the sustained entrepreneurial beliefs and behaviours produces a great deal of variance in the performance of EO organisations.

2.2 Contribution of Theories

The development of the multi-discipline nature of entrepreneurship is imperative when considering four empirical theories. These theories are identified in the arena of entrepreneurship and have origins in a number of management fields (Fiet, 2001). The theories and synthesis of their relationships are highlighted for the purpose of this study.

- (1) *Resource-based theory of entrepreneurship*: The resource-based framework developed by Barney (1991), shows the multi-disciplinary nature of entrepreneurship, and draws on a number of management fields. It also argues that entry to resources by creators is an important predictor of opportunity-based entrepreneurship (Alvarez & Busenitz, 2001). Uniqueness is fundamental when conceptualising this theory against the pre-defined dimensions of both EO and CE.
- (2) *Psychological entrepreneurship theory*: This theory underlines the personal characteristics that define entrepreneurship. There are three main constructs, the personality behaviours, need for achievement, and locus of control, all of which have been found to be associated with the psychological entrepreneurship theory (McClelland, 1965). Lastly, the perception and pursuance of opportunities is also being assessed (EO enables CE), which inspires the activity and creativity while driving entrepreneurial behaviour.

- (3) *Stakeholder theory*: Freeman (1984) developed a theory stating that an organisation should create value for all stakeholders, both internal and external. This theory intends to prioritise strategic renewal and understand the relationship with CE and the benefits thereof.
- (4) *Opportunity-based entrepreneurship theory*: According to Drucker (1985), entrepreneurs do not cause change but exploit the opportunities that change creates. Key constructs in Drucker's opportunity-based theory is that entrepreneurs identify opportunities, instead of problems, created by change. For example, an organisation might find itself in a crisis whereby the regulator changes policy, which adversely affects profit. Instead of viewing this as a problem, an opportunity might present itself, with a new revenue channel having just opened. This is the perception, pursuing of opportunities, unearthing and synchronising of knowledge, and the risk-taking nature, which talks to the opportunity-based theory and suggests that EO dimensions such as innovation can be best applied in opportunity generation.

These four theories intended to develop a deeper understanding of the unique dynamics incorporated in the dimensions of EO and CE, and their relevance in assisting to model empirical findings to confirm or reject the three hypotheses. This study used the opportunity-based theory of Drucker (1985), as the shaping dynamics of this theory expresses how entrepreneurs take advantage of opportunities instead of resolving them. Pursuing of opportunities in a corporate environment, with the added element of risk-taking, embodies CE.

2.3 Corporate Entrepreneurship (CE)

In defining CE, a number of scholars have articulated the significant factors of the concept. Table 1 shows various accepted definitions:

Table 1: CE definitions

Author(s)	Definition
Miller (1983:770)	Product-market innovation, uncertain endeavours, first with pro-active innovations
Burgelman (1983:1349)	The process whereby a company participates in diversification through internal development, requires new resource combinations
Jennings and Lumpkin (1989:485)	The extent to which new products and/or new markets are developed
Ginsberg and Guth (1990:5)	Resurrection of new businesses within existing organisations, i.e. internal innovation or venturing
Zahra (1993:5)	Process of organisational renewal; two related but distinct dimensions: venturing and strategic renewal
Covin and Miles (1999:47)	Four forums of CE with innovation as single common underlying themes: sustained regeneration, organisational rejuvenation, strategic renewal, and domain redefinition
Sharma and Chrisman (1999:11)	Process of creation of new organisation or instigate renewal or innovation in association with an existing organisation
Antoncic and Hisrich (2003:7)	Entrepreneurship within an existing organisation, referring to growing behavioural intentions and behaviours of an organisation that are related to departures from the customary
Urban and Nikolov (2013:383)	CE depends on individual employees who undertake innovative activities that stimulate positive perceptions in top-level managers

The definition of Sharma and Chrisman (1999:12) was used as the working definition, which reads, “the process of creation of new organisation or instigate regeneration or innovation in association with an existing organisation”.

CE is an instrumental practice for both new and established organisations, particularly for identifying, evaluating, and capturing opportunities, measuring future strategic steps, and creating and establishing a sustainable competitive advantage (Morris, Kuratko, & Covin, 2008). CE encompasses formal and informal activity with the focus on discovering and pursuing new business opportunities by means of strategic renewal, innovation, and corporate venturing (Sharma & Chrisman, 1999).

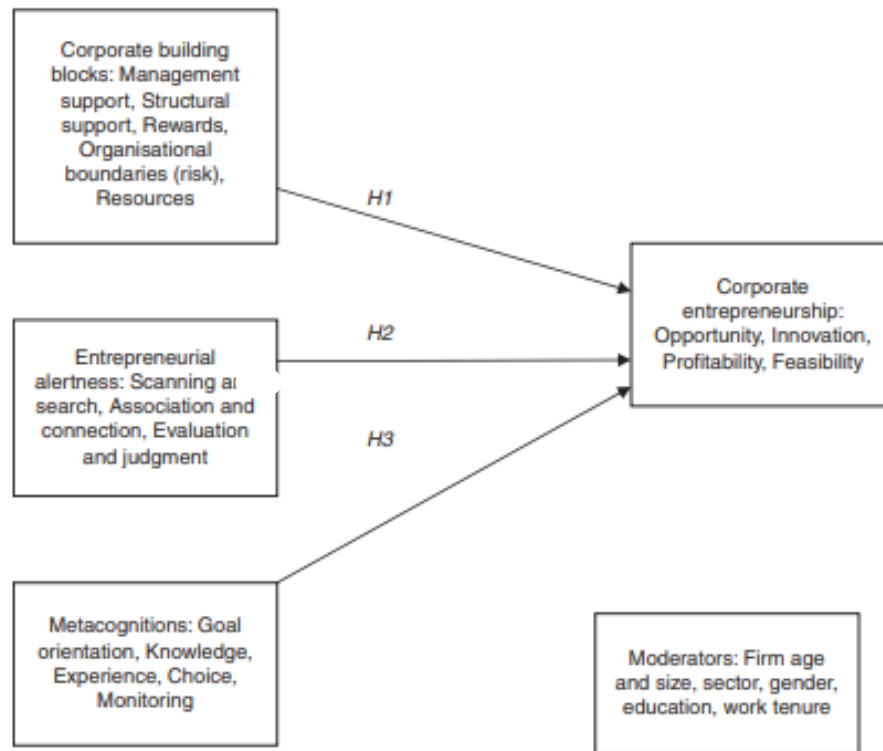


Figure 1: Integrative model of individual and organisational factors influencing CE activity

(Urban & Wood, 2015:540)

The model in Figure 1 incorporates the various elements of CE, by illustrating the paradigms and model paths. It shows the constructs per hypothesis, Hypothesis 1 includes the corporate building blocks such as management support, structural support, rewards, organisational boundaries, and resources. Entrepreneurial alertness, namely, scanning and searching, association and connections, evaluations, and judgements are in Hypothesis 2. The third hypothesis includes metacognitions such as goal orientation, knowledge, experience, choice and monitoring. These three constructs show similarities with this study's hypotheses, which focus on entrepreneurial orientation, specifically the innovativeness, risk-taking and pro-activeness dimensions, and how they affect the level of CE. The model of Urban and Wood (2015) consists of individual and organisational level moderators. Each of the variables are necessary; however, do not sufficiently explain CE (Urban, 2014). It is

noteworthy that the variables are not exhaustive; however, the variables noted best mirror the actual process of how CE activity takes place (Kuratko, Covin, & Garrett, 2009). The integrative model of individual and organisational factors influencing CE activity also uses moderators such as firm age and size, sector, gender, education, and work tenure. This gives context to the South African financial sector, which was used as this study's survey population. The financial sector was categorised into banking, short- and long-term insurance, brokerage, asset management, stock brokering, and collective investment schemes. These moderators were similar to that of this study, in which demographics such as tenure, education, gender, and business age were used.

Contemporary entrepreneurship research started with the work of future thinker and visionary Joseph Schumpeter (1883-1950). Schumpeter believed that the main agent of economic development was entrepreneurs who encouraged new products and services, new methods of production methods and activities inspiring economic output (Noteboom, 1994). Schumpeter defined entrepreneurship as a "creative destruction" process, whereby entrepreneurs constantly modify, amend, and improve their products, services, and methods of production.

A different perspective is how CE centres re-energise and enhance an organisation's ability to not merely develop skills, but to innovate. CE is interconnected to organisations' efforts to bring about sustainable competitive advantages as the basis for profitable growth (Ireland, Hitt, & Sirmon, 2003).

Lumpkin and Dess (1996) described CE as a new entry, referring to both new and established markets. CE comprises product innovation, risk-taking, and pro-active behaviour (Covin & Slevin, 1991). Longstanding literature has conceptualised CE as a multi-dimensional phenomenon that incorporates the behaviour and interactions of the individual, the organisation, and environmental elements within organisations.

CE includes strategic renewal, consisting of regeneration and structural changes; innovation, consisting of new ideas and opportunities; and corporate

venturing, consisting of efforts to create new companies within the organisation (Kuratko et al., 2009). Most notably, for CE to become a significant conduit for organisations' value creation and addition, it cannot and should never merely be confined to a specialist function within an organisation (Ireland, Covin, & Kuratko, 2009).

CE is not static, it is a dynamic and vigorous process through which managers and leaders can encourage the appropriate employee behaviour, achieved through effective incentive measures. CE should be considered highly disruptive, requiring significant organisational change to move away from the status quo. Supportive organisational structures require excellently communicated strategies if it is to stand a real chance at success (Shepherd, Covin & Kuratko, 2009). For successful CE, all within the organisation must be aware of the strategies, and be supported and encouraged to engage.

Pro-entrepreneurship architecture is considered the corporate context through which the entrepreneurial strategic vision is described, with particular entrepreneurial processes and behaviours (Ireland et al., 2009). Organisations that wish to provide supportive, conducive entrepreneurial environments must provide fitting reward systems, senior leadership and management support, and explicitly set attainable goals (Hornsby, Kuratko, Shepherd, & Bott, 2009).

Literature establishes that CE plays a pivotal role in an organisations performance as organisations engage for both financial and/or strategic reasons (Phan, Wright, Ucbasaran, & Tan, 2009). Successful entrepreneurial organisations deviate and differ from prior routines, strategies, business models, and operating environments when needed. CE, being a very broad concept, includes the development and application of new ideas. CE remains an ever-growing topic for both management and entrepreneurship research, with a significant body of the literature examining it as an important means for large and established multinational enterprises to both revitalise their business and to react appropriately to changes in the organisations' environment (Zahra, 1991).

Organisations that exhibit CE are regarded as vigorous, dynamic, and flexible businesses that take advantage of new opportunities when they arise (Morris et al., 2008). Central to the conduct of corporate entrepreneurial activities is the disposition to experiment and try out new possibilities (Kuratko & Audretsch, 2013). Entrepreneurial organisations explore new business domains as well as new ways of conducting business within existing domains. These organisations accept risk and are well aware that the outcomes of innovation are uncertain.

There has been much discourse regarding the importance of releasing the entrepreneurial potential of organisations by ridding of controls and restriction on entrepreneurial behaviour (Pinchot & Pellman, 1999). The global business environment is fast becoming ever more competitive, and this dictates that entrepreneurial activity is growing in prominence, allowing for the survival and future competitiveness of corporates. At business level, the collective appeal of the innovation process imitates the dependence of the intrapreneur on the skills and efforts of other enterprise participants and dynamics (De Clercq, Dimov, & Belausteguigoitia, 2014).

Entrepreneurship enables the vision and direction of the organisations entire operation, serving as an essential element of the organisations strategy, and possibly as the core component of corporate strategy (Ireland et al., 2009). CE should not be viewed as a standalone strategy, it should be viewed in a manner that allows and provides researchers with a multitude of opportunities to examine the multi-dimensional relationships.

Senior leaders and management are gradually accepting, approving, and embracing CE as a probable source of achieving competitive advantage (Morris & Kuratko, 2002). CE is broadening as organisations that were once not recognised as entrepreneurial begin to embrace entrepreneurship as a survival mechanism in an ever-changing, globally competitive environment (Sarooghi, Libaers, & Burkemper, 2015).

The CE strategy model ascertains pro-entrepreneurship architecture in an organisational context through which entrepreneurial strategic vision is

deciphered into specific entrepreneurial processes and behaviours (Kuratko, Hornsby, & Goldsby, 2004). This is further demonstrated by individual members undertaking innovative activities, thus stimulating positive perceptions in senior management and leadership, which indirectly leads to further allocation of much needed organisational support and resources (Sarooghi et al., 2015).

Some of the facets of CE are discussed in the sub-sections that follow.

2.3.1 Corporate building blocks

Corporate building blocks of entrepreneurial behaviour with varied perceptions and insights are apparent in the literature by Goodale, Kuratko, Hornsby, and Covin (2011), Hornsby et al. (2009), Ireland et al. (2009), and Kuratko et al. (2004), which include:

- *Management support:* Senior management should be willing to support an entrepreneurial strategy and assist in fostering entrepreneurial behaviour required of employees.
- *Work discretion/autonomy:* Senior management should be dedicated and steadfast in their acceptance of the potential failure of entrepreneurial outcomes and offer a degree of freedom to subordinates who are expected to act on the entrepreneurial strategy, while delegating authority to allow for autonomous decision-making.
- *Rewards/reinforcement:* A rewards system should buoy entrepreneurial thought and action.
- *Time availability:* Senior management should enable subordinates, who are engaged in CE, sufficient time to pursue such activities.
- *Organisational boundaries:* It is essential that positive perceptions around the availability of resources in enabling the pursuit of entrepreneurial opportunities are provided and tolerated.

In spite of the sustained efforts to support and back entrepreneurial initiatives, the organisation must identify both the internal and external environmental factors that can encourage entrepreneurial initiatives. An integrative model in Figure 2 demonstrates how the CE strategy incorporates the antecedents of entrepreneurship strategy (Ireland et al., 2009). What is central to this model is how CE is articulated as an identifiable strategy.

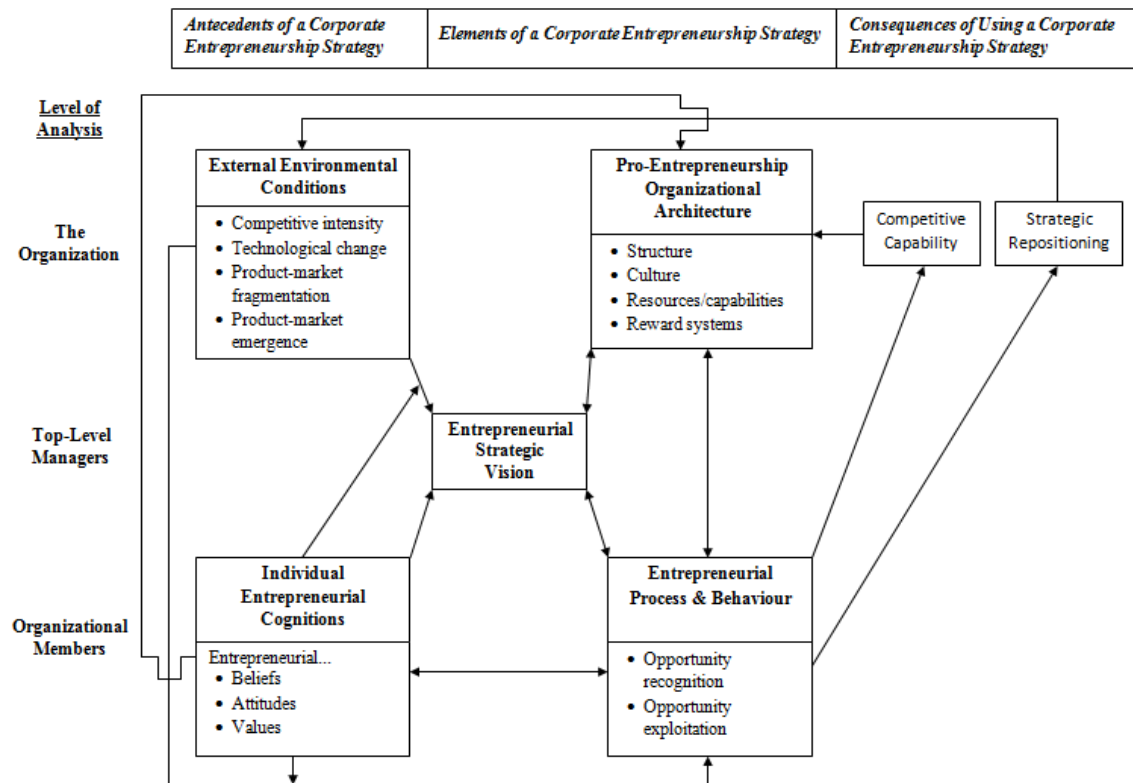


Figure 2: An integrative model of CE strategy

(Ireland et al., 2009:24)

This model suggests that the CE strategy manifests through the presence of three key elements, namely an entrepreneurial strategic vision, a pro-entrepreneurship organisational structure, and entrepreneurial processes and behaviour as exhibited across the organisation's hierarchy. The model is dependent on continual entrepreneurial behaviour and lists the antecedents of a CE strategy as individual entrepreneurial perceptions of the organisation's members, and external environmental conditions that offer entrepreneurial activity.

Organisations are actively searching for means to innovate and grow in a competitive environment. Corporations such as, Royal Bank of Canada (RBC), Adobe, and 3M are shaping programs with four fundamental building blocks of intrapreneurship.

The first building block was that of having a greater understanding for the employees. Entrepreneurs and intrapreneurs alike are made, not born (Pinchot & Pinchot, 1978). Organisational leaders can nurture and cultivate an intrapreneurial mind-set in their employees by first understanding the unique needs and talents of each employee, as well as the resources they need to innovate successfully. Organisations must encourage these traits by setting up systems to not only identify but also grow potential.

The second building block was framing the business problem. Disappointingly, a good number of leaders view intrapreneurship as a tick box exercise (Kahn, 2018). Innovation ought to be continuous. The desired result should be impactful and not a playbook full of concepts that will never be implemented. The RBC is particularly well versed in framing its business problems before embarking on intrapreneurship projects, this is largely due to how the company has structured its innovation activities. RBC has a dedicated innovation team that collaborates with units across the bank, scoping needs and then identifying solutions. It is a holistic view, which equips them to identify problems and opportunities across the company (Dummett, Trichur & MacDonald, 2014).

Understanding the risk appetite is the third building block. For any intrapreneurial pursuit, there must be a tolerance for risk; however, enough scope for new ideas to be born and tested should be allowed. A practical example is that of 3M where Dr Silver, an employee at the organisation was attempting to create an extremely strong adhesive for an aerospace application, in attempting to fix one problem, he solved another by creating a light bonding agent that did not leave a residue (3M, 2020). In essence, the initial problem was not solved; however, the employee was in an environment that allowed him to persist with an idea outside of the original scope, allowing new ideas to be

born and tested. The 'fail' of Dr Silver ultimately led to the invention of the world famous Post-It note.

The final building block of intrapreneurship is the instilling of ownership. Corporate entrepreneurs are intrinsically imaginative and self-driven; provided with the tools to explore, organisation should step aside and watch how ideas flourish (Heavey & Simsek, 2013). A practical example is that of Lockheed Martin's 'Skunk Works' project, which best describes autonomy (Brown, 2004). The organisation allowed a select group of employees to work as an autonomous company with a small, focused team, independent and freed from the corporate obstacles that can halt an innovation program. By allowing this, Skunk Works created some of the most advanced and pioneering aircraft models known today.

Even organisations that actively support innovation and new venture creation need to, at times, make an extra effort to stimulate entrepreneurial behaviour. Thinking like an entrepreneur needs encouragement. It is common that organisations with an entrepreneurial mission use a 'top-down' approach to stimulate entrepreneurial activity. This is where the senior management and leadership foster a climate of entrepreneurship; however, some of the very best ideas for corporate venturing come from the 'bottom-up'. Therefore, within many corporations, extra effort and special incentives might be needed to develop and build support for an entrepreneurial activity (Brown, 2004).

In a corporate setting, product champions play an important entrepreneurial role by scavenging for resources and encouraging others to take a chance on promising new ideas (Covin & Slevin, 1991). It is common for large organisations wishing to expand via corporate venturing to either purchase existing businesses or develop ventures internally. A growing substitute is investing in independent start-ups; this method is used when organisations wish to be entrepreneurial while maintaining their autonomy. Two other methods companies can use to foster CE effectively and autonomously include:

- *Skunkworks*: This encourages independent thought and action whereby an organisation may develop and deploy independent work units. This

work unit represents a work environment that is often physically and geographically separate from the head office. Skunkworks is a concept derived from 1943 during World War II where Lockheed Corporation built the very first fighter jet. The term is now renowned as a concept used to inspire creative thinking and brainstorming about new venture ideas without any head office restrictions (Brown, 2004).

- *Physical reorganisation*: Reorganising work stations with the goal of stimulating entrepreneurial initiatives. To help stimulate new ideas, there is a need to do more than create independent think tanks; physical change to organisational structure may be the antidote (Covin & Slevin, 2004).

Considering the above, excessive decentralisation has the potential to create inefficiencies, these inefficiencies can cause duplication of effort as well as wastage of limited resources. The former Chief Executive Officer (CEO) of Motorola scrapped the well-documented skunkworks approach, a method the organisation had been using in research and development for mobile phones. This decision greatly reduced spiralling costs and redundancies (Leifer et al., 2000). This approach must be undertaken with a clear sense of purpose to generate new sources of competitive advantage.

2.3.2 Opportunity recognition

Research on opportunity recognition, or the pursuit of new opportunities, continues to be the ultimate area of focus, while previous studies have primarily focused on the individual entrepreneurs within their own firms, and left no notable empirical evidence on the opportunity recognition within a corporate context (Ireland & Webb, 2007). The opportunity to meet a need (or want) through a creative and innovative blend of resources (Ardichvili, Cardoza, & Ray, 2003) can create new marketplaces when new information is forthcoming.

