Entrepreneurial orientation , market orientation and opportunity exploitation in driving business performance: Moderating effect of interfunctional co-ordination

Rose B. Mathafena

Supervisor: Dr Jabulile Msimango-Galawe

A Research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation.

Johannesburg 2021

ABSTRACT

Corporate companies operate in highly competitive, global and fast-paced environments, requiring continuous re-examination, with much adaptations and flexibility. It is prudent to consider the potential strategic capabilities which have performance implications for organisations, more specifically from a corporate entrepreneurship perspective.

The primary purpose of the study was to investigate the extent to which interfunctional co-ordination moderates the relationship between entrepreneurial orientation , market orientation and organisational opportunity exploitation and business performance. Secondly, the report examined the impact of entrepreneurial orientation, market orientation and organisational opportunity exploitation on the business performance.

An empirical quantitative approach and positivistist paradigm was adopted for the study. A cross-sectional design was employed to collect 203 cases through self-administered surveys. Employees of various companies within Gauteng, mainly Johannnesburg, were purposively targeted to take part in the study. The hypothesis testing was conducted through multiple linear regression and moderation analysis.

The results indicate that both entrepreneurial orientation , market orientation and opportunity exploitation are important contributors to business performance from a financial and non-financial perspective. Furthermore, interfuctional co-ordination moderates the relationship between market orientation and business performance (financial and non financial).. Lastly, interfuctional co-ordination moderates the relationship between opportunity exploitation and business non-financial performance.

The practical implications for corporate entrepreneurs lies in the consideration of integrating interfuctional co-ordination when opportunity exploitation strategies are being implemented in order to achieve non-financial performance. Furthermore, market orientation strategies are better implemented effectively through interfuctional co-ordination, and yield both financial and non-financial performance outcomes.

Keywords: Corporate Entrepreneurship, Entreprenheurial Orientation, Market Orientation, Opportunity Exploitation, Interfuctional Co-ordination and Business Performance.

DECLARATION

I, Rose Boitumelo Mathafena, declare that this research report in my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneuship and New Venture Creation at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to this or any other university.

R.B. Mathafena

Name : Rose B. Mathafena **Signature: _____**

Signed at ____Johannesburg _____

On the _____17th _____day of _____June _____ 2021

DEDICATION

To God who is the Lord God Almighly for life, strength, energy and the motivation he has given me to courageously conduct this study to completion. I have come this far only because of his help, grace and the faith to persevere.

I would like to thank all my family members and relatives for the encouragement, prayers and unfailing support.

ACKNOWLEDGEMENTS

The acknowledgement is to the individuals and academics who made it possible for me to reach the point of completion of my research report. My supervisor, Dr Jabulile Msimango-Galawe, who provided guidance, direction as well as constructive feedback throughout the research process. I am very grateful for the support and advice you have given me relating to the study.

All the lecturers to the programme MMENVC, for the excellent sharing of knowledge in the field of entrepreneurship. You have made the programme very interesting, challenging, rich and informative. I am very blessed to have attended your modules.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

The chapter lays a foundation by providing the backround, context and the purpose of the study. Importantly, the theoretical foundations which underpin the study are unpacked. The section is followed by the motivation, research questions and the anticipated contributions of the study. The chapter concludes with the definition of key concepts, delimitations, the underlying assumptions and the summary of the chapter.

1.1 Backround of the study

Businesses operate in highly complex, volatile and competitive markets, intensified by global competition, technological development and evolving customer needs (Ungerman, Dedkova & Gurinova, 2018). Firms need to continuously scan their external environments (Shtal, Buriak, Amirbekuly, Ukubassova, Kaskin, Zukhra & Toiboldinova, 2018) in order to acquire key intelligence about their competitors' activities, the customers' changing needs as well as emerging technologies with the potential to frame business operations for success. For an organisation to acquire and constantly develop their competitive advantage, and keep up with market performance demands, it needs to adapt and transform externally acquired market insights and intelligence into unique internal core competencies (Irtaimeh, 2018).

External environmental information has a significant impact on the firms' strategic decision making (Shtalet al., 2018), performance and long-term sustainability. Business performance measured in terms of market sales growth, customer attraction and engagement, profitability and market development are important for the success of the business, both for the current and future. Factors such as organisational entrepreneurial orientation , market orientation and absorptive capacity (Aljanabi & Noor, 2015), are critical in facilitating the examination of external factors which drive performance and improve competitiveness. Additionally, the internal resources, core competencies and capabilities (Irtaimeh, 2018) must be transformed into tangible products and services which closely match the market and customer needs, whilst the technological improvements are introduced to better enable and improve internal processes for superior and efficient delivery of both services and products to the market. The market oriented, innovative and entrepreneurial initiatives necessary in meeting market and customer needs, while outperforming the competitors, can be achieved through inter-functional co-ordination, characterised by functional and process harmonisation.

During the early months of 2020, Covid-19 has spiralled into a global public health pandemic, with a catastrophic impact on most of the world's economies. The World Health Organisation declared Covid-19 a pandemic, requiring major downscaling and shutting down of most business operations not deemed to be mandatory or essential services (Lu, Wu, Peng & Lu, 2020), with the aim of containing the virus and saving lives. Many businesses in various industries have had to manage with a substantial decline in demand for their products and services, raising costs and increased business risks during a time of decreased business activities (Syriopoulos, 2020). These settings created a very difficult environment for businesses to operate in once the permissions to resume business were granted and lockdowns were lifted. Many businesses across various sectors and industries are facing operating challenges due to financial fragility, interrupted supply chains and reduced trading activities. The study also assesses the impact of Covid-19 on the business operations. According to Statistics South Africa (2020b), the full impact of the pandemic cannot be fully measured at this stage due to the unknown variables, such as the duration of the pandemic, the scale of the infections, and also volatility related to future containment and potential resurgences. Nonetheless, the pandemic highlights the importance of collecting and analysing emerging data related to the impact of Covid-19 on business operations.

1.2 Context of the study

In recent times, the South African economy has been characterised by slow growth, with the burden of rising inflation and high government debt (African Development Bank Group, 2019). Despite South Africa being the largest economy in Southern Africa, the GDP growth has been less than 1% since 2018 and continues to decline. Since 2010, South Africa has seen the decline in the regional GDP contribution from 68% to now 57%. The African Development Bank (2019) reported the following GDP statistics - 2017- 1.3%, 2018 - 0.7, 2019- 1.7, and 2020 projected at 2%, with the projected average inflation of 5.5 % for 2020. The declining economic and market performance of South Africa has negatively impacted exports and the country experienced a sharp increase in imports, mainly from China. Public finances are strained due to high public spending, and reduced revenue collection. Poverty, inequality and unemployment is on the rise (Mkhize, 2019), with the number of people living below the poverty line of $1.90 USD a day is estimated to be more than 17%. Unemployment continues to be a major socio-economic challenge and is estimated to be around 29% officially and more than 40% unofficially. Economic instability only contributes negatively to the unemployment challenges.

Given the socio-economic challenges that South Africa faces (Dauda, Nyman & Cassim, 2019), entrepreneurship has an important role to play in the country's emerging economy (Czarniewski 2016). Similarly, Bosma, Content, Sanders and Stam (2018) found entrepreneurship to be important for economic growth. Corporate trading activities stimulate buying and selling of commodities, products, services, and manufacturing. Furthermore, the contribution to the public fiscus is mostly funded by corporates. Other benefits of healthy corporate companies are the contribution to employment as well as skills development.

The role of corporate entrepreneurship in the economy cannot be over-emphasised (Dauda, Nyman & Cassim, 2019), because product and market competition drives both the economic activities and productivity levels. Successful corporate businesses in the South African economy translate into better standards of living for the community, economic activity and growth, as well as the availability of tax revenue which can be ideally re-invested in the country's infrastructure and service delivery improvements. It is for the greater good for all to ensure that corporate enterprises or companies remain relevant to the customers, and continue to grow, innovate new products and services in order to ensure continuity and sustainability (Ungerman, Dedkova & Gurinova, 2018).

It is however, important to highlight that the current South African market structures are characterised by large companies playing a dominant role (World Bank, 2018), to the exclusion of smaller and newly emergent firms, and this needs urgent policy interventions towards the diversification of various players in various industries and markets for increased product and service competitiveness. Fritsch and Wyrwich (2017) iterate the criticality of new entrants, and increased business activities in order to heighten competition, which effectively leads to improved products and services, and even call for more innovation.

The study examines pertinent factors which drive the company's ultimate performance; these factors identified for this study are: entrepreneurial orientation, market orientation and organisational opportunity exploitation. Whilst interfunctional co-ordination is instrumental in facilitating the execution of entrepreneurial market oriented and opportunity exploitation activities or tasks. Daud, Remli and Muhammad (2013) emphasise that interfunctional co-ordination is critical for integrated and co-ordinated utilisation of company resources, improvement of communication across various departments, working together towards a shared vision and goals, robust problem-solving and innovation. Entrepreneurial orientation plays an important role in

shaping the firms' entrepreneurial strategies, processes as well as organisational practices and decision-making. Market orientation creates a premise for a customer-oriented organisational culture, which continually seeks to create value for the customer. Absorptive capacity's opportunity exploitation is important as it enables the transformation of acquired knowledge and insights into products and services which yield commercial value. It is prudent to consider the potential strategic capabilities which have performance implications for organisations.

1.3 The purpose of the study

Previously conducted studies have found interfuctional co-ordination to play a critical role in the improvement of organisational performance through the bundling and integration of resources in order to improve market responsiveness (Daud, Remli & Muhammad, 2013; Migliori, Pittino, Consorti & Lucianetti, 2019). Furthermore, interfuntional co-ordination was utilised as a moderator in studies seeking to improve innovation, customer and market orientation (Auh & Menguc, 2005; Babu, 2018; Chebet, Gabriel & Bonuke, 2018).

The main purpose of the study is to investigate the extent to which interfunctional co-ordination moderates the relationship between entrepreneurial orientation , market orientation and organisational opportunity exploitation and business performance; secondly, to examine the impact of entrepreneurial orientation, market orientation and organisational opportunity exploitation on the business performance.

1.4 The theoretical foundations

The study has its roots in the corporate entrepreneurship discipline. Corporate entrepreneurship is perceived as the firms' competitive capability (Jiménez-Barrionuevo, Molina, & García-Morales, 2019), in that proactiveness and innovativeness can be transformed into improved performance, new ventures and products. The impact of entrepreneurial orientation, market orientation and organisational opportunity exploitation on the business performance is examined, whilst taking into account the interactive role of interfuctional co-ordination among the South African operating companies, within the various sectors such as primary (extractive industries), secondary (manufacturing) and tertiary (commercial services) sectors of the economy (Industrial Development Corporation, 2010). The empirical analysis of organisational actions, practices, processes and decisions which have performance implication for organisations needs to be closely

studied. Furthermore, the corporate entrepreneurship phenomenon cuts across diverse businesses, sectors, as well as industries.

The resource-based view, human capital theory, dynamic capability theory, as well as corporate entrepreneurship theory, were found to be relevant and influential in grounding this study. The resources based, human capital and dynamic capability theories are critical in providing the rationale for the complementary interrelationships between organisational entrepreneurial orientation , market orientation and absorptive capacity, as supported by interfunctional co-ordination efforts in improving business performance. Corporate entrepreneurship theory also plays a fundamental role in the study, in that the results of corporate entrpreneurship, such as the development of new products, services, or the creation of a new business units within an extisitng business, are closely linked to performance outcomes such as value creation and financial growth (Oosthuizen, 2015).

Resource based theory (RBT): The RBT suggests that an organisation obtains its competitive advantage through the transformation of its core competencies (Irtaimeh, 2018), unique capabilities and resources into products and services which mirror the customer and market needs. In this sense, the organisation is reflecting its ability to proactively and innovatively act, and this action is largely driven by environmental dynamics and changes. Furthermore, RBT recognises intangible resources that cannot be quantified through accounting procedures, such as the ability to manage knowledge and translate it into innovative and profitable projects through entrepreneurial processes. Chuang and Lin (2017) assert that organisational strategic resources are valuable in that, when applied, they produce value adding solutions which positively impact on performance. These resources include human, financial, knowledge and technical capabilities. Interfunctional co-ordination supports the premise of resource based theory through the promotion of collaborative resource sharing, collective knowledge creation and multifunctional efforts directed towards environmental responsiveness. Entreprenerial activities play an important role in influencing the effective utilisation of resources, both tangible and intangible, through the alternative use of resources and the unique bundling of resources thereof, leading to heterogeneity, the formation of dynamic capabilties and improved outputs (Liu, Yu & Wu, 2019). The manner in which resources are being applied and organised should support and enable market orientation improvements and the exploitation of opportunities for profit generation (Arend, 2014). Due to resources being generally limited and scarce, interfuntional co-ordination

can play a pivotal role in ensuring that the acquisition, utilisation, assembling and deployment of resources is prioritised towards the creation of market opportunities and opportunity exploitation. The capacity to combine, restructure and improvise resources during changes is key in maintaining competitiveness and performance improvement.

Human Capital Theory: It is important to recognise that entrepreneurial orientation, market orientation and organisational opportunity exploitation cannot materialise without the human capital element of the organisation. Human Capital, through its collective knowledge, skills, experience and education transforms ideas, knowledge, and intelligence into outputs of process improvements, products and services. According to Chuang and Lin (2017), business resources alone cannot create value, however human resources which provide the business know-how, skills, knowledge, and ideas can be combined with other complementary resources to build a unique and distinct capability. Marvel, Davis and Sproul (2016) emphasise that it is through human capital that entrepreneurial activities are promoted. Furthermore, the effective interfunctional co-ordination ensures that management and employees across various functions are aligned and united towards the same objectives and goals. The human capital theory explains how the stock of knowledge within the individual or teams of entrepreneurs within an organisational context is able to unlock economic opportunities, through creativity and innovation (Jogaratnam, 2017). The capacity to deploy resources for entrepreneurial endeavours, such as opportunity identification, creation and exploitation, is through the acquired skills, knowledge and experience, within the human capital (Urban, 2015). This intangible resource facilitates processes which improve market orientation, intentions and the acquisition of resources which assist opportunity exploitation projects which are value adding and performance enhancing. Interfuctional co-ordination efforts can secure the effective allocation and unleasing of task related knowledge, skills, experience and education throughout the various organisational projects geared towards business improvement.

Dynamic capability theory: Baškarada and Koronios (2018)'s perspective of dynamic capability theory is based on the premise that both organisational capabilities and resources are instrumental in cultivating competitive advantages. Dynamic capabilities consider the processes of integrating, building, and restructuring resources and capabilities to address the complex, dynamic and changing environment. Furthermore, this theory underpins entrepreneurial orientation, innovation

processes, adaptation, strategic planning, product development, knowledge creation and change management.

Medeiros, Christino, Gonçalves and Gonçalves (2020) conceptualise dynamic capability as a five-dimensional framework, consisting of (1) Ability to monitor the environment and its changes, thereby identifying threats and opportunities in order to perceive the potential impact on current and future organisational outcomes; (2) Application of market orientation through the recognition of customer needs and taking strategic decisions which create customer value; (3) Modification of the resource bases through assessment, formulating and deciding on the resources, in order to adjust to the environmental changes, in a timely manner ahead of the competitors; (4) The agility to implement change, which involves the various managerial and organisational processes; (5) Finally, the ability of sense-making, through perceiving and interpreting changes, in order to analyse and interpret internal and external changes. According to Arend (2014), the very acts of entrepreneurial orientation are demonstrative of organisational dynamic capabity, for instance, the capability to identify market opportunities, exploit novel ideas, tap into innovativeness, and also take risks to develop market and product potential. Market orientation, combined with other internal capabilities, such as innovativeness and absorptive capacity's opportunity exploitation, strengthens the organisation's dynamic capacity, through the acquired and realised potential. Moreover, dynamic capabilities enable the firms to modify, expand and re-configure internal capabilities to meet external demands, such capabilities facilitate opportunity exploitation (Liu, Yu & Wu, 2019). Interfuntional co-ordination ensures that the dynamic capabilities are optimally leveraged and their combined complementory strengths are explored to competitively adapt to the dynamic and changing business environment.

Corporate entrepreneurship: According to Oosthuizen (2015), corporate entrepreneurship is driven mainly by entrepreneurship within a corporate context, through an action oriented mindset which recognises market opportunities, develops processes of how to bring them to fruition and creates a product or service that is truly novel. Hornsby, Kuratko, Holt, and Wales (2013) iterate that corporate entrepreneurship leads to the development of differented and market relevant products and services. Additionally, corporate entrepreneurship is realised through organisations striving towards the exploitation of market and product opportunities, through innovativeness and proactive behaviours. In this sense, the integrated processes of entreprenurship, market

orientation and opportunity exploitation are critical in the performance improvement of corporate organisations, when effectively interacting with interfunctional co-ordination.

1.5 Motivation for the study and problem statement

The declining economic performance of South Africa, based on Mkhize (2019), provides evidence that there is a need for high growth and entrepreneurial firms, with performance characterised by competitiveness, new products and services in stimulating economic activities (Dauda, Nyman, & Cassim, 2019). The decline in corporate market participation and closures, which have resulted in massive retrenchments and downscaling activities may be indicative of declining active corporate entrepreneurship participation in the economy. In the South African market, there is a need for companies to focus on how the entrepreneurial spirit can be re-kindled within organisations. Hence, this study focuses on exploring the interactive mechanisms of interfuctional co-ordination on enhancing entrepreneurial orientation, market orientation and opportunity exploitation in improving business performance. Daud, Remli and Muhammad (2013) found interfunctional co-ordination to have a positive impact on organisational performance.

Fritsch and Wyrwich (2017)'s literature analysis suggests that entrepreneurship supports growth and development of a country or region. Therefore, this study adopts the assumption that the social and economic development and growth of South Africa will, among other contributing factors, be revived from both entrepreneurial orientation and entrepreneurial efforts of individuals within organisations. Corporates operate in highly competitive, global and fast-paced environments, requiring continuous re-examination, with much adaptations and flexibility (Ungerman, Dedkova & Gurinova, 2018). The failure of companies to redefine their purpose, the introduction of relevant and current technologies, and products and services improvements will more likely than not, result in the loss of market position, see the decline in competitiveness and ultimately, a diminishing business. Companies who stay ahead embrace entrepreneurial orientation by being proactive and innovative as well as by taking entrepreneurial risks. Secondly, organisations that are likely to succeed know how to generate and disseminate market intelligence, as well as how to respond to it, while the opportunity'exploitation element, ensures that the knowledge and intelligence acquired is transformed into tangible market deliverables, thus realising absorptive capacity. Interfunctional co-ordination plays a critical role in ensuring that both management and employees across various functions in the organisation are involved

and committed to improving organisational performance, through active participation in supporting entrepreneurial activities, as complemented by both market orientation and absorptive capacity.

The central question that this research proposes to answer is the extent to which effective interfunctional co-ordination significantly moderates the relationship between entrepreneurial orientation, market orientation, opportunity exploitation and business performance. In addition, it assesses the extent to which the variables of entrepreneurial orientation, market orientation and opportunity exploitation determine business performance.

1.6 Research question

The study study addresses the area which is under-researched in the corporate entrepreneurial context by testing the interactive role of interfuctional co-ordination on organisational performance. Therefore the approach will help to effectively answer the following research questions: To what extent does interfunctional co-ordination moderate the relationship between entrepreneurial orientation, market orientation and organisational opportunity exploitation and business performance in an organisational context? Additionally, what are the contributions of entrepreneurial orientation, market orientation and organisational opportunity exploitation on business performance?

1.6.1 The sub-research questions

1. To what degree does entrepreneurial orientation positively impact business performance?
2. To what degree does market orientation positively impact business performance?
3. To what extent does opportunity exploitation positively influence business performance?
4. To what extent does Interfunctional Co-ordination moderate the relationship between Entrepreneurial orientation and Business Performance?
5. To what extent does Interfunctional Co-ordination moderate the relationship between Market Orientation and Business Performance?
6. To what extent does Interfunctional Co-ordination moderate the relationship between Opportunity Exploitation and Business Performance?

1.7 Contribution of the study

The relationship between entrepreneurial orientation (Wardi, Susanto, Abror & Abdullah, 2018; Octavia and Ali, 2017) opportunity exploitation (Rangus and Slavec, 2017), market orientation (Jaworski & Kohli, 1993) and business performance are been widely reported in literature (Ramadani, Abazi-Alili, Dana, Rexhepi, & Ibraimi, 2017). However, very little is known about the potential moderating role of interfunctional co-ordination towards these identified complementary strategic capabilities within the South African corporate context. Though previous studies have identified interfunctional co-ordination as a moderator based on several studies (Auh & Menguc, 2005; Babu, 2018; Chebet, Gabriel & Bonuke, 2018) , those particular studies did not have a focus on the interacting role of interfuctional co-ordination with the complemetory variables of entrepreneurial orientation, market orientation and opportunity exploitation. It becomes important to study these factors which enhance organisational performance, through the interactive mechanisms of interfunctional co-ordination, as this gap in research still remains. The current research bridges this identified gap. Furthermore the study contributed to the extention of knowledge pertaining to corporate entrepreneurship's performance enhancement strategies, through the testing of the complementory capabilities and their interactions with interfuntional co-ordination. The empirical results will inform practice, by generating insights that corporate entrepreneurs can apply in improving performance. Additionally, the study hopes to bring a focus on the knowledge that can assist in the realisation and improvement of market and economic activities, for market and product competitiveness (Dauda, Nyman & Cassim, 2019), and to ultimately improve the quality and livelihoods of South Africans. In a developing and emerging economy such as South Africa, both policy makers and entrepreneur practitioners can draw learnings arising from empirical entrepreneurial research and knowledge.

1.8 Conceptual definition of terms

The key concepts which embed the study are entrepreneurial orientation, market orientation, opportunity exploitation, interfuctional co-ordination and business performance. These concepts are defined in order to provide a common understandiing which is adopted and used throughout the study.

Entrepreneurial Orientation (EO): Kollmann, Stöckmann, Niemand, Hensellek and de Cruppe (2020) refer to Entrepreneurial orientation as the organisation's affinity and inclinations towards embracing the entrepreneurial processes, practices and decision making, which encompasses innovativeness, proactivity and risk taking. Innovativeness is the firm's tendency to engage and support new creative ideas, experimentation, novelty, and processes which might result in new products, services, enhanced processes or technological improvements (Kozubíková, Sopková, Krajčík & Tyll, 2017). Another element of entreprenurship is proactivity, which entails a forward-looking approach and the anticipation of future customer needs, which is supported by innovative and venturing activities with the aim of bringing new products and services to the market, ahead of the competition (Oosthuizen, 2015). Risk Taking pertains to the organisation's willingness and propensity to accept and tolerate unknowable outcomes when both tactical and strategic decisions are made, mainly related to resource commitment to venture projects in uncertain circumstances and that may be potentially risky. Oosthuizen (2015) asserts that risk taking is not merely blind optimism, but entails thorough investigation of various opportunities and rigorous scenario modeling of likely outcomes.

Market Orientation (MO): Based on Octavia and Ali (2017), MO entails the implementation of the market concepts of intelligence generation, intelligence dissemination and also responsiveness, the concepts are based on the premise that customers are core to business, therefore the current and future customer needs require much focus. Pantouvakis, Vlachos and Zervopoulos (2017) view Intelligence generation to be concerned with the collection and analysis of key information about customer needs from the market. While intelligence dissemination pertains to knowledge sharing and the exchange of ideas, derived from the intelligence generation among organisational individuals, teams and departments. The element of Responsiveness has to do with the employment of existing information to design and develop products and services that are closely linked to the customer needs.

Opportunity Exploitation (OE): Zobel (2017) refers to Opportunity exploitation as the capacity to improve, extend, and apply the existing organisational processes and routines, competencies and technology to create new or improved products or services, based on information that has been transformed. Ultimately, opportunity exploitation is about the enablement of implementation and the application of assimilated capabilities, and a combination of resources to unlock commercial potential (Zobel, 2017). It is important to note that opportunity

exploitation is an element of absorptive capacity, which refers to the organisation's ability to identify, and recognise external information, assimilate the knowledge and apply the knowledge for commercial outcomes.

Interfunctional Co-ordination (IFC) The concept of interfunctional co-ordination, according to Babu (2018), alludes to the organisation's co-ordinated efforts in integrating its internal resources, processes and knowledge with the purpose of better serving the customer and improving value. Collaboration and integration among the various functions is encouraged to harness synergies and build capacity in order to develop the principles of customer, market and competitor orientation. Webb, Ireland, Hitt, Kistruck and Tihanyi (2011) emphasise that interfunctional co-ordination provides organisational settings where employees and management from diverse functions can share ideas, overcome knowledge boundaries and positively influence the modification of practices and processes, in promoting innovation and market orientation.

Business Performance (BP): According to Ramadani, Abazi-Alili, Dana, Rexhepi, and Ibraimi, (2017), business performance is measured through indicators such as profitability, market growth, productivity, new markets, revenue and even efficiencies. Rajapathirana and Hui (2018) highlight that both financial and non-financial measures are applicable in analysing business performance. Furthermore, business performance is indicated through financial indicators such as financial growth, profitability and the rate of return on investments, whilst market performance can be traced through growth in sales and market share. Sales volumes and market expansions are reflective of the market responses and demand reactions that might be triggered by organisational marketing efforts. Market positioning is indicated by customer satisfaction, brand acceptance, loyalty, reputation, etc., which implies the organisation's advantaged position in the mind of the customer. New product or service success is signified by the extent of product/service acceptance by the market. Growth in profitability is linked to the firm's economic performance and it could be based on margins and profits realised.

1.9 Delimitations of the study

The study examines the construct of entrepreneurial orientation, which have been further developed into a five dimentsonal structure of innovativeness, risk taking, proactiveness, competitive aggressiveness and autonomy (Oosthuizen, 2015). For the purposes of the study, a single dimension structure of an entrepreneurial orientation scale was adapted from Gonza´lez-

Benito, Gonza´lez-Benito, & Mun˜oz-Gallego (2008). This shorter version of the scale consists of six items, which are well characterised by innovativeness, risk taking and proactiveness. Rauch, Wiklund, Lumpkin and Frese (2009) support the notion of entrepreneurial orientation as a unidimentional contruct, although the approach of measuring innovativeness, proactiveness and risk taking separately to determine business performance is acceptable, a consolidated index of the three dimensions in explaining performance remains important. Addtionally, the sub-construct of opportunity exploitation was extracted from the full scale of absorptive capacity. Ordinarily absorptive capacity consists of the sub-scales of acquisition, assimilation, transformation and opportunity exploitation (Camisón & Forés, 2010; Flatten, Engelen, Zahra & Brettel, 2011).

1.10 Key underlying assumption

The assumption made about the study is as follows: (i) The respondents (employees at the various companies) is assumed to be sufficiently informed and experienced to perceive businesses environmental dynamics and complexities, thus able to inform the study constructively.

1.11 Summary of the chapter

The chapter provides a backround and context for the study, thereby laying a foundation for the study. The study investigates the extent to which interfunctional co-ordination moderates the relationship between entrepreneurial orientation, market orientation and organisational opportunity exploitation and business performance; secondly, to examine the impact of entrepreneurial orientation, market orientation and organisational opportunity exploitation on the business performance. The study is underpinned by the theoretical foundations of the resource-based view, human capital theory, dynamic capability theory. Furthermore, the study is conducted in the context of corporate entrepreneurahip.

The declining economic performance of South Africa provides evidence that there is a need for high growth and entrepreneurial firms, with performance characterised by competitiveness, new products and services in stimulating economic activities. The study examines pertinent factors which drive the company's ultimate performance, these factors identified for this study are entrepreneurship, market orientation and organisational opportunity exploitation, whilst interfunctional co-ordination is instrumental in facilitating the execution of entrepreneurial, market oriented and opportunity exploitation activities or tasks.

The study contributes to the extention of knowledge pertaining to corporate entrepreneurship's performance enhancement strategies, through the testing of the complementary capabilities and their interactions with interfunctional co-ordination. The empirical results will inform practice, by generating insights that corporate entrepreneurs can apply in improving performance. Additionally, the study brings a focus on the knowledge that can assist in the realisation and improvement of market and economic activities, for market and product competitiveness. Furthermore, the assumptions and the delimitation impacting the study were outlined, including the concept definitions.

1.12 The structure of the report

Chapter 2: Provides an overview of the constructs which underpin the study. The importance of entrepreneurial orientation in a corporate context is discussed, together with complementary interventions, such as market orientation and opportunity exploitation. Aspects of business performance are operationalised into the elements of profitability, market responsiveness, market position value and also new product success. Hypothesis development guided by the previous literature, and the conceptual model which articulates the hypotheses, is also presented.

Chapter 3: The central focus of the chapter is the research methodology, highlighting that the study adopted a postitivistic paradigm and quantitative approach. Self-administered surveys were utilised to collect the data from employees of various companies. The data analysis procedures that were utilised are discussed, includin the descriptive statistics, as well as inferential statistics for the purposes of testing the hyphothesis. Furthermore, issues related to validity and reliability of the study are addressed, according to the analytical prodecures outlined.

Chapter 4: Presents the results of the demographic profile of the respondents and the descriptives of the constructs being investigated. Furthermore, the validity and reliability is assessed. Importantly, the hyphothesis testing results are presented.

Chapter 5:The empirical results are reflected on and comprehensively discussed in relation to the existing literature and theories. Furthermore, the unique key findings pertaining to the study are highlighted. Chapter 6: Draws the conclusion about the study, in addition, the theoretical and practical implications, contributions, limitations are discussed and the recommendations for future research are summarised.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature review provides the overall theoretical foundations and underpinning of the study. The theoretical constructs applicable to the study and their relationship are explored. This study examines the relationship between the organisational entrepreneurial orientation , market orientation absorptive capacity and business performance, while taking into account the interactive mechanism of interfunctional co-ordination The dimensions of entrepreneurial orientation, market orientation absorptive capacity, as a collective are a critical organisational resource, competence and capability, which enables organisations to create competitive advantage and performance improvement (Arend, 2014). This study is located within the discipline of corporate entrepreneurship, in which the unit of analysis (employees in an organisation) is situated. Todorovic, Todorovic and Ma (2015) take the view that entrepreneurship within the organisation affects corporate entrepreneurial outcomes, and also shapes the organisational culture, vision and practices. This study assumes that corporate entrepreneurial activities can be further strengthened through market orientation and absorptive capacity, while interfunctional co-ordination provides an enabling mechanism, since interfunctional co-ordination brings management, employees, resources, ideas, knowledge and innovations together, in a collaborative and integrated manner.

2.2 Corporate Entrepreneurship

Essentially the study is broadly located within the field of entrepreneurship, with the main focus on Corporate entrepreneurship. Corporate firms contribute substantially towards economic development (GDP); it is important to observe the relevant performance enhancing strategies in order to improve knowledge about critical practices and approaches which can potentially enhance sustainable entrepreneurial practices within organisations and broadly, in the economy (Van Wyk and Adonisi). Corporate entrepreneurship relates to entrepreneurial activities and their development within an already existing and established organisation (Jiménez-Barrionuevo, Molina, & García-Morales, 2019). Both new and established organisations need to constantly improve and re-invent themselves in order to maintain market relevance. Entrepreneurial efforts within the existing organisational context is referred to, using various concepts such as internal corporate entrepreneurship, strategic entrepreneurship, corporate venturing, innovation through new product/service development, or process improvements (Sakhdari, 2016). Entrepreneurship,

which characterises the firm's behaviour and activities, is explained by Wardi, Susanto, Abror and Abdullah (2018) in terms of innovativeness, proactiveness and risk taking. Todorovic, Todorovic, and Ma (2015) assert that both corporate entrepreneurship and entrepreneurial approaches promote innovation in the firm. Also, the internal orientations and the culture of firms that are classified to be engaging in corporate entrepreneurship, have characteristics of innovativeness, proactivity and risk-taking.

Buli (2017) argues that market orientation is linked to an organisational culture which strives to create customer value, through continuous analysis and determination of customer needs and aspirations. Such orientation drives the organisational development as well as responsiveness to market information.

According to Javalgi, Hall and Cavusgil (2014), absorptive capacity, which encompasses opportunity exploitation, facilitates knowledge acquisition, as well as enabling acting upon the knowledge to produce tangible results. This dynamic capability allows for organisational change and transformation towards best practices. Without the capacity to effectively acquire market knowledge in a timely manner and being able to adapt and learn from this knowledge, the organisation will find it impossible to adapt, reduce negative exposure to competition as well as developing innovative strategies to stay competitive. Absorptive capacity, and more specifically, opportunity exploitation has grown to be accepted as an intangible organisational asset which has both performance and competitive advantage implications.

Interfunctional co-ordination encourages the integration of all the business activities, efforts and resources in order to allow for improved flow of information, from the internal and external sources. Tomaskova (2018) links interfunctional co-ordination with market orientation through the activities which are channelled at ensuring co-operation with customers, acquiring of market insights and the evaluation of current and future resources required in order to implement the business strategy. Furthermore, interfunctional co-ordination is associated with internal marketing, as it is perceived to improve communication, and is also a formal or informal mechanism of social adaptation. The effects of these interactive mechanisms enhance organisational transformation through learning, information sharing and co-operation.

The brief review of the corporate entrepreneurship and its performance outcomes are summarised in table 1. The review intended to locate the field of corporate entrepreneurship and identify various practices that have been instrumental towards performance enhancement.

Table 1: Summary of entrepreneurial phenomena in organisations: Corporate entrepreneurship, complementory interventions and performance outcomes.

Author(s)	Focal entrepreneurial orientation phenomenon	Locus of entrepreneurial orientation/ complementary interventions	Relationship between entrepreneurial orientation phenomenon/ complementary interventions and performance
Criado-Gomis , Iniesta-Bonillo and Cervera-Taulet, (2018)	Corporate Entrepreneurship/ Intrapreneurship	Innovation, new business development, corporate venturing and strategic renewal	Improvement of organizational performance through value creation through exploitation and exploration of emergent opportunities.
Jiménez-Barrionuevo, Molina, and García-Morales, (2019)	Internal corporate entrepreneurship, strategic renewal, internal entrepreneurship	Both potential and realised absorptive capacity and development of innovative potential	Improved performance derived from innovativeness and sustained organisational growth.
Matsuno, Mentzer, and Özsomer (2002)	Strategic and corporate entrepreneurship	Market orientation as a result/consequence of entrepreneurial orientation. Entrepreneurial firms engage with environmental scanning.	Both entrepreneurship and market orientation are complementary, and collectively impact on business performance
Ogunsiji and Ladanu (2017)	Linkages between Entrepreneurial orientation and Corporate entrepreneurship	Opportunity seeking behaviours, Managerial choices and actions to applying organisational resources	Wealth creation, capacity to survive dynamic challenges, Competitive and sustainable wealth generation. Recognition of both financial and non-financial performance.

Author(s)	Focal entrepreneurial orientation phenomenon	Locus of entrepreneurial orientation/ complementary interventions	Relationship between entrepreneurial orientation phenomenon/ complementary interventions and performance
Todorovic, Todorovic and Ma (2015)		Promotion of internal innovation. Corporate Entrepreneurship processes entail the development of new products/services, explored markets, product improvements	Corporate entrepreneurship's contributory role to long term firm development. Wealth creation, profitability and growth.

Souces: Criado-Gomis et al. (2018), Jiménez-Barrionuevo et al. (2019), Matsuno et al (2002), Ogunsiji et al. (2017), and Todorovic et al. (2015) (as per column 1)

Entrepreneurial orientation within a corporate organisational context entails the continuous identification of market opportunities, and also the creation and combining of resources in order to pursue the opportunities with the potential of value creation (Criado-Gomis, Iniesta-Bonillo & Cervera-Taulet, 2018). Entrepreneurial endeavours in a corporate context are closely linked to competitiveness and performance (Covin & Miles, 2007; Ireland, Covin & Kuratko (2009). Corporate entrepreneurship is realised through the development of new businesses, renewal of key ideas, and the transformation of the existing organisation. The dynamic and changing environment in which organisations operate provides opportunities for the development of new products and services, which improves the organisation's competitive standing (Todorovic, Todorovic & Ma, 2015) which affects performance. The pursuit of entrepreneurial activities in the established corporate organisations entails decision making which alters the strategies related to resource deployment as well as the magnitude thereof. Various assertions are made that entrepreneurial orientation improves business performance, and it is considered to be a driving force towards value creation.

2.2.1 Approaches to corporate entrepreneurship

Corporate entrepreneurship, or intrapreneurship can be achieved through various processes such as innovation, new business venturing, as well as strategic business renewal (Kuratko, Hornsby,

& Hayton, 2015). According to McFadzean, O'Loughlin and Shaw (2005), corporate entepreneurship is set to promote enteprenerial behaviours, practices and actions within an organisation. Management practices and behaviour support innovation through seeking potential opportunities, acquition of resources, exploiting and ultimately commercialising new products and services. Furthermore, these attitudes enhance organisational ability to take proactive actions and risks while seizing opportunities for creativity and innovation.

Covin and Miles (2007) identify corporate venturing as the most fruitful and effective manner of enhancing organisational performance when conducted in a very strategic manner. Corporate venturing is realised when a well-established firm carries out entrepreneurial activities through investing in a new firm or creating a new business. Corporate venturing can be either internal or external; in the case of external venturing, investments are made to facilitate the founding, development or growth of external businesses, while internal corporate venturing is created through the setting up a new division within the firm by introducing new competencies which can be acquired externally (Verbeke, Chrisman, & Yuan, 2007). The organisation's core competencies can be leveraged by means of products or market avenues in order to yield value (Covin et al. 2007) . Additionally, new competencies outside the scope of the organisation can be acquired through innovation. The advantages of corporate venturing are that the risk related to the investment in resources is only extended to the new venture as opposed to the entire organisation.

Strategic Renewal, based on Verbeke, Chrisman, and Yuan (2007) occurs when the organisation goes through a radical transformation and renewal where ideas in which the organisation was established are changed. The changes can be both structural and strategic, while strategic changes involve modifications in the existing products, approaches to serving the markets, shifts in the differentiation strategy and channels of distribution. Furthermore, such changes many necessitate the altering of internal processes, systems and the organisational structure (Kelley, Neck, O'Conner & Paulson, 2005).

Innovation is central to the development and growth of corporate entrepreneurship, as product and market innovations crafts future paths for growth (Kelley, Neck, O'Conner and Paulson (2005). Innovation results in new products, services, process improvements. Often new technological developments are leveraged on for process improvement and also for the creation of entirely new markets and products. Organisations not leveraging on innovation limit their potential for

performance improvements as well as growth prospects. McFadzean, O'Loughlin and Shaw (2005) indicates that commercialisation opportunities are enabled by innovation through the evaluation of new opportunities, resource acquisition, utilisation and execution. Furthermore innovation is more than just a process of ideation, research and development, prototyping , production, marketing and sales. Furthermore innovation is about new and novel ideas intended to bring about new products and also to bring about improvements. Kelley, Neck, O'Conner and Paulson (2005) advocates for investment in radical or breakthrough innovation in order to unleash the growth potential and organisational survival. Innovations gives an organisation the advangage of influencing the market ,gaining competitive advantage and also outperforming the rivals.