CE is defined as a set of organisation wide actions that centre on the pursuit of new prospects through origination, new creation, and unique business models (Hayton & Kelley, 2006). An opportunity has been defined as a feasible concept

that is discovered or created through an entrepreneurial entity (Short, Ketchen, Shook, & Ireland, 2010).

Recognising and taking advantage of entrepreneurial opportunity is at the centre of CE strategy (Ireland et al., 2009) and has the potential to provide conventional and traditional organisations a competitive advantage (Lumpkin & Lichtenstein, 2005). Prior understanding, experience, and expertise plays a significant and impactful role in entrepreneurial opportunity recognition (Arentz, Sautet, & Storr, 2013). The knowledge and acumen an individual has about existing markets, how best to serve that market, and awareness about customers' challenges and experiences will guide and often dictate the opportunities available for discovery (Corbett, 2007).

Ultimately, CE entails employees with specific individual competencies to incorporate both existing and new knowledge in order to suitably identify and act upon entrepreneurial opportunities (Hayton & Kelley 2006). For the organisation to boost the incentive of its employees, the idea or opportunity must be accepted in the minds of those applying it (Ciabuschi, Forsgren & Martin, 2011). Evaluation of ideas and opportunities, and the outcomes thereof, play an important role in detecting innovations that are worthy of deployment (Dailey & Mumford, 2006).

Innovations considered satisfactory are perceived as suitable for implementation (March & Simon, 1958), while those that go beyond satisfactory may offer additional incentives if acted upon. Innovations that are created to maintain market share may be considered important to implement; however, innovations that can increase and grow market share may be considered even more alluring.

Designated organisation champions assist in steering innovations through the various dimensions of the company's internal environment by having access to resources, guiding the progress, and building legitimacy (Day, 1994). Championing occurs when employees can directly affect innovation implementation via an informal, bottom-up process. The support garnered

internally for an innovation can greatly increase the likelihood for implementation.

CE is classically modelled and displayed as a learning process in which organisations interchangeably participate in idea identification and take advantage of opportunity creation (Phan et al., 2009). It is widely accepted that the innovation process has attitudinal and behavioural components, with the opportunity-recognition process representing one of the core intellectual questions in the domain of corporate innovation and entrepreneurship. Investigation into opportunity recognition shows that entrepreneurs make use of their cognitive frameworks, attained through practise and knowledge, to recognise and understand entrepreneurial opportunities (Wood, McKelvie, & Haynie, 2014).

Individual differences in perceptive processes (e.g. mental models) may assist in identification of formerly unrecognised opportunities (Alvarez, Barney, & Anderson, 2013). In spite of the fact that most people scan their environment, successful entrepreneurs are known to be superior at discovering opportunities embedded in that environment. The most effective and successful entrepreneurs identify high-potential opportunities and use the opportunities to overcome newness (Tang, Kacmar, & Busenitz, 2012).

Entrepreneurial alertness is considered a key component of the opportunity recognition process. Entrepreneurial alertness has been conceptualised to recognise and be sensitive to information about matters, instances, and patterns of behaviour in the supporting environment, and display critical awareness of problems, needs, and wants with a special mixture of resources. Highly alert entrepreneurs examine their surroundings for new capabilities and/or technologies, offering opportunities to create and deliver value addition to potential markets. These entrepreneurs navigate the opportunity recognition process by discovering a special combination of environment needs and limited means / resources. The awareness of a prevailing 'match' of market needs and resources embodies the discovery of an opportunity to be investigated. Entrepreneurial alertness is likely to be intensified when numerous elements,

including inventiveness, confidence, positivity, familiarity, and experience all come together (Valliere, 2013). Despite the new opportunity presented, the corporate entrepreneur must still decide to exploit the opportunity.

2.3.3 Strategic renewal

Strategic renewal is the process of transformation and change as well as the outcome of adjustment in strategic direction of an organisation (Manso, 2017). The key objective is providing strategic suitability between the organisation's internal capabilities and its direction in the external environmental involving factors such as technology, markets, and industries. Strategic renewal characterises the movement in activity, shifting the organisations competitive approach and encouraging a new way of doing business (Zahra, 1993). Strategic assessment, also referred to as strategic renewal, is considered the re-evaluation and revision or adaption of an organisation's strategy (Huff, Huff, & Thomas, 1992). Implementing the opportunities ultimately results in strategic renewal.

Efforts of strategic renewal such as the re-definition of an organisations mission, vision, and principles are fundamental when adapting to ever-changing environments. By adjusting internal organisational dynamics to improve alignment of the company's strategic approach, results in competitive advantage (Russell, 1999). In addition, strategic renewal similarly enriches the organisation's performance by expanding and prolonging the capability set and adding additional shareholder value (Zahra, 1996).

Strategic renewal is made up of two types: incremental renewal and transformational renewal. Incremental renewal involves a series of changes whereas transformational renewal is about radical shifts in strategic management. It must however be noted that some radical shifts may be catastrophic as abolishing the core might not allow the business operations to be renewed (Sakhdari, 2016).

Entrepreneurial renewal is considered the foresight of opportunity recognition and the means to find probable answers (Shepherd & DeTienne, 2005). Both

strategic assessment and entrepreneurial renewal are two important workings of CE, in addition to being the direct and indirect relationship thereof.

Achieving harmony around strategic change proves challenging by the political manoeuvring of organisational employees known to forge influential associations that have the ability to sway strategic changes toward personal and sometimes self-centred interests (Eisenhardt & Bourgeois, 1988). Organisational stakeholders may at times observe drastic change in a damaging light (Benner, 2007). Organisations management and leadership often find themselves engrossed with effecting recent changes, which stifles the creative desire to foster and implement changes of greater magnitude and direction.

Entrepreneurial renewal includes basic inputs such as guidance and limits, prior consequences, individual expertise, and new technologies, which lead to cutting-edge innovations (Ahuja & Lampert, 2001). Senior management and leadership grasp the significance of setting the strategic path and providing the necessary direction and guidance to the organisation. Senior management and leadership are able to affect employees' entrepreneurial cognitions by posing restrictions on the limited resources accessible by employees.

Culture and strategic direction are two of the primary controls available to the leadership of an organisation in the never-ending quest to preserve organisational success. What strategic planning does is propose the organisations goals and positions people around the set goals (Bryson & Roering, 1988).

To break down the strategic renewal phrase, the word strategy is what provides transparency and attention to the shared choices and actions. Strategic renewal is heavily dependent on the strategies around organising employees and the rewards and incentives for achieving the goals (Simons, 1994). Leadership and strategy formation go hand in hand. Leaders are able to lay out detailed, thoughtful plans for strategy and execution, but when they lack the cultural power and dynamics, the plans can be derailed. A phrase originated by Peter Drucker and made famous by Mark Fields, the ex-president of Ford motor

company, who said, “Culture eats strategy for breakfast”. Therefore, altering the organisation’s culture can greatly improve its performance.

It is not only important to recognise change, but to act on it, ahead of the competition. Strategic managers are visionaries, with sights on the next big thing, constantly in search of new opportunities and possibilities. A forward-looking perspective is pivotal for organisations that seek to be market leaders.

The direction and limitations that come from strategic assessment greatly affect entrepreneurial renewal. This is done by providing sustenance and backing to the strategic direction of the organisation. Organisations are multi-faceted and change course and direction; this may bring about divergence as new entrepreneurial thinking takes place. Striking the correct balance between the controls of the organisation and autonomy requires managing to obtain the desired innovative behaviour (Morris, Van Vuuren, Cornwall, & Scheepers, 2009).

Information and understanding are key drivers in the entrepreneurial renewal process. Knowledgeable individuals are better suited to apply critical thinking on matters requiring acute judgement, while maintaining opportunity recognition (Shepherd & DeTienne, 2005). Ultimately, entrepreneurial renewal nurtures the organisation’s entrepreneurial insights while allowing the flow of opportunity recognitions. Ambidextrous organisations have the ability to deal with present circumstances successfully, while adjusting themselves to forthcoming hurdles (Tushman & O’Reilly, 1996).

Strategic renewal also entails potential downsides, one being that personnel may not identify with the new strategy; this can have an adverse effect on staff motivation, negatively affecting the organisations performance (Parnell, 1994). Strategic renewal is an agile response to dynamism that has the ability to enable organisations in fast changing industries to find innovative and creative means to participate and break traditional boundaries. In competing more robustly, organisations need to rework their structure and refine their processes.

By concentrating on long-lasting competitive capabilities and reintroducing business operations to find a means of differentiation, organisations position themselves to improve their competitiveness (Zahra & Das, 1993). Programmes that focus on self-renewal assist in redefining and adapting organisations' ability to speedily divert threats and best position themselves for opportunities in dynamic industries. Strategic renewal efforts create awareness to external factors, enabling diversification that allows agile responses to threats and opportunities (Zahra, 1993).

2.3.4 Corporate venturing

Corporate venturing improves performance by prolonging and diversifying an organisation's business structures. The extension of current business structures is realised through the creation of new venture units in markets related to the parent organisations focal market. Synergies are created when strategic relationships occur between the new venture units and the parent organisation; this is achieved by means of cross leveraging of opportunities and experiences (Lin & Lee, 2011).

Exposing new technological means develops the organisations knowledge and skills, aiding with the performance objectives, such as the learnings at various departments and physical locations within the organisations (Simsek & Heavey, 2011). The exposure to varying streams of information from various industries is invaluable as it enhances the opportunity recognition and allows pursuit of further growth opportunities.

Additionally, corporate ventures embrace working methods that are most appropriate for their fact-finding missions (Burgers, Jansen, Van den Bosch, , & Volberda, 2009), which in turn leads to even more inventive breakthroughs (Fiol, 1995). However, corporate venturing also has some shortcomings; it is commonly associated with early costs that may strain the organisations often-limited resources. In a worst-case scenario, expenses may exceed profits and cause severe losses (Rothaermel, 2001). Moreover, corporate venturing cash injections might be done to the detriment of other investments, such as

research and development and branding to name only two (Hitt, Hoskisson, Ireland, & Harrison, 1991).

Corporate venturing endeavours of larger organisations might assist with performance over the longer term; whereas, the smaller more nimble organisations that embark on corporate venturing closely tied to its core business, are debatably more likely to benefit from the performance of these endeavours.

2.4 Entrepreneurial Orientation (EO)

EO is one of the most recognised and acknowledged concepts in entrepreneurship and management research, with voluminous most recent reviews of the underlying EO literature having been conducted (Covin & Miller, 2014). The historic origins of the EO concept have been discussed in studies conducted by authors such as Anderson, Kreiser, and Kuratko (2015), Covin and Wales (2012), and Edmond and Wiklund (2010). It is accepted that with the EO construct, entrepreneurship is considered as more than a singular doing, such as the launching of a new innovation, it is an overall strategic position (Covin & Lumpkin, 2011). In defining EO, Anderson et al. (2015) proposed a concise, yet, colourful definition of EO as organisations' decision-making practices, leadership values, and strategic actions that are entrepreneurial in nature. Three dimensions of EO have been identified and used consistently in the literature: innovativeness, pro-activeness, and risk-taking (Edmond & Wiklund, 2010).

EO can be used to encourage CE by enhancing internal venture development and fostering strategic renewal. It is most imperative to emphasise that the mere possession of the various elements of EO would not guarantee organisational goal attainment. Some EO dimensions provide opportunities for researchers; namely, EO facilitates the pursuit of new opportunities to enhance performance. Adopting strong EO is increasingly considered necessary but insufficient for wealth creation by new ventures (Stam & Elfring, 2008). Scholars also indicated that EO is resource-consuming (Covin & Slevin, 1991). Although

differences in findings might be attributed to differences in research design or methodological idiosyncrasies, such differences reflect that EO may sometimes, but not always, contribute to improved performance (Wiklund & Shepherd, 2003). EO is evident within organisations that enjoy entrepreneurial practices and firm behaviour (Ireland et al., 2009). Consequently, numerous characteristics of organisational strategy support EO's effectiveness, yet, it ought to be viewed as a necessary part of a distinctive, recognisable strategy. EO characterises a strategic measurement, which assists all organisations to plot themselves, and manifests with continual entrepreneurial behaviour over time.

It can therefore be assumed that organisations with a high degree of EO have customary and habitual entrepreneurial behaviour (Covin & Slevin, 1991), where sustained entrepreneurial behaviour has an approving managerial disposition toward entrepreneurial actions over a prolonged period (Covin & Lumpkin, 2011). Organisations move between periods of sustained entrepreneurial behaviour, high EO, and periods of lower EO (Wales et al., 2011); it is imperative that organisations sustain entrepreneurial beliefs and behaviours (Wiklund & Shepherd, 2011). Organisations with high levels of EO have a predisposition to inconsistent outcomes, from success stories to complete losses. In better understanding how organisations can successfully test new possibilities for progressive growth and in doing so forge the distribution of outcomes from their EO remains an important area for future research. In addition, research into how EO pervades organisations helps address the question of where within the organisation entrepreneurial behaviours and processes come from (Ireland et al., 2009). Many entrepreneurial initiatives stem from non-management approaches and as such the organisations manifestation of EO might be driven by factors such as location, job responsibilities, and department goals (Wales et al., 2011).

When new ventures lack a financial network, it is difficult to acquire resources from financial institutions. Such resource constraints stifle entrepreneurial initiatives (Wiklund & Shepherd, 2003) and impede the performance implication of EO (Tang, Tang, Marino, & Li, 2008). EO involves making large resource

commitments (Keh, Nguyen & Hwei, 2007); hence, the positive relationship between EO and new venture performance is restricted when the financial networking is at a low level. Only with sufficient resources can EO be translated into higher performance (Covin & Slevin, 1991). Without considerable resources, the performance implication of EO is impeded (Tang et al., 2008).

CE theory endures to advance and improve (Zahra et al., 2013) and although existing studies have enriched our knowledge of the impact of CE on the relationship between EO and CE, a serious research gap remains; therefore it is important to investigate the roles played by both constructs. This would provide a more comprehensive picture of how EO affects CE. Whichever form CE efforts take, it is essential that creating value is observed as a means to competitive advantage with all internal value chains.

EO is incorporated and subsumed within CE strategy, which is distinctive from prior models of entrepreneurial phenomena (e.g. EO) in established organisations with four key features:

- (1) the behavioural dimension;
- (2) the locus of entrepreneurship;
- (3) the philosophical justification; and
- (4) a unique and identifiable strategy (Kuratko, Ireland, & Hornsby, 2001).

CE strategy is only successful when an organisation has the required skillset to structure (accrue and strategically invest), package (successfully combine), and leverage (assemble and deploy) its resources (Sirmon, Hitt, & Ireland, 2007).

2.4.1 Prior studies looking at the unit analysis for EO

EO has received significant conceptual and empirical attention, demonstrating an area in entrepreneurship research where a growing body of knowledge is developing. A study by Rauch, Wiklund, Lumpkin, and Frese (2009) documented and evaluated the cumulative knowledge on the relationship between EO and business performance by undertaking a meta-analysis, which

explored the extent of the EO-performance relationship and measured potential moderators affecting this relationship. The study analysed 53 samples from 51 studies with an N of 14 259 companies indicating that the correlation of EO with performance is moderately large ($r = .242$); adding that the affiliation is strong to different operationalisations of key constructs as well as cultural contexts (Rauch et al., 2009).

With the EO – performance relationship, the conceptual arguments of previous research unite on the notion that organisations benefit from underlining newness, responsiveness, and a degree of boldness (Lumpkin & Dess, 1996). As per the findings of Ireland et al. (2003), the efforts to anticipate demand and position new products and or services often result in strong performance. This suggests that EO leads to higher performance in an organisation. Interestingly, the degree of the relationship appears to vary across studies. Studies by Covin and Slevin (1986), Hult, Snow, and Kandemir (2003), Lee, Lee and Pennings (2001), and Wiklund and Shepherd (2003), found that organisations that adopt a robust EO perform much better than the organisations that do not adopt an EO ($r > .30$, 9). Studies by George, Wood, and Khan, (2001), and Covin, Slevin, and Schultz (1994), were unable to find a significant relationship between EO and performance, whereas studies by Dimitratos, Lioukas, and Carter (2004), Lumpkin and Dess (2001), and Zahra (1991), reported lower correlations between EO and performance.

When considering and accepting alternate measurement approaches from the well-established approach advanced by Covin and Slevin (1989) for measuring organisational EO, a more objective alternative is that of secondary measurement indicators that offer understanding into a organisations' EO behaviour (Miller, 2011). A study by Lyon, Lumpkin, and Dess (2000) highlights the benefit of assessing firm EO through numerous indicators, including managerial perceptions, organisational behaviours and resource allocations. In this respect, secondary measures provided useful insight into an organisation's behaviour and the distribution and allocation of its resources. However, it is important to note that in contexts where obtaining primary data is problematic, proxies may also be appointed as indicators of managerial attitudes toward risk-

taking. Miller and Le-Breton Miller (2011) used a proxy as a secondary measure of EO for managerial risk-taking. Their work embodies a highly convenient step toward alternative operationalisations of EO.

Another alternative measurement approach is the use of computer-aided text analysis (CATA), which observes an organisation's EO as communicated within written organisation discourse (Wales, 2016). Earlier research submits that CEOs of large corporate firms consistently articulate EO to external audiences (Short, Brigham, & Broberg, 2009). These articulations provide insight into senior management perceptions of EO. In spite of the availability of previously authenticated CATA measurements of EO (Short et al., 2010), there has been narrow research on EO using CATA. In addition, Anderson et al. (2015) proposed a varying measurement approach to examine and study EO. They proposed the use of functional magnetic resonance imaging (fMRI) techniques for examining managerial attitudes toward risk. This creative method enlarges the toolkit available to researchers triangulating the measurement of EO. There is also the unanswered call for qualitative research, despite researchers such as Lumpkin and Dess (1996), and Wiklund and Shepherd (2011) calling for qualitative research on the topic of EO, there is a near absence of such. Lumpkin and Dess (1996) put forward that qualitative research could provide deeper understanding and insight into how the dimensions of EO are exhibited and might be empirically captured. Wales (2016) inferred that qualitative research would provide greater insight into how EO is manifested within organisations, yielding closer congruence between theorising and managerial practice.

2.4.2 Constituents of EO

EO refers to the processes, practices, and decision-making activities that lead to new entry (Lumpkin & Dess, 1996), and consists of three key dimensions: Pro-activeness, innovativeness and risk-taking (Covin & Slevin, 1992). EO as a whole is considered the active search for new opportunities, which facilitates the pursuit of opportunities (Covin & Slevin, 1991). Organisations that are strong in only a few aspects of EO can be very successful whereas

organisations with higher EO are good at monitoring environmental changes and adapting quickly to those changes (Keh, Nguyen & Ping, 2007). Therefore, a greater onus on EO puts new ventures in a position to deal effectively with such uncertainties, and to enjoy high entrepreneurial profit (Wiklund & Shepherd, 2003).

In the same way that the effect of CE on a firm's strategic success is strongest when it animates all parts of an organisation, EO is found in companies where the strategic leaders and the culture together generate a strong impetus to innovate, take risks, and aggressively pursue new venture opportunities (Dess & Lumpkin, 2005). The factors often work together to enhance a firm's entrepreneurial performance.

EO is attributed to several fast-growing young corporations, where the organisations often count on EO to enrich and support corporate venturing undertakings. The Virgin Group of companies has created approximately 200 new businesses since its inception in 1970, notwithstanding the lesser ventures, with sound concepts, which are run by former and current employees (Reference for Business, 2020).

A persistent entrepreneur insisted that Virgin Airline should offer passengers on-board massages, and went to the extent of camping on founder, Richard Branson's, doorstep until she was allowed to give him a neck and shoulder rub. Today, Virgin's in-flight massage is a valued benefit among Virgin Atlantic's upper-class passengers. Very few organisations have a more exemplary and enduring reputation for effective entrepreneurship than 3M, the company has an overarching philosophy of entrepreneurship (Seelos & Mair, 2012), where virtually all characteristics of 3M's management methodology are focused on new venture creation. It is noteworthy that these organisations' policies create and foster an environment conducive to innovation and entrepreneurial advances.

These examples depict corporations with a company-wide dedication to entrepreneurship. Virgin's emphasis on autonomy and risk-taking, and 3M's dedication to innovation and pro-activeness are indicative of strong EO.

2.4.3 Innovativeness

Innovation, in terms of EO, refers to the persistence of an organisation with regard to the formation and introduction of products, the production process, and organisational systems (Lumpkin & Dess, 1996). It is also referred to as a firm's efforts to find new opportunities and novel solutions. It involves creativity and experimentation, which result in new products, new services, or improved technological processes. It is one of the major components of an entrepreneurial strategy. Damanpour (1991) argued that innovation can be either a new product or service, an administrative system, or a new idea that relates to employees in the organisation. Van de Ven (2017) termed innovation as the development and implementation of new ideas over a period. Drucker (2002:5) suggested that innovation is the "specific function of entrepreneurship"; Han and Park (2017) reinforced this classification and prescribed that when an organisation has CE, innovation occurs.

Innovativeness refers to the tendency to engage in and support new ideas, novelty, experimentation, and creative processes that might result in new products, services or technological processes (Lumpkin & Dess, 1996). The strategic goals of any organisation have a positive and important affiliation with innovation.

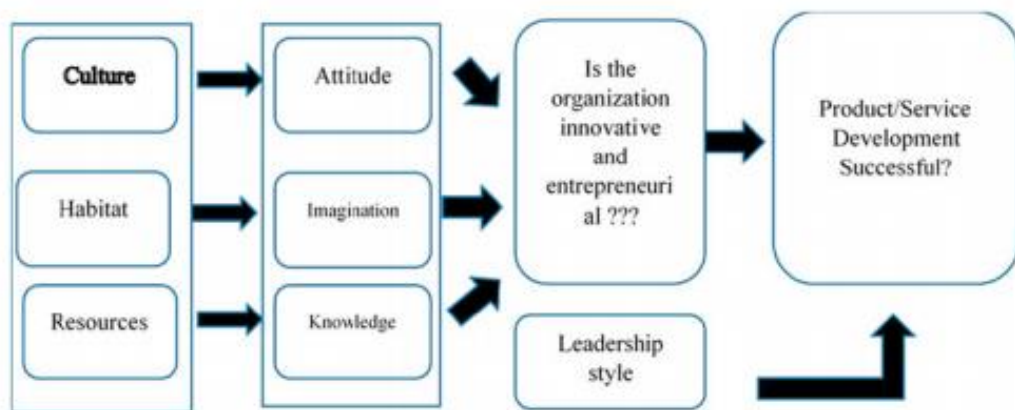


Figure 3: Innovation framework

(Abdelkader et al., 2019:4)

The framework in Figure 3 demonstrates the association between innovation and CE. The first block depicts the fundamentals that the organisation would contribute to the innovation platform. The second block shows the qualities required of the individuals to be creative and innovative. This leads to idea generation, which develops when both blocks are synchronised. When the two blocks are fulfilled, the CE approach is introduced.