2.2.2 Entreprenerial orientation in a corporate context

Taheri, Bititci, Gannon and Cordina (2018) view the pursuit of an entrepreneurial culture within an organisation as a means to competitiveness. Furthermore entrepreneurial orientation is underpinned by the elements of innovativeness, risk taking as well as proactiveness (Lumpkin & Dess, 1996). Moreover it is through entrepreneurial orientation that organisations constantly scan the environment in order to identify entrepreneurial opportunities that are exploitable and has potential for strengthening performance (Omar, Aris & Nazri, 2016). Entreprenerial orientation is a key capability which enables the identification and exploitation exploitation of critical market opportunities, addressing challenges and also taking risks in uncertain market conditions (Wiklund & Shepherd, 2005).

Innovativeness entails the embracing of innovative ideas, practices, attitudes and process in an organisation (Taheri, Bititci, Gannon & Cordina, 2018), which results in wealth creation, when markets are disrupted with new goods and service based on Lumpkin and Dess (1996). Given that there are varying degrees of innovativeness, the willingness to innovate reflects the willingness move away from existing practices and technologies as well as venturing beyond the current status.

Proactiveness highlight the firms willingness to exploit business opportunities ahead of competitors with the aim of establing competitive advantage and also to develop competitive capabilities (Taheri, Bititci, Gannon & Cordina, 2018). Similarly Venkatraman (1989) asserts that proactiveness is actioned through continuous scanning and searching of the environment for

opportunities and developing solutions for the changing market conditions. The result of proactivity is new product development and the strategic removal of products that are at declining stages, however this involves risk taking and embracing of uncertainty.

Risk taking entails making bold decisions within an uncertain business environment and investing and committing resources without the certainty of receiving returns (Lumpkin and Dess, 1996). Entreprenerially oriented firms display an eagerness in pursuing opportunities and implementing new projects and ideas at a large scale, as opposed to being restrictive. The motivation behind the pursuit of such initiatives with uncertain returns is mainly to mitigate business stagnation (Taheri, Bititci, Gannon & Cordina, 2018). Venturing into the unknown, will likely generate a sense of uncertainty,which brings about various risk which can be personal, social, financial and also psychological (Lumpkin & Dess, 1996).

2.2.3 Elements of corporate entrepreneurship

Corporate entrepreneurial strategy takes into account all of the practices, activities and organisation-wide initiatives which enable entreprenerial opportunity recognition and exploitation (Morris, Kuratko & Covin, 2011). Therefore corporate entrepreneurial strategy is essesntial in mapping and providing direction about organisational goals which are focused on organisational renewal and constant seeking of new opportunities (Ireland, Covin & Kuatko, 2009). Organisational corporate entrepreneurial strategy is build upon the elements of entrereprenurial strategic vision, pro-entrepreneurship organisational architecture and also entrepreneurial processes and behaviours.

Entrepreneutial strategic vision - McFadzean, O'Loughlin and Shaw (2005) consider entrepreneurial strategic vision to be an indicator of what the organisation is expected to achieve in the future. The process of envisioning entails seeing what is not yet in existence, by recognising the opportunities, and also seeing how changes can be created in the environment in order to create opportunities. Ireland, Covin and Kuatko (2009)'s literature analysis views entrepreneurial strategic vision as the organisational articulation of the philosophical way of operating, which supports innovation and entrepreneurial activities, processes and behaviours. Moreover, top management's communication of the entrepreneurial strategic vision paints the picture of the envisioned organisation, which is opportunity-seeking, innovative and self re-newing. Therefore pro-entreprenerial endeavours and behaviours are supported and encouraged

organisational-wide. Importantly, the strategic vision sets an expectation for desired entrepreneurial actions and outcomes, which then drives motivations and activities.

According to Ireland, Covin and Kuratko (2009), Pro-Entrepreneurship Organisational Architecture entails the creation of an organisational culture and climate which is conductive and enabling of entrepreneurial actions and behaviours within an organisation. Ireland, Kuratko and Morris (2006) assert that internal triggers of corporate entepreneurship are equally important in promoting entrepreneurial behaviours, and such behaviours are better enabled by a conductive organisational structure, human resources systems, culture, resources, as well as capacity. Ireland, Kuratko and Morris (2006) argue that the creation of an enabling environment begins with the identification of key entrepreneurial employees, affording the employees the opportunity to step up to the challenge. Importantly, thereby creating the environment which rewards and encourages opportunity recognition and also exploitation, given the risks and uncertainties.

Entrepreneurial Behaviour and Processes, based on the observations of Ireland, Covin and Kuatko (2009), are important in the organisational settings to drive both entrepreneurial organisational and individual outcomes, which include active opportunity recognition and exploitation. Choi, Lévesque and Shepherd (2008) refer to opportunity exploration and exploitation as the starting point for entrepreneurs to embark on an venturing process. Essentially, entrepreneurial venturing begins with the exploration of the viability of a business opportunity. Through exploration, the knowledge about the markets and technology are acquired, and also customer demands are identified through market research. Multiple milestones of concept and product testing, prototyping, production and market testing are conducted.

Choi, Lévesque and Shepherd (2008) suggest that opportunity exploitation involves the development of a full scale and efficient operation where products and services can be created and be delivered in order to generate revenue and also to realise business performance. George, Parida, Lahti and Wincent (2016) recognise entrepreneurial opportunities to be central in leading towards entrepreneurial action. Opportunies can be in the form of new markets, products, technological applications, new material and also resource combinations, furthermore opportunities arise from environmental changes. The recognition of opportunities create conductive and favourable conditions for entrepreneurial activities. Preconditions for opportunies

are based on the alignment between the supply and demand for product and services, the potential for value creation and also opportunity creation where neither demand nor the products and services exists, but need to be developed and created from inception (George, Parida, Lahti and Wincent, 2016).

2.2.4 Opportunity based view of entrepreneurship

Brown, Davidsson and Wiklund (2001) argue that Stevenson (1983) provides an alternative view of the conceptualisation of entrepreneurship, which is entirely focused on opportunies. Based on Stevenson (1983), entrepreneurship is viewed as a management approach with an entire focus on opportunity pursuit and exploitation without being restrained by the resources. In contrast to the dimensions of innovativeness, risk taking as well as proactiveness (Lumpkin and Dess, 1996), Stevenson (1983) proposed entrepreneurial management behaviours as characterised by the dimensions of strategic orientation, commitment to opportunity, commitment of resources, control of resources, management structure, the reward philosophy, growth orientation and also entrepreneurial culture. This conceptualisation highlights that there are various drivers of organisational entrepreneurship, and a managerial approach is among alternatives for entrepreneurial performance improvement.

2.2.5 Internal corporate environment as an enabler of corporate entrepreneurship

The critical question raised by Todorovic, Todorovic and Ma (2015) is how can organisations enable and cultivate corporate entrepreneurial behaviours or what is referred to as entrepreneurial orientation in an organisational context. Both Dess and Lumpkin (2005) and María, Martina, and Luz (2007) closely align corporate entrepreneurship with corporate entepreneurship , as characterised by innovativeness, proactiveness and risk takng. Todorovic, Todorovic and Ma, 2015) assert that the corporate culture enables entrepreneurship and that entrepreneurship is a by-product of organisational culture. Furthermore, other enabling aspects include organisational structure, management styles and also human resources (Covin & Slevin, 1991).

According to Brettel, Chomik and Flatten (2015), a flexible organisational culture characterised by interdepartmental communication and free flow of information is central to cultivating innovativeness and creativity, whilst centralised and hierarchical communication is very restrictive. Moreover, goal orientation is also important in driving productivity, efficiency and goal attainment, more specifically in relation to market orientation, improving competitiveness

and attainment of strategic entrepreneurial goals. Mitchell, Busenitz, Lant, McDougall, Morse and Smith (2004) attribute proactive employee behaviour of discovering, assessing and exploiting market opportunities to organisational culture.

Organisational structure that is hierarchical in nature hinders communication at a horizontal level, thus stifling innovativeness and risk taking behaviours due to hierarchical decision making and limited information flow (Brettel, Chomik & Flatten, 2015). Organic, flat and flexible structures are recommended by Kearney, Hisrich and Roche (2008) in order to foster entrepreneurial behaviours and activities, as much adaptability is agility is prevalent in such structures.

Based on Brettel, Chomik and Flatten (2015), management's role in supporting enteprenerial actions, includes a style of managing which fosters an attitude cultivating new and innovative ideas, pursuit of opportunities and also taking risks. Scheepers, Bloom, and Hough (2008b) assert that management can promote innovativeness through rewarding and recognising entrepreneurial behaviours, championing creative ideas, providing resources to sponsor entrepreneurial opportunities.

Human Resources Systems, such as rewards and job structuring play an important role in encouraging entrepreneurial behaviour in an organisation. Scheepers, Bloom, and Hough (2008b) assert that rewarding employees for desired behaviours re-inforces motivation and commitment towards engagement in innovativeness, responsible and calculated risk taking and also proactiveness. Effective reward systems are linked to performance outcomes which are aligned to organisational strategies and goals. Importantly, job structuring elements should consider the level of autonomy apportioned in a role as well as the workload model which determines the time allocated to task that are related to entrepreneurial projects (Scheepers, Bloom, & Hough, 2008b).

2.2.6 Corporare entrepreneurship in the emerging economies and South African context

Scheepers, Bloom and Hough (2008a) iterate the importance of corporate entrepreneurship for both organisational and economic development. The criticality of entrepreneurial attitudes and

behaviours are important for determining key organisational outcomes which helps the organisation to survive and to prosper in a turbulent and volatile market environment. Additionally, Van Wyk and Adonisi (2012) emphasise the need for nurturing an entrepreneurial environment in the South African context in order to grow both local and global competitiveness, and also business growth and sustainability. Van Wyk and Adonisi (2011) acknowledge that South Africa, as an emerging economy, still has many developmental challenges, such as economic stability, unemployment as well as limited business skills. Therefore, corporate entrepreneurship is essential in economic growth, furthermore the identification of factors which nurtures and enables corporate entrepreneurship are critical.

Van Wyk and Adonisi (2011) consider the elements of developing a clear entrepreneurial strategy, empowering and supportive management, conducive entrepreneurial climate, competency development, vision communication and also employee participation to be critical in a South African corporate context. Employees are considered to be among the important resource of executing entrepreneurial projects when they are exploited, which required an emphasis to be placed on entrepreneurial skills development (Van Wyk & Adonisi 2011).

Urban and Verachia (2019) caution that the development of an entrepreneurial strategy does not automatically translate into the desired results, but requires the alignment of internal corporate processes, systems, behaviours, structure and also the culture. Aspects such as rewards, senior management support and a clear articulation of goals provide an explicit signal about desired actions and behaviors related to outputs.

Kwinje, Mwando-Gukushu and Zengeni (2020) point out that small medium enterprises in the developing economies, face constraints and challenges whilst adapting to corporate entrepreneurial strategies. These challenges are due to limited resources, scarce skills and expertise, few and limited customers, and low marketing budgets. Other systemic barriers are due to economic recessions, regulatory burdens as well as access to financial resources (Kwinje, Mwando-Gukushu & Zengeni, 2020). Based on the above, small and medium enterprises faces different challenges in implementing corporate entrepreneurship, mainly that of limited resources (Tinarwo, 2016).

Khoza, Schachtebeck and Groenwald (2017) assert the importance of promoting corporate entrepreneurship, as this is important for economic growth as well as the development of entrepreneurial skills in the developing economies. The study also highlights the value of corporate entrpreneurship in small and medium enterprises.

2.2.7 Measurements and conceptualisation of entrepreneurial orientation in the corporate context

Previous studies on entrepreneurship have conceptualised entrepreneurial orientation as a compositive construct, while others have adopted a multi-dimentional approach (Shan, Song & Ju, 2016) .

The unidimentional approach initially presented by Covin and Slevin (1989) focuses on the elements of innovativeness, risk taking and proactiveness. Lumpkin and Dess (1996) proposed that a multi-dimensional approach to assessing entrepreneurial orientation provides an avenue to assessing the magnitude of each dimension separately in a particular context. Furthermore the multi-dimentional approach further extends innovativeness, risk taking and proactiveness with autonomy and competitive aggressiveness. Rauch, Wiklund, Lumpkin and Frese (2009) support entrepreneurial orientation as a unidimensional construct in the successful measure of organisational performance. Additionally, Rauch, Wiklund, Lumpkin and Frese (2009) encourage the use of a summed index of the variables of innovativeness, risk taking and proactiveness, for which validity is not put at risk.

Covin and Miles (2007) broadly identify entrepreneurial orientation as the driving force behind the pursuit of entrepreneurial activities in an organisation. Furthermore, a dictinction is made between a unidimensional or composite construct of entrepreneurial orientation with a multi-dimensional approach presented by Lumpkin and Dess (1996). The main difference lies in the multidimensional approach being domain focused and allowing for the examination of entrepreneurial orientation in a specific dimension, whilst the unidimensional construct's conceptualisation is more phenomenon based, in that it specifies what entrepreneurial orientation looks like as a whole (Covin & Slevin 1989). Covin and Miles (2007) confirm that there are varying conceptulisation and measurements of entrepreneurial orientation, each with their own merits, however the promise lies in furthering the understanding of the pursuit of entrepreneurial ectivities in an organisation.

2.3 Business Performance

Organisations are able to stay sustainable only through continued and sustained performance. Business performance is attainable through the firm's ability to achieve the set strategic objectives and operational goals. Na, Kang and Jeong (2019) assert that business success depends on the organisation continuously revitalising and restructuring strategies in order to respond to market demands flexibly. Survival, growth and performance of the firm is enhanced through delivering what the customer regards as valuable. Shah and Dubey (2013) iterate that business performance has both financial (sales growth, profits, rate of return on investments, market share) and non-financial (customer value, product quality, market effects, reputation, image and product launch success) elements of measurement. Gonza´lez-Benito, Gonza´lez-Benito and Mun˜oz-Gallego (2008) operationalise business performance into elements of profitability, market responsiveness, market position value and also, new product success.

Profitability is refered to as economic performance outcomes which incorporate profit margins, and returns on investments (Gonza´lez-Benito et al., 2008). Essentially, profitability is reflective of organisational effectiveness, by providing an understanding of how effectively the company utilises its resources to generate profit and also create value. Entrepreneurial and market oriented strategies have an impact on profitability, as they relate to sales revenue, searching for new and better profitable products, and also growing the customer base and markets.

Market response relates to sales growth and market share growth, and is reflective of the customer demands created in the market due to proactive and competitive organisational strategies (Gonza´lez-Benito et al., 2008). Sales growth and market expansion are critical in the maintenance of the economic contribution, in that growth improves the financial performance of the organisation.

Market position value takes into account the aspects of customer satisfaction, image and reputation of the organisation's products and services. This is about the development of an advantageous position in the minds of the customers and consumers. Narteh and Braimah (2020) highlight that outcomes of both brand image and reputation include intentions to buy, repeat sales, customer retention, customer loyalty and also the shaping of consumption decisions for products or services, which has major implications that are linked to business performance. Based on Na, Kang and Jeong (2019), customer satisfaction can be achieved through exerted

efforts to intentionally satisfy the needs and wants of customers, including those that are explicitly expressed and those that cannot be expressed but are meaningful in the mind of the customer.

New products or services developed in market oriented businesses are likely to succeed, due to greater company-wide understanding of customer needs as well as value creation. Utilisation of market insights and intelligence leads to the understanding, development and implementation of strategies which enable the delivery of customer value (Pelham, 1997), leading to product or servive success. Na, Kang and Jeong (2019) express the importance of innovative and creative practices in organisations towards the provision of solutions related to products, services, distribution and promotions' quality and differentiation.

2.3.1 Entrepreneurial orientation and business performance

Wardi, Susanto, Abror and Abdullah (2018) indicate that organisations with strong entrepreneurial orientation are likely to show better performance, and more specifically, in a financial sense. Organisations with practices, processes and policies which promote entrepreneurial decisions, new venture developments and product introduction initiatives in the marketplace are likely to outperform their competitors and improve performance (Hult, Snow & Kandemir, 2003). Similarly, Eze (2018) argues that entreprenerial inclinations in the corporate context with elements of strategic renewal and corporate venturing will affect performance significantly. Rauch, Wiklund, Lumpkin and Frese's (2009) empirical results are supportive of the concept of entrepreneurial orientation being supportive of business performance.

Entrepreneurially focused organisations are inclined to develop new and innovative products and services needed by the market, in addition, they pursue risky resource investment projects, as well as being able to proactively restructure the market well ahead of competition(Ireland, Hitt & Sirmon, 2003). Through innovative processes, new products and services are developed in order to match customer needs. Proactivity is key in organisations for the purposes of identifying emerging and future customer needs. The gaps in the market are anticipated in advance, which result in opportunity identification, exploration and exploitation well ahead of competition. Most entrepreneurial projects have an element of risk, as resources are appropriated to ventures and novel products or services where the outcomes cannot be clearly determined and where the probability of success is not known in advance(Rauch, Wiklund, Lumpkin & Frese, 2009). The exploitation of market opportunities carries a considerable amount of risk with the hope of

obtaining rewarding financial returns in both the short and long term. Entrepreneurial orientation through innovation, proactivity and risk-taking activities enables the organisation to better understand customer needs and take actions to meet them, with the hope of realising positive performance outcomes. Wardi, et al. (2018) and Octavia and Ali (2017) attribute the performance of firms to entrepreneurial orientation, in that the firm is able to address competition and market threats quickly and timeously, as well as being able to capture opportunities. Jiménez-Barrionuevo, Molina and García-Morales (2019) indicated a relationship between organisational entrepreneurial adaptation and firm performance through the strategic renewal. Saeed, Yousafzai and Engelen (2014); Chaudhary and Batra (2018) iterate the criticality of entrepreneurial activities of proactiveness, risk taking and innovativeness in approaching the changing environment in order to pursue growth opportunities for the purposes of improving business performance (Shan, Song & Ju, 2016). Along with Masadeh, Al-Henzab, Tarhini and Obeidat (2018); Tang, Tang and Cowden (2017)'s literature analysis highlights a strong link between entrepreneurial orientation and performance at a financial and non-financial level. Therefore, businesses with a strong entrepreneurial focus and capability are likely to realise their performance objectives, because of the engagement in activities which entail innovativeness, proactivity and also risk taking elements, in order to create economic value (Wiklund & Shepherd, 2003). It is therefore hyphothesised that:

H1: Higher levels of entrepreneurial orientation in an organisational context positively impact business performance.

2.3.2 Market orientation and business performance

Although there are clear conceptual differences between market orientation and entrepreneurial orientation, Roskos and Klandt (2007) have found a significant correlation between the constructs. Additionally, González-Benito, González-Benito and Muñoz-Gallego (2009) found the relationship between entrepreneurial orientation and market orientation to be complementory. Similarly, Grinstein (2008) asserts that both market orientation and entrepreneurial orientation seek to improve performance through searching for market opportunities and also to satisfy customer and market needs.

Kohli and Jaworski, 1990) conceptulised market orientation as activities pertaining to intelligence generation, intelligence dissemination and responsiveness. Goldman and Grinstein (2010) view

market orientation as behaviour and a culture within an organisation which pursues performance improvement through an emphasis on the exploitation of market opportunities and being customer focused. Furthermore proactive behaviours drive the market through searching and identifying new ideas which have potential to satisty emerging customer needs (Slater & Narver, 2000). According to Day (1994), marketing oriented organisations are defined by the extend to which they implement the marketing concept, again they have superior market sensing capabilities which are able to better link and connect them with the customers. Such organisations are able to improve performance through growing the market share and also deliver to the customers more effectively and efficiently.

Octavia and Ali (2017) argue that market orientation is critical to the improvement of business performance, even though there are varying views among researchers on the idea. Market orientation contributes towards business performance (Babu, 2018), through the processes of collecting customer insights that are critical in aligning organisational expertise and objectives to market opportunities (Hult & Ketchen, 2001). The fact of the matter is that, without the customers or the markets, there are no successful entrepreneurial endeavours, therefore market and customer orientation is critical. The organisation needs to be constantly alert through generating intelligence from the market, in order to identify opportunities, which are informed by customer demands (Narver, and Slater, 1990). Market intelligence must be disseminated within the organisation in order to generate ideas and insights which inform organisational responsiveness (Kohli & Jaworski, 1990). Responsiveness ensures that action is taken to operationalise ideas into concrete services and products. Business performance is influenced by the market acceptability of the organisational products, brand and services. Therefore, market orientation attempts to understand the market and in the same breath, influence the very same market, with the efforts to improve organisational performance and overall competitiveness. Chaudhary and Batra (2018) highlight the positive implications of market orientation on the firm's success, as market oriented firms are driven by the business philosophy and culture which prioritises and keeps the customers at the centre. Masadeh, Al-Henzab, Tarhini and Obeidat (2018) strongly argue for market orientation to be critical towards business success, along with Greenley (1995) and Jaworski and Kohli (1993). Therefore this study hypothesises that:

H2: A strong focus on market orientation in an organisational context positively impact business performance.

2.3.3 Opportunity exploitation and business performance

Yoruk and Jones (2020) emphasise the importance of opportunities in entrepreneurial organisations, however it is the exploitation thereof which bring desired results. Choi, Lévesque and Shepherd (2008) entail practical steps of converting market insights into efficient and full scale production capacity which deliver products and services which are expected to generate revenue for business success.

The opportunity exploitation dimension is central to the activation of value creation and triggering of actions which address market needs which have been signalled by the customers. The concept of opportunity exploitation forms part of realised absorptive capacity, because of a recursive process of transforming novel ideas into meaningful knowledge with potential commercialisation ends (Patel, 2018). Absorptive capacity entails the organisational capability to identify and recognise external knowledge, followed by knowledge assimilation and knowledge application. Absorptive capacity encompasses the elements of potential absorptive capacity and realised absorptive capacity. Potential absorptive capacity entails knowledge acquisition, whilst realised absorptive capacity focuses on the capability to transform the acquired knowledge and successfully exploit it, thus opportunity exploitation. Rangus and Slavec (2017) advocate for the firm's investment in the development of absorptive capacity, as a critical competence and means to contributing to competitiveness and performance. This study focuses on the exploitation component of realised absorptive capacity, being opportunity exploitation. Chaudhary and Batra (2018) assert that absorptive capacity, which includes opportunity exploitation, positively impacts business performance, in that acquired knowledge is exploited through the realised absorptive capacity. Beniteza, Llorensb, and Braojosb (2018) argue that the capacity to explore and exploit opportunities provides an understating why and how some organisations perform better than others. Choi, Lévesque and Shepherd (2008) argue that opportunity exploitation is a trade-off between performance outcomes such as profit potential, exploration costs and also the likelihood of loss. Organisations which are able to assimilate valuable market information and apply it through opportunity exploitation for commercial ends and value creation, are likely to enhance their performance. Therefore the following hypothesis is proposed:

H3: Higher levels of opportunity exploitation in an organisational context positively influences business performance.

2.3.4 The moderating role of interfunctional co-ordination on the relationship between entrepreneurial orientation, market orientation, opportunity exploitation on business performance

Babu (2018) argues that interfunctional co-ordination is critical in influencing both market and customer orientation, through the integration of internal resources and multiple functions to achieve the overall business performance. Interfunctional co-ordination is an enabling mechanism to strengthening and aligning entrepreneurial oreintation, market orientation and opportunity exploitation in the delivery of the business objectives. An integrated and multifunctional organisational approach to addressing markets, customer, competitor and innovation can only improve competitiveness. Trainor, Rapp, Beitelspacher and Schillewaert (2011), interestingly, perceive interfunctional co-ordination as a component of market orientation, together with customer and competitor orientation. Tajeddini, Altinay and Ratten (2017) highlight the moderating role of interfunctional co-ordination in enabling the effective exploitation of market insights which lead to innovativeness for product and service improvements. Webb et al. (2011)'s literature analysis associates interfunctional co-ordination with incremental and radical innovation in the modification and advancing of existing products. Auh and Menguc (2005) recognise the interactive and enabling effect of interfunctional co-ordination in improving business performance through innovative practices. The integrated and collaborative organisational approaches enhance communication and information sharing among the various functions. The type of information shared includes multiple functional expertise, experience, education and knowledge. The study hypothesises that the extent to which interfunctional co-ordination is achieved, will positively impact on business performance through entrepreneurial orientation , market orientation, opportunity exploitation. The dynamic capabilities theory according to Baškarada et al. (2018), articulates how interfunctional co-ordination is implemented, through considering the processes of integrating, building, and restructuring resources and capabilities to address the complex, dynamic and changing environment. Jiménez-Barrionuevo et al. (2019) highlight that knowledge exploitation can be effectively incorporated into entrepreneurial activities through the co-ordination of implementation actions which are triggered by newly acquired knowledge. Fallatah (2019) suggests that interfunctional co-ordination is positively associated with high performance and innovation. Ho, Nguyen, Adhikari, Miles and Bonnie (2018) argue, from a market orientation perspective, that interfuctional co-ordination creates value for the customer, as it improves mutual sharing, and dissemination of critical information, which is pertinent for deliberations relating to product improvements, development and launching. Lwamba, Bwisa, and Sakwa (2014) mention

entrepreneurial efforts such as competitive strategies to outperform industry rivals, implementation of innovative ideas and translating them into tangible products and services, being proactive in the identification of new market demands, taking calculated risks and also finding risk mitigation tactics, while introducing new products and services would improve performance, when these activities are well integrated and co-ordinated.

The study posits that the strategic business capability of interfunctional co-ordination will moderate the relationship between entrepreneurial orientation and business performance (Wardi et al., 2018; Octavia et al., 2017; Tang, Tang & Cowden, 2017), market orientation and business performance (Babu, 2018) , as well as opportunity exploitation and business performance (Rangus et al. 2017). Auh and Menguc (2005) argue that interfunctional co-ordination can be instrumental in ensuring that there are organisation-wide goals and processes which are geared towards serving targeted customer markets, and that the resources are channelled towards a common mission of contributing towards the improvement of customer value. Migliori, Pittino, Consorti and Lucianetti (2019) iterate the criticality of interfunctional co-ordination in being able to integrate all the business functions and units in order to address market requirements, as informed by customer needs through capability, capacity, knowledge and resource sharing. Furthermore, Marjanova, Sofijanova, Davcev and Temjanovski (2015) advocate interfunctional co-ordination to be important for performance enhancement, profitability and competitiveness. Therefore the following hypotheses are framed:

H4: Interfunctional co-ordination significantly moderates the relationship between entrepreneurial orientation and business performance.

H5: Interfunctional co-ordination significantly moderates the relationship between market orientation and business performance.

H6: Interfunctional co-ordination significantly moderates the relationship between opportunity exploitation and business performance.

2.4 Conceptual Framework

The proposed conceptual model is instrumental for the articulation and the hypotheses development. The model aims to illustrate the impact of Entrepreneurial Orientation (Wardi et al. 2018), Market Orientation (Babu 2018) and Opportunity Exploitation (Rangus et al. 2017) on Business Performance, whilst being moderated by Interfunctional Co-ordination. The proposed

conceptual model is underpinned by the resource based theory, the human capital theory and the dynamic capability theory, and mainly within a corporate context. This model explains and illustrates how resources (finances, competencies, capabilities, etc..) and human capital (knowledge, skills, abilities and experiences of individuals) are harnessed and tapped into, in order to meet customer and market needs. Auh and Menguc (2005) emphasise that interfunctional co-ordination provides a structural mechanism in order to facilitate the realisation of organisational goals, through improved communication, cohesiveness and also collaboration.

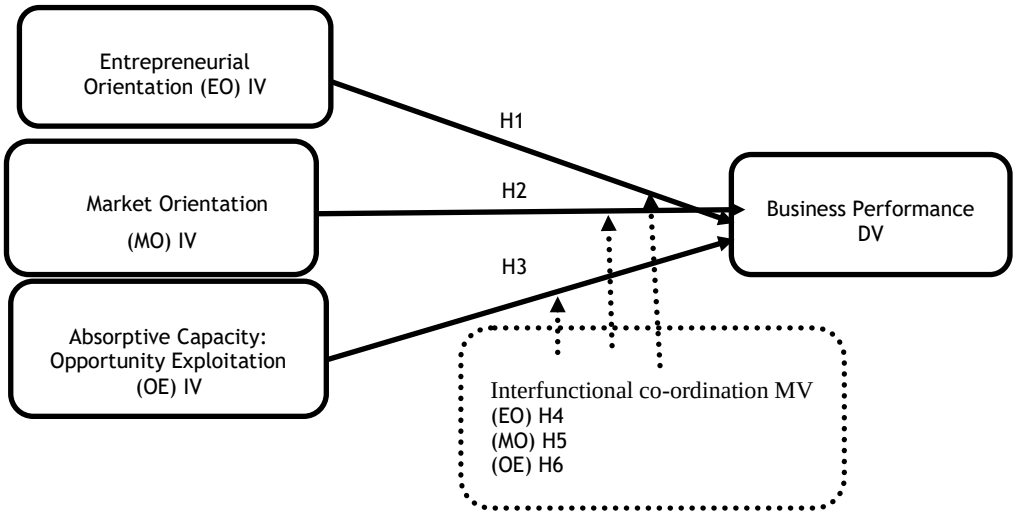

Figure 1: The study's conceptual model format was adapted from several authors

(Auh & Menguc, 2005; Cooper & Schindler, 2014; Tajeddinia, Altinay & Ratten, 2017; Farooq, 2018).

Interfunctional co-ordination is important in improving goal alignment through the harmonisation of internal processes and functions (Hübnerová, Tomášková, & Bednář 2020), in the organisation, and more particularly when strategies of entrepreneurial orientation, market orientation (Kahn 1998), and opportunity exploitation (Zobel 2017) are employed for the purposes of performance improvement. Performance can be enhanced by proper co-ordination of both resources (people, skills, knowledge, finances and capabilities (translating market insights into tangible products and services) of an organisation, as Kahn (1998) found interfunctional co-ordination to be a instrumental in enabling marketing orientation through collaboration, teamwork, and communication. De Saá-Pérez and García-Falcón (2002) argue that it is through the human capital that the organisational capabilities are developed and utilised in order to

improve performance and organisational sustainability. Furthermore, a resource based view considers that organisations invest in the human capital in order to create value due to the uniqueness, dynamic and intangible nature of the human capital resource. Strengthened interdepartmental collaborations leads to pooled resources and shared responsibilities through the division of labour and the co-ordination of tasks in the various functions towards a common goal and vision. Based on Ramon-Jeronimo, Florez-Lopez and Araujo-Pinzon (2019), dynamic capabilities emphasise the reconfiguration and the renewal of capabilities in order to cope with the changing environment, whilst utilising the ability to exploit and restructure the resources for sustainable performance. Increased information and communication flow among the various functions promotes transperency. In this manner, the resources can be efficiently committed to the critical strategic projects in the best and optimal manner; De Saá-Pérez et al. (2002) assert that it is through capabilities that the organisation has capacity to deploy resources and organisational processes in order to achieve the desired outcomes. Importantly, high quality collaborative information inputs impact on the likelihood of rational decision making due to improved integration.

The study hyphothesises that Interfunctional Co-ordination positively moderates the relationship between Entrepreneurial Orientation, Market Orientation, Opportunity Exploitation and Business Performance. Furthermore, to test the extend to which Entrepreneurial Orientation, Market Orientation and Opportunity Exploitation impacts Business Performance, the following hypotheses are investigated

H1: Higher levels of entrepreneurial orientation in an organisational context positively impact business performance.

H2: A strong focus on market orientation in an organisational context positively impact business performance.

H3: Higher levels of opportunity exploitation in an organisational context positively influences business performance.

H4: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance.

H5: Interfunctional Co-ordination significanlty moderates the relationship between Market Orientation and Business Performance.

H6: Interfunctional Co-ordination significanlty moderates the relationship between Opportunity Exploitation and Business Performance.

Table 2: Summarised version of the consistency template (Annexture X)

Consistency Matrix – Entrepreneurial Orientation, Market Orientation, Opportunity Exploitation, Interfunctional Coordination and Business Performance				
Objectives	**Literature Review**	**Hypotheses**	**Research Questions**	**Variables Independent and Dependent**
Determining the impact of entrepreneurial orientation on Business Performance.	Chaudhary and Batra (2018) Jiménez-Barrionuevo, Molina and García-Morales (2019) Masadeh, Al-Henzab, Tarhini and Obeidat(2018 Octavia and Ali (2017) Saeed, Yousafzai and Engelen (2014) Tang, Tang and Cowden (2017). Wardi, Susanto, Abror, and Abdullah (2018)	H1: Higher levels of entrepreneurial orientation in an organisational context positively impact business performance.	To what extent does Entrepreneurial orientation positively impact on Business Performance?	Independent variable =Entrepreneurial orientation Dependent variable = Business Performance
Examining the impact of Market Orientation on Business Performance.	Masadeh, Al-Henzab, Tarhini and Obeidat(2018) Octavia and Ali (2017) Babu (2018)	H2: A strong focus on market orientation in an organisational context positively impact business performance.	To what degree does Market Orientation positively impact on Business Performance	Independent variable = Market Orientation Dependent variable = Business Performance
Analyse the influence of Opportunity Exploitation on Business Performance	Rangus and Slavec (2017) Chaudhary and Batra (2018)	H3:Higher levels of opportunity exploitation in an organisational context positively influences business performance.	To what extent does Opportunity Exploitation positively influence Business Performance?	Independent variable = Opportunity Exploitation Dependent variable = Business Performance

Examine the moderating role of Interfunctional Co-ordination on the relationship between Entrepreneurial orientation and Business Performance.	Auh and Menguc (2005) Jiménez-Barrionuevo, Molina and García-Morales (2019). Tang, Tang and Cowden (2017) Webb, Ireland, Hitt, , Kistruck and Tihanyi (2011)	H4: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial orientation and Business Performance.	To what extend does Interfunctional Co-ordination moderate the relationship between Entrepreneurial orientation and Business Performance.	Independent variable =Entrepreneurial orientation Moderating Variable =Interfunctional co-ordination Dependent variable = Business Performance
Determine the moderating role of Interfunctional Co-ordination on the relationship between Market Orientation and Business Performance.	Tajeddini, Altinay and Ratten (2017) Trainor, Rapp, Beitelspacher and Schillewaert (2011)	H5: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance.	To what extend does Interfunctional Co-ordination moderate the relationship between Market Orientation and Business Performance?	Independent variable = Market Orientation Moderating Variable =Interfunctional Co-ordination Dependent variable = Business Performance
Analyse the moderating role of Interfunctional co-ordination on the relationship between Opportunity Exploitation and Business Performance.	Baškarada and Koronios (2018) Fallatah(2019)	H6: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance.	To what extend does Interfunctional Co-ordination moderate the relationship between Opportunity Exploitation and Business Performance	Independent variable = Opportunity Exploitation Moderating Variable =Interfunctional co-ordination Dependent variable = Business Performance

2.5 Summary of the chapter

The chapter provides an overview of the constructs which underpin the study, namely entrepreneurial orientation, market orientation, opportunity exploitation, interfunctional co-

ordination and business performance. The importance of entrepreneurial orientation in a corporate context is discussed, together with complementary interventions such as market orientation and opportunity exploitation, with the aim of improving business performance. Aspects of business performance are operationalised into the elements of profitability, market responsiveness, market position value and also new product success. Hyphothesis development was guided by the previous literature relating to the relevant variables, as well as the research purpose and questions. The conceptual model, which is instrumental in the articulation of the hypotheses, is also presented. The next chapter provides the details of the research methodology.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology sections addresses the research design adopted for the study, the data collection methods, as well as sampling techniques that are best suited for the study. The measurement instruments utilised for data collection are discussed, whilst the procedures applied for the data analysis are briefly outlined. Ethical considerations illustrate the ethical protocol and standards that the researcher needed to comply with when conducting the study.

3.2 Research approach and paradigm

In order to meet the objectives of the study, the empirical quantitative approach was adopted. The approach allowed for the collection and analysis of observable data in addressing the research questions using statistics. Mcdonald, Gan, Fraser, Oke and Anderson (2015)'s study reported that most entrepreneurial research in top journals used mainly primary research data, with the application of survey techniques, which implies a predominantly positivistic and quantitative underpinning. Rutberg and Bouikidis (2018) highlight that quantitative research uses standardised measuring instruments in the collection of statistical and numerical data. Furthermore, this type of methodology is useful in the determination of the relationships between the variables and their predicted outcomes.

A positivistic paradigm, according to Aliyu, Bello, Kasim and Martin (2014), is a research strategy underpinned by the ontological view which asserts that truth and reality is free from the subjectivity of the observer. Concepts that are associated with positivism are realism and objectivism, which are embedded in the stance that factual occurrences can be studied and observed empirically through rational investigations and analysis. Atieno (2009) highlights that quantitative studies tend to be deductive, in that their conclusions follow the reasons that are given.

3.3 Research Design

The study employed a cross-sectional design approach, with the use of electronic and manual distribution of self-administered surveys, which enabled the collection of data from the population sample. Cross-sectional design's disadvantages, based on Woodside (2011), are that they are often conducted once-off, within a particular timeframe, in a self-report format and this

limits the ability to predict causality. Furthermore, the study has both elements of descriptive and explanatory research. According to Torchiano, Fernández, Travassos and De Mello (2017), descriptive studies focus on what is happening, while explanatory questions explain why situations happen.

3.4 Population

Taherdoostv (2016) defines the population as the total set of cases from which the research sample is drawn. The entire pool of the targeted population for the study were employees in Gauteng based corporates within the various sectors, such as primary (extractive industries), secondary (manufacturing) and tertiary (commercial services) sectors of the economy. The respondents included in the study had to be employees in coporates in Gauteng, in which product or service offerings are made to the market and customers. Again the employment companies must be operating in a competitive and dynamic environment in which they are compelled to continuously improve their performance in order to sustain their competitive advantage.

3.5 Sampling Strategy

The study targed employees of companies in varying industries, which are profit and revenue generating through the provision of goods and services, and operate in highly competitive markets. As part of sourcing and identification of where the population was locatable, the following organisations and networks were instrumental : Firstly, a Johannesburg-based organisation which has a database of corporates and their employees was approached to assist with the distribution of the research survey to their customer base. The company's managing director was instrumental in distributing both the link and research request letter. Secondly, the research request was also sent to the Consulting Engineers of South Africa (CESA) members, utilising a publicly accessible contact database. The CESA has over 580 member companies. Thirdly, the electronic contact list of approximately 120 masters students who graduated in 2018 and 2019 (alumni) was utilised to reach out to the graduates for purposes of participating in the study. Fourthly, a marketing company which sells life, medical, legal and insurance cover assisted with access to both customers and sales staff (second stream income) who were willing to take part in the study. Additionally, the researcher's professional contacts and previous colleagues from manufacturing, wholesale, retail, power generation, motor and insurance companies where

also contacted through social media platforms to request participation in the study. Gauteng based, and mainly Johannesburg based, employees were purposely approached for the aims of conducting the study.

Table 3: Full-time employees by industry within 95% confidence limits (excluding agricultural employees)

Industry	**Relative Standard Error**	**Quarter ended September 2020**		
		Lower limit	**Estimate**	**Upper limit**
Mining and quarrying	0,0	449 851	449 851	449 851
Manufacturing	0,7	1 105 540	1 120 919	1 136 298
Electricity, gas and water supply	0,9	57 070	58 095	59 120
Construction	2,5	487 093	512 191	537 288
Wholesale and retail; repair of motor vehicles, motorcycles, and personal and household goods; hotels and restaurants	1,2	2 055 184	2 104 686	2 154 189
Transport, storage, and communication	1,3	442 856	454 435	466 014
Financial intermediation, insurance, real estate and business services	1,7	2 100 017	2 172 402	2 244 786
Community, social and personal services	0,5	2 680 672	2 707 203	2 733 733
Total	**0,5**	**9 485 899**	**9 579 781**	**9 673 663**

Source : Department of Statistics, South Africa (2020d, pp 47)

Table 3 gives an indication of potential sectors and industries where the population is locatable. Furthermore the estimated population is highlighted. Primary, secondary and tertiary sectors are presented, with the exeption of the agricultural industry.