Innovation in corporations has been labelled in many different ways, with conceptual roots in innovation entrepreneurship (Schumpeter, 1934) and innovation management (Drucker, 1979). More recent terms include intrapreneurship (Antoncic & Hisrich, 2001), venture entrepreneurship (Tang & Koveos, 2004), corporate intrapreneurship (Dess et al., 2003), strategic entrepreneurial posture (Covin & Slevin, 1989), and internal corporate venturing (Hornsby, Kuratko, & Zahra, 2002). CE, as a construct adopted in this study, included strategic renewal (organisational renewal involving major strategic and/or structural changes), and corporate venturing (corporate entrepreneurial efforts that lead to the creation of new companies within the corporate company), both significant and valid working parts of the CE process (Urban, 2009). This led to the formulation of the first hypothesis, where it is anticipated that:

H1: The higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

Organisations are continually seeking to re-orientate themselves and become strategically innovative, where previous literature and empirical findings point to corporate innovation as an important element in organisational renewal and economic development (Ucbasaran, Westhead, & Wright, 2009). Since innovation is essential for economic development, a theory of economic development requires not only a theory of the firm, but also a theory of the innovating firm (Lazonick, 2008).

Instead of a single depiction of innovation, Rogers (1998) affirmed five different types of innovation:

- (1) Introducing a new product or a significant alteration to an existing product;
- (2) Processing innovations that are novel to an industry;
- (3) Introducing a brand new marketplace;
- (4) Advancing new supply chains for raw materials or other inputs; and
- (5) Variations in industrial organisation

Rogers (1998) believed that there could be a difference in the nature of innovation. For example, an innovation can be characterised as either radical or incremental.

2.4.4 Culture

Culture is the tacit social order of an organisation; it shapes attitudes and behaviours in wide-ranging and durable ways. Cultural norms define what is encouraged, discouraged, accepted, or rejected within a group. When properly aligned with personal values, drives, and needs, culture can unleash tremendous amounts of energy toward a shared purpose and foster an organisation's capacity to thrive. Culture is an elusive lever, because much of it is anchored in unspoken behaviours, mind-sets, and social patterns. For better or for worse, culture and leadership are inextricably linked.

While some cultures emphasise stability, prioritising consistency, predictability and maintenance of the status quo, others emphasise flexibility, adaptability, and receptiveness to change. Those that favour stability tend to follow rules, whereas those that favour flexibility tend to prioritise innovation, openness, diversity, and a long-term orientation. The best leaders are fully aware of the multiple cultures within which they are embedded, can sense when change is required, and can deftly influence the process.

2.4.5 Innovation teams

Innovation teams are internal corporate teams formulated for the purpose of creating new innovations (Kuratko, 2009). Innovation teams have been recognised as a productivity breakthrough of the 21st century. According to Kuratko (2009), innovation teams are semi-autonomous. They have their own budget and management, and they are generally free to make decisions within broad guidelines. In fact, innovation teams are often separated from other parts of a corporation, especially those involved in day-to-day operations.

It is suggested that corporate management professionals want to prevent the unit from engaging in procedures that can stifle innovation activities. However, if the innovation later proves to be successful, the innovation team would be integrated into the larger organisation, eventually receiving the same treatment as the other outputs of an organisation (Ireland, Kuratko, & Morris, 2006).

Organisations differ in the volume and size of inputs devoted to the innovation process. It must be noted that despite the level of inputs into the innovation process, there are no assurances for innovation outcomes, as the complexities of developing innovations comes with high risk. When considerable resources are devoted to the innovation process, but organisations are unable to utilise and profit from the innovative offerings, the resources are wasted and organisation performance suffers (Urban, 2016).

Innovation has to address market needs and requires entrepreneurship if it is to achieve commercial success (Casson, 2005). Entrepreneurship and innovation are positively related to each other and interact to help an organisation to flourish (Urban & Wood, 2015). Not only are entrepreneurship and innovation complementary, a combination of the two is vital to organisational success and sustainability in today's dynamic and changing environment (Dess & Lumpkin, 2005).

Within Multinational corporations (MNCs) formidable challenges are faced, in comparison to that of innovation teams within small and medium-sized enterprises (SMEs). The SMEs focus on existing products and processes

instead of innovation, pro-activeness, and evaluating the opportunities and realising differentiation: whereas, MNCs face formidable challenges due to growing globalisation, technological changes, and organisational complexity. To deal with these challenges, MNCs rely on innovation and renewal to achieve a sustainable competitive advantage and to survive in the long-term. Many MNCs are said to face a “globalisation penalty” as MNCs seem to lag behind locally-focused champions in terms of learning and innovation (Dewhurst, Harris & Heywood, 2011:14).

Corporate headquarters are responsible for providing the strategic leadership necessary to leverage corporate resources across regions and divisions to utilise the innovative capacity of the multi-market firm fully (Dewhurst et al., 2011). The way the head office is staffed will likely have an important impact on strategic leadership, CE initiatives, and subsequent innovation performance of MNCs (Heavey & Simsek, 2013).

Various approaches and strategies could increase corporate entrepreneurial behaviour; these include: creating a system of positive reinforcement, producing innovation teams, continuous support combined with fostering an entrepreneurial environment, providing intra-capital for corporate entrepreneurs, reducing organisational boundaries, and facilitating top management support.

Despite the belief that senior management and leadership are solely responsible for putting into place pro-entrepreneurship organisational architecture, a large part of the workplace's structural, cultural, resource, and system attributes is what encourages entrepreneurial behaviour, both individually and collectively (Morris et al., 2009).

Innovativeness can be a source of great progress and corporate growth; however, major pitfalls occur in organisations that invest heavily in innovation. Expenditure on research and development (R&D) can be a waste of resources. Even if a company creates a new capability or successfully applies a technological breakthrough, another company may develop a similar innovation or find a use for it that is more profitable. R&D and other innovation efforts are

the first to be cut back during an economic downturn, which involves major risks because investments in innovations might not pay off. For strategic managers of entrepreneurial firms, successfully developing and adopting new innovations can generate competitive advantages and provide a major source of firm growth.

2.4.6 Risk-taking

Risk-taking constitutes a crucial part of CE; however, CE comprises more comprehensive risk than risk undertaken in an R&D project. Simply high R&D expenditure can cause internal inefficiency, and the unnecessary consumption of resources to find a new product or technology (Zahra, 1996).

Risk-taking implies a willingness to commit resources to projects with high failure rates and unknown outcomes (Wiklund & Shepherd, 2003). It enables new ventures to conduct risk-taking behaviours in the interest of obtaining high returns (Lumpkin & Dess, 1996), and it contributes to embarking on pro-active and innovative initiatives to alter the competitive landscape of the market (Covin & Slevin, 1991). Pro-activeness, innovativeness, and risk-taking all involve making large resource commitments to risky projects, untried technologies, and new products or services to the market (Tang et al., 2008).

Whether they are being aggressive, proactive, or innovative, organisations on the path of CE must act without knowing how their actions will turn out. Before launching their strategies, corporate entrepreneurs must know their organisation's appetite for risk. How far is it willing to go without knowing what the outcome may be?

Three types of risk:

- (1) *Business risk-taking*: Venturing into the unknown without knowing the probability of success; this risk is associated with entering untested markets or unproven technologies.
- (2) *Financial risk-taking*: Borrowing heavily or committing a large portion of its resources in order to grow; the risk-return trade-off.

- (3) *Personal risk-taking*: Executives taking a stand in favour of a strategic course of action; this stands to influence the course of the whole company and these decisions could have significant implications for their careers.

Successful organisations who apply the values and qualities of CE usually have to take on riskier alternatives to obtain high financial returns. The companies take risks such as assuming high levels of debt, committing large amounts of the firm's resources, introducing new products into new markets, and investing in unexplored technologies. Even though risk-taking involves taking chances, it is not gambling. Entrepreneurial firms engage in product-market innovation, undertake somewhat risky ventures, and create 'proactive' innovations, beating competitors to the punch. The goal, however, is to reduce the riskiness of business decision-making. It is important to remember that entrepreneurship always involves embracing what is new and uncertain to gain competitive advantage. Drucker (2002) argued that successful entrepreneurs are typically not risk-takers; instead, they take steps to minimise risk by carefully understanding it. Consequently, they avoid focusing on risk and remain focused on opportunity. Entrepreneurial failures may lead to new resource combinations and, in turn, help create 'learning platforms', which may facilitate future value creation. Strategic managers must always remain mindful of potential risk.

There is a fundamental need for organisations to strike a balance between exploring for new opportunities and the level of utilisation of its resource base. Similarly, scholars have encouraged the need for organisations to become ambidextrous, wherein they have the attributes of both adaptability (the ability to move quickly toward new opportunities and to adjust to avoid complacency) as well as alignment. Clearly, advocates of the need for a firm to possess a strong EO have a normative bias, which would implicitly favour the need for exploration and adaptation over the short-term for the efficient allocation of the existing resource base (Tushman & O'Reilly, 1996).

Generating earnings from entrepreneurial activities and processes can usually take a long time (Zahra & Covin, 1995). Instilling an entrepreneurial culture

requires avoidance of activities that might include high and not accurately calculated risks as far as possible.

This supports the second hypothesis of the study:

- *H2*: The higher the level of EO in terms of the risk-taking dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

2.4.7 Pro-activeness

Pro-activeness reflects the process of seeking new opportunities, which might be related to the present line of operations, the introduction of a new product or service ahead of competition, and strategic elimination of operations that are in the declining stage of their life cycles (Venkatraman, 1989).

Pro-activeness refers to a firm's efforts to seize new opportunities. Pro-active organisations monitor trends, identify the future needs of existing customers, anticipate changes in demand, or foresee problems that can lead to new venture opportunities. It aids finding opportunities in the market, quickly seizing those opportunities, and garnering a high profit (Wiklund & Shepherd, 2003).

Proactive firms seek out ways not only to be future-orientated, but also to change the very nature of competition in their industry. By means of an example, Dell (Magretta, 1998) sold computers directly to consumers, diminishing the role of retail stores as a way to reach customers. Its success revolutionised the way in which computers were sold.

Pro-active firms are the first to enter new markets, which gives them the first-mover advantage (Dess & Lumpkin, 2005). This has several perquisites:

- Often a first-mover captures unusually high profits as there are no competitors to drive prices down;
- They are usually able to retain their image and hold on to the market share gains they earned by being first; and

- Have an advantage that can be sustained until the maturity phase of an industry's life cycle.

First-movers are not always successful. Customers of companies that introduce novel products or embrace breakthrough technologies may be reluctant to commit to a new way of doing things. Some companies try to be first-movers before they are ready. By means of a practical example, two major entertainment companies, namely NBC and Disney, made large investments in promising internet ventures, but had to pull back after suffering huge financial losses (Dess & Lumpkin, 2005). Disney spent \$2.5 billion to create a major portal called the Go Network (go.com), which started losing \$250 million per quarter, despite being an early mover.

Pro-activeness is effective at creating competitive advantages because it puts competitors in the position of having to respond to successful initiatives. Two other methods firms use to act pro-actively include:

- (1) Introducing new products of technological capabilities ahead of the competition; and
- (2) Continuously seeking out new product or service offerings.

Organisations that continuously monitor and scan the environment and undertake feasibility research apply the proactive strategy, which leads to a competitive advantage. There are many organisations that have been able to sustain the advantages of pro-activeness and continue to reap the rewards.

This supports the third hypothesis of the study:

- *H3*: The higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

2.5 Emerging Markets and Local Studies

Emerging market firms (EMFs) have experienced economic growth and developed into important players in global business. EMFs make up approximately 30 per cent of the Global Fortune 500 companies, and are evolving and progressing to the top of many industry sectors (Casanova & Miroux, 2018). The performance of Chinese technology firms, namely, Alibaba and Tencent, both have embodied the rapid revolution of the Chinese technology sector from a once initiator to innovator. This has brought the need to explore the activities of EMFs and the creation and sustaining of competitive advantage.

The literature on CE in general, in terms of the drivers of the theory, the constructs, and contexts that contribute to the outcomes (Sakhdari, 2016), lack emerging market context compared to that of the developed nations. In comparison, emerging markets in general differ, economically, institutionally, culturally, socially, and technologically. However, the questions of how these differences in emerging market contexts impact the CE activities relates to innovation, venturing, and strategic renewal in EMFs, and how these differences provide incentives or hinder the activities that contribute to CE remain mostly unanswered. This confirms the need to consider the situation and contexts to comprehend CE activities in EMFs (Liu & Vrontis, 2017).

Upon investigation, CE research in emerging markets was found to focus on the concepts of innovation, venturing, and strategic renewal separately rather than holistically. A study done by Demirkan, Yang, and Jiang (2019) searched for peer-reviewed academic journals between the years 2000 and 2019, with the keywords “innovation” and “emerging markets” or “emerging economies” which provided 447 scholarly articles. However, the number dropped to just 35 when the search was limited to the key phrase “corporate entrepreneurship,” which considers the concepts of innovation, strategic renewal, and venturing in an interconnected, holistic way.

Demirkan et al.’s (2019) study showed two current issues in the CE literature in emerging markets. First, the study found that in the macro context of CE in

emerging markets, the institutional context and role of governments were substantial in fostering organisations' entrepreneurship. Second, the study found that on a micro context of CE in emerging markets, the studies lack both in quality and in quantity.

EMFs face institutional environment challenges such as amendments comprising of changes of rules and regulations, poor IP protection, and inadequate or unavailable financing sources (Holmes, Zahra, Hoskisson, Deghetto, & Sutton, 2016). The governments in these countries might choose to stimulate organisations to take up entrepreneurial activities directly; this is different from that of the developed countries (Ring, Bigley, D'Aunno, & Khanna, 2005). The Chinese Government puts innovation as the top national development priority in recent years and strongly encourages firm innovation undertakings. State owned entities, as the main agencies of the Chinese Government, respond actively to governments calls and invest heavily in R&D (Zhou et al., 2017). Governments in general may employ policies, national strategic planning, financing, and other regulation amendments with the aim of stimulating business activity (Sun & Liu, 2014). Governments also adopt collaborative innovation activities to promote firm innovation competitiveness (Zheng, Li, & Wu, 2013).

In an emerging market context, CE literature to some extent has established that CE activity is impacted greatly by the organisational culture, hampering entrepreneurial behaviour. Whereas, in a developed country context, namely, the USA, Hornsby, Kuratko, and Montagno (1999) have verified that entrepreneurial behaviour is meaningfully related to organisational factors. While organisational culture ranks among the factors that most influence CE, the creation of an overarching entrepreneurial culture within the organisation (Arz, 2017) and the role of organisational culture in emerging market organisations has not received the necessary academic research attention.

A study conducted in Kenya, East Africa by Hughes and Mustafa (2017), discovered that supportive internal organisational environments, specifically that of senior management, are fundamental antecedents for CE to flourish. At

the individual level, Urban and Wood (2015) studied how the opportunity recognition behaviour and motivation of employees influences organisations' CE. Their findings show a significant relationship between these individual level behaviours and CE activities of the firms in the financial sector in South Africa. Additional and complementary studies, with a focus on individual antecedents of CE, were also conducted by Urban and colleagues focusing on South Africa as the emerging market context (Urban, 2017; Urban & Verachia, 2019; Urban & Wood, 2017). No empirical study was found on CE in Namibia.

First-hand studies that focused on CE, in general, used surveys as a primary source of data to measure the CE behaviour of a firm. A recent exception to this is the study by Boone et al. (2019), which measured CE using secondary data sources. While this study focused mainly on developed country contexts such as the USA and Germany, it is suggested by Demirkan et al. (2019) that by using innovative measures, such as Boone et al.'s (2019) instrument can open up vast research that focuses on CE in emerging market contexts. The use of secondary data in identifying the three main dimensions of CE, namely, innovation, strategic renewal, and venturing may find a more holistic and higher-quality research stemming from EMFs.

2.6 Conclusion

A critical review of the literature suggests that CE and the resultant entrepreneurial activity may not always be easy to achieve, predominantly because successful CE activity goes beyond a simple decision (Ireland et al., 2009). It requires the alignment of the entrepreneurial actions of employees throughout the organisation as well a supportive and conducive working environment (Sarooghi et al., 2015). Corporate environments supportive of entrepreneurship must provide appropriate reward systems, senior management and leadership support, clear explicit goal setting, and appropriate organisational values, which all signal to employees that entrepreneurial behaviour and action are desirable (Goodale et al., 2011). A synthesis of the main studies on CE shows that numerous elements promote entrepreneurial

action, but, to some extent, these studies ignore individual participation, which may promote CE within organisations (Ireland et al., 2009).

Although there are external factors such as competition, technology, and industry dynamism, which may influence the level of CE (Urban, 2014), this study focused on empirically testing a model which builds on existing research. These studies understand the pro-entrepreneurship organisational architecture not only as a unique form, but also as an internal environment or context exhibiting certain attributes that individually and collectively encourage entrepreneurial behaviour.

An integration of all-embracing research on the relationship between CE (strategic renewal, innovation, and corporate venturing) and EO (innovativeness, risk-taking, and pro-activeness) comprised this study.

Table 2: Summary of references on how an intrapreneurial mind-set can solve the innovation gap in Namibia

Author(s)	Focal Entrepreneurial Phenomenon	Locus of Entrepreneurship	Relationship between Entrepreneurship phenomenon and CE
Adenfelt and Lagerstrom (2007)	Organisational rejuvenation, knowledge exploitation, CE	Individual and organisational members	Organisational rejuvenation
Alagoz and Ortkepuz (2017)	Corporate Wisdom, CE, knowledge management entrepreneurship	Not specified	Factors of corporate wisdom interact with elements of CE
Antonich and Hisrich (2001)	Intrapreneurship, construct refinement	Not specified	Intrapreneurship construct shows good convergence and relation to organisational characteristics, and positive consequences
Arz (2017)	Organisational culture, CE	Not specified	Organisational culture fosters CE
Audretsch and Kuratko (2013)	CE, corporate venturing, strategic entrepreneurship	Not specified	Revitalising innovation, creativity, and leadership in corporations

Author(s)	Focal Entrepreneurial Phenomenon	Locus of Entrepreneurship	Relationship between Entrepreneurship phenomenon and CE
Birkinshaw (1997)	Entrepreneurship in MNCs	Global, local, internal and global-internal hybrid locus	Characteristics of subsidiary initiatives
Bolbol (2018)	CE, organisations financial performance	Top level management	Positive significant relationship between CE dimensions and organisational financial performance
Burgelman (1983)	Internal Corporate Venturing	New venture division, corporate management	Corporate strategy extends to new business activities, as a result of internal corporate venturing
Covin and Slevin (1991)	CE, organisational elements	Organisational members	Conceptual model of entrepreneurship in an organisation. Relationship between entrepreneurial posture and organisational performance
Devarajan et al. (2006)	CE, innovation, leadership	Middle-level managers	Competitive advantage through innovation on a sustained basis
Lassen and Nielsen (2009)	Difficulties of CE	Not specified	Opposing forces, core of CE
Manso (2017)	Innovation management, CE, creativity	Corporate management	Motivating innovation in the workplace through incentives
Puhan and Vogel (2009)	Innovation, exploration and exploitation, CE, think tanks	Individual and organisational members	Organisational think tanks solve the innovation dilemma
Sakhdari (2016)	CE	Not specified	Review of previous studies to develop a framework
Thornberry (2001)	CE and Intrapreneuring	Corporate management, Top and middle - level management	CE can be a powerful antidote for large company staleness
Yildiz (2014)	CE, new business venturing, organisational culture	Not specified	Relationship between dimensions of organisational culture and CE
Zahra (1991)	New business venturing, financial outcomes of CE	Corporate management	Five models hypothesizing the financial outcome and performance of CE

The conceptual model, shaped from the work of Urban and Wood (2015), intended to contribute to the body of knowledge providing both researchers and organisations alike the foundation to examine the relationship between EO and CE.

Figure 4 presents the conceptual model for this study.

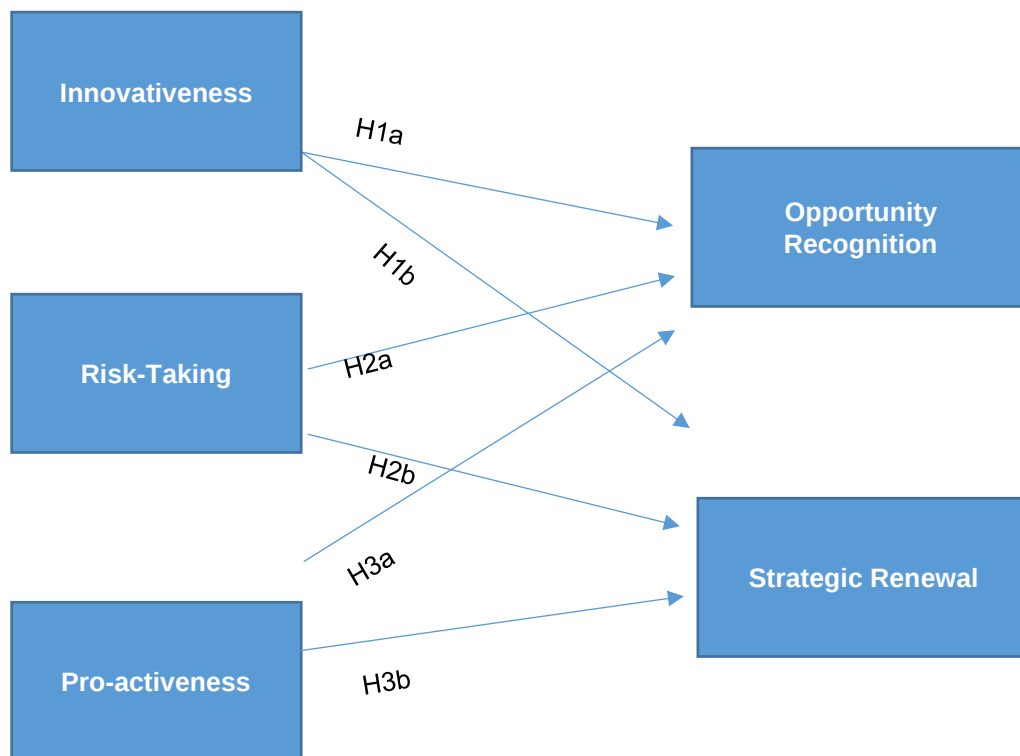


Figure 4: Conceptual model

(Adapted from Urban & Wood, 2015).

2.6.1 Summary of hypotheses

The following three hypotheses were formulated for this study.

- *H1*: The higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

- *H2*: The higher the level of EO in terms of the risk-taking dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.
- *H3*: The higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Methodology

This chapter displays and describes the research methodology used in this study. The approach in selecting the sample respondents as well as the research instrument and collation of empirical quantitative data was expressly specified. This cross-sectional study looked at the process through which data was gathered, and the chapter describes the research instrument used.

This study used scholar reviewed, established, and tested theories such as the resource-based theory, stakeholder theory, opportunity-based theory, and psychological theory to establish relationship variables. Emphasis was on the relationship between variables (Bryman, 2015). The constructs of EO and CE comprised dimensions of pro-activeness, risk-taking, and innovation, as well as opportunity recognition and strategic renewal. EO was the dependent variable (DV) and CE the independent variable (IV). This method was considered necessary for this research as it tested the formulated hypotheses, taken from the constructed theories (Creswell, 2015). Consistent with the objective of this study, a positivist approach to quantitative research was applied due to the high level of credibility (Bryman, 2015).

3.2 Research Design

Widely used research paradigms are positivism and post-positivism. Positivism relies largely on theories that can be tested, considerable in instances where the intention is to predict possible outcomes through established variables (Battachjee, 2012), while remaining autonomous (Blaxter, Hughes, & Tight, 2010).

Positivist research uses primarily quantitative research techniques, observable through structured instruments. This study drew on the positivist paradigm to assess the extent to which EO enables CE in large Namibian companies. A quantitative research design, using a cross-sectional approach was undertaken

using primary data, to ensure the accuracy of the responses of employees in a large corporate organisation in Namibia, and to ensure that the data was not outdated (Krueger, 1993). The quantitative methods employed had previously been used in comparable studies (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003). This approach is cost effective and allows for a greater number of respondents in a shorter timeframe (Field, 2009). This method also ensures objectivity upon data analysis and will be utilised to test the theory and to respond to questions relating to the link between EO and CE.

The drawback of using quantitative research is common method bias, and a lack of in-depth insight about the constructs studied. Despite ethical concerns for this type of research, it was ensured that the respondents consented to undertaking the study and did not feel compelled to answer against their will. Total confidentiality was observed, with all respondents remaining anonymous (Cooper, Schindler & Sun, 2006).

3.3 Data collection and sampling

3.3.1 Population

A complete set of all items that are of interest in the research is considered the population (Asiamah, Mensah, & Oteng-Abayie, 2017). This study used in part, employer data from previous winners of the Deloitte 'best company to work for' annual Namibian survey (Deloitte, 2019). Winners in the large company category included Trustco, FirstRand, Roads Fund Administration, Pupkewitz, and Bank of Namibia. This annual Deloitte survey is strictly by means of an electronic survey whereby all employees are invited to participate. A minimum of 70 per cent of the organisation's employees must participate to ensure the organisation is not penalised. Companies are not invited to participate in the annual survey; it is the organisations decision to partake. In total, 12 large companies with employees in excess of 500 were identified from the population.

3.3.2 Sample and sampling frame

The sample was drawn from prior winners of the Deloitte 'best company to work for' Namibia survey, as well as organisations that form part of the 'Who's Who Namibia Excellence' annual publication, where all private and public sector companies were considered. One key reason for using the past winners of the Deloitte survey was the interest shown by these organisations in enhancing the workplace for their employees. When identifying the organisations sampled, the only two criteria were that the organisations employed 500 individuals or more and operated within Namibia. This allowed for a diverse representation of organisations, operating in various sectors and geographic locations. The respondents were full-time employees of the selected organisations. In addition, using the most recent Who's Who Namibia Excellence publication meant that organisations' contact details were made available.

Twelve private and public sector organisations were selected and formal requests were made with the CEOs to meet in person. The majority of the selected organisations made time to meet, and allowed a discussion of the research question, which was to understand the role EO has in enabling CE in large Namibian companies. Two CEOs requested that additional questions be considered and included under the CE construct, proving that there was indeed a buy-in from the organisations to participate in this study.

Of a target population of 3 500 respondents, 614 responded; a response rate of nearly 18 per cent. Individually e-mailing the targeted respondents had a higher success rate than the generic group e-mails initially distributed in the pilot study, this was proven by the speedy response rate observed on Qualtrics compared to when group e-mails went out to organisations. A large part of the success of receiving 614 responses in 17 days was due to the initial work that had gone into physically meeting with the CEOs and HR executives, signing non-disclosure agreements and answering all questions around the purpose and objective of the study. The groundwork and pro-active approach allowed for immediate sending out of the survey link upon confirmation of ethics clearance.

The five largest contributors to the data received were Old Mutual, Standard Bank, Nedbank, FNB, and Bank Windhoek.

3.4 Research Instrument

The research instrument used in this study was a pre-set, self-administered, electronic, on-line questionnaire. The questions and statements administered were based on the instrument from Urban and Wood (2015), with additions from other studies (Urban, 2012). A self-administered questionnaire ensures objectivity and confidentiality; with this research instrument having been successfully piloted, allowed for areas of confusion, common method bias, and structure to be remedied and enhanced. The piloted study proved successful (Rauch et al., 2009).

The research instrument was developed to collect data on EO's key dimensions pro-activeness, risk-taking, and innovativeness and other combined dimensions. CE, as the dependent variable, collected data on opportunity recognition and strategic renewal. There were provisions made for various demographics, allowing for a holistic view of the respondents. A multi-item scale, which consisted of between five and 10 questions per construct was used in this study; this is preferred in social science research as the variables measured are subjective and this proves challenging to measure when using a single question measure (Wolf, 1978).

Table 3: Measures used in the study

Construct	Literature sources	Dimensions	Comment on Instrument
EO (IV) Measured using the seven-point Likert scale	Lumpkin and Dess (2005) Baumol and Strom (2007)	Innovativeness Risk-taking Pro-activeness Combined dimensions	Exploratory factor analysis (EFA) tested validity (Urban & Wood, 2015) and uncover a relatively large set of variables Cronbach's Alpha tested reliability across all three dimensions (Haynie & Shepherd, 2009)
CE (DV) Measured using the seven-point Likert scale	Urban and Wood (2015)	Opportunity recognition Strategic renewal	EFA tested validity (Urban & Wood, 2015) Cronbach's Alpha tested the reliability across all dimensions (Haynie & Shepherd, 2009)

A seven-point Likert scale, measuring the dependent and independent variables, was decided upon after reviewing alternative measurement scales in literature. The Likert scale was developed by Rensis Likert and is considered a popular rating scale, which evaluates the scale of agreement (Bhattacharjee, 2012). The strength of using the Likert scale is the simplicity (Neuman, 2000) with the seven-point scale being decided on due to the odd number, which allows for the scale to be evenly balanced, retaining a range of positive and negative statements (Neuman, 2000). A further benefit to using the seven-point scale, over a five-point scale, is that the responses can be collapsed into summarised categories for analysis purposes. The scale was used, assessing both ends of the spectrum, namely strongly disagree (1) to strongly agree (7). The scale proved rather easy to construct with the only real challenge being the analysis and interpretation of the meaning of each score (Zikmund, 1997).

The research instrument attempts to establish the respondents' perceptions, motivations, and subjectivity (Morris et al., 2009). The measure of perception in this instrument has been widely used in previous research, in which management perceptions are the preferred measure for CE (Antoncic and Hisrich, 2004).

3.4.1 Control variables

A control variable is one that is held constant during an experiment (Bernerth & Aguinis, 2015). It is also identified as a constant variable or merely as a control. The control variable is not part of the testing itself, if it is neither the independent nor the dependent variable, yet, it is important as it can have an effect on the results. It is not the same as a control group. Research commonly has various control variables, and it becomes important to attempt to hold all variables constant (Anderson, Wennberg, & McMullen, 2019), with the exception of the independent variable. Should a control variable change during an investigation, it may invalidate the correlation between the dependent and independent variables. The importance of a controlled variable is that although they may not always be measured, they offer substantial effect on the outcome of the study. Noting control variables makes it easier for future researchers to reproduce the research and therefore establish the relationship between the independent and dependent variables, without skewing the results.

Measurements of control variables included the demographics section, namely age and gender. Scales from previous studies were used to obtain a certain level of reliability because they have been tested before and been found to have excellent Cronbach alphas. They met the reliability and validity requirements (Wiklund, Patzelt, & Shepherd, 2009), though not tested in the Namibian context, which is what this study undertook.

3.4.2 Instrument objective

The objective of the instrument was to collect data on the constructs CE and EO, as well as the demographics. The questionnaire was divided into four sections, labelled A to D. Section A was selection criteria. Section B was demographic information. Section C measured the CE construct; the dependent variable in the study. Section D measured the EO construct; the independent variable in the study. The traits studied are represented through individuals and their relationship to firms' behaviour (Murimbika & Urban, 2014). The comprehensive questionnaire has been included as Appendix A.

3.5 Procedure for Data Collection

A cross-sectional convenience sampling method was implemented for this study. A non-probability sample is used when the sample is drawn from a convenient, readily available population (Bhattacharjee, 2012).

After consent from the identified corporate institutions, a personalised e-mail was sent to each individual employee, detailing the purpose of the research and requesting the employee to assist by completing the non-compulsory survey using the attached link. The link was for the online software program named Qualtrics, which was used to design and distribute the questionnaire, and capture the data from the respondents.

An optimistic target was set at 1 000 respondents. It is common and advisable to target a large sample size as this caters for a low response rate as well as any incomplete and unusable questionnaires. The personalised e-mail request was sent to approximately 3 500 potential respondents of which 614 responses were received. The first survey link went live on 11 November 2019 and the last response considered for the survey was received on 27 November 2019. The reason for closing the survey after 17 days was due to the slow response rate in the final days, and 614 responses was sufficient data to commence with analysis.

3.6 Data Analysis and Interpretation

3.6.1 Data transformation and cleaning

The data was downloaded from Qualtrics in its raw, unfiltered form. The data was cleaned to ensure that its integrity and reliability was not compromised. Screening of the raw data for errors, removing of incomplete datasets, and coding was done as part of the data quality check process. Thereafter, several questions were reverse coded to ensure all coding reflects positive responses from (1) strongly disagree to (7) strongly agree.

Next, the 'cleaned' data was exported into SPSS, a statistical software package, which performs statistical analysis. This software package is user friendly and does not require a special skill set, making the output easy to comprehend and interpret (Field, 2013). SPSS checks for missing data, and any violation of statistical assumptions. Thereafter, the data was evaluated for missing values and violation of multivariate analysis, tested for validity and reliability, and statistical methods were used for the hypothesis testing.

3.6.2 Factor analysis

Exploratory factor analysis (EFA) was used to test a three-factor model of EO risk-taking, innovativeness, and pro-activeness. This was used to test the construct validity of the scale where the overarching goal was to identify the underlying relationships between the variables. Standardised regression coefficients give an indication of the extent of direct effect of an independent variable on a dependent variable (Hair, Anderson, Babin, & Black, 2010).

3.7 Validity and Reliability

This study used a questionnaire with multi-item scales, measuring various constructs. It was therefore essential that construct, scale, and instrument validity (internal and external) and reliability were tested. Reducing measurement error is one of the goals of validity and reliability testing (Field, 2009).

3.7.1 Internal validity

The internal validity of a concept helps to verify how a question related to the concept actually measures what it is set out to measure (Cooper & Schindler, 2011). It examines if the change in dependent variable is caused by the change in the independent variable (Bhattacharjee, 2012), and ensures that each question efficiently addresses a concern of the intended research.

3.7.2 External validity

External validity is ensured to verify and confirm that the results of the study might be valid in other places if generalisation is necessary (Cooper & Schindler, 2011). Limited to the large companies in Namibia, with employees of 500 or more, the study made generalisations of corporates in Namibia. The large sample size of 614 respondents ensured a diversified valid set of results. The purpose of this validity testing method is to ensure that the findings will apply in real life and other contexts (Weiner, 2007).

3.7.3 Reliability

Reliability refers to the accuracy and precision of measurement procedure (Blumberg, Cooper & Schindler, 2008) and the consistency with which a construct is measured (Bhattacharjee, 2012). Reliability is the degree to which a measurement technique can be depended upon to have reproducible results upon reproducible application, meaning a researcher should be able to carry out the same study and produce the same results (Bhattacharjee, 2012).

3.8 Limitations of the Study

Due to the quantitative method used for this study, causal relationships cannot be determined. Only four dimensions of EO were considered, and with CE two dimensions were considered. Research suggests that more dimensions could be considered, such as innovation in CE and competitive aggressiveness and autonomy in EO (Covin & Lumpkin, 2011).

The results of the study might be exposed to systematic bias, as there could be variances between the results from the sample, and the theoretical results should the entire population have taken part in the study.

It is noteworthy that responses from certain companies might be similar to that of other companies; however, due to the anonymous nature of the study, this could not be confirmed.

This study did not assess nor examine the reasons for the results, which too could be viewed as a limitation of the study (Segal, Borgia, & Schoenfeld, 2005).

Lastly, the questionnaire was centred on self-assessment and perception, and as such, might not reflect the employees' true behaviours.

3.9 Ethical Considerations

Ethical consideration is of paramount and fundamental importance and Wits Business School ethical standards were followed. The researcher ensured a strict ethical code of conduct while conducting and compiling the data collection. The research instrument ensured a non-mandatory informed consent, informing all respondents of the greatest level of confidentiality; however, electronic questionnaire confidentiality remains a great concern for respondents (Fox, Murray, & Warm, 2003). An objective, non-leading set of questions on the consistent variables were followed and the voluntary participation of the study was made explicitly clear. The contact details of the researcher and supervisor were provided and the respondents were informed that the results of the completed study would be made available upon request. All participating companies were provided with a copy of the Wits Business School ethics clearance, protocol number: WBS/BA/2243728/153.

In addition, the researcher ensured a zero tolerance for any form of plagiarism with all sources referenced, without fault.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter presents and interprets the results of the data analysed, as outlined in the research methodology chapter. The chapter starts with the description of the sample characteristics, an analysis of the demographics of the respondents, highlighting some key observations. Thereafter an analysis of the reliability of the measurement scales is taken. Data tables and figures are presented for the descriptive analysis, to graphically assess potential relationships between the variables. The results relating to the testing of each hypothesis follow, and the chapter closes with a summary.

4.2 Data Screening

Data screening is the process of confirming that the data is clean and ready to be used before conducting further statistical analyses (Field, 2013). The sample of 614 respondents completed the survey electronically, using the questionnaire loaded on the software program named Qualtrics. From the 614 individuals that responded only 597 gave consent, the remaining 17, who did not give their consent at question 1, were automatically taken to the end of the survey and thanked for their time. These 17 respondents were therefore excluded from further analysis. Further datasets had to be excluded as some respondents did not meet the inclusion criterion, which was being employed in a corporate with 500 or more employees. Missing data analysis was conducted and all cases that had more than 10 per cent data points missing were excluded (Foster, 2001) After all screening, 500 cases were eligible for further analysis. The official sample size for this study was therefore 500. Hair et al. (2010) recommended that sample sizes greater than 100 be used to conduct multiple regression analysis, therefore the useable and final sample of 500 was sufficient.

4.3 Demographic Profile of the Respondents

This section summarises and presents the demographics of the respondents. Each demographic is summarised by means of a table or graph and interpreted accordingly starting with age, then gender followed by level of education and length of service. This section also presents the business age, region, organisation type and participation and the respondents' role in the business.

4.3.1 Age distribution

Table 4 confirms that most respondents (36 per cent) were in the 30 to 39 year age group (n=180). This was followed by the 18 to 29 year age group (33.6 per cent), 40 to 49 year age group (19.4 per cent), 50 to 59 year age group (9.8 per cent), and just over one per cent in the 60 years and above age group. The bulk of the respondents were between the ages 18 to 39 years, which was over two thirds of the sample (n=348), suggesting a unique observation that nearly 70 per cent of the respondents were below the age of 40. The low number of 60 and above years of age (n=6) respondents was due to the fact that as per Namibian legislation, retirement age was anywhere from 55 to 65 years of age.

Table 4: Age distribution

Age groups		Frequency	Per cent	Cumulative per cent
Valid	18-29 years	168	33.6	33.6
	30-39 years	180	36.0	69.6
	40-49 years	97	19.4	89.0
	50-59 years	49	9.8	98.8
	60+ years	6	1.2	100.0
	Total	500	100.0	

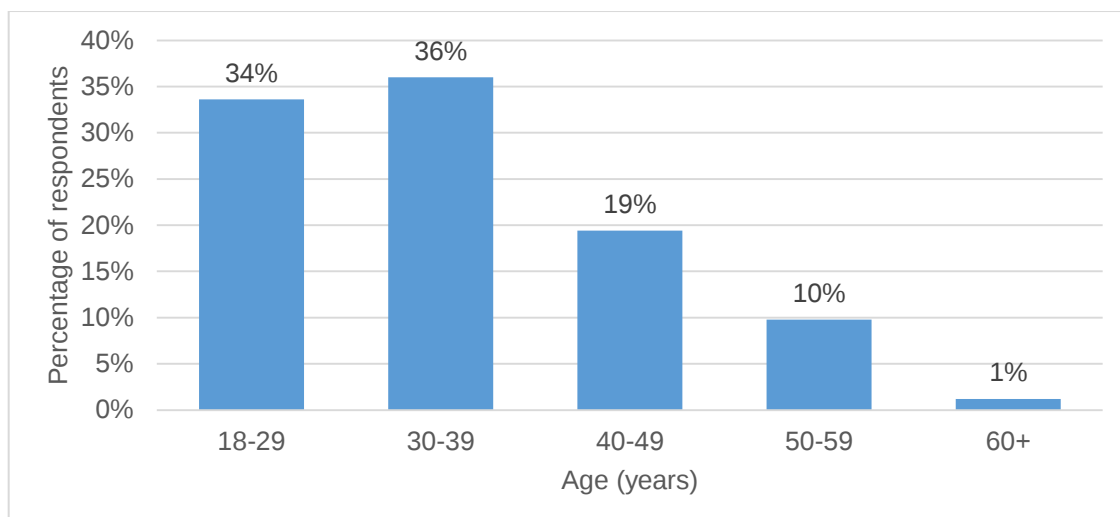


Figure 5: Age distribution

4.3.2 Gender

Sample characteristics results revealed that there were more females (58 per cent) than males (41.2 per cent) sampled. Females amounted to 290 and males 206. A small number ($n=4$) of respondents preferred not to state their gender.

Table 5: Gender distribution

Gender groups		Frequency	Per cent	Cumulative per cent
Valid	Female	290	58.0	58.0
	Male	206	41.2	99.2
	Prefer not to say	4	.8	100.0
	Total	500	100.0	

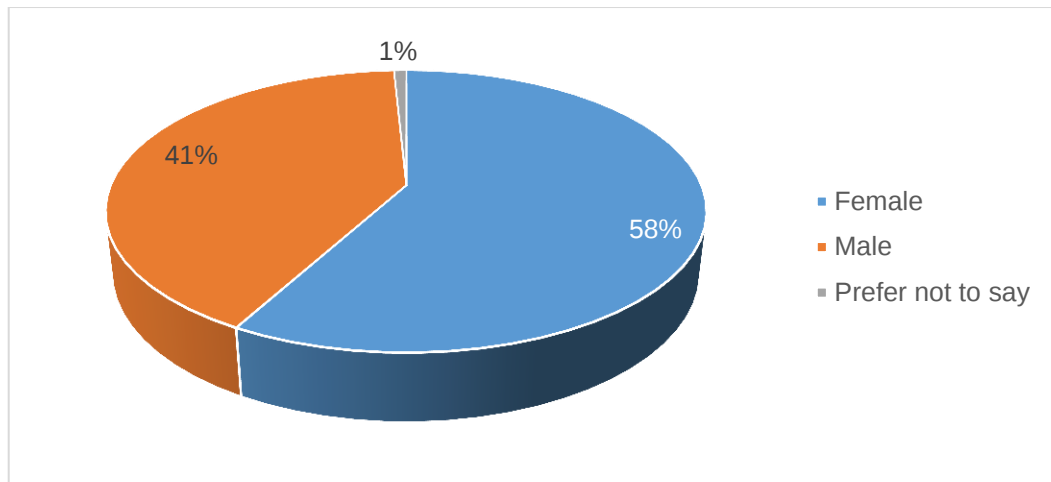


Figure 6: Gender distribution

4.3.3 Level of education

Just over one per cent (n=6) of the respondents did not have a grade 12 qualification, with the highest number of respondents (30.8 per cent) having grade 12 only (n=154). The second highest number of respondents (25.6 per cent) had a diploma (n=128), followed by 18 per cent having an honour's degree (n=90). The degreed respondents (17 per cent) were fewer (n=85) than the honours degree respondents. The respondents holding a master's degree amounted to just over seven per cent (n=36) with a solitary respondent having a PHD.