3.5.1 Sample Size

Siddiqui (2013) highlights that there are various guidelines provided in the literature to determine appropriate sample required for a type of research as well as the statistical techniques to be applied. Siddiqui (2013) provides a basic guideline for sample size classification and quality as follows: 50 is very poor, 100 is poor, 200 fair, 300 is good, 500 is very good and 1000 is excellent. The sample of over 150 employees had to be drawn from an estimated total population of 10 347 000 based on the Department of Statistics, South Africa (2020a), and also 37 industries or sectors.

Table 4: Estimated number of employees in South Africa (2020 June)

Period	Total employees' number of employees (non-agricultural sector)	Full time	Part-time	Total Employees in the agricultural sector	Total employees for agricultural and non-agricultural
March 2020	10 196 000	9 165 000	1 031 000	869 000	**11 065 000**
June 2020	9 548 000	8 624 000	924 000	799 000	**10 347 000**

Source: Adapted from Department of Statistics, South Africa (2020a, pp 5-6)

Table 4 gives an indication of the number of employees who are actively employed, which is estimated at 10 347 000. However, this may not be the exact figure, as some companies may have been excluded from the estimations made by Statistics South Africa. The Department of Labour (2020) reported that the total workforce recorded for companies who submitted their Employment Equity Reports in 2019 amounted to 7 332 072. The employment equity report shows the figures that are 23.2% less than the total number of employees in the non-agricultural sector as at June 2020.

3.5.2 Targeted Sample

The sample is a small group of units of interest which are to be drawn from the population, consisting of the required characteristics which are prevalent in the population (Leedy & Ormrod , 2016). Therefore, the sample is only the portion of the population targeted for the research. Consequently, the sample is typically smaller that the total population, due to practical and feasibility reasons, however it allows for observations and conclusions to be made about the sampled datasets which are attributed to the population.

The targeted number of respondents for the purposes of this research is 150, calculated as a total number of responses to be obtained. In order to mitigate the risks of the non-response rates, the sample size was increased during the distribution of surveys.

Table 5: Projected profile of respondents

Description of respondent type: Company Employees	**Number to be sampled %**
Management levels – Senior Management	3%
Professional Levels – Specialists, including Middle Management	8%
Skilled Level, including the Supervisors	26%
Administrative level	34%
Temporary employees (within the accepted occupational categories) atleast 12 months of employment.	12%

Source : Adapted from Department of Labour, South Africa (2020, pp. 40-41).

The respondent profiles are presented on table 5, and the percentage that had to be sampled were informed by the Department of Labour of South Africa (2020)'s occupational categories and levels, which reported senior management to be 3%, professionals 8%, skilled 26%, semi-skilled/administrative 34%, temporary employees 12% and unskilled employees 17%(not to be included) .

The respondents needed to be at an administrative, skilled, professional, or management levels of their organisational grading systems or occupational categories. Secondly, the participants had to have at least the minimum of one year of working experience.

3.5.3 Sampling Frame

The sampling frame, as outlined by Saunders, Lewis, and Thornhill (2009), entailed all the employees in the identified company's payroll list, who meet the inclusion criteria, as stated below.

The employees of the companies had to have at least one year of work experience. Additionally, these employees must have been employed at either administrative, skilled, professional or various management levels such as junior, middle, senior and executive levels, based on the

occupational levels grid. The identified groups of individuals or those defined as the unit of analysis (Torchiano, Fernández, Travassos & De Mello, 2017) were expected to have been sufficiently informed and experienced to perceive businesses environmental dynamics and complexities, more specifically the impact of Entrepreneurial orientation, Market orientation, and Opportunity exploitation on business performance. Furthermore, they had to be appreciative of the significance and impact of interfunctional co-ordination in enabling a company-wide customer-focused culture and initiatives. The employees who were categorised at a job level as unskilled were excluded from the study. The inclusion criteria are set in order to ensure that the sample is better able to inform the research, in keeping up with the quality of responses, which impacts on both reliability and validity of the study. Based on Hübnerová, Tomášková and Bednář (2020), interfunctional co-ordination requires co-operation of all members of the organisation, and enables communication with employees in aligning them to work towards performance improvement. Also, Trainor, Rapp, Beitelspacher and Schillewaert (2011) assert that management need to understand how employees deliver customer value. Given the contributory role of both management and employees towards interfunctional co-ordination's success, the sample includes both junior management and administrative employees. Torchiano, Fernández, Travassos and De Mello (2017) assert that the identification of the unit of analysis is guided by the survey objectives and the relevant questions.

3.5.4 Sampling Technique

Non-probability sampling was utilised for the study, the main purpose of selecting this method is due to the convenience of access to the sample, as well as time limitations linked to the project (Etikan, Musa, & Alkassim, 2016). Unlike the probability sampling techniques, such as random sampling, generalisability cannot be achieved to the broader population, but only within contexts in which the samples are drawn. Convenience sampling was found most practical due to geographical proximity of the sample, willingness to take part in the study as well as time available for the study. It is important though, to ensure that the sample is adequately experienced and knowledgeable in order to constructively participate in the study.

3.6 Procedure for data collection

Questionnaires were distributed to the targeted sample through the electronic mail system, manually, and using web-based means (Granello & Wheaton, 2004). The reason for the selection

of this mode of data collection is due to reduced time and the convenience it offers to administer the process as well as the cost effectiveness of the methods.

Qualtrics software is the web-based means which was utilised to distribute, capture and store some of the questionnaire responses while other surveys were administered manually, captured and stored on an Excel spreadsheet. The survey was launced between October and November of 2020, once the ethical clearance certificate was issued by the Witswatersrand Business School's Ethics Commitee. In order to optimise the response rates, the questionnaire links were distributed to various social media platforms such as LinkedIn, WhatsApp, and also various professional associations' databases such as Business Unity South Africa, Knowledge Resources, as well as the Best Employers for 2020. Additionally, the electronic mailing and manual distribution of the survey was done in order to research those who could not complete the survey electronically.

3.7 Measuring instruments

The measuring instrument of **Entrepreneurial Orientation** was adapted from Gonza´lez-Benito, Gonza´lez-Benito and Mun˜oz-Gallego (2008). Entrepreneurial orientation consists of a seven-point Likert scale (1= Strongly disagree to 7=Strongly agree). The scale consists of six items, which relate to entrepreneurial behaviours. The main elements of the measurements include innovativeness, risk taking; and proactiveness (Covin & Slevin, 1989). The reliability analysis of the unidimensional scale is based on Gonza´lez-Benito et al. (2008) who reported the Cronbach's alpha of 0.894.

The **Market orientation scale** presented by Gonza´lez-Benito, Gonza´lez-Benito and Mun˜oz-Gallego (2008) measures the construct on a seven point Likert scale (1= Strongly disagree to 7=Strongly agree). The nine items of the scale are reflective of the marker-oriented behaviour. The literature of Kohli and Jaworski (1990) focuses on the elements of intelligence generation, intelligence dissemination, and responsiveness, which are included in the measurement. The reported Cronbach's alpha is 0.939 (Gonza´lez-Benito et al., 2008).

The **Absorptive capacity-Opportunity Exploitation -** measures the four dimensions of Acquisition, Assimilation, Transformation and Opportunity Exploitation. For the purposes of the study, only opportunity exploitation, which focuses on realised capacity potential was applied in

the study. The scale of opportunity exploitation has three items, on the seven-point scale (1= Strongly disagree to 7=Strongly agree). The reliability of the subscale of opportunity exploitation was reported with the Cronbach Coefficient of .82. Flatten, Engelen, Zahra, and Brettel (2011)'s study established the convergent validity of the measurement, as well as the discriminant validity. In order to improve validity of the scale, an additional five items, adapted from the scale validated by Camisón and Forés (2010), were added to the scale. The particular opportunity exploitation scale reported composite reliability of 0.652, based on the confirmatory factor analysis report. Adding more items mitigated the risk of having to terminate the entire scale of Absorptive Capacity's Opportunity Exploitation, should certain items fall away or not load to the factor structure.

The **Inter-departmental Co-ordination** scale presented by Trainor, Rapp, Beitelspacher and Schillewaert (2011) measures the construct on a seven point Likert scale (1= Strongly disagree to 7=Strongly agree). The five items of the scale are reflective of the collaboration across all the functions within the organisation, in order to develop customer-centric solutions. The reported Cronbach's alpha of the scale is 0.86 based on the study by Trainor et al. (2011).

The **Business Performance** measure was adapted from Gonzalez-Benito et al. (2008). The performance indicators identified as the dimensions of profitability, market response, market position value and also new product success, in order to enable the measuring of business performance in comparison to that of the competitors. All the four concepts are represented by either a single or maximum of two items, on the seven-point Likert scale (1= Much worse than competitors to 7=Much better than competitors). All the factors proposed were matched by the Principal Component Analysis, summarised by a 95.06% of variance. Table 6, provides the summary of the measures used in the study.

Table 6: Measures used in the study

Construct	Literature sources	Dimensions/content	Comment on Instrument reliability
Entrepreneurial orientation Measured on 7-point Likert, 1= Strongly disagree to 7=Strongly agree.	Gonza´lez-Benito, Gonza´lez-Benito, and Mun˜oz-Gallego (2008)	1. Innovativeness 2. Risk taking 3. Proactiveness	Cronbach alpha of 0.894
Market orientation Measured on 7-point Likert, 1= Strongly disagree to 7=Strongly agree.	Gonza´lez-Benito, Gonza´lez-Benito, and Mun˜oz-Gallego (2008)	1. Intelligence generation; 2. Intelligence dissemination 3. Responsiveness	Cronbach alpha of 0.939
Absorptive capacity-realised : Opportunity Exploitation Measured on 7-point Likert, 1= Strongly disagree to 7=Strongly agree.	Flatten, Engelen, Zahra and Brettel (2011) Camisón and Forés (2010)	1.Opportunity Exploitation	Cronbach alpha of 0.82 Composite reliability 0.652(CFA)
Interfunctional coordination Measured on 7-point Likert, 1= Strongly disagree to 7=Strongly agree.	Trainor, Rapp, Beitelspacher & Schillewaert, (2011).	1.Sharing customer information 2. functions work in a integrated fashion 3. Managers understand how employees contribute to customer value 4. Shared "resources" 5. Managers of various departments visit customers	Cronbach alpha of 0.86
Business performance Measured on 7-point Likert, 1= much worse than the competitors to 7=much better than competitors	Gonza´lez-Benito, Gonza´lez-Benito, and Mun˜oz-Gallego (2008)	1. Performance profitability 2. Performance Market Response 3. Performance Market Position Value 4. Performance New Product Success	Principal components analysis- reported 95.07 per cent of variance explained

3.8 Data analysis

The data analysis section focuses on the analytical procedures that were followed once the data was collected, screened and cleaned. The descriptive and inferential statistical techniques were used in order to identity trends in the data as well as in the testing of the hyphothesis.

Descriptive statistics, according to Bickel and Lehmann (2012), measure the different characteristics of the population such as the distribution of population values. The descriptive measure may include the mean, standard deviation, range, skewness and kurtosis. These specified statistics were applied for this study.

Inferential statistics, according to Somekh and Lewin (2005), are utilised for the purposes of identifying relationships between attributes, and to create models which enable predictions. Regression and correlation analysis are part of the inferential statistics applied in the study.

Correlational analysis was conducted (Choi, Peters & Mueller, 2010) to analyse the ordinal data obtained from the Likert scales. Correlations simply assess the relationship between the variables, in terms of the attributes and associated changes. Regression analysis, based on Pallant (2016), was applied to explore the relationships between one dependent variable, and multiple independent variables. The data analysis procedures included the descriptive statistics.

Moderation analysis was also conducted in order to test the contributory or contingent effect of interfunctional co-ordination on the hypothesised relationship between the entrepreneurial orientation , market orientation, opportunity exploitation and business performance (Cooper & Schindler, 2014).

3.9 Validity and Reliability

Botma, Greeff, Mulaudzi and Wright (2010) highlight that all the research studies should consider the aspects of validity and reliability proactively, in order to minimise the threats to validity and reliability. All the factors which undermine validity and reliability were considered and planned into the research design and method. The validity and reliability of the research is impacted by the rigour applied throughout the research process in order to enhance the quality of the studies (Heale & Twycross, 2015).

3.9.1 Validity

Validity indicates whether the conclusion of the study can be justified based on the research design as well as the interpretations (Botma et al. 2010). Validity, according to Heale and Twycross (2015), is simply about the accurancy of an instrument. The validity of the scale, according to Pallant (2016) refers to the extent to which a measure, measures what it is supposed to measure.

3.9.1.1 Internal Validity

Content validity is the extend to which the measurement instrument is relevant and it is adequately representative of the construct it is proposed to measure. In other words, the measure should be able to sufficiently represent all the relevant items of the study (Cooper & Schindler, 2014).

Construct validity refers to how well theory is operationalised into the actual measure, to an extent that inferences can be legitimately made from the operationalisation of the study. Leedy et al. (2016) argue that the some characteristics cannot be directly observed, but are assumed to exist, based on the patterns of behaviour, and such a characteristic is classified as a construct. Furthermore, the measure should not have irrelevant constructs, and measurement errors. The literature on the measurements should provide clear and thorough theoretical definitions, in order to achieve theoretical or construct validity. Heale and Twycross (2015) assert that construct validity provides a means by which inferences can be drawn about the test scores related to the concept being studied.

Face validity simply refers to a subjective assessment of whether the measurement or test measures that which it is supposed to measure. Face validity provides consensus that the measure represents a particular concept (Heale & Twycross, 2015). The criteria for face validity is to establish if the measurement looks valid, and appears to measure what is is supposed to measure. There are no formal tests or quantitative techniques to measure for face validity.

According to Leedy et al. (2016), criterion validity refers to the extent to which the results of a measurement instrument correlates with another. Convergent validity is part of criterion validity, because convergence measures the extend to which the measure correlates with the existing measures of the same concept (Heale & Twycross, 2015). Furthermore, divergent validity would

highlight the extent to which a measure does not correlate with the measures of a different concept.

3.9.1.2 External validity

External validity refers to the extent to which the results of the study qualify to be generalised to the entire population (Botma et al. 2010). External validity concerns the degree by which the internally valid results can be assumed or be held to be applicable to other cases, such as different samples, time frames and also geographical areas, and that the results can be generalised in a valid manner.

Leedy et al. (2016) emphasise the importance of external validity in that the research yields contribution and significance with implications which are far reaching and extend beyond a particular study. Probability sampling is one of the criteria for external validity, nonetheless the study selected a non-probability sampling procedure which did not guarantee that each element of the population was represented in the sample. Cooper and Schindler (2014) iterate that external validity is a matter of generalisation, which is a limitation in this particular study.

3.9.2 Reliability

Reliability of the scale, based on Pallant (2016), entails the assessment for internal consistencies, this relates to the extent to which the collective items of the scales measure the same attributes. The Cronbach's coefficient alpha was used to calculate the reliability of the scale, which is recommended to be at a minimum of 0.70, in order to indicate reliability. Botma et al. (2010) assert that low reliability results are not valid, because they do not measure what they are supposed to measure consistently.

Furthermore, reliability needs to be tested specifically if the instrument is used for a different population and culture. Reliability provides information about the consistency of the measure, in that if a valid measuring instrument is utilised for different groups under various circumstances, it should produce the same results. Leedy et al. (2016) highlight that a reliable measurement instrument would have internal consistency, in that all the items within a single instrument would yield similar results.

3.10 Ethical considerations

The research ethics govern and guide how the researcher should conduct the research through the provision of standards of conduct, as well as the articulation of the ethical principles (Leedy & Ormrod, 2016). The research protocol observed for this particular study was guided by the ethics procedures which were provided by the Witwatersrand Business School's Ethics Committee. The research process must ensure adherence to the important protocols, such as informed consent, voluntarily participation, right for non-participation at any given stage of the research, as well as the preservation of confidentiality and dignity of the participants (Cooper et al. 2014). The comprehensive ethical principles of research were adhered to, throughout the entire research process.

In the identification of the research population and sample, careful consideration was given to the process of ensuring that the vulnerable groups such as minors, or the aged, were not going to form part of the study. Furthermore, those who took part in the study were not exploited, and the measures were taken to ensure that they all had the capacity to accept or to reject participation in the study. The data gathering process took into consideration that participation was voluntary and that informed consent was adhered to, through the adequate briefing of the potential participants about the purpose of study (Cooper et al., 2014).

The information collected from the respondents was processed in such a manner that ensured that their privacy was protected, as well as their confidentiality and anonymity. The values of honesty, justice, integrity, fair treatment and transparancy guided the interactions with the research respondents to make sure that their human rights were respectected and protected. Furthermore, the research report provides the relevant literature references and gives credit to sources where required in order to ensure professional reporting and fair presentation of accounts, thus no plagiarism.

The ethical clearance application was submitted to and approved by the Witswatersrand Business School's Ethics Committee in order to seek approval to conduct the research and collect the data. The final research report contains a Turnitin report, to ensure and protect the overall research integrity.

3.11 Limitations

The identified limitations related to the study were as follows: (i) Cross-Sectional and nonexperimental design of the study cannot determine causality (Cooper & Schindler, 2014), thus rendering the outcomes of the study exploratory, as opposed to being absolute and definitive. (ii) Secondly, the generalization of the results cannot be achieved due to the non-probability sampling method, and again obtaining larger samples proportionate to the population would require more resources and time, which are limited for the scope of the study (iii) Self-report bias, such as social desirability, leading to common method bias is possible (Podsakoff, Mackenzie, Lee & Podsakoff , 2003).

3.12 Summary of the chapter

The central focus of the chapter is the research methodology and approach. This study adopted a positivistic paradigm and quantitative approach. Self-administered surveys were utilised to collect the data from employees of revenue generating companies, operating in very competitive and highly dynamic environments where business performance is critical. The data analysis procedures that were utilised were discussed, and include the descriptive statistics as well as inferential staistics for the purposes of testing the hyphothesis. Furthermore, issues related to validity and reliability were addressed according to the analytical procedures outlined.

CHAPTER 4: PRESENTATION OF THE RESULTS

4.1 Introduction

The purpose of the chapter is to present the results of the study in alignment with the postulated hypotheses discussed in chapter 2, as well as the methodological procedure presented in chapter 3. The chapter begins with the presentation of the data screening process, followed by the presentation of the sample characteristics, and then the descriptive statistics pertaining to the rating attributes of the constructs. Furthermore, the construct validity as well as reliability of the scales are presented, followed by the hypotheses testing results. The chapter concludes with a summary, highlighting the key findings.

4.2 Data Quality and Screening

The data was collected through the paper questionnaires as well as Qualtrics software. All the manual questionnaires returned were captured on an Excel spreadsheet. A total of 225 responses were received, 116 were collected manually, while 109 were online responses. A total of 22 cases were excluded from the analysis due to missing values. The data cleaning process ensured that values which were outside of the pre-coded ranges were detected and corrected on the datasets before the analysis (Botma, Greeff, Mulaudzi & Wright, 2010). Only a total of 203 cases were analyzed with no missing values. Both the manual file and the Qualtrics files were coded and combined to prepare for further analysis. In addition, the negatively worded items on the scale were reversed before the analysis could be conducted (1=7, 2=6, 3=5, 4=4, 5=3, 6=2, and 7=1).