Table 6: Education distribution

Education levels		Frequency	Per cent	Cumulative per cent
Valid	Below Grade 12	6	1.2	1.2
	Grade 12	154	30.8	32.0
	Diploma	128	25.6	57.6
	Degree	85	17.0	74.6
	Honours Degree	90	18.0	92.6
	Masters	36	7.2	99.8
	PHD	1	.2	100.0
	Total	500	100.0	

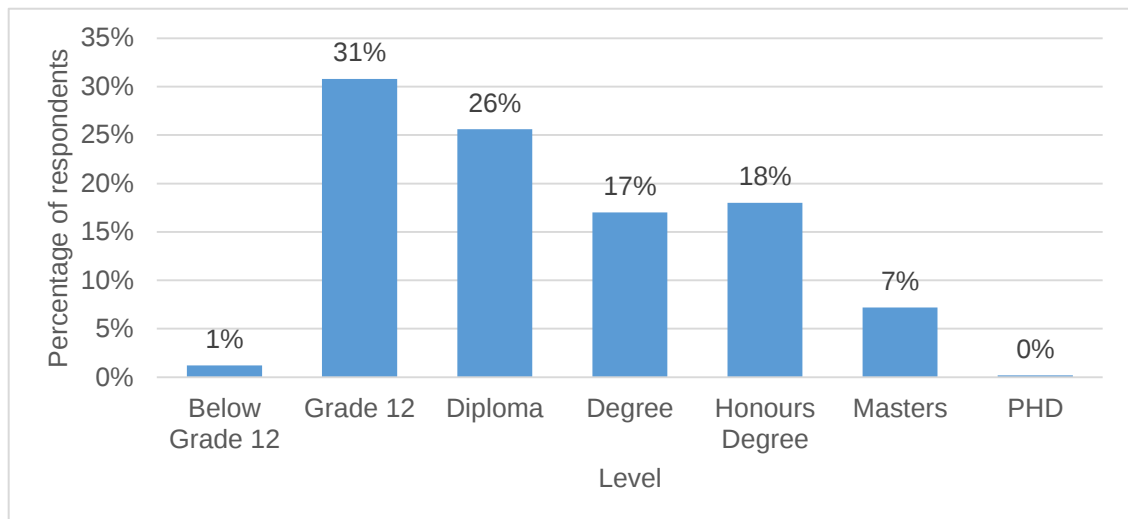


Figure 7: Education distribution

4.3.4 Length of service

Respondents with a tenure of less than one year (8.4 per cent) reflected the smallest group (n=42), followed by respondents with a tenure of six to 10 years (19.6 per cent) reflecting the second smallest group (n=98). The largest group of respondents (45.4 per cent) were those with a tenure of between two and five years (n=227) with the second largest group of respondents (26.6 per cent) being those with a tenure of 10 years or more (n=133).

Table 7: Service distribution

Length of service		Frequency	Per cent	Cumulative per cent
Valid	Less than a year	42	8.4	8.4
	2-5 years	227	45.4	53.8
	6-10 years	98	19.6	73.4
	10+ years	133	26.6	100.0
	Total	500	100.0	

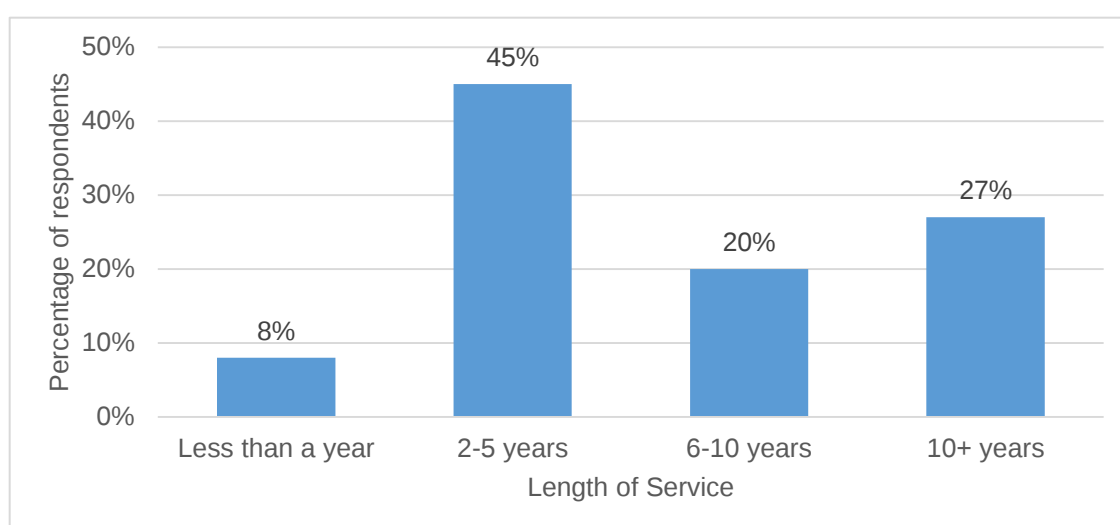


Figure 8: Service distribution

4.3.5 Business age

The overwhelming majority of the respondents (89.8 per cent) were employed at businesses that were 10 years or older in age (n=449). Respondents that worked for corporates that were aged between six and nine years amounted 1.8 per cent, three to five years of age (4.8 per cent), and less than three years of age (3.6 per cent). The sample criteria was to work at an organisation that employed 500 or more employees; this considered, nearly 90 per cent worked for corporates of 10 years or older in business age. However, there were corporate employers that were the holding company, with newer more recent companies within the group. This could have been reason for the over 10 per cent of respondents stating that they were employed by corporates with an age of nine years or less.

Table 8: Business age distribution

Business age		Frequency	Per cent	Cumulative per cent
Valid	Less than 3 years	18	3.6	3.6
	3-5 years	24	4.8	8.4
	6-9 years	9	1.8	10.2
	10+ years	449	89.8	100.0
	Total	500	100.0	

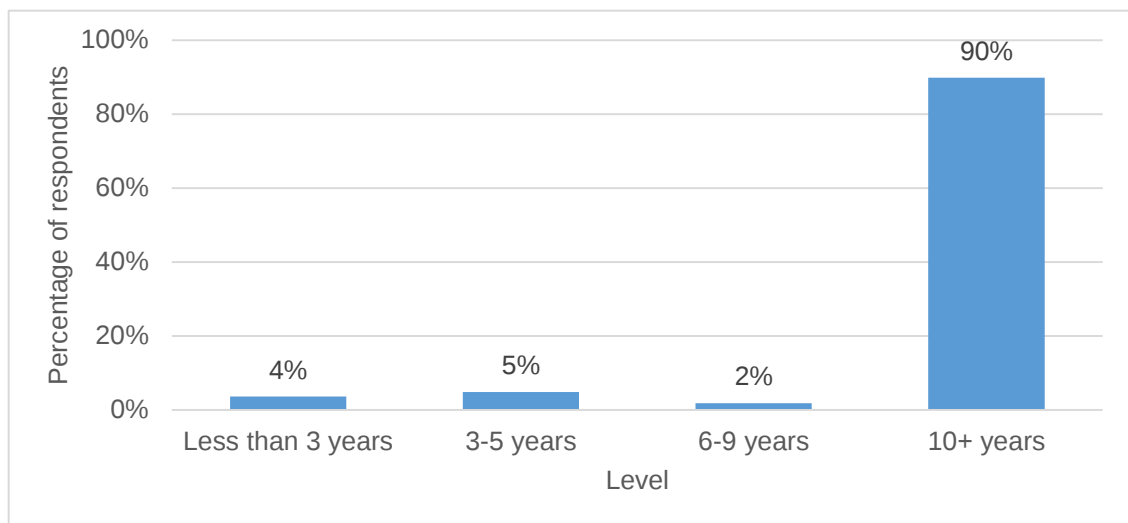


Figure 9: Business age distribution

4.3.6 Region where business is located

Namibia is made up of 14 regions, with the capital city being Windhoek, which is in the Khomas region, the region where the majority (70 per cent) of the respondents (n=350) were geographically located. Namibia is one of the least densely populated countries in the world with just 3.13 people per square kilometre, with a large migration of citizens to the capital in search of employment opportunities (Namibia Statistics Agency, 2017). The second highest response rate (8.8 per cent) came from the Oshana region (n=44). The Oshana region is the highest populated region in Namibia (Namibia Statistics Agency, 2017) and is also considered the region with the most economic potential, due to the masses. Notably, the Erongo region had the third highest

(six per cent) number of respondents (n=30). There was a minimum of one respondent from each of the remaining 11 regions.

Table 9: Business region distribution

Region		Frequency	Per cent	Cumulative per cent
Valid	Erongo	30	6.0	6.0
	Hardap	5	1.0	7.0
	Karas	19	3.8	10.8
	Kavango East	8	1.6	12.4
	Kavango West	1	.2	12.6
	Khomas	350	70.0	82.6
	Kunene	3	.6	83.2
	Ohangwena	7	1.4	84.6
	Omaheke	5	1.0	85.6
	Omusati	6	1.2	86.8
	Oshana	44	8.8	95.6
	Oshikoto	4	.8	96.4
	Otjizondjupa	16	3.2	99.6
	Zambezi	2	.4	100.0
	Total	500	100.0	

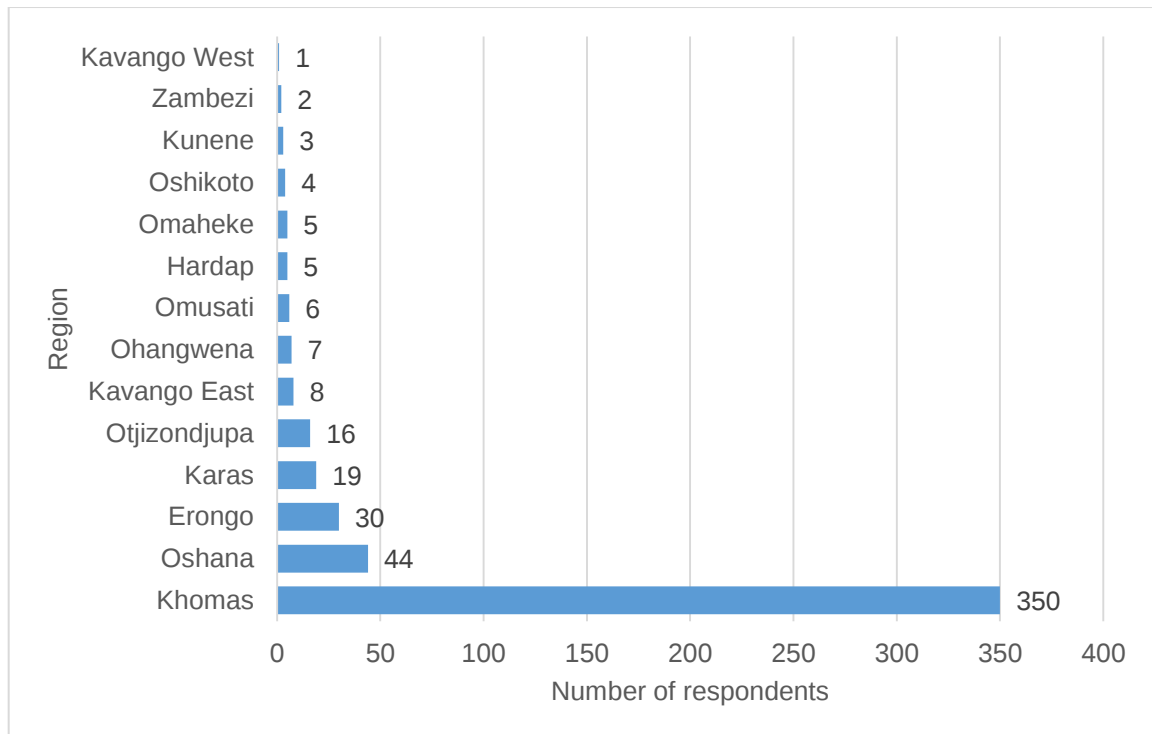


Figure 10: Business region distribution

4.3.7 Organisation type

The focus of this study was on the private sector, with meetings being held pre-survey with organisations in the private sector. However, the public sector's State Owned Entities (SOEs) are run in the same vein as a private sector operation, thus were accepted for the purpose of this study. Respondents that worked in the private sector (88 per cent) made up the bulk of the respondents (n=444) with public sector respondents (11.2 per cent) making up the difference (n=56).

Table 10: Organisation type distribution

Organisation type		Frequency	Per cent	Cumulative per cent
Valid	Public sector	56	11.2	11.2
	Private sector	444	88.8	100.0
	Total	500	100.0	

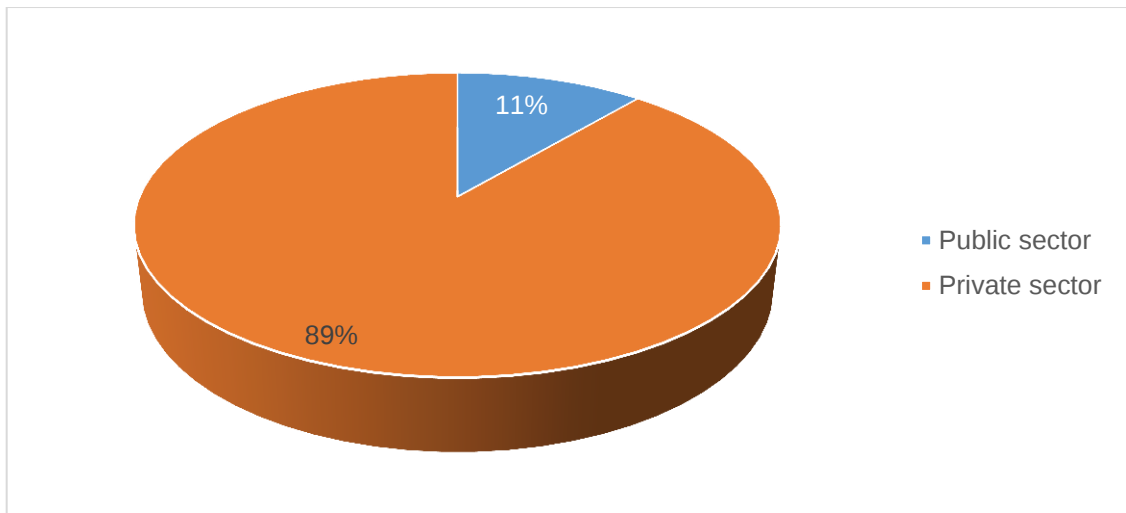


Figure 11: Organisation type distribution

4.3.8 Organisation participation

As discussed under the research methodology section, formal meetings were held with various CEOs and HR executives prior to the questionnaire going online. Consent to have employees participate in the study was obtained by the four largest commercial banks, namely; Bank Windhoek, FirstRand, Nedbank, and Standard Bank. Consent was also obtained from Old Mutual. Due to either the time constraint to receive the consent and / or the challenge of receiving formal buy-in from the initially identified 15 corporate employers in the private and public sectors, the study commenced without the remaining identified corporates. The research instrument included the name option of additional corporates, where a small number of responses were received. The link to the research instrument was made public and shared among respondents who could not be controlled. As long as the respondents gave their personal consent and met the sample criteria, requiring consent from the organisations was not required. For privacy purposes, four additional corporates are therefore referred to as Company A, B, C, and D, and a field for other is included in Table 11. The largest number of respondents (41.2 per cent) came from Old Mutual (n=206). This can be attributed to the researcher's formal employment in the group, where colleagues assisted to complete the electronic survey out of solidarity. Personalised e-mails were sent to approximately 950 Old Mutual employees requesting their participation in the survey. Standard Bank (18.4 per cent) had

the second highest number of respondents (n=92), followed by FirstRand (17.4 per cent), Nedbank (10.2 per cent) and Bank Windhoek (9.4 per cent). The combined total of companies A, B, C and D amounted to two per cent (n=10), with the category of other amounting to 1.4 per cent (n=7).

Table 11: Organisation participation distribution

Organisation		Frequency	Per cent	Cumulative per cent
Valid	Bank Windhoek	47	9.4	9.4
	FirstRand	87	17.4	26.8
	Company A	4	.8	27.6
	Nedbank	51	10.2	37.8
	Company B	2	.4	38.2
	Old Mutual	206	41.2	79.4
	Standard Bank	92	18.4	97.8
	Company C	2	.4	98.2
	Company D	2	.4	98.6
	Other	7	1.4	100.0
	Total	500	100.0	

4.3.9 Role in the business

Respondents occupied various roles in the organisations, with the majority (67 per cent) being employees (n=335), followed by managers at 29.8 per cent (n=149), and lastly executives, making up 3.2 per cent (n=16).

Table 12: Designation distribution

Designation		Frequency	Per cent	Cumulative per cent
Valid	Executive	16	3.2	3.2
	Manager	149	29.8	33.0
	Employee	335	67.0	100.0
	Total	500	100.0	

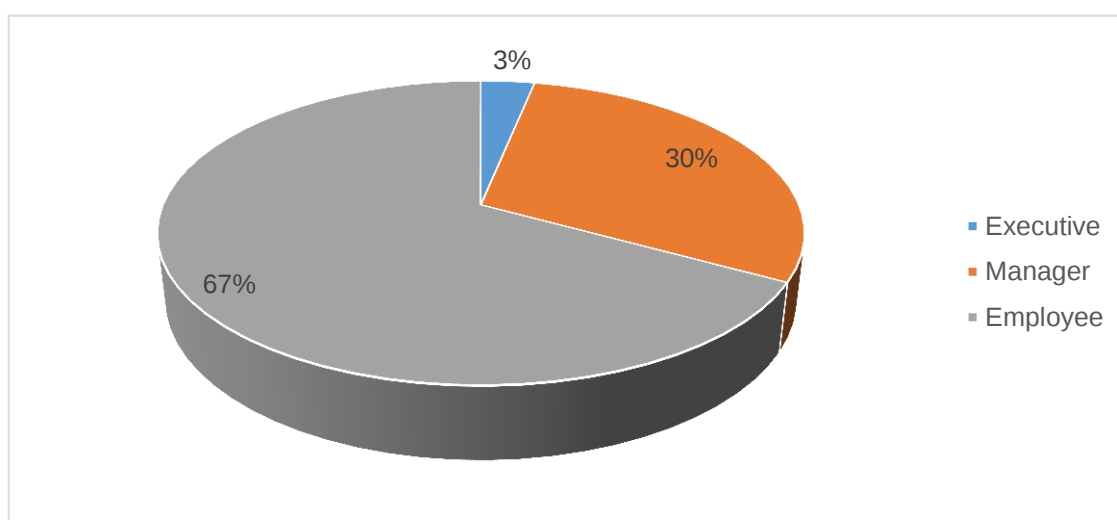


Figure 12: Designation distribution

4.3.10 Demographic consolidation

Table 13 presents a consolidation of the demographic results

Table 13: Demographic consolidation

Variable	Option	Frequency	Per cent
Age	18-29	168	34%
	30-39	180	36%
	40-49	97	19%
	50-59	49	10%
	60+	6	1%

Variable	Option	Frequency	Per cent
Gender	Female	290	58%
	Male	206	41%
	Prefer not to say	4	1%
Education Level	Below Grade 12	6	1%
	Grade 12	154	31%
	Diploma	128	26%
	Degree	85	17%
	Honours Degree	90	18%
	Masters	36	7%
	PHD	1	0%
Length of service	Less than a year	42	8%
	2-5 years	227	45%
	6-10 years	98	20%
	10+ years	133	27%
Business age	Less than 3 years	18	4%
	3-5 years	24	5%
	6-9 years	9	2%
	10+ years	449	90%
Region where business is located	Khomas	350	70%
	Oshana	44	9%
	Erongo	30	6%
	Karas	19	4%
	Otjizondjupa	16	3%
	Kavango East	8	2%
	Ohangwena	7	1%
	Omusati	6	1%
	Hardap	5	1%

Variable	Option	Frequency	Per cent
	Omaheke	5	1%
	Oshikoto	4	1%
	Kunene	3	1%
	Zambezi	2	0%
	Kavango West	1	0%
Organisation Type	Public sector	56	11%
	Private sector	444	89%
Organisation	Old Mutual	206	41%
	Standard Bank	92	18%
	FirstRand	87	17%
	Nedbank	51	10%
	Bank Windhoek	47	9%
	Company A	4	1%
	Company B	2	0%
	Company C	2	0%
	Company D	2	0%
	Other	7	1%
Designation	Executive	16	3%
	Manager	149	30%
	Employee	335	67%

4.4 Descriptive Statistics

This section presents the frequencies and descriptive statistics of the key variables, both dependent and independent variables, showing the standard deviation and mean value from the seven-point Likert scale, which indicated the level of agreement and disagreement of the respondents.

4.4.1 Opportunity recognition

The descriptive statistics for the items within the opportunity recognition (OPR) construct indicated that the highest rated item was OPR3 (mean = 2.36), followed by OPR5 (mean = 2.33), and OPR2 (mean = 2.33). All the items were rated low because none of them had a mean value above the mid-point of the scale (4).

Table 14: Opportunity recognition descriptive statistics

Item	n	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean	Std. Deviation
OPR3	500	25%	41%	19%	8%	4%	2%	1%	2.36	1.27
OPR5	500	25%	42%	18%	8%	4%	2%	1%	2.33	1.25
OPR2	500	34%	37%	17%	6%	3%	2%	1%	2.19	1.27
OPR1	500	38%	37%	14%	6%	3%	2%	1%	2.10	1.27
OPR4	500	40%	37%	13%	5%	2%	2%	1%	2.01	1.20

4.4.2 Strategic renewal

The descriptive statistics for the items within the strategic renewal (STR) construct indicated that the highest rated item was STR2 (mean = 5.86), followed by STR4 (mean = 4.91), and STR3 (mean = 4.80). Strategic renewal was rated higher than opportunity recognition. The lowest rated item was STR5 (mean = 3.89).