Approximately 550 electronic mails with the Qualtrics link were sent randomly to the contact databases associated with Business Unity South Africa , Knowledge Resources as well as the Best Employers for 2020.

4.3 Sample characteristics

The demographic variables of the respondents are presented in terms of age, gender, race, occupational levels, education, work experience, type of industry where they are employed as well as the business or company size.

4.3.1 Age Groups

Figure 2 depicts the age distribution of the respondents. It is important to note that the age ranges are diverse and varied. The majority of the employees are within the age groups of 36-45 (35.4 %), followed by the age groups 45-55 (22.3%), and then 26-35 (29.9%), while the age groups of 56-65 (10.7%) and 18-25 (9.2%) reflect lower values.

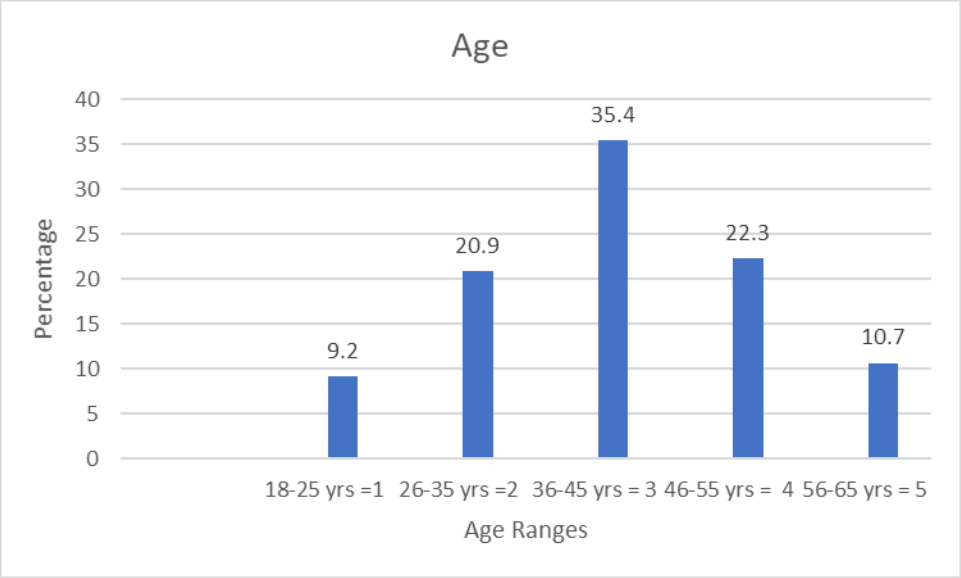

Figure 2: Respondent Age

4.3.2 Gender of the respondents

The information about the gender distribution is illustrated in **Figure 3.** The sample consisted of 52.9 % males and 44.9% females while other consisted of 2.1% and those who chose not to share their gender status.

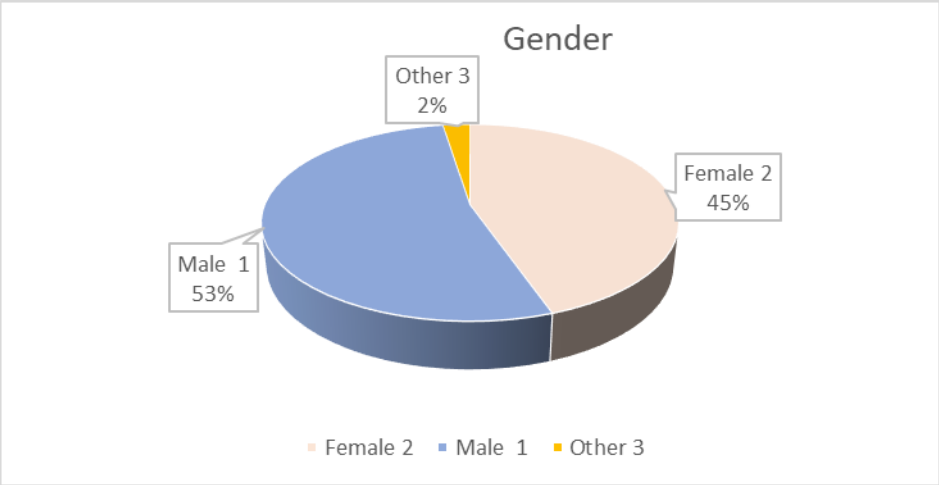

Figure 3: Gender

4.3.3 Race of the respondents

The African respondents were in the majority (64.6%), followed by the Coloured (14.6%), White (10.2%) , and then the Asian/Indian (9.2%) and the other (1.46%). **Figure 4** highlights the race composition of the sample.

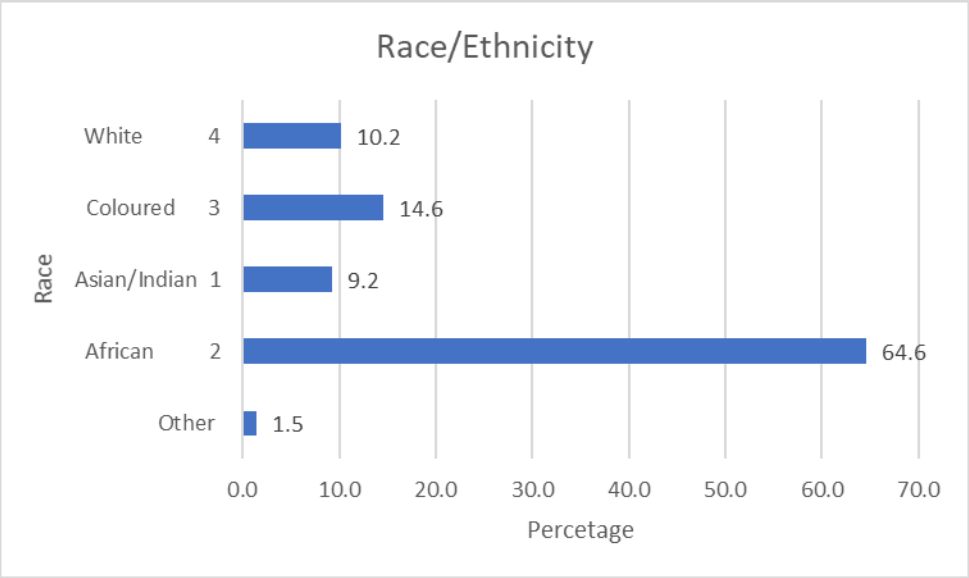

Figure 4: Race of the respondents

4.3.4 Occupational levels

Figure 5 illustrates the occupational categories of the respondents. The professionals were in the majority (43.7%), senior management (29.6%), semi-skilled with discretionary decision making (15.1%), and the skilled and supervisory levels (10.2%).

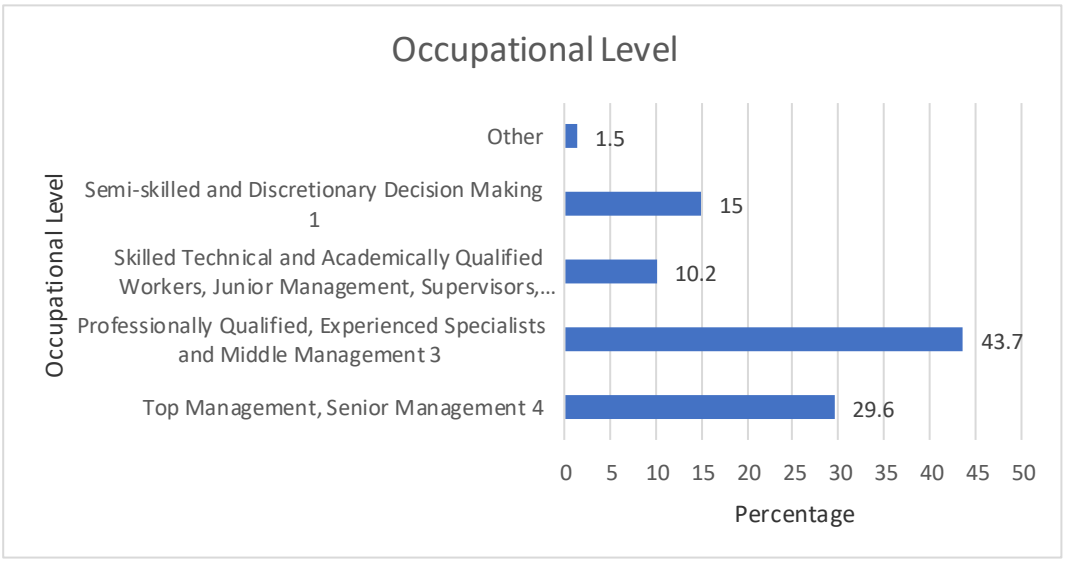

Figure 5: Occupational levels

4.3.5 Education Levels

Over 97% of the respondents have completed grade 12 studies. The majority (38.8%) have post graduate qualifications, whilst (22.3%) have degrees, those with diplomas (17%), and grade 12 certifications (17.5%). **Figure 6** presents the highest qualifications obtained by the respondents.

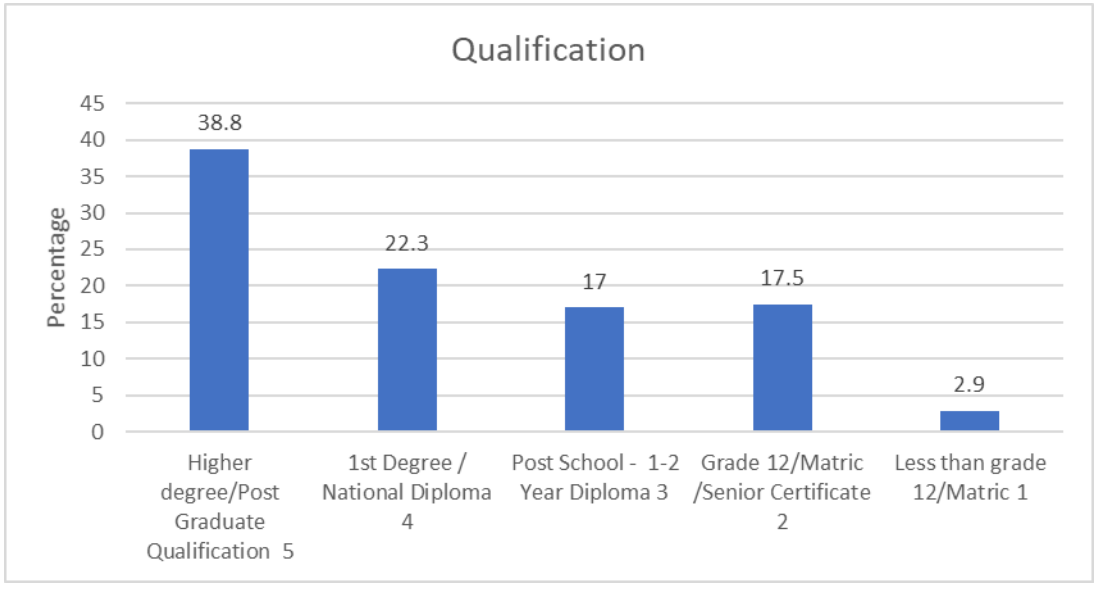

Figure 6: Educational levels

4.3.6 Work Experience

The majority of the respondents of over (93%) have work experience of more than four years. The large proportion of the respondents (32%) have 16 or more years, with (23.8%) for the those with seven to nine years of work experience, whilst four to six years is (16.1%), and both 10 to 12 years and 13-15 years are (10.7%). Figure 7 indicates the total percentages of the number of years related to work experience.

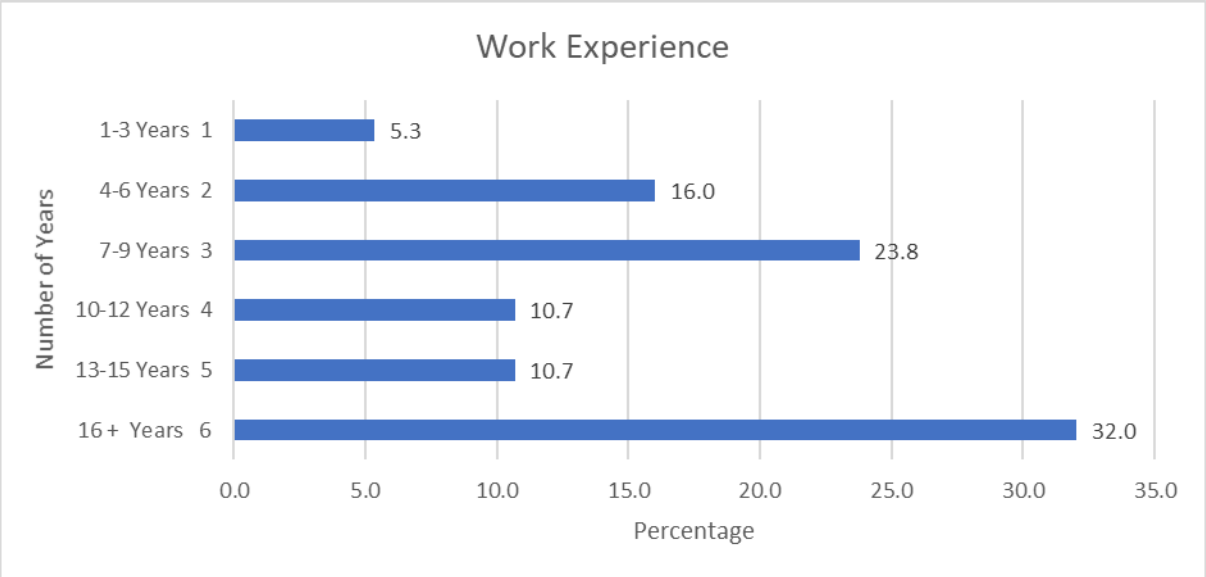

Figure 7: Years of work experience

4.4 Contextual characteristics

4.4.1 Industry type

The respondents are employed in industries such as Engineering and Education (10.7%), Insurance (8.3%), with manufacturing, oil and gas and professional services and wholesale (7.3%), Information technology (6.3%), legal services (4.9%), state owned companies (5.34 %), real estate (4.4%) and others that are below (3 %) such as food and telecommunication services are also presented. Figure 8 indicates the industries in which the respondents are involved.

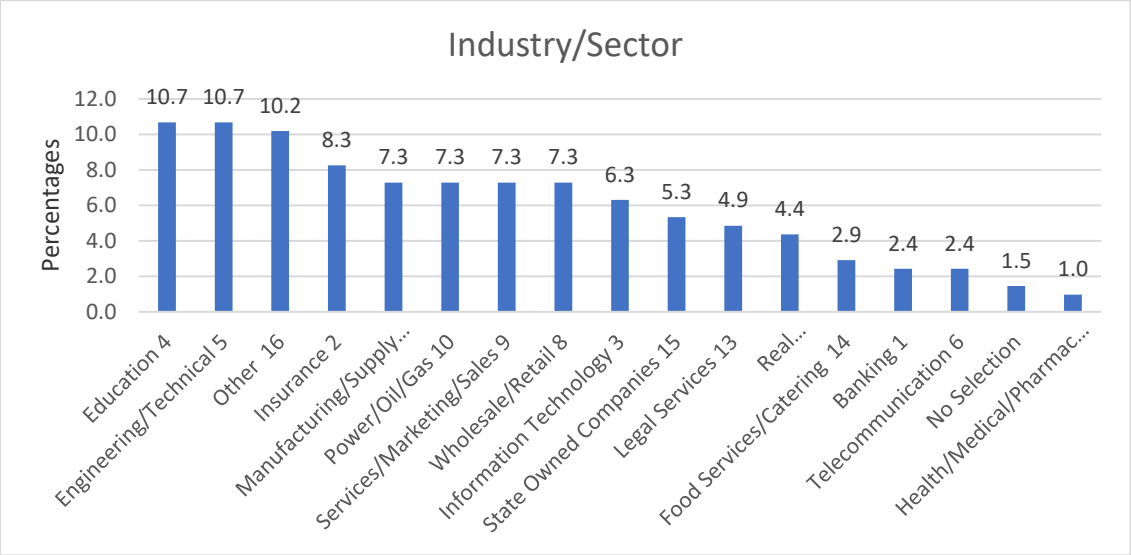

Figure 8: Industry

4.4.2 Business Size

Most of the respondents are employed in medium sized businesses (44%), followed by small businesses at (26.2%), large businesses at (22%). The micro businesses' employees are the least represented at (7.8%). The locations of the businesses are in the Gauteng province and mainly in Johannesburg. Figure 9 shows the size of businesses in which the repondents are employed.

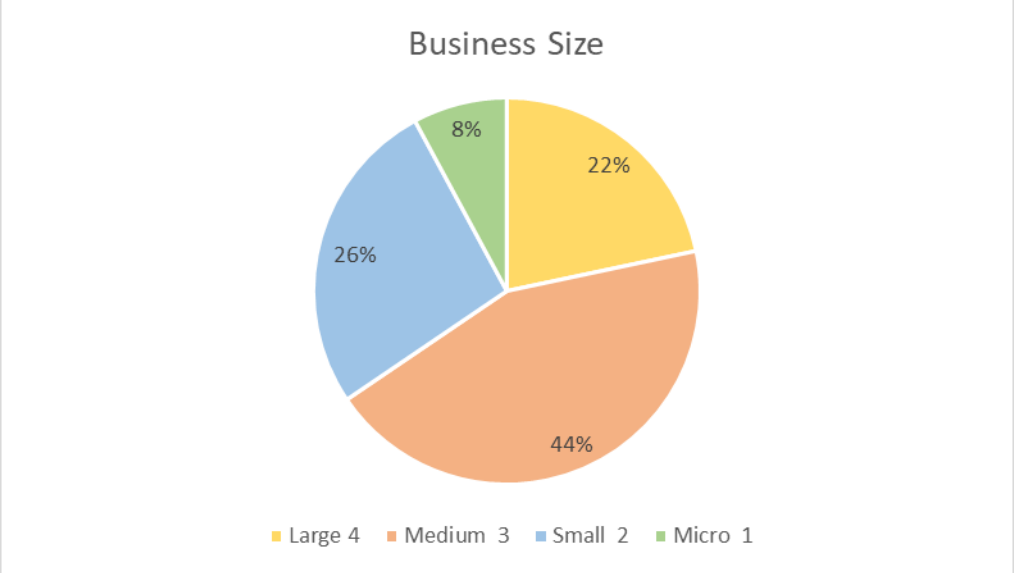

Figure 9: Business Size

4.5 Descriptive statistics

The descriptive statistics for all the rated items of the constructs were analysed and the results are presented in this section. The main constructs are Entrepreneurial Orientation , Market Orientation, Opportunity Exploitation, Interfunctional Co-ordination and Business Performance. The seven point Likert scale was applied, with the possible responses to the items as follows : 1= strongly disagree, 2= disagree, 3= somewhat disagree, 4= neither agree nor disagree, 5=somewhat agree, 6= agree, and 7= strongly agree. Additionally, more data was collected in order to assess the perceptions of the impact of Covid-19 on the business operations during 2020.

4.5.1 Entrepreneurial Orientation

The descriptive statistics for the construct entrepreneurial orientation (independent variable) are presented in Table 7. The table consists of six items, the seven point Likert scale, the percentages of the respondents, the mean and the standard deviation. The highest rated item was about the importance of changes introduced in the products and services (mean = 5.31), with 49% of the respondents agreeing or strongly agreeing with the item statement. The respondents agreed the least that many products and services were launched in the past five years (mean = 4.90).