Table 15: Strategic Renewal descriptive statistics

Item	n	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean	Std. Deviation
STR2	500	2%	3%	4%	4%	9%	46%	33%	5.86	1.33
STR4	500	4%	14%	5%	11%	19%	27%	21%	4.91	1.81
STR3	500	4%	11%	9%	11%	21%	30%	14%	4.80	1.70
STR1	500	6%	17%	9%	10%	20%	25%	12%	4.43	1.85
STR5	500	8%	26%	11%	14%	16%	19%	7%	3.89	1.84

4.4.3 Innovativeness

The descriptive statistics for the items within the innovativeness (INV) construct indicated that the highest rated item was INV7 (mean = 5.57), followed by INV6 (mean = 5.37), and INV8 (mean = 4.93). INV1 (mean = 2.14) was the lowest rated item with only four per cent either agreeing or strongly agreeing with the item.

Table 16: Innovativeness descriptive statistics

Item	n	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean	Std. Deviation
INV7	500	2%	4%	4%	10%	15%	36%	29%	5.57	1.46
INV6	500	3%	6%	7%	9%	17%	30%	29%	5.37	1.63
INV8	500	6%	12%	4%	15%	13%	24%	26%	4.93	1.90
INV4	500	22%	33%	21%	14%	4%	5%	2%	2.68	1.47
INV2	500	27%	32%	17%	11%	5%	7%	1%	2.62	1.56
INV3	500	32%	33%	17%	9%	4%	5%	1%	2.38	1.42

Item	n	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean	Std. Deviation
INV5	500	35%	36%	15%	6%	3%	3%	1%	2.19	1.33
INV1	500	37%	36%	16%	4%	3%	3%	1%	2.14	1.29

4.4.4 Risk-taking

The descriptive statistics for the items within the risk-taking (RIS) construct indicated that the highest rated item was RIS6 (mean = 4.95), followed by RIS4 (mean = 3.90), and RIS5 (mean = 3.82). The lowest rated item was RIS1 (mean = 2.74).

Table 17: Risk-taking descriptive statistics

Item	n	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean	Std. Deviation
RIS6	500	5%	10%	8%	12%	18%	25%	23%	4.95	1.80
RIS4	500	8%	17%	14%	28%	10%	17%	6%	3.90	1.70
RIS5	500	11%	16%	17%	24%	8%	17%	7%	3.82	1.77
RIS3	500	11%	24%	18%	19%	8%	14%	5%	3.53	1.74
RIS2	500	12%	30%	17%	20%	8%	10%	3%	3.23	1.62
RIS1	500	22%	33%	18%	14%	5%	5%	3%	2.74	1.55

4.4.5 Pro-activeness

The descriptive statistics for the items within the pro-activeness (PRO) construct indicated that the highest rated item was PRO6 (mean = 5.04), followed by PRO8 (mean = 4.95). PRO4 (mean = 2.48) was the lowest rated item with only four per cent either agreeing or strongly agreeing with the item.

Table 18: Pro-activeness descriptive statistics

Item	n	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean	Std. Deviation
PRO6	494	2%	6%	9%	16%	20%	28%	19%	5.04	1.58
PRO8	498	5%	7%	8%	14%	16%	31%	18%	4.95	1.73
PRO7	498	4%	9%	7%	15%	20%	27%	18%	4.90	1.68
PRO3	498	22%	24%	19%	15%	8%	9%	4%	3.03	1.72
PRO1	498	26%	26%	15%	8%	9%	10%	4%	2.98	1.85
PRO2	498	22%	27%	17%	13%	10%	8%	3%	2.97	1.70
PRO5	498	26%	29%	16%	9%	8%	9%	2%	2.82	1.71
PRO4	498	23%	39%	19%	13%	3%	3%	1%	2.48	1.32

4.5 Exploratory Factor Analysis (EFA)

The constructs opportunity recognition and strategic renewal both represented the dependent variables in the study. Principal axis factoring was used to extract the number of factors from the 32 items as the factors are expected to be correlated. The oblique rotation with promax was used to rotate the items in order to optimise the factor structure. A screeplot was used together with the eigenvalue rule of greater than one to decide on the number of factors to extract

Each factor had to have three or more items loaded and the cut-off of factor loading of equals or more than 0.4 was used to decide on good loadings. The pattern matrix was analysed together with total variance explained (Table 19), which ideally had to explain 60 per cent of what was happening in the dataset. During the iterations the following items were excluded, as either they did not load or they loaded on the wrong factor: opportunity recognition (OPR6), all the strategic renewal items, innovativeness (INV1) and risk-taking (RIS2).

The relationship between strategic renewal and innovativeness was not tested since the strategic renewal construct did not converge into a factor, thus was not valid and excluded from any further analysis.

Table 19: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.583	44.192	44.192	14.583	44.192	44.192
2	2.258	6.844	51.036			
3	1.674	5.072	56.108			
4	1.516	4.594	60.702			
5	1.315	3.985	64.687			
6	1.015	3.076	67.763			
7	.969	2.936	70.699			
8	.873	2.647	73.345			
9	.727	2.203	75.549			
10	.649	1.966	77.514			
11	.580	1.756	79.270			
12	.548	1.660	80.930			
13	.529	1.602	82.533			
14	.501	1.517	84.050			
15	.456	1.381	85.431			
16	.436	1.321	86.752			
17	.404	1.224	87.975			
18	.394	1.193	89.168			
19	.373	1.130	90.298			
20	.359	1.088	91.385			
21	.334	1.013	92.399			

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
22	.317	.960	93.358			
23	.303	.918	94.277			
24	.284	.860	95.137			
25	.266	.807	95.944			
26	.249	.754	96.698			
27	.220	.667	97.365			
28	.206	.626	97.991			
29	.193	.583	98.574			
30	.186	.564	99.138			
31	.165	.501	99.639			
32	.119	.361	100.000			
33	-1.226E-16	-3.714E-16	100.000			

Extraction Method: Principal Component Analysis.

4.5.1 Sampling adequacy

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy showed a value of 0.958, which was greater than the minimum acceptable value of at least 0.5. This indicated that the sample was satisfactory and adequate to perform factor analysis. The Bartlett's Test of Sphericity was significant ($p\text{-value} = 0.000 < 0.05$), which indicated that the items had correlation values high enough to conduct factor analysis. The results for these two tests indicate that the sampling adequacy was met (Field, 2013). The results are presented in Table 20.

Table 20: KMO and Bartlett's Test

Test		Result
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.958
Bartlett's Test of Sphericity	Approx. Chi-Square	9721.710
	df	300
	Sig.	.000

Table 21 shows that factor analysis retained four factors, which explained 69.799 per cent of variance in the original items.

Table 21: Total variance explained (four factors)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.922	51.687	51.687	12.579	50.316	50.316	10.756
2	1.878	7.514	59.201	1.494	5.975	56.290	10.825
3	1.453	5.812	65.012	1.080	4.319	60.610	9.479
4	1.197	4.786	69.799	.879	3.516	64.125	4.176
5	.731	2.926	72.724				
6	.646	2.585	75.309				
7	.604	2.415	77.724				
8	.530	2.119	79.843				
9	.470	1.879	81.722				
10	.451	1.804	83.526				
11	.406	1.624	85.150				
12	.394	1.574	86.724				
13	.357	1.428	88.152				

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
14	.352	1.408	89.559				
15	.335	1.338	90.897				
16	.322	1.289	92.186				
17	.301	1.204	93.391				
18	.270	1.081	94.472				
19	.242	.966	95.438				
20	.228	.912	96.350				
21	.215	.861	97.211				
22	.206	.824	98.035				
23	.197	.786	98.822				
24	.173	.693	99.514				
25	.121	.486	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

The scree plot shown in Figure 13 suggested that four factors were extracted. This was because the line graph flattens after four factors. This was in line with what was shown in the total variance explained in Table 21.

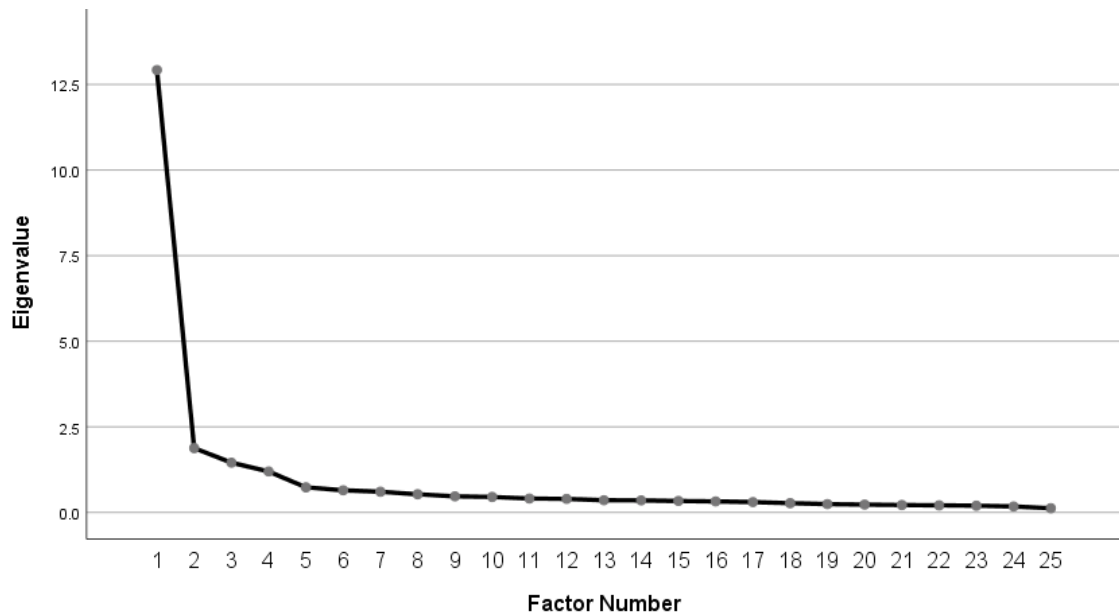


Figure 13: Scree Plot

The pattern matrix shown in Table 22 indicates the items that were retained in each of the four factors. The retained factors were pro-activeness, innovativeness, opportunity recognition, and risk-taking.

Some of the items were very highly correlated, to the extent that RIS1 and RIS6_Rev, which were supposed to be under risk-taking, as well as INV3 which was supposed to be under innovativeness, loaded onto pro-activeness.

The final innovativeness construct also had PRO3, PRO7_Rev, and PRO8_Rev items that were supposed to be under pro-activeness; this was not surprising as all the items are dimensions of EO and expected to be highly correlated and sometimes difficult to diverge. Opportunity recognition retained all five items that had been initially hypothesised. Risk-taking retained three out of the six originally hypothesised items.

All items loaded highly onto their respective factors. All factors that had a factor loading less than 0.4 were excluded during factor analysis.

Table 22: Pattern matrix

Construct	Items	Factor			
		1	2	3	4
Pro-activeness	PRO1	.983			
	PRO2	.932			
	PRO5	.891			
	PRO6_Rev	.819			
	RIS1	.559			
	RIS6_Rev	.513			
	INV3	.460			
	PRO4	.416			
Innovativeness	INV6_Rev		.956		
	PRO7_Rev		.815		
	INV8_Rev		.783		
	PRO8_Rev		.747		
	INV7_Rev		.634		
	PRO3		.565		
	INV4		.483		
	INV5		.430		
	INV2		.414		
Opportunity Recognition	OPR2			.897	
	OPR1			.854	
	OPR3			.848	
	OPR5			.847	
	OPR4			.664	
Risk-taking	RIS4				.805
	RIS3				.717
	RIS5				.548

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalisation.^a

a. Rotation converged in 6 iterations.

All the codes that end with Rev means that the scales were reversed

In accordance with literature, five constructs: risk-taking, pro-activeness, innovativeness, opportunity recognition and strategic renewal were hypothesised for this study (Urban & Wood, 2017). Exploratory factor analysis retained four out of the five constructs. Strategic renewal was not a valid construct in this study and therefore was not retained. The final analysis excluded the strategic renewal construct.

4.6 Reliability Analysis

To test the reliability (internal consistency) of each scale, Cronbach's alpha was used. Criterion for scales was ($\alpha \geq 0.7$) (Field, 2013). The results shown in Table 23 indicated an excellent reliability level for pro-activeness (eight items, $\alpha = 0.928$), innovativeness (nine items, $\alpha = 0.931$), and opportunity recognition (five items, $\alpha = 0.916$), since the Cronbach's alpha values were greater than 0.9 (Hair et al., 2010). There was acceptable reliability for risk-taking (three items, $\alpha = 0.731$) since the Cronbach's alpha value was greater than 0.7 (Hair et al., 2010). Since all the Cronbach's alpha values were greater than 0.7, items within each scale could be combined to create a composite scale per construct.

The Cronbach's alpha values, if items were deleted in each construct, did not result in a significant increase in the alpha value. Therefore, the items within each construct were considered the ideal items and were retained as per the pattern matrix.

The inter-item correlation values were all above 0.3, which indicated that the items belonged to their respective scales (Field, 2013).

Table 23: Reliability level

Construct	Number of items	Cronbach's Alpha	Reliability level
Pro-activeness	8	0.928	Excellent
Innovativeness	9	0.931	Excellent
Opportunity Recognition	5	0.916	Excellent
Risk-taking	3	0.731	Acceptable

4.6.1 Common method bias

Common method bias (CMB) takes place when dissimilarities in responses are caused by the instrument, rather than the actual predispositions of the respondents that the instrument attempts to uncover. This means that the instrument introduces a bias, hence dissimilarities or variances, which must be analysed, as the results observed get 'contaminated' by the biased instrument (Meade, Watson & Kroustalis, 2007).

A simplified way to test if CMB is of concern in the study is to use Harman's single factor score, whereby all variables are loaded into one common factor. Should the total variance for a single factor be less than 50 per cent, this will suggest that CMB does not affect the data. It must be noted that Harman's approach is to test for CMB and not to control for it (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). In many cases, CMB is considered irrelevant due to the size and may not necessarily risk the validity of the study in every case (Meade et al., 2007).

The potential impact of CMB on the findings of this study were known and efforts to reduce CMB were incorporated into the instrument with seven questions being reverse coded to ensure all coding reflected positive responses from (1) strongly disagree to (7) strongly agree (Appendix A).

4.7 Correlational Analysis

Pearson's correlation was conducted to assess how the constructs were related to each other. The results shown in Table 24 indicate a strong positive and significant correlation between pro-activeness and each of innovativeness ($r = 0.806$, $p\text{-value} < 0.01$), and opportunity recognition ($r = 0.663$, $p\text{-value} < 0.01$). There was also strong positive and significant correlation between opportunity recognition and innovativeness ($r = 0.705$, $p\text{-value} < 0.01$).

There was moderate positive yet significant correlation between risk-taking and each of pro-activeness ($r = 0.437$, $p\text{-value} < 0.01$) and innovativeness ($r =$

0.416, p -value < 0.01). There was weak positive and significant correlation between risk-taking and opportunity recognition ($r = 0.291$, p -value < 0.01).

All the correlations were significant at 0.01 significance level (Field, 2013).

Table 24: Pearson's correlation analysis

Correlation		Opportunity Recognition	Gender	Age	Pro-activeness	Innovativeness	Risk-taking
Pearson Correlation	Opportunity Recognition	1	0.097	0.01	0.663	0.705	0.291
	Gender	0.097	1	0.115	0.044	0.079	0.018
	Age	0.01	0.115	1	0.049	0.015	0.123
	Pro-activeness	0.663	0.044	0.049	1	0.806	0.437
	Innovativeness	0.705	0.079	0.015	0.806	1	0.416
	Risk-taking	0.291	0.018	0.123	0.437	0.416	1
Sig. (1-tailed)	Opportunity Recognition	.	0.015	0.41	0	0	0
	Gender	0.015	.	0.005	0.16	0.039	0.348
	Age	0.41	0.005	.	0.137	0.373	0.003
	Pro-activeness	0	0.16	0.137	.	0	0
	Innovativeness	0	0.039	0.373	0	.	0
	Risk-taking	0	0.348	0.003	0	0	.
N	Opportunity Recognition	500	500	500	500	500	500
	Gender	500	500	500	500	500	500
	Age	500	500	500	500	500	500
	Pro-activeness	500	500	500	500	500	500
	Innovativeness	500	500	500	500	500	500
	Risk-taking	500	500	500	500	500	500

4.8 Violation of Regression Assumptions

The regression assumptions included multicollinearity, outliers, normality, independence of errors, autocorrelation, linearity, and homoscedasticity.

4.8.1 Multicollinearity

Multicollinearity occurs when there is more than one predictor variable in the model and when two or more are highly correlated ($r > 0.8$) and offer no real information about the respondents' response. The real objective of this test is to conclude if any of the independent variables are related (Tabachnick & Fidell, 2003). Although the correlation between pro-activeness and innovativeness was 0.806 as shown in Table 24, there was no fear of multicollinearity since all the variance inflation factors (VIF) values were less than 10 (Tabachnick & Fidell, 2003). The tolerance values were also all greater than 0.1, below which there would be fear of multicollinearity (Tabachnick & Fidell, 2003). This means that the assumption of there being no multicollinearity was met.

Collinearity implies both variables are near perfect linear combinations of one another. Table 25 provides the Collinearity diagnostics for this study.

Table 25: Collinearity diagnostics

Model	Dimension	Eigenvalue	Condition Index	Variance Propositions					
				(Constant)	Gender	Age	Pro-activeness	Innovativeness	Risk-taking
1	1	2,787	1	0,01	0,02	0,02			
	2	0,15	4,315	0,01	0,36	0,75			
	3	0,063	6,633	0,97	0,63	0,23			
2	1	5,43	1	0	0	0,01	0	0	0
	2	0,251	4,655	0,01	0,07	0,25	0,06	0,06	0
	3	0,146	6,098	0,01	0,53	0,5	0,01	0	0,01
	4	0,094	7,589	0,03	0,07	0,15	0,05	0,06	0,68
	5	0,044	11,081	0,96	0,032	0,08	0	0	0,3
	6	0,035	12,505	0	0	0,01	0,88	0,88	0

a. Dependent Variable: Opportunity Recognition

4.7.2 Outliers

Outliers are data points that are different from the data set, as they are not within the range of the majority of other observations and fall outside the set boundaries. The outliers can therefore bias the parameter estimate and magnify the sum of squared error (Field, 2013).

In searching for outliers, one of the most popular methods is to use the box and whisker plot. It is one of the most simple and easy to understand methods (Iglewicz & Hoaglin, 1987) and was readily available on the SPSS platform.

The box plots had extreme values. The data points were marked with an asterisk (*) as shown in Figures 14 and 15. Under the opportunity recognition construct, cases 399 and 355 were identified to be outliers. The outliers were substituted by the second highest value 6.2. Box plots drawn after substituting the outliers indicated that there were no more outliers.

A regression model was fitted with the data that had outliers substituted; the assumption of there being no outliers was met.

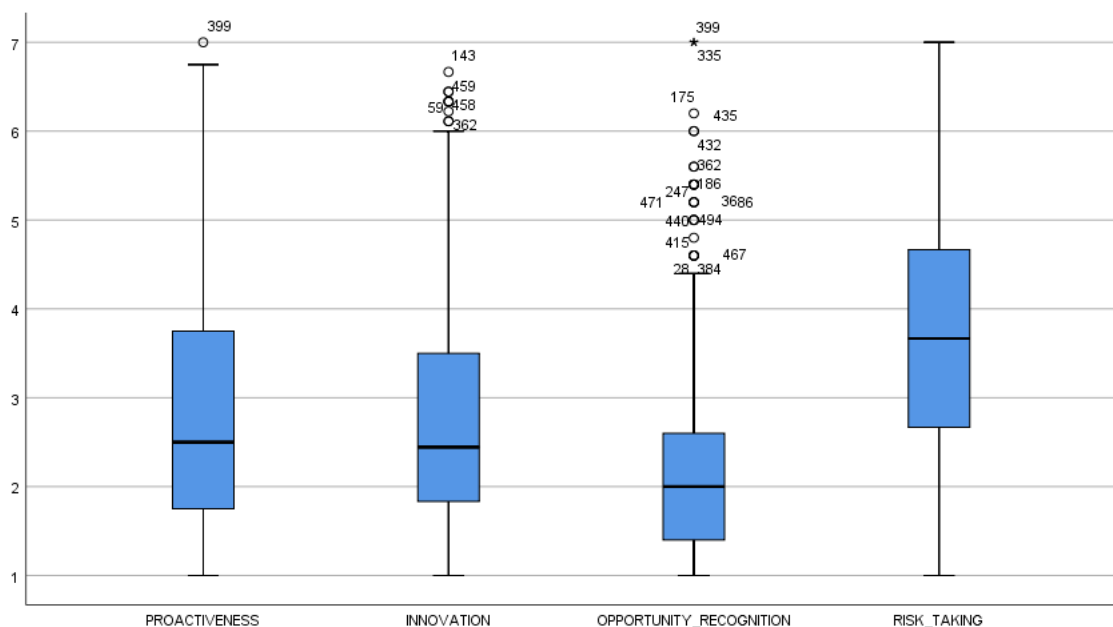


Figure 14: Boxplots including outliers

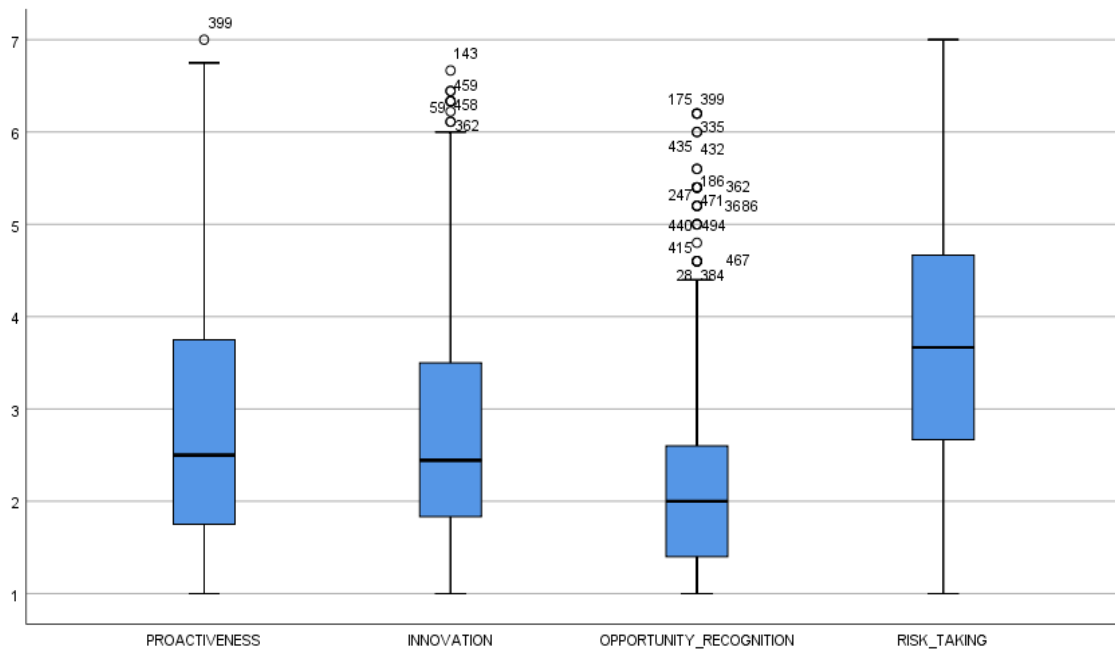


Figure 15: Boxplots excluding outliers

4.7.3 Normality and independent errors

The descriptive statistics for the constructs were calculated showing the skewness and kurtosis to assess the normality of the constructs. Normality of statistical analysis is not a mandatory requirement should the results of the sample collected not wish to be generalised (Field, 2009). The results shown in Table 26 indicated that variables approximate the normal distribution, because for skewness, the values should be between -3 and 3, and for kurtosis, values should be between -7 and 7, and that was the case for all the four constructs (Wilcox, 2017). Thus, all four constructs approximated the normal distribution.