Table 7: Entrepreneurail orientation descriptive statistics (independent variable)

N 203 = 100%	2.1 We have launched many new products/services on the market during the last five years. (1)	2.2 The changes introduced in our products/services are usually important. (2)	2.3 We usually beat our competitors in developing innovative actions. (3)	2.4 We usually adopt an aggressive attitude towards our competitors. (4)	2.5 We are prone to carry out risky projects when they involve profitable opportunities. (5)	2.6 When uncertainty is high, we adopt a brave and aggressive attitude to exploit possible opportunities. (6)
Strongly disagree (1)	2.5	2.0	2.5	3.0	3.4	2.5
Disagree (2)	7.9	3.9	5.9	9.9	10.3	8.4
Somewhat disagree (3)	7.9	2.5	6.9	3.0	3.0	5.9
Neither agree nor disagree (4)	10.8	6.4	11.8	9.9	8.4	7.9
Somewhat agree (5)	32.0	36.0	32.0	29.6	21.2	20.2
Agree (6)	28.1	36.9	32.5	37.9	43.3	42.9
Strongly agree (7)	10.8	12.3	8.4	6.9	10.3	12.3
Mean	4.90	5.31	4.96	4.95	5.05	5.13
Std Deviation	1.497	1.269	1.410	1.497	1.594	1.543

4.5.2 Market Orientation

Table 8 presents the results of how the attributes of the market orientation construct were rated. The table consists of nine items, the seven point Likert scale, the percentages of the respondents, the mean and the standard deviation. The item relating to being informed about the customer complaints and suggestions (mean =5.8), with the statements for agree and strongly agree averaging 57.7%. Additionally, the item about the premise for new product development being customer satisfaction (mean= 5.8) , with the total of 57.9 % for the selection of agree and strongly agree statements. The respondents agree the least about the statement that indicates that the strategies are based on market knowledge rather than the productive capabilities (mean= 4.05).

Table 8: Market Orientation descriptive statistics (independent variable)

N 203 =100%	3.1 We continuously gather information about the trends in our target market. (1)	3.2 We continuously gather information about our competitors' strategies. (2)	3.3 We collect information about our customers' satisfaction. (3)	3.4 We collect information about our customers' satisfaction. (4)	3.5 We regularly contact marketing/sales managers to discuss the trends in the market. (5)	3.6 We are promptly informed about any complaint or suggestion from our customers. (6)	3.7 We frequently meet other functional units in order to anticipate a response to the changing environment. (7)	3.8 Our strategies are based on market knowledge rather than on productive capabilities. (8)	3.9 Our premise for new product development is customer satisfaction, instead of taking advantage of our productive capabilities. (9)
Strongly disagree (1)	1.0	1.5	0.0	1.0	2.5	1.5	0.5	0.5	1.0
Disagree (2)	4.9	6.9	5.4	6.4	8.4	3.9	6.9	37.4	4.5
Somewhat disagree (3)	8.9	4.4	5.4	3.9	4.4	3.9	5.4	3.0	5.4
Neither agree nor disagree (4)	10.3	15.8	12.8	12.3	12.8	8.9	8.4	8.9	7.9
Somewhat agree (5)	29.1	26.1	23.6	27.6	21.2	24.1	25.1	25.6	23.3
Agree (6)	35.5	37.4	38.4	41.4	42.9	42.9	43.3	14.8	42.1
Strongly agree (7)	10.3	7.9	14.3	7.4	7.9	14.8	10.3	9.9	15.8
Mean	5.09	5.02	5.27	5.13	5.02	5.38	5.22	4.05	5.38
Std Deviation	1.352	1.375	1.313	1.310	1.486	1.312	1.344	1.822	1.333

4.5.3 Opportunity Exploitation

Table 9 portrays the results of the ratings for the opportunity exploitation scale. The table consists of eight items, the seven point Likert scale, the percentages of the respondents, the mean and the standard deviation. Notably, the item pertaining to the company's ability to work more

effectively by adopting new technologies had a high score (mean =5.52), with a total of 64% for both agree and strongly agree statements.

While the respondents agree less about the company's capacity to put technological knowledge into products and processes (mean= 5.26) , as well as about the company's innovations in order to gain competitiveness (mean= 5.26).

Table 9: Opportunity Exploitation Descriptive Statistics (independent variable)

N 203 = 100%	4.1 Our management supports the development of product/service prototypes (1)	4.2 Our company regularly reconsiders technologies and adapts them in accordant to new knowledge (2)	4.3 Our company has the ability to work more effectively by adopting new technologies (3)	4.4 The company has the capacity to use and exploit new knowledge in the workplace (4)	4.5 The application of knowledge and experience acquired is prioritised in the business strategy that enables	4.6 The company has the capacity to put technological knowledge into product and process patents. (6)	4.7 The company has the ability to respond to the requirements and demands due to the competitive pressures. (7)	4.8 The company innovates to gain competitiveness by broadening the portfolio of products, capabilities and technology ideas. (8)
Strongly disagree (1)	0.0	0.0	0.5	1.0	0.5	2.0	2.5	1.0
Disagree (2)	4.4	7.9	3.9	4.9	6.9	4.9	2.5	3.4
Somewhat disagree (3)	3.9	5.9	4.4	3.9	3.4	4.9	0.0	7.4
Neither agree nor disagree (4)	10.8	4.9	5.9	5.9	9.4	11.8	10.3	11.3
Somewhat agree (5)	26.6	20.7	21.2	20.7	26.1	21.2	25.1	24.1
Agree (6)	38.4	46.3	47.3	48.3	37.9	39.9	43.8	38.9
Strongly agree (7)	15.8	14.3	16.7	15.3	15.8	15.3	15.8	13.8
Mean	5.38	5.34	5.52	5.46	5.31	5.26	5.48	5.26
Std Deviation	1.242	1.386	1.244	1.306	1.363	1.423	1.252	1.326

4.5.4 Interfunctional Co-ordination

The descriptive statistics for interfunctional co-ordination are illustrated in Table 10. The table consists of six items, the seven point Likert scale, the percentages of the respondents, the mean and the standard deviation. The highest rated item on the scale relates to management's understanding of how employees can contribute towards customer value (mean =5.8) at 48.8% for both agree and strongly agree.

The respondents least agree that management does not see the importance of employee contribution to customer centricity (mean =3.50) .

Table 10: Interfuctional Coordination Descriptive Statistics (moderating variable)

N 203 = 100%	5.1Information about our customer is communicated freely throughout the company. (1)	5.2 Different company functions work in an integrated fashion to fulfil the needs of	5.3 Managers understand how employees from all functions can contribute to deliver ' customer value' . (3)	5.4 We share " resources" between different business units. (4)	5.5 Managers from different company functions visit customers regularly. (5)	5.6 Management does not to see the importance of employee contribution to customer centricity(R). (6)
Strongly disagree (1)	2.5	0.0	2.5	5.4	2.5	9.9
Disagree (2)	5.4	7.4	5.9	17.7	13.8	28.1
Somewhat disagree (3)	8.4	7.9	5.4	14.3	8.4	16.3
Neither agree nor disagree (4)	15.8	12.3	11.8	10.8	10.8	15.8
Somewhat agree (5)	24.1	24.6	25.6	18.7	20.2	10.8
Agree (6)	37.9	38.9	38.9	25.6	35.0	16.3
Strongly agree (7)	5.9	8.9	9.9	7.4	9.4	3.0
Mean	4.91	5.06	5.08	4.26	4.75	3.50
Std Deviation	1.411	1.361	1.431	1.779	1.659	1.722

4.5.5 Business Performance

The descriptive statistics for business performance are summarised in Table 11 . The table consists of six items, the seven point Likert scale, the percentages of the respondents, the mean and the standard deviation.

The respondents were asked to rate the company's performance in relation to the competitors, the 7-point Likert scale was used, where 1= much worse than the competitors and 7= much better than the competitors. The item relating to customer satisfaction show a (mean = 5.4), with 72.5% perception of performing better than the competitors, and new product/service success (mean = 5.4) and indicating better performance than the competitors at 72.9%. Sales growth has the least performance (mean =4.80).

Table 11: Business Performance descriptive Statistics (dependent variable)

N 203 = 100%	6.1 Profitability (1)	6.2 Sales Growth (2)	6.3 Market Share Growth (3)	6.4 Customer Satisfaction (4)	6.5 Image and Reputation (5)	6.6 New .0Product/Service Success (6)
Much worse than competitors 1	3.0	4.4	2.0	0.00	1.5	1.5
Moderately worse than the competitors 2	4.4	2.0	3.9	3.0	2.5	3.4
Slightly worse than the competitors 3	7.4	7.4	5.4	6.4	5.9	5.9
About the same as competitors 4	24.1	21.2	18.7	18.2	18.2	16.3
Slightly better than the competitor 5	23.2	31.0	33.5	28.1	27.6	24.6
Moderately better than the competitors 6	29.1	28.1	25.6	34.5	34.5	38.4
Much better than the competitors 7	8.9	5.9	10.8	9.9	9.9	9.9
Mean	4.83	4.80	4.98	5.14	5.11	5.14
Std Deviation	1.426	1.372	1.331	1.196	1.270	1.309

4.5.6 Impact of Covid-19 on the business operations

Figure 10 illustrates the impact of Covid-19 on the business operations, sales as well as profit during the year 2020. Notably, 46.6% indicated that their sales volumes were not affected at all by Covid-19, whilst 43.7% highlighted that their business operations were negatively affected. The business operations were positively affected (33%), sales (30.1%) and then profit at (32%). Fu and Shen (2020) discusses the impact of covid 19 pandemic on countries, regions and companies, whilst highlighting the severity of the outbreak on companies revenue and profits. It is for this reason that the impact of covid 19 is presented in the study, as the study was conducted during the lockdown measures which were intended to mitigate the risk of the spread of the pandemic.

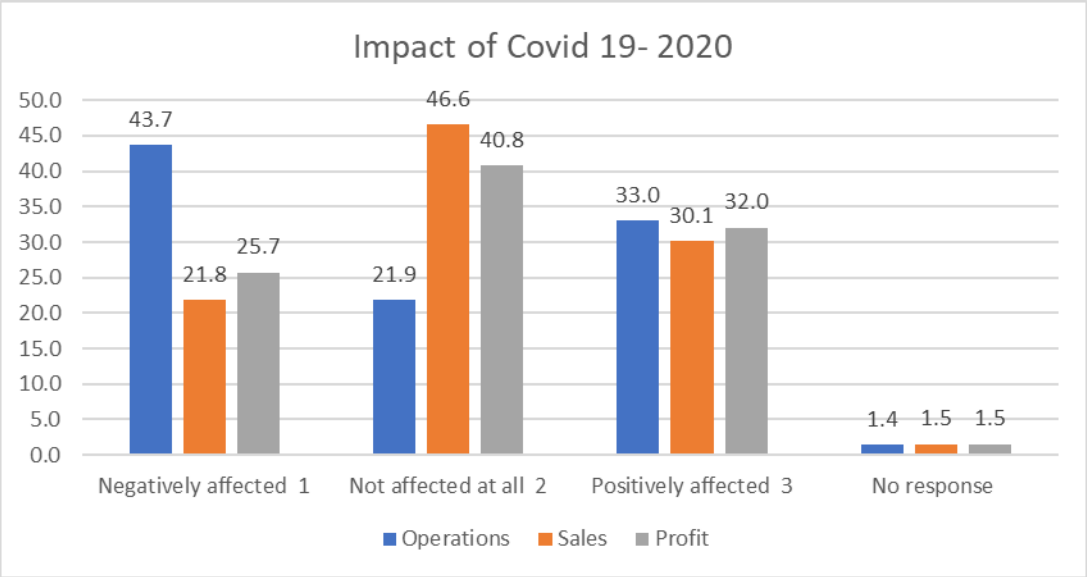

Figure 10: Covid- 19 Impact

4.6 Validity of the Constructs

The validity of the constructs were assessed through the Exploratory Factor Analysis (EFA). Based on Leedy and Ormrod (2016), factor analysis is critical for the identification of clusters of interrelated variables, which reflect the underlying factors within the data. The scales for measuring Entrepreneurial Orientation, Market Orientation, Opportunity Exploitation, Interfunctional Co-ordination and Business Performance were exposed to exploratory factor analysis by means of Principal Axis Factoring and Promax Rotation.

Table 12 highlights the results of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity tests. These tests are instrumental in checking the adequacy of the sample. The KMO value (0.878) indicates sample adequacy in order to proceed with factor analysis because it is greater than the acceptable minimum value of 0.6 (Pallant, 2016). Bartlett's Test of Sphericity is significant (p value = 0.000, $p < 0.05$) based on Field (2017), which supports the factorability based on the items being adequately correlated.

Table 12: Kaiser-Meyer-Olkin Measure and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.878
Bartlett's Test of Sphericity	Approx. Chi-Square	4072.275
Df		528
Sig.		0.000

The results of the EFA are presented in Table 13, indicating the total variance explained by the retained items. The six factors were retained, as opposed to the initially proposed five factors, with eigenvalues exceeding one. The total factors explained 64.19% variance, with factor 1 (31.32%), factor 2 (9.63%), factor 3 (7.91%), factor 4 (6.45%), factor 5 (5.23%) and factor 6 (3.65%).

Table 13: Total Variance Explained

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.336	31.322	31.322	9.969	30.210	30.210	6.854
2	3.178	9.630	40.952	2.793	8.465	38.675	7.153
3	2.610	7.909	48.861	2.259	6.845	45.519	5.576
4	2.128	6.449	55.310	1.802	5.460	50.979	6.410
5	1.725	5.228	60.538	1.281	3.883	54.862	5.086
6	1.204	3.649	64.187	0.811	2.457	57.319	4.980
7	1.161	3.519	67.706				
8	0.959	2.907	70.612				
9	0.852	2.583	73.195				
10	0.805	2.441	75.636				
11	0.740	2.242	77.878				
12	0.726	2.201	80.079				
13	0.632	1.916	81.996				
14	0.561	1.700	83.696				
15	0.516	1.565	85.261				
16	0.492	1.490	86.750				
17	0.429	1.301	88.052				

18	0.411	1.244	89.296				
19	0.377	1.143	90.439				
20	0.334	1.013	91.452				
21	0.312	0.944	92.396				
22	0.290	0.878	93.274				
23	0.283	0.858	94.132				
24	0.261	0.790	94.923				
25	0.249	0.755	95.677				
26	0.237	0.719	96.396				
27	0.220	0.666	97.062				
28	0.198	0.600	97.662				
29	0.177	0.537	98.199				
30	0.170	0.514	98.713				
31	0.161	0.488	99.201				
32	0.141	0.427	99.629				
33	0.123	0.371	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 total number of the factors extracted are displayed inn the scree plot in Figure 11.

The inspection of the scree plot reveals a break after the 6th factor. The eigenvalues of the six factors were greater than one and the point of inflection is aligned with what was suggested by the Kaizer rule.

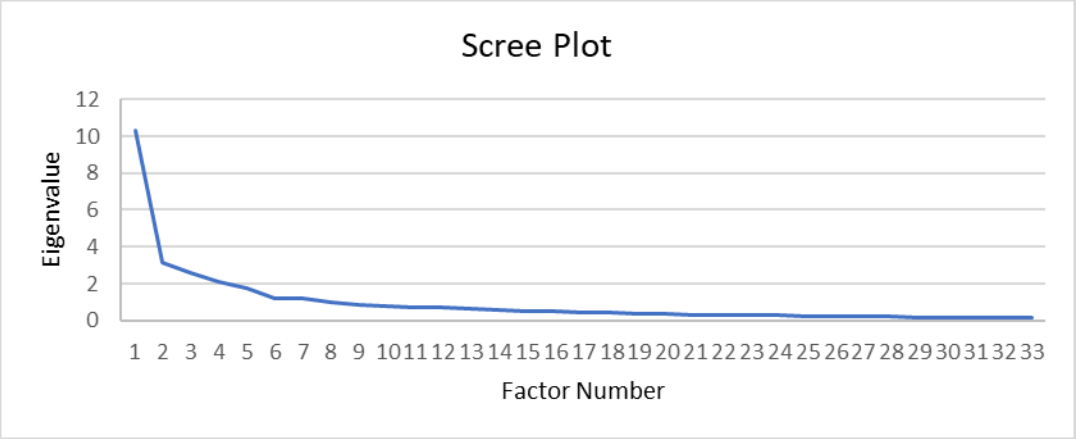

Figure 11: Scree Plot

The pattern matrix illustrates the factor loadings of all six factors in Table 14. The results indicates that Entrepreneurial orientation retains all the six items initially hypothesised (Factor 3), Market orientation retains six out of the nine items (Factor 1), opportunity exploitation six out of

the eight items (Factor 2), interfunctional co-ordination five out of the six items (Factor 4), business performance retains all the six items. Notably, business performance splits into two factors, with the characteristics of financial (Factor 5) and non-financial (Factor 6) elements. Shah and Dubey (2013) and Rajapathirana and Hui (2018) highlight that both financial and non-financial measures are applicable in analysing business performance. The indicators of performance such as financial growth, profitability and the rate of return on investments, sales growth and market share are financial in nature, whilst qualitative measures of performance such as customer satisfaction, brand acceptance, loyalty, good reputation and new product or service success is categorised as non-financial indicators of business success.

All the items which are retained have a higher factor loading of ($\lambda > .40$) (Field, 2017). The factor loadings for all the factors range from (0.50, 0.60, 0.70, 0.80 and 0.90). Convergent validity was reached since all the relevant items converged into their respective scales, furthermore, the items diverged from any possible unrelated constructs.

Table 14: Pattern Matrix

Pattern Matrix						
Factor :	1	2	3	4	5	6
3.3 Mark	0.963					
3.4 Mark	0.907					
3.5 Mark	0.808					
3.2 Mark	0.727					
3.1 Mark	0.674					
3.6 Mark	0.654					
4.3 Oppo		1.016				
4.2 Oppo		0.845				
4.1 Oppo		0.817				
4.4 Oppo		0.750				
4.7 Oppo		0.557				
4.5 Oppo		0.548				
2.4 Entre			0.941			
2.3 Entre			0.840			
2.5 Entre			0.835			
2.2 Entre			0.702			
2.6 Entre			0.632			
2.1 Entre			0.618			
5.2 Interf				0.906		
5.1 Interf				0.826		
5.3 Interf				0.769		

5.4 Inter				0.559		
5.5 Interf				0.555		
6.2 Busi					0.829	
6.1 Busi					0.735	
6.3 Busi					0.609	
6.4 Busi						0.785
6.5 Busi						0.784
6.6 Busi						0.567
Extraction Method: Principal Axis Factoring. a. Rotation converged in 8 iterations. Rotation Method: Promax with Kaiser Normalization.						

4.7 Reliability of the scales

The Cronbach's Alpha was applied to determine the reliability of the scales by testing for the existence of internal consistency (Cooper & Schindler, 2014). The results in Table 15 indicate that all the scales have above the acceptable levels of reliability, which requires the minimum acceptable level of $\alpha = 0.70$ (Pallant, 2016). Entrepreneurial orientation (6 items, $\alpha = 0.87$), Interfunctional Co-ordination (5 items, $\alpha = 0.82$), Business Performance Financial (3 items, $\alpha = 0.85$), and Business Performance Non-Financial (3 items , $\alpha = 0.84$) all have very good reliability scores, while Market Orientation (6 items, $\alpha = 90$) and Opportunity Exploitation (6 items, 0.90) have very good reliability scores.

Table 15: Reliability of the scales

Construct	Items No.	Cronbach's Alpha	Levels of reliability
Entrepreneur Orientation	6	0.866	Very Good
Market Orientation	6	0.896	Excellent
Opportunity Exploitation	6	0.903	Excellent
Interfunctional Co-ordination	5	0.816	Good
Business Performance Financial	3	0.851	Good
Business Performance Non-Financial	3	0.837	Good

4.8 Test for Normality

Prior to conducting the analytical procedures such as correlation and regression analysis for hypothesis testing, it is critical to inspect the variables for normality. The descriptive statistics,

histogram, normal probability plot and the box plot were generated, together with the Kolmogorov-Smirnova's test for normality.

The Skewness values were assessed for the symmetry of distribution of the scores. Leedy and Ormrod (2016) propose the cut-off point for the values (-2 to 2), while kurtosis assesses the peakedness of distribution with the cut-off point of (7) based on Galawe (2017). The values for skewness and kurtosis are within the recommended thresholds, as presented in table 16.

Table 16: Descriptive Statistics (Skewness and Kurtosis)

Variables	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
Mark_3	**203**	**5.5**	**1.5**	**7**	**5.15**	**1.1**	**-0.85**	**0.171**	**0.48**	**0.34**
Oppor_4	203	5.7	1.3	7	5.42	1.07	-1.3	0.171	2.29	0.34
Entr_2	203	6	1	7	5.05	1.14	-1.07	0.171	1.24	0.34
Enterf_5	203	5.4	1.6	7	4.81	1.17	-0.48	0.171	-0.15	0.34
BusFin_6	203	6	1	7	4.87	1.21	-0.82	0.171	0.92	0.34
BusNonFin_6	203	5	2	7	5.13	1.09	-0.7	0.171	0.22	0.34

The histogram was utilised to assess the shape of the distribution of scores for each of the variables as presented in Figure 12 . Most of the scores occurs in the centre, tapering outwards towards the extremes, therefore the variables are assumed to be reasonably normal.

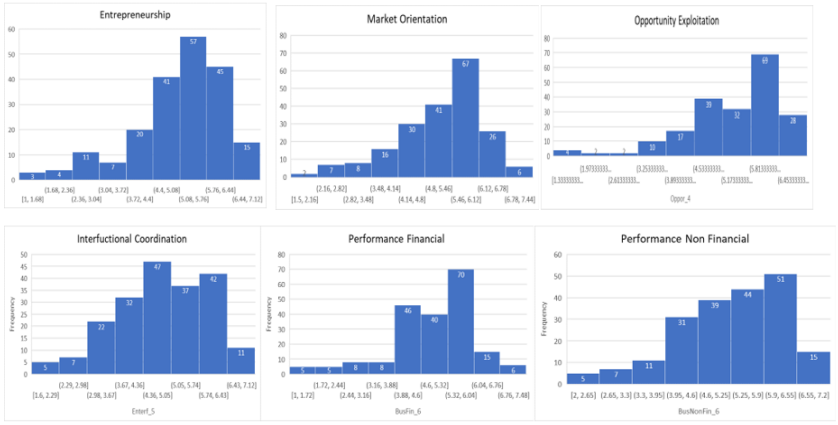

Figure 12: Histogram of the variables

The inspection of normality pertaining to the distribution of the scores was further assessed through the normal probability plots labelled the Normal QQ Plots, in Figure 13. The reasonably straight line suggests a normal distribution. The more closely aligned are the observed values for each score is to the straight line, the greater the assumption for normality.

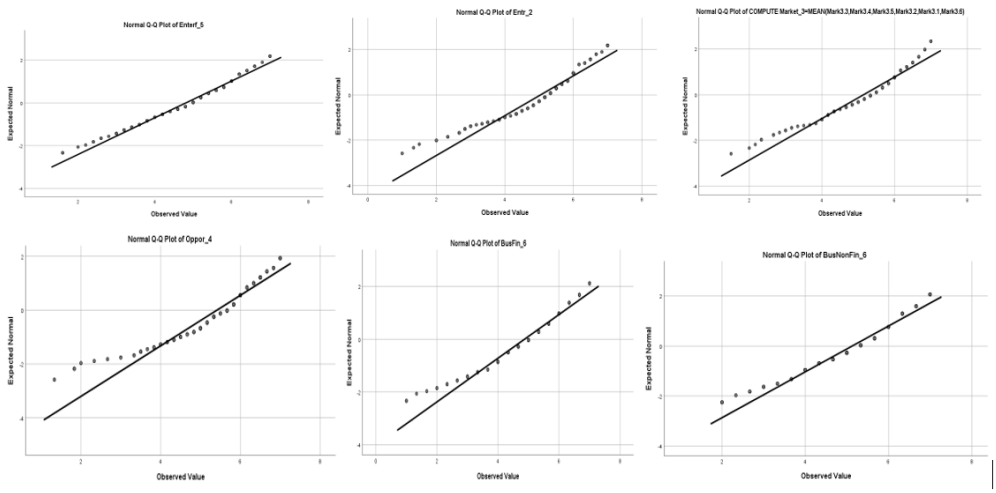

Figure 13: The Normal QQ Plot

Figure 14 presents the box plots for each variable. The box plot highlights outliers, in the form of (asterisks *) which are extreme points indicative of extreme scores which could negatively impact the various analyses such as correlation and regression. The box plots has no asterisks, which confirms that there are no extreme points (Pallant, 2016).

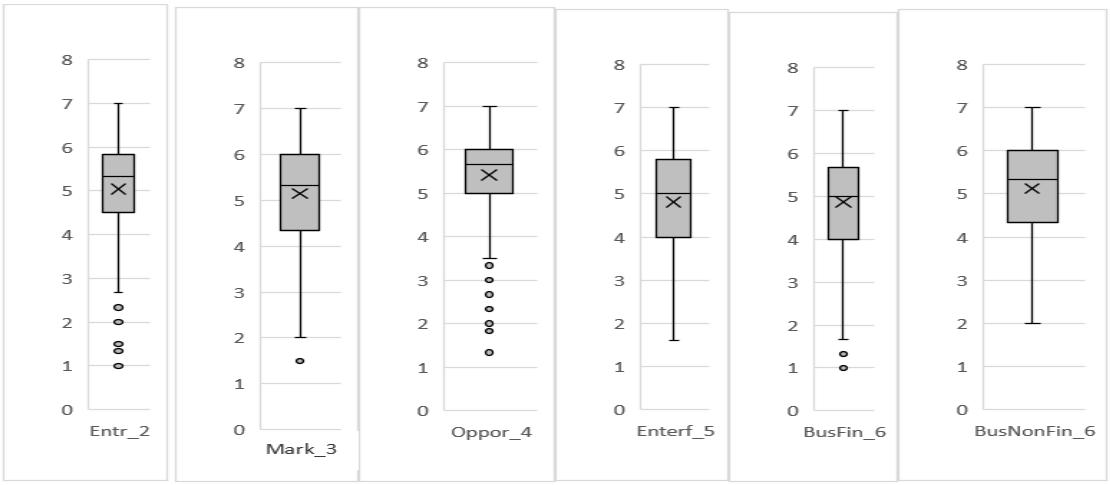

Figure 14: The Box Plot

Table 17 depicts the additional results of the normality test based on Kolmogorov-Smirnova. According to Field (2017), the tests compares the scores in the sample to the normally distributed set of scores with the same mean and standard deviation. In this case, the significance is 0.000, suggesting imperfect normality, which is common in samples over 200 in the social sciences (Pallant, 2016).

Table 17: Kolmogorov-Smirnova Test for Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Entr_2	0.135	203	0.000	0.923	203	0.000
Market_3	0.112	203	0.000	0.945	203	0.000
Oppor_4	0.132	203	0.000	0.904	203	0.000
Enterf_5	0.105	203	0.000	0.974	203	0.001
BusFin_6	0.119	203	0.000	0.949	203	0.000
BusNonFin_6	0.128	203	0.000	0.947	203	0.000

4.9 Correlation Analysis

The nature of the relationships among the variables was assessed through the Pearson correlation analysis. The variables' scores were assumed to be normally distributed, based on assessment of the skewness and kurtosis as well as the inspections of the Normal probability plots (Normal QQ Plot), presented in figure 14. Table 18 summarises the mean scores, standard deviation, and the correlations of the constructs.

Entrepreneurial Orientation and Business Performance Financial (r = .33, p-value <0.01) has a moderate and significant relationship (Pallant, 2016) . Whilst Entrepreneurial Orientation and Business Performance Non-Financial (r = .29 , p-value <0.01) has a small, yet significant relationship (Pallant, 2016). Market Orientation and Business Performance Financial (r = .41, p-value <0.01) moderately and significantly correlate. There is a medium and significant relationship between Market Orientation and Business Performance Non-Financial (r = .32 , p-value <0.01). Opportunity Exploitation and Business Performance Financial (r =.38 , p-value <0.01) are moderately and significantly correlated (Leedy & Ormrod, 2016) Finally, Opportunity Exploitation and Business Performance Non-Financial (r = .48 , p-value <0.01) indicate a significant and moderate relationship.

Opportunity Exploitation is the construct with the highest mean score (mean =5.42, SD =1.07), followed by market orientation (mean= 5.15, SD =1.10) while interfunctional co-ordination has the lowest mean score (mean =4.81, SD = 1.53).

Table 18: Pearson Correlation Analysis and descriptive statistics

Pearson Correlation **. Correlation is significant at the 0.01 level (2-tailed). N= 203	Mean	Standard Deviation	Market_3	Oppor_4	Entr_2	Enterf_5	BusFin_6	BusNonFin_6
Market_3	5.15	1.10	1					
Oppor_4	5.42	1.07	.409**	1				
Entr_2	5.05	1.14	.351**	.351**	1			
Enterf_5	4.81	1.53	.380**	.528**	.202**	1		
BusFin_6	4.87	1.21	.406**	.377**	.327**	.375**	1	
BusNonFin_6	5.13	1.09	.323**	.482**	.286**	.467**	.579**	1
Significance	**. Correlation is significant at the 0.01 level (2-tailed).							

4.10 Multiple linear regression analysis

Regression analysis was conducted to assess the influence of all the independent variables on the two dependent variables. The initially proposed hypotheses in chapter 2, considered only one dependent variable, namely business performance. The Exploratory Factor Analysis results indicated that business performance consists of the two factors, namely Business Performance Financial and Business Performance Non-Financial. The regression analysis was conducted in parallel for both the dependent variables of Business Performance Financial and Business Performance Non-Financial dependent variables. Table 19 provides a summary of the revised hypothesis to guide the statistical analytical procedures.

Table 19: Revised Hypotheses

Initially proposed hypotheses in chapter 2	Revised hypotheses to incorporate EFA results
H1: Higher levels of entrepreneurial orientation in an organisational context positively impact business performance.	H1a: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Financial H1b: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Non-Financial
H2: A strong focus on market orientation in an organisational contex positively impact business performance.	H2a: A strong focus on market orientation in an organisational context positively impact Business Performance Financial H2b: A strong focus on market orientation in an organisational context

	will positively impact Business Performance Non-Financial
H3: Higher levels of opportunity exploitation in an organisational context positively influence business performance.	H3a: Higher levels of opportunity exploitation in an organisational context positively influence Business Performance Financial H3b: Higher levels of opportunity exploitation in an organisational context positively influence Business Performance Non-financial
H4: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance.	H4a: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Financial H4b: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Non-Financial
H5: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance.	H5a: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Financial H5b: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Non-Financial
H6: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance.	H6a: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Financial H6b: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non-Financial

4.10.1 Testing the assumptions for regression

Prior to conducting the multiple regression analysis, it is important to test the basic assumptions about the data and the distribution of the scores. Normality was addressed already in section 4.8 of this chapter. Multicollinearity, linearity and homoscedasticity were assessed.

Multicollinearity refers to the relationship between the independent variables, in that the independent variables should not be highly correlated (r= 0.9 and above) based on Pallant (2016). The existence of multicollinearity does not contribute to a solid regression analysis. There is no concern for the existence of multicollinearity based on **Table 18: Pearson Correlation Analysis.**

The correlations between the independent variables are below the threshold of multicollinearity. Entrepreneurial orientation and market orientation (0.35), entrepreneurial orientation and opportunity exploitation (0 .35) and also opportunity exploitation and market orientation (0.41).

4.10.2 Linearity and Homoscedasticity

Homoscedasticity for the two independent variables was examined on the scatter plots presented in Figure 16 and Figure 17. The scatter plots portray that the residuals plotted against the predicted dependent variables, are mostly the same for all the predicted scores. In this case, the values were mostly scattered randomly around zero.

The regression analysis assumes the existence of linearity between the independent variables and the dependent variable. **Figures 15 and 16** present the Normal PP Plot of regression standardised residuals for both the dependent variables. The residuals have a relatively straight line relationship with the predicted dependent variable scores. Futhermore, normality is further confirmed by the normally distributed residuals around the predicted dependent variable scores, as illustrated by both Figure 16 and 17‘s Histogram of the Regression Standardised Residual.

Figure 15: ScatterPlot for the Regression Standardised Predicted Value and the Normal PP Plot of Regression Standardised Residual – Performance Business Financial

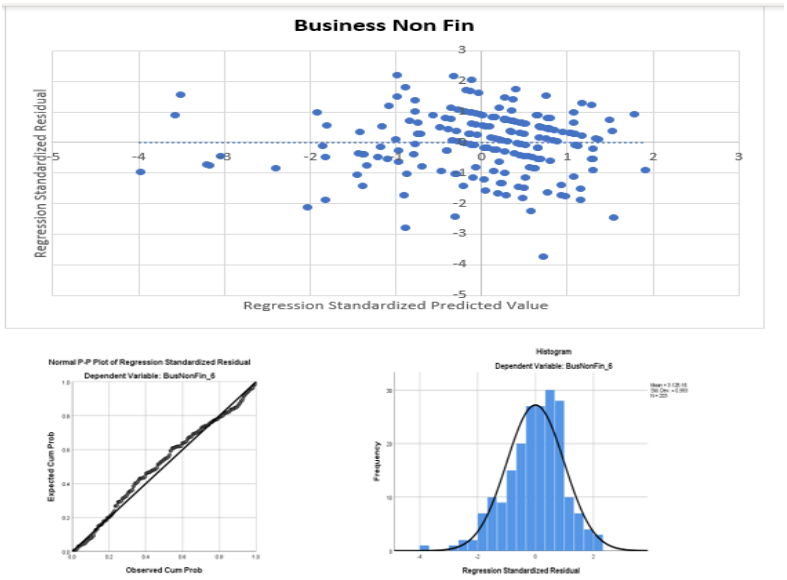

Figure 16: ScatterPlot for the Regression Standardised Predicted Value and the Normal PP Plot of Regression Standardised Residual – Performance Non Financial

4.10.3 Hypothesis Testing

In testing the hypothesis, the simple linear regression was conducted. Regression analysis yields an equation in which independent variables are used to predict an dependent variable (Leedy & Ormrod, 2016) The regression analysis was conducted separately for the dependent variables of Business Performance Financial and Business Performance Non-Financial. Table 20 shows the Regression Model Summary for Business Performance Financial.

Table 20: Regression Model Summary for Business Performance Financial.

Model Summary[b]										
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	.489[a]	0.239	0.228	1.06225	0.239	20.854	3	199	0.000	2.040

a. Predictors: (Constant), Entr_2, Oppor_4, Market_3. b. Dependent Variable: BusFin_6

The R Square value in the model summary for Business Performance Financial presents a variance of 0.24. Entrepreneurial orientation , market orientation and opportunity exploitation positively impact Business Performance Financial (24%). The model is statistically significant (Sig. = .000, p <0.05), based on Pietersen and Maree (2012). Table 21 presents the results of the Coefficients. The coefficients provide the exact contribution of each independent variable towards the regression model. The coefficient's table for Business performance financial has tolerance

values of 0.78 for market orientation and opportunity exploitation, and for entrepreneurial orientation 0.83. The tolerance values less than 0.10 indicate multiple correlations with other variables being high, which suggests the possibility of multicollinearity (Pallant, 2016). The Variance Inflation Factor (VIF) is below the cut off of 10, the values of 1.28, and 1.21 are reported. Both VIF and Tolerance levels are acceptable and indicate no multicollinearity.

Table 21: Regression Coefficients for Business Performance Financial

Coefficients[a]													
Model				Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	Unstandardized Coefficients			Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.222	0.471		2.593	0.010	0.293	2.151					
	Market_3	0.287	0.077	0.262	3.753	0.000	0.136	0.438	0.406	0.257	0.232	0.784	1.276
	Oppor_4	0.242	0.079	0.213	3.057	0.003	0.086	0.398	0.377	0.212	0.189	0.784	1.276
	Entr_2	0.170	0.072	0.160	2.354	0.020	0.028	0.312	0.327	0.165	0.146	0.825	1.212

a.Dependent Variable: BusFin_6

Market orientation reported the highest beta value of (beta = 0.26, p <0.001), indicating a significant contribution. Opportunity exploitation (beta = 0.21, p <0.005), and entrepreneurial orientation (beta = 0.16, p <0.005), also reported a significant and unique contribution to the model. Based on the regression analysis results, the hypotheses below are all supported and significant:

- H1a: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Financial
- H2a: A strong focus on market orientation in an organisational context positively impact Business Performance Financial
- H3a: Higher levels of opportunity exploitation in an organisational context positively influence Business Performance Financial

The linear regression analysis was also conducted for the assessment of the influence of entrepreneurial orientation, market orientation and opportunity exploitation on business performance non-financial.

Table 22 provides the model summary for the dependent variable of Business Performance Non-Financial.

Table 22: Regression Model Summary for Business Performance Non- Financial

Model Summary[b]										
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	.510[a]	0.260	0.249	0.94726	0.260	23.328	3	199	0.000	1.881

a. Predictors: (Constant), Entr_2, Oppor_4, Market_3. b. Dependent Variable: BusNonFin_6

The reported R Square value of 0.26 accounts for the variance in Business Performance Non-Financial, due to the collective impact of both entrepreneurial orientation , market orientation and opportunity exploitation. The model reached the statistical significance (Sig.=.000, p <0.05) based on Pietersen and Maree (2012*).* Entrepreneurial orientation , market orientation and opportunity exploitation influences Business Performance Non-Financial significantly by 26%. Table 23 illustrates the significant and unique contribution of all the individual independent variables towards the model. The coefficient's table for Business performance non-financial has tolerance values of 0.78 for market orientation and opportunity exploitation, and for entrepreneurial orientation 0.83. The tolerance values less than 0.10 indicate multiple correlations with other variables being high, which suggests the possibility of multicollinearity (Pallant, 2016). The Variance Inflation Factor (VIF) is below the cut-off of 10, the values of 1.28, and 1.21 are reported. Both VIF and Tolerance levels are acceptable and indicate no multicollinearity.

Table 23: Regression Coefficients for Business Performance Non-Financial

Coefficients[a]													
Model	**Unstandardized Coefficients**			**Standardized Coefficients**	**T**	**Sig.**	**95.0% Confidence Interval for B**		**Correlations**			**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**	**Zero-order**	**Partial**	**Part**	**Tolerance**	**VIF**
1	(Constant)	1.800	0.420		4.285	0.000	0.972	2.628					
	Market_3=	0.125	0.068	0.126	1.823	0.070	-0.010	0.259	0.323	0.128	0.111	0.784	1.276
	Oppor_4	0.404	0.071	0.395	5.729	0.000	0.265	0.543	0.482	0.376	0.349	0.784	1.276
	Entr_2	0.099	0.064	0.103	1.536	0.126	-0.028	0.226	0.286	0.108	0.094	0.825	1.212

a. Dependent Variable: BusNonFin_6

Entrepreneurial orientation reported (beta = 0.10, p >0.05), and market orientation (beta = 0.13, p >0.05). Both entrepreneurial orientation (10%) and market orientation (13%) individually contribute to the model, however they are not statistically significant. Opportunity exploitation

(beta = 0.40, p >0.0001) was found to make a unique contribution of 40%, at a statistically significant level.

Based on the regression analysis the outcomes for the hypotheses testing are as follows:

- H1b: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Non-Financial, it is supported but not significant.
- H2b: A strong focus on market orientation in an organisational context positively impact Business Performance Non-Financial , it is supported but not significant.
- H3b: Higher levels of opportunity exploitation in an organisational context positively influence Business Performance Non-financial , it is supported and significant.

Further hypothesis testing was conducted in order to assess the moderating effect of Interfunctional Co-ordination, towards the relationship between independent and dependent variables. The interaction effect for both Business