Table 26: Statistics

Test		Pro-activeness	Innovativeness	Opportunity Recognition	Risk-taking
N	Valid	500	500	500	500
	Missing	0	0	0	0
Mean		2.7966	2.7565	2.1968	3.7500
Std. Error of Mean		.05906	.05792	.04786	.06257

Test	Pro-activeness	Innovativeness	Opportunity Recognition	Risk-taking
Median	2.5000	2.4444	2.0000	3.6667
Mode	2.00	1.00	2.00	3.00 ^a
Std. Deviation	1.32059	1.29504	1.07027	1.39916
Variance	1.744	1.677	1.145	1.958
Skewness	.651	.787	1.340	.052
Std. Error of Skewness	.109	.109	.109	.109
Kurtosis	-.342	.105	1.932	-.526
Std. Error of Kurtosis	.218	.218	.218	.218
Range	6.00	5.67	5.20	6.00
Minimum	1.00	1.00	1.00	1.00
Maximum	7.00	6.67	6.20	7.00
Sum	1398.31	1378.23	1098.40	1875.00

a. Multiple modes exist. The smallest value is shown

The normal P-P plot of standardised residuals shown in Figure 16 indicated that the values were very close to the diagonal line; this suggested that the residuals approximated the normal distribution as required for regression.

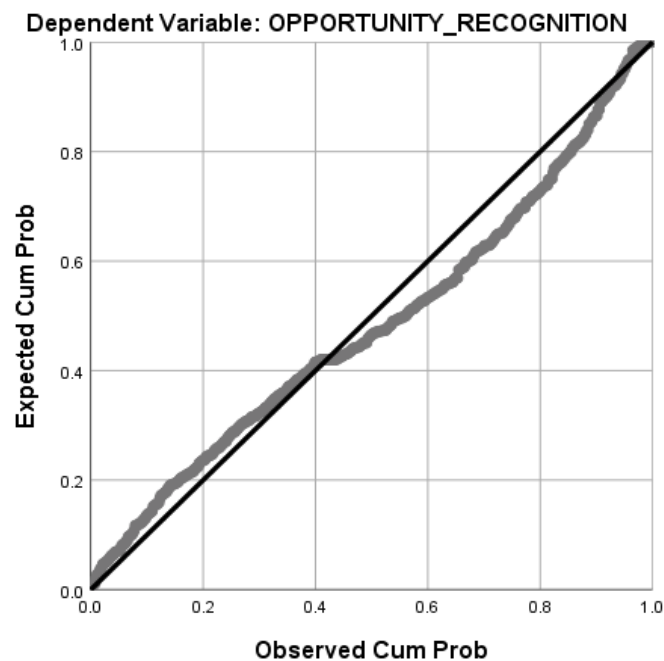


Figure 16: Normal P-P plot of regression standardised residual

A histogram of the regression standardised residuals was also plotted (Figure 17). The histogram showed that almost all the bars fitted below the normal curve; hence, confirming that the regression residuals approximated the normal distribution as seen with the normal P-P plot. This deduces that the normality of residuals assumption was met.

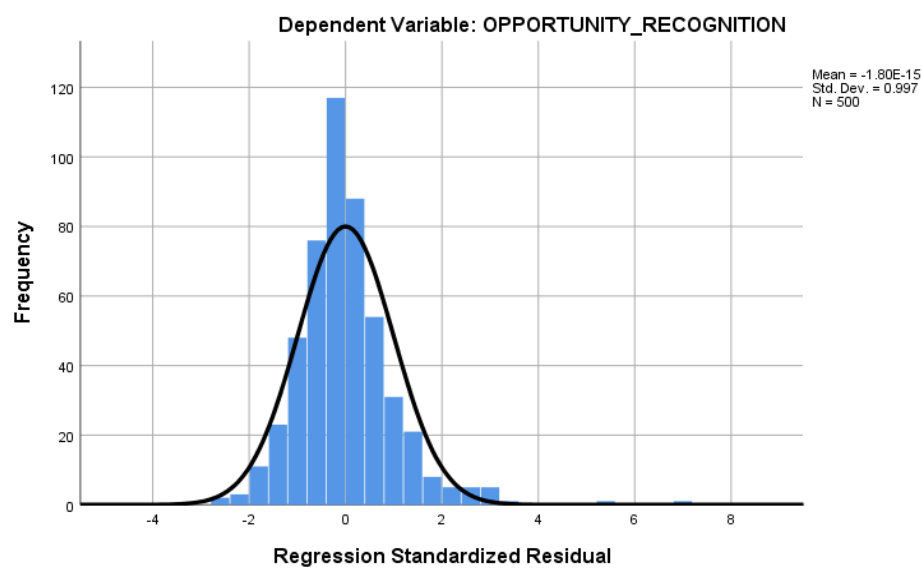


Figure 17: Histogram for opportunity recognition

4.7.4 Autocorrelation

The Durbin-Watson (DW) test measures the next error terms, and ranges need to be between zero and four (Field, 2013). It is time based and the order of the observation influences the result. The Durbin-Watson statistic was 1.956, which indicated that there was no autocorrelation (Table 27).

Table 27: Bootstrap for model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.097a	0,009	0,005	1,06738	0,009	2,352	2	497	0,096	1,956
2	.725b	0,525	0,521	0,74106	0,516	179,023	2	497	0	

a. Predictors: (Constant) Age, Gender

b. Predictors: (Constant) Age, Gender, Pro-activeness, Risk-taking, Innovativeness

c. Dependent variable: Opportunity Recognition

4.7.5 Linearity and residuals

The linearity test determines whether a linear relationship exists between both the dependent and independent variables (Tabachnick & Fidell, 2003); linearity can also be tested using scatterplots. The correlations between the independent variables and the dependent variable were all greater than 0.3 (Field, 2013), as shown in Table 27, indicating that there was linearity. Therefore, the linearity assumption was met.

4.7.6 Homoscedasticity

A scatter plot of the regression standardised residuals against the regression standardised predicted values was done and is shown in Figure 18. This was plotted to assess independent errors (homoscedasticity). The scatter plot showed that the error terms were scattered around the zero value without any pattern. This shows that the error terms were independent (Field, 2013). Thus, the assumption of homoscedasticity was met.

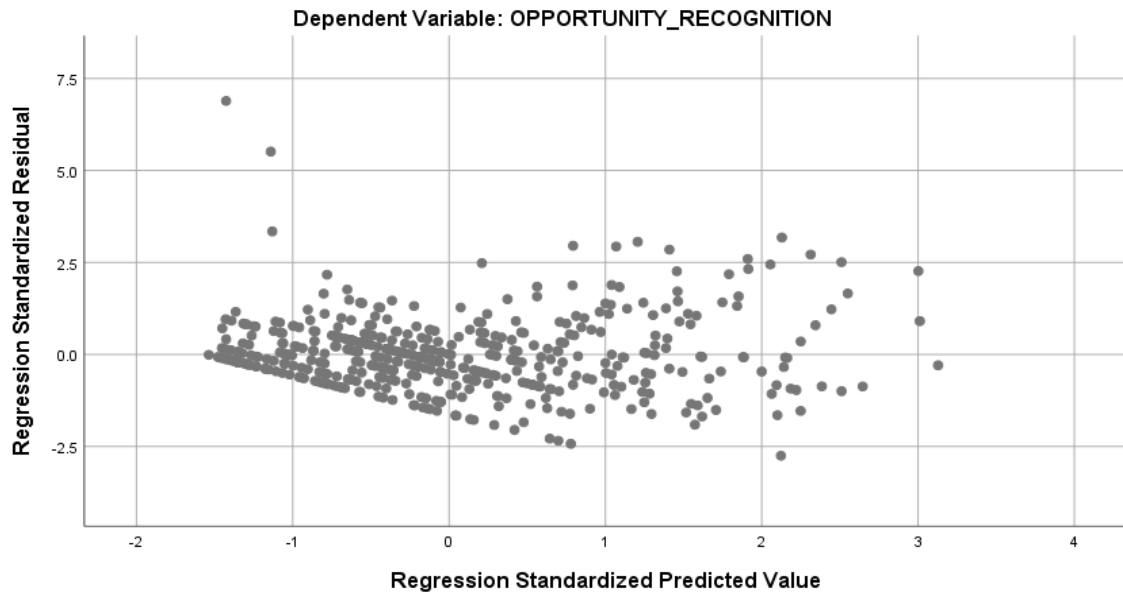


Figure 18: Scatterplot

4.8 Response and Common Method Bias

Common method bias was tested using Harman's single factor test. The principal component analysis (PCA) is one of the exploratory factor analysis processes (Field, 2009). PCA was used and all items were constrained into one factor to assess whether there was common method bias. The results in Table 28 indicated a total variance explained of 44 per cent, which was less than the acceptable 50 per cent (Tabachnick & Fidell, 2003). This confirmed that there was no issue of common method bias.

The Levene's test showed no issues of response bias, as all the constructs' variance tests were $p > 0.05$.

Table 28: Independent samples test

Construct		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pro-activeness	Equal variances assumed	1,285	0,258	1,583	498	0,114	0,18676	0,11794	-0,045	0,4185
	Equal variances not assumed			1,583	493,73	0,114	0,18676	0,11794	-0,045	0,4185
Innovativeness	Equal variances assumed	0,843	0,359	2,64	498	0,009	0,30397	0,11515	0,0777	0,5302
	Equal variances not assumed			2,64	494,3	0,009	0,30397	0,11515	0,0777	0,5302
Opportunity Recognition	Equal variances assumed	0,328	0,567	0,953	498	0,341	0,0912	0,09574	-0,0969	0,2793
	Equal variances not assumed			0,953	497,84	0,341	0,0912	0,09574	-0,0969	0,2793
Risk-taking	Equal variances assumed	3,812	0,051	0,564	498	0,573	0,07067	0,12523	-0,1754	0,3167
	Equal variances not assumed			0,564	491,07	0,573	0,07067	0,12523	-0,1754	0,3167

4.9 Hypothesis Testing using Multiple Regression

Hierarchical multiple regression was conducted, with the first model having respondent gender and age group as the independent variables. In the second model, pro-activeness, innovativeness, and risk-taking were added to age and gender as the independent variables.

Multiple regression is comparable to multiple correlations with the exception that it focuses on the prediction and estimate of dependent variables from the scores of several independent variables, rather than just the relationships (Tabachnick & Fidell, 2003).

The model summary shown in Table 29 indicated that a model with age and gender only explained 0.9 per cent of variance in opportunity recognition. The addition of pro-activeness, innovativeness, and risk-taking in the second model resulted in a significant improvement in the r-square from 0.009 to 0.525, an improvement of 51.6 per cent. This implied that a new model with age, gender, pro-activeness, innovativeness and risk-taking explained 52.5 per cent of variance in opportunity recognition as shown by an r-square value of 0.525.

Table 29: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.097 ^a	0.009	0.005	1.06738	0.009	2.352	2	497	0.096	1.956
2	.725 ^b	0.525	0.521	0.74106	0.516	179.023	3	494	0.000	

a. Predictors: (Constant), Age, Gender

b. Predictors: (Constant), Age, Gender, Pro-activeness, Risk-taking, Innovativeness

c. Dependent Variable: Opportunity Recognition

The Anova values shown in Table 30 indicated that age and gender alone were not significant in predicting opportunity recognition ($p\text{-value} = 0.096 > 0.05$). On the other hand, a combination of age, gender, with pro-activeness,

innovativeness and risk-taking was significant in predicting opportunity recognition as shown by a p-value of $0.000 < 0.05$.

Table 30: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.360	2	2.680	2.352	.096 ^b
	Residual	566.235	497	1.139		
	Total	571.595	499			
2	Regression	300.303	5	60.061	109.366	.000 ^c
	Residual	271.291	494	0.549		
	Total	571.595	499			

a. Dependent Variable: Opportunity Recognition

b. Predictors: (Constant), Age, Gender

c. Predictors: (Constant), Age, Gender, Pro-activeness, Risk-taking, Innovativeness

Table 31 indicates the coefficients for the individual constructs. It can be noted that pro-activeness (p-value = 0.000), and innovativeness (p-value = 0.000) were significant in predicting opportunity recognition while risk-taking (p-value = 0.316) was not significant. The demographic variables, age group (p-value = 0.705) and gender (p-value = 0.128) were not significant in predicting opportunity recognition.

Table 31: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.943	0.153		12.680	0.000	1.642	2.244		
	Gender	0.177	0.082	0.097	2.157	0.032	0.016	0.338	0.987	1.013
	Age	-0.001	0.048	-0.001	-0.020	0.984	-0.094	0.092	0.987	1.013
2	(Constant)	0.446	0.138		3.227	0.001	0.174	0.717		
	Gender	0.087	0.057	0.048	1.523	0.128	-0.025	0.200	0.979	1.022
	Age	-0.013	0.033	-0.012	-0.379	0.705	-0.078	0.053	0.968	1.033
	Pro-activeness	0.231	0.043	0.285	5.330	0.000	0.146	0.316	0.336	2.973
	Innovativeness	0.401	0.044	0.486	9.157	0.000	0.315	0.488	0.341	2.929
	Risk-taking	-0.027	0.027	-0.035	-1.004	0.316	-0.079	0.026	0.786	1.272

4.9.1 Hypothesis 1

- *H1*: The higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

The results shown in Table 31 (Coefficients) indicated a positive and significant impact of innovativeness ($B = 0.401$, $\beta = 0.486$, $t\text{-value} = 9.157$, $p\text{-value} = 0.000$) on opportunity recognition. The impact was positive because the coefficient for innovativeness ($B = 0.401$) was greater than zero and was significant because the $p\text{-value}$ was less than 0.05 (Field, 2013). This implied that the higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of opportunity recognition. This inferred that Hypothesis 1a was supported and significant.

The relationship between strategic renewal and innovativeness was not tested since the strategic renewal construct did not converge into a factor, thus was not valid and excluded from any further analysis.

4.9.2 Hypothesis 2

- *H2*: The higher the level of EO in terms of the risk-taking dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

It was noted in Table 31 (Coefficients) that the impact of risk-taking ($B = -0.027$, $\beta = -0.035$, $t\text{-value} = -1.004$, $p\text{-value} = 0.316$) on opportunity recognition was negative and insignificant. The impact was negative because the coefficient for risk-taking ($B = -0.027$) was less than zero, and the impact was insignificant because the $p\text{-value}$ was greater than 0.05 (Field, 2013). This inferred that Hypothesis 2a was not supported.

The relationship between strategic renewal and risk-taking was not tested since the strategic renewal construct did not converge into a factor, thus was not valid and excluded from any further analysis.

4.9.3 Hypothesis 3

- *H3*: The higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

The results shown in the Coefficients (Table 31) revealed a positive and significant impact of pro-activeness ($B = 0.231$, $\beta = 0.285$, $t\text{-value} = 5.330$, $p\text{-value} = 0.000$) on opportunity recognition. The impact was positive because the coefficient for pro-activeness ($B = 0.285$) was greater than zero, and was significant because the p -value was less than 0.05 (Field, 2013). This implied that the higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of opportunity recognition. This inferred that Hypothesis 3a was supported.

The relationship between strategic renewal and pro-activeness was not tested since the strategic renewal construct did not converge into a factor, thus was not valid and excluded from any further analysis.

4.10 Summary of the Results

The results in this chapter indicated that Hypothesis 1 (the higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of opportunity recognition) was supported and showed significant results.

Results also confirmed that Hypothesis 3 (the higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of opportunity recognition) was supported.

However, Hypothesis 2 was not supported as the risk-taking dimension was found to have a negative impact on CE in terms of opportunity recognition, nevertheless the impact was insignificant.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

The study postulated important insights in a Namibian context, providing an empirical analysis into the role of EO in enabling CE. This chapter provides understanding and insight into the results presented in the previous chapter, and discusses the multi-faceted theoretical framework. The demographic statistics are discussed first, followed by the descriptive statistics and the multiple regression analyses used to test the hypotheses. The chapter concludes with an overall discussion on the empirical findings and theoretical concepts investigated in this study.

5.2 Demographic Profile of the Sample

The research encompassed data collected by means of an electronic survey questionnaire, which was analysed for this study. All participants consented to the study and did so of their own freewill, with no prejudice or favour, answering a set of pre-defined questions relating to the constructs of both EO and CE.

Of the 614 respondents from a targeted 3 500, 500 were used for analysis. From the 500 respondents, 69.6 per cent were under the age of 39, indicating nearly two thirds to be considered generation Y, Millennial, and gen Z. More respondents were female (58 per cent), compared to male (41.2 per cent), the remaining 0.8 per cent preferred not to say.

One per cent of the respondents did not have a grade 12 qualification, with the highest number being that of respondents with grade 12 only (31 per cent). This is the reality of an emerging market country such as Namibia, where tertiary education stands at 0.3 years on average compared to developed nations with 0.85 years (UNESCO Institute for Lifelong Learning, 2019). A knowledge economy is spreading rapidly with technology revolutionising entire economies and societies. The impact on education in emerging market countries is challenged by the access to internet and funding (UNESCO Institute for

Lifelong Learning, 2019). According to the World Bank (2019), tertiary education is growing globally, however, the gap between developed and developing countries is widening.

Close to half (45.4 per cent) of the respondents indicated that they had a tenure at the firm of between 2 to 5 years. The second highest tenure was those with tenure of 10 years or more.

The majority of the respondents were employed at mature organisations, with 89.9 per cent stating that they were employed at businesses of 10 years or older. This finding confirmed that the majority of corporates in Namibia take 10 or more years to grow to an employee level numbering 500 or more.

Findings relating to graphical location of respondents' organisations showed all 14 regions represented. The majority of the respondents (70 per cent) were from the Khomas region, which is the region where the capital city, Windhoek, is located.

Respondents from both the private and public sector were considered, as the criteria to partake in this study did not dismiss those employed in the public sector. The majority (88.8 per cent) of the respondents were, however, from the private sector.

The roles occupied by the respondents varied suggestively, with just over two thirds being employees and just under a third (29.8 per cent) being managers. It is plausible to state that the respondents who participated in the study showed a good representation from different designations, which is in line with considered norms.

5.4 Descriptive Statistics Discussion

5.4.1 Innovativeness

Innovativeness is the means whereby an organisations' attempts to foster and create new opportunities and novel solutions (Lumpkin & Dess, 1996). Innovativeness involves creativeness and resourcefulness, which results in new

products and services, as well as improved and more efficient processes. The response rate regarding the innovativeness construct of EO in this study indicated a mixed reaction to the firms considered innovative. Items 6, 7, and 8 showed a mean of somewhat agreeing, whereas items 1 to 5 signified a lower loading with a mean of between 2.68 and 2.14, confirming that the respondents disagreed with the organisations being high on innovativeness.

The descriptive statistics for the items within the innovativeness construct (Table 16) indicated that the highest rated item was INV7 (mean = 5.57), followed by INV6 (mean = 5.37), and INV8 (mean = 4.93). INV1 (mean = 2.14) was the lowest rated item with only four per cent either agreeing or strongly agreeing with the item.

One of the major components of entrepreneurial strategy is innovativeness, which leads to greater competitive advantage (Zeebaree & Siron, 2017) and is confirmed by the sustainability of overall performance (Alegre & Chiva, 2013). It is proven that an organisations' strategic goals encourage a positive relationship between innovation with EO, supporting organisations that evolve, innovate, and transform, all positively contributing to the innovative mind-set of employees.

5.4.2 Risk-taking

Risk-taking is considered as a tendency to take action without real certainty and guarantee of a successful outcome (Li, Huang & Tsai, 2009). It is the willingness of an organisation to pledge resources without a known outcome (Wiklund & Shepherd, 2003), whether these be financial, business, or personal risks. The results revealed that the respondents agreed the most with RIS6 (My company strives to be the first in the market with new services while the future remains unknown), which was the highest rated risk-taking initiative among the respondents, as per Table 17.

Entrepreneurial organisations that reflect highly in the innovation space, undertake somewhat precarious ventures and are first to come up with 'proactive' innovations. High risk equates to high reward; it is argued that risk-

taking can be positively related to success (Frese, Brantjes, & Hoorn, 2002). Entrepreneurial failures can create new resource combinations and, in turn, foster and create 'learning platforms', which might facilitate future value creation.

5.4.3 Pro-activeness

Pro-activeness refers to an organisations effort in seizing new opportunities. It is about identifying both future needs and anticipating changes in demand or opportunity (Wiklund & Shepherd, 2003). Organisations that incessantly observed and scanned the environment, and applied a pro-active strategy, had a competitive advantage. The data revealed that the respondents agreed the most with PRO6 (My company always foresees potential environmental changes and future demands ahead of the competitors), which was the highest rated pro-activeness initiative with a mean of 5.04.

Organisations with a high level of EO proactively explore the means provided through their existing environment with the objective of gaining competitive advantage (Zeebare & Siron, 2017).

5.4.4 Opportunity recognition

CE is defined as a set of organisational undertakings centred on the discovery and pursuit of new opportunities through innovation, the creation of business, or the introduction of new business models (Hayton & Kelley, 2006). The opportunity to meet a need through a creative and original blend of resources (Ardichvili et al., 2003) can create new markets when entrepreneurial opportunity is at the centre of CE strategy (Ireland et al., 2009).

The data revealed that the respondents agreed the most with OPR3 (My company searches systematically for business opportunities), which was the highest rated opportunity recognition initiative with a mean of 2.36. All the items were generally rated as low, as none of them had a mean value above the mid-point of the scale.

In order for the organisation to optimise the motivation of its employees, the idea or opportunity must have legitimacy in the minds of those implementing it (Ciabuschi et al., 2011). Entrepreneurial alertness is an important element of the opportunity-recognition process. The alert individual scans for underutilised or unemployed resources as well as new capabilities or technologies, which may offer possibilities to create and deliver new value for prospective customers. Despite the new opportunity presented, the onus is still on the corporate entrepreneur who must decide to exploit the opportunity (Lumpkin & Lichtenstein, 2005).

5.4.5 Strategic renewal

Strategic renewal is considered the process of transformation and change, as well as the result of adjustment in strategic direction of an organisation (Manso, 2017). Strategic renewal represents the changes to work or activity areas, changes to the competitive approach, or stimulation of the business while changing both of them (Zahra, 1993). Indirectly, the implementation of opportunities leads to strategic renewal.

The data revealed that the respondents agreed the most with STR2 (Adoption of a new strategy involves multiple levels of management), which was the highest rated strategic renewal initiative, with a mean of 5.86.

Strategic renewal also enhances the organisation's performance by increasing the ability to extend business capabilities and creatively leverage them to add shareholder value (Zahra, 1996). It is important to not only recognise changes but also be willing to act on those insights ahead of the competition. Strategic managers have their eye on the future in a search for new possibilities for growth and development. A forward-looking perspective is important for companies that seek to be industry leaders.

5.5 Hypotheses Discussion

5.5.1 Hypothesis 1

- *H1*: The higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

The results supported this hypothesis and confirmed that the higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of opportunity recognition.

Innovativeness necessitates that organisations advance from existing technologies and practices, and search for new and unique approaches and means. New ideas require encouragement and cultivation despite an unclear future. In today's climate of rapid change, innovativeness remains significant as a means to achieving competitive advantage.

Madhoushi, Sadati, Delavari, Mehdivand, and Mihandost (2011) hypothesised that EO positively affects innovation performance. They found that most prior studies looked at the independent effect on EO and did not pay attention to the factors intercepting the organisations' innovation performance. Their study, in an Iranian SME specific context, found that emerging economies, much like that of Iran, revealed that EO had a direct positive impact on innovation performance; much like this study, which found that the higher the level of innovativeness, the greater the level of CE.

5.5.2 Hypothesis 2

- *H2*: The higher the level of EO in terms of the risk-taking dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

The results of this study did not support this hypothesis and found risk-taking to have a negative impact on CE in terms of opportunity recognition; nevertheless, the impact was insignificant.

It is imperative that leadership always remain mindful and aware of possible risk. Successful entrepreneurs are not risk takers (Drucker, 2002), but individuals that take steps to mitigate and minimise risk by understanding it and focusing on the opportunity. Taking bold risks, venturing into unknown new markets, and embracing what is new and uncertain is what entrepreneurship is all about (Dess & Lumpkin, 2005). In the 1800s, John Stuart Mill argued that risk-taking is the paramount attribute of entrepreneurship (Vij & Bedi, 2012).

Empirical evidence suggests that the risk-taking dimension of EO is positively related to firm performance (Rauch et al., 2009). The positive effect of risk-taking on firm performance is largely because organisations that make significant resource commitments to high-risk projects, with high-return rewards, would undoubtedly have a competitive advantage over competitors in the same sector. A study undertaken in Nigeria by Olaniran, Namusonge, and Muturi (2016) sought to establish the role of risk-taking on the performance of firms on the Nigerian Stock Exchange. They hypothesised a significant relationship between risk-taking and financial performance; however, the study discovered that there was in fact a negative relationship between risk-taking and organisation performance.

5.5.3 Hypothesis 3

- *H3*: The higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.

The results supported this hypothesis and established that the higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of opportunity recognition.

Staying ahead of the competition is what involves not only recognising opportunities, but also being willing and able to act on them. Searching for growth and development opportunities with a future-looking perspective is what spurs pro-activeness. Pro-active organisations seek ways not only to be future

orientated, but also to change the very nature of the status quo and business as it is known.

A study undertaken in Pakistan by Haider, Asad, and Fatima (2017) investigated the EO and business performance of the manufacturing sector's SMEs in Punjab, Pakistan. They hypothesised that innovativeness had a significant impact on performance of manufacturing SMEs. Their findings supported the hypothesis, confirming the positive impact that innovativeness has as a construct of EO on business performance. Their findings also established that if effort was put into innovativeness, SMEs can perform at a stronger and more competitive level.

5.6 Conclusion

It is generally accepted that through the innovation development and practice, there are both attitudinal and behavioural components (Wood et al., 2014), with the opportunity recognition process demonstrating a fundamental research question in the field of CE (Plambeck, 2012). The research around opportunity recognition shows that entrepreneurs apply their perceptive biases acquired through prior experiences and knowledge to realise entrepreneurial opportunities (Wood et al., 2014). Kirzner (2009) was the first to define the term alertness to explain entrepreneurial recognition of opportunities.

Entrepreneurial alertness comprises scanning and searching, association and connection, and evaluation and judgment (Tang et al., 2012). An alert individual looks for opportunities through passive resources, which may lead to future opportunities. The individual must combine limited resources in order to create value with a competitive advantage to what is present. By identifying potential, the individual is showing entrepreneurial alertness, a key attribute of the opportunity recognition process. This study contributed and built on existing literature of Urban and Wood (2017) that looked at the innovating firm as CE, and focused on the role of EO in enabling CE in Namibian specific organisations.

This study provided quantitative, first-hand, empirical support for academic and practical claims of the role EO plays in supporting CE in an emerging market context. Urban and Wood (2017) found that the majority of research on CE comes from the US, while this study supported African specific literature. As per the hypotheses, this study confirmed that the higher both innovativeness and pro-activeness, the greater the CE.

The study's conceptual model, adapted from the work of Urban and Wood (2015), contributed to the body of knowledge allowing researchers to examine the relationship between both EO and CE. An integrated framework of CE has allowed for a broad overview of the relationship of EO. The results from this study were important due to the Namibian context in which they were acquired.

This study has far-reaching implications for leaders and senior managers. Despite senior management teams recognising the importance of CE and EO, the real efforts in the rest of the organisation go unheeded in the process. The results of this study confirmed that by strengthening EO, organisations are required to make concerted efforts to enrich the capabilities of knowledge and application, which will critically advance competitive advantage.

CHAPTER 6: CONCLUSION

6.1 Introduction

Promoters of organisations possessing a robust EO have a normative bias, displaying strong CE qualities. Studies can investigate organisational human capital policies, means of gratification and compensation systems, internal processes, and cultures in determining EO, and thus have a better and broader perspective. Failed endeavours and undertakings have the potential to breed new social capital, which can lead to taking advantage of new opportunities. Analysis of the best practices of highly entrepreneurially orientated organisations can deliver useful insights to leaders who wish to possess the same levels of EO. This is only possible through continual and perpetual rediscovery of theory and practice.

EO can positively influence corporate performance. It is found that organisations with higher levels of EO are inclined to update managerial structures, create new product offerings, adjust to market changes, and change strategy without hesitation (Zhou et al., 2017). This leads to competitive advantage and increases corporate performance. This research adds to the theoretical developments by answering calls of previous studies (Urban & Wood, 2017).

Global entrepreneurship means that entrepreneurial activity is on the upward trajectory, where entrepreneurial behaviour in an organisational setting has been linked to entrepreneurial performance (Urban & Wood, 2015). One study, almost identical in nature to the empirical study of Dess and Lumpkin (2005) titled 'The role of EO in stimulating effective CE' was identified. Their study resolved that future studies should consider which factors increase or diminish the EO firm performance relationship, and encouraged future research to consider factors beyond economic outcomes when examining the EO performance relationship. They argued that consumed resources may deprive an organisation of new opportunities due to a depleted resource base; however, the trade-offs for value creation and competitive advantage outweigh the

consumed resource theory. Lastly, they suggested analysing the best practices of a leading organisation, which could provide valuable insights into the relationship of EO with performance.

In the US and Canada, Hornsby et al. (2002) investigated the organisational antecedents contributing towards EO. It was found that management support was the most significant contributor, in addition to appropriate reward systems. It was revealed that researchers should not assume outcomes and findings in developed economies to be equally valid for emerging economies (Murimbika & Urban, 2014). In an emerging economy like Namibia, the primary objective is growth, and this is attainable by continually innovating and adopting an EO (Urban, 2016).

Entrepreneurship is a dynamic and holistic process where the corporate building blocks of EO all constitute an active role in the development and advancement of CE. Various recommendations stem from the study's results. The leadership of an organisation should adopt a CE strategy, in so doing, encourage, and advocate for entrepreneurial behaviour that can lead to great competitive advantage through the exploitation of entrepreneurial opportunities at all levels of employee. An additional recommendation is for organisational leadership and senior management to influence and advantage employee's levels of entrepreneurial opportunity recognition. This is achievable by means of more stringent and focused recruitment and on-boarding. The screening process can include appointing individuals with higher levels of EO, by means of psychometric testing, on the job training, and continuous improvement, which is essential for existing employees to stimulate and arouse entrepreneurial intent, with the ultimate objective of identifying and exploiting entrepreneurial opportunities.

The leadership team as well as senior management of any organisation must be supportive of CE and must provide an environment conducive to such activity. This entails correctly rewarding entrepreneurial endeavours, which result in competitive advantage, allocating sufficient resources to entrepreneurial concepts as well as verbalising support. Bearing in mind that

CE activity is reliant on individuals within the organisation undertaking entrepreneurial activities, leadership ought to create an atmosphere that will increase the risk-taking appetite

6.2 Conclusions of the Study

Two of the three hypotheses were supported, based on the evidence from the results. Positive and significant results were found for the innovativeness (H1) and the pro-activeness (H3) dimensions in terms of influencing CE. A number of organisational characteristics have been empirically linked to innovation activity (Urban, 2017). Employees must experience the connection between performance and reward, if not they may remain unenthusiastic to partake in CE activities (Kuratko et al., 2014). The same is applicable for both risk-taking and innovation, where sufficient resource allocation is required and provided by senior management. Increased levels of innovativeness require employees to feel both empowered and invested in the decision-making, which takes advantage of opportunities (Burgess, 2013). When employees feel empowered and receive the necessary support, they feel more motivated, which results in a positive competitive advantage.

6.3 Implications and Recommendations

This research inquiry might have useful and real-world application for corporates and organisations alike. It is imperative to understand the dynamics of EO and its connection to CE. Previously, a large focus has been on emotional intelligence, with authors (Morris et al., 2008; Urban & Wood, 2015) deliberating the effects in organisations. Future studies can explore the extent to which the leader's behaviour enriches the organisations EO tendency by being pro-active, taking risks, and being innovative. The cultural dynamic is relative, as strong traditional norms may lead to rigours that both hinder and impede innovativeness and risk-taking.

Prior studies by Alvarez and Barney (2014) proved that opportunity recognition is accepted as a critical component of CE, where employees who possess high

levels of entrepreneurial alertness inevitably find opportunities of heightened lasting value. An entrepreneurial organisation persistently searches for new product ideas and innovations that can lead to greater levels of profitability (Kuratko et al., 2001). Accordingly, the construct of opportunity recognition in CE, as per this study, was authenticated in both an African and Namibian context. Comparatively, what the positive and significant set of results meant is that the study findings could be generalised to an emerging market context, where organisational antecedents have validated their applicability to CE (Urban, 2017).

In a wide-ranging context, this study could aid national policy construction due to the empirical evidence that CE activity is interrelated with growth. Policy reforms should place larger emphasis on programs that can foster the development of CE with the focus moving away from only independent start-ups, because organisation-based entrepreneurial activities are more relevant in providing scalable, employable, high growth, economic opportunities for the country (Bosma et al., 2010).

This study was limited in terms of its cross-sectional design, which did not permit inferences to be drawn. The nature of this study was conducted at a specific point in time and further longitudinal studies are required over a longer time horizon to sustain the relationship and role of EO in enabling CE. In developing an all-inclusive model, the hurdles and impediments of CE, as well as industry specific factors such as competition and business environment, should be included. This would provide space for additional factors hypothesized in enabling and supporting CE.

The dependent variable, opportunity recognition, was tested using the independent variables, innovativeness, risk-taking, and pro-activeness, which all offered a foundation for future research with greater controls and the interaction of circumstantial and perception of CE.

6.4 Suggestions for Further Research

Supplementary research may look to elaborate on the relationship of EO and CE by viewing mediating and moderating effects of other organisational and individual level variables not accounted for in this study. Future research could examine the role of organisations EO and entrepreneurial awareness and how these antecedents' effect CE. Furthermore, future studies can consider the performance of the employee as a variable factor and explore the relationship this may have with CE.

This study enhanced an understanding of the enabling positive relationship between EO and CE, and therefore contributed to the academic expansion of the subject matter.

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Appendix A: Survey Instrument



SURVEY INSTRUCTIONS

Dear Respondent

My name is Dino Ballotti, a Masters of Management student in Entrepreneurship and New Venture Creation at the University of the Witwatersrand Business School (Wits Business School), pp. Johannesburg. You are herewith invited to participate in my research by completing the accompanying questionnaire. My research title is: "The role of entrepreneurial orientation in enabling corporate entrepreneurship in Namibian companies". The purpose of this research is to test the various links between Corporate Entrepreneurship and Entrepreneurial Orientation as well as to test the strength in increasing the overall corporate entrepreneurship activity.

The questionnaire is divided into 3 parts. The first is your consent to participate. Second, the demographic questions and thirdly, questions relating to the measurement scales. This online questionnaire should not take longer than 12 minutes of your time.

Your participation in this research is 100% voluntary and you have the right to withdraw at any point during the study, for any reason, and without any prejudice. The questionnaire will not be gathering any personal data, only information related to the specific study. Confidentiality will be observed throughout the research process and the final report will be for academic purposes only. Your responses remain strictly confidential.

The Wits Business School Ethics Committee have approved this research study. Should you have queries related to the research, please feel free to contact me on 081 704 1927 or at ballottid@gmail.com alternatively my supervisor Professor Boris Urban can be reached at: Boris.Urban@wits.ac.za

Thank you sincerely for your contribution to our Namibian Corporate Entrepreneurship context.

Yours sincerely

Dino

SURVEY CONSENT

- ☐ I consent, begin the study.
- ☐ I do not consent, I do not wish to participate.

INCLUSION CRITERION

Are you currently employed in a large Namibian company (500 or more employees)?

If yes, then you can continue with the survey.

- ☐ Yes
- ☐ No

DEMOGRAPHIC DATA

Q2.1 Are you employed in the public or public sector?

- ☐ Public sector
- ☐ Private sector

Q2.2 Are you employed as a part-time or full-time employee?

- ☐ Part-time
- ☐ Full-time

Q2.3 Select the organisation you are employed by.

- ☐ Bank Windhoek
- ☐ FNB
- ☐ MTC
- ☐ Nampost
- ☐ Nedbank
- ☐ O&L Group
- ☐ Old Mutual
- ☐ Pupkewitz Group
- ☐ Standard Bank
- ☐ Sanlam
- ☐ Trustco Group
- ☐ Other

Q2.4 Which of the following roles would you classify yourself as?

- ☐ Executive
- ☐ Manager
- ☐ Employee

Q2.5 What is your gender?

- ☐ Female
- ☐ Male
- ☐ Transgender
- ☐ Other
- ☐ Prefer not to say

Q2.6 What is your age group?

- ☐ 18-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60+

Q2.7 What is your race group?

- ☐ Black

- White
- Coloured
- Asian
- Indian
- Mixed Race
- Other

Q2.8 What is your highest level of education completed?

- Below Grade 12
- Grade 12
- Diploma
- Degree
- Honors Degree
- Masters
- PHD

Q2.9 What is your length of service at your current employer?

- Less than a year
- 2-5 years
- 6-10 years
- 10+ years

Q2.10 What is the age of the business you are currently employed at?

- Less than 3 years
- 3-5 years
- 6-9 years
- 10+ years

Q2.11 In which region is your office located?

- Erongo
- Hardap
- Karas
- Kavango East
- Kavango West
- Khomas
- Kunene
- Ohangwena
- Omaheke
- Omusati
- Oshana
- Oshikoto
- Otjizondjupa
- Zambezi

MEASUREMENT SCALE INSTRUCTIONS

The next set of questions use 7-point Likert scales where 1 = strongly disagree and 7 = strongly agree. Indicate the extent to which you agree or disagree.

OPPORTUNITY RECOGNITION

Q3.1 My company is always alert to business opportunities.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q3.2 My company research potential markets to identify business opportunities.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q3.3 My company searches systematically for business opportunities.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q3.4 My business looks for information about new ideas on products or services.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q3.5 My business regularly scans the environment for business opportunities.

- ☐ Strongly agree

- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q3.6 In recognising opportunities within your business, who do you most feel is responsible for identifying new opportunities?

- Individuals in the business mandated to find opportunities
- Executive leadership
- Any employee

STRATEGIC RENEWAL

Q4.1 Strategic renewal depends on the strategic intent of the senior management team only.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q4.2 Adoption of a new strategy involves multiple levels of management.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q4.3 It is not the corporate strategy but the internal selection environment (recruitment) which promotes change.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q4.4 Mind sets of management make it impossible for the business to engage in change.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q4.5 There is little faith in initiatives by management to renew the business.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

INNOVATION

Q5.1 My company has an emphasis on introducing new innovations or technology.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q5.2 My company has strong focus on Research and Development activities.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q5.3 My company invests heavily on new product development.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree

- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q5.4 My company is open to outside ideas that can lead to new business opportunities.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q5.5 Innovation and creativity are part of the business strategy of my company.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q5.6 Employees are encouraged to come up with new ideas.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q5.7 Our CEO and business leaders are involved in fostering innovation.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q5.8 There is a reward system for creative and innovative individuals.

- Strongly agree
- Agree

- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

RISK-TAKING

Q6.1 My company's Research and Design division has a culture of introducing new products in a complex market.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q6.2 My company commits significant resources to ventures in uncertain conditions.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q6.3 Business growth is driven by new innovations which brings potential customer business failures.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q6.4 My company takes bold actions by venturing into unknown business environments.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree

- Disagree
- Strongly disagree

Q6.5 My company shows a great deal of tolerance for high risk projects and rewards individuals for taking calculated risks.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q6.6 My company strives to be the first in the market with new services while the future remains unknown.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

PRO-ACTIVENESS

Q7.1 My company is leading in introducing new innovation or technology.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q7.2 My company is leading in new market identification.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q7.3 The pro-active individuals in my company are being rewarded.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q7.4 My company always strives for market share through pro-actives sales.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q7.5 My company always strives to introduce new products or services ahead of competitors.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q7.6 My company always foresees potential environmental changes and future demands ahead of the competitors.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Q7.7 Employees are encouraged to take action with their new ideas.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Disagree

- Strongly disagree

Q7.8 My company's organisation structure supports pro-activeness through a recognition system.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Appendix B: Consistency matrix

The role of entrepreneurial orientation in enabling corporate entrepreneurship in large Namibian companies.							
Sub-problem/Aims	Literature Review	Hypotheses or Propositions	Research questions	Variables(Independent & Dependent)	Source of data	Type of data	Analysis
To establish the effect of the levels of EO innovativeness on the perceived importance of CE initiatives in Namibia.	Urban (2017) Adenfelt and Lagerstrom (2007) Antonic and Hisrich (2001) Audretsch and Kuratko (2013)	H1: The higher the level of EO in terms of the innovativeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.	To what extent does innovation enable CE in large Namibian companies?	IV: Innovation	Questionnaire	Ordinal data (7-point Likert scale)	Descriptive analysis, Correlation analysis, Regression analysis
				DV: CE	Questionnaire	Ordinal data (7-point Likert scale)	
To establish the effect of the levels of EO risk-taking on the perceived importance of CE initiatives in Namibia.	Urban (2017) Thornberry (2001) Covin and Lumpkin (2011) Antonic and Hisrich (2001) Zahra (1991)	H2: The higher the level of EO in terms of the risk-taking dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.	To which degree does risk-taking enable CE in large Namibian companies?	IV: Risk-taking	Questionnaire	Ordinal data (7-point Likert scale)	Descriptive analysis, Correlation analysis, Regression analysis
				DV: CE	Questionnaire	Ordinal data (7-point Likert scale)	

The role of entrepreneurial orientation in enabling corporate entrepreneurship in large Namibian companies.							
Sub-problem/Aims	Literature Review	Hypotheses or Propositions	Research questions	Variables(Independent & Dependent)	Source of data	Type of data	Analysis
To establish the effect of the levels of EO pro-activeness on the perceived importance of CE initiatives in Namibia	Urban (2017) Antonic and Hisrich (2001) Burgelman (1983) Zahra (1991)	H3: The higher the level of EO in terms of the pro-activeness dimension, the greater the level of CE in terms of (a) opportunity recognition and (b) strategic renewal.	To what extent does pro-activeness enable CE in large Namibian companies?	IV: Pro-activeness	Questionnaire	Ordinal data (7-point Likert scale)	Descriptive analysis, Correlation analysis, Regression analysis
				DV: CE	Questionnaire	Ordinal data (7-point Likert scale)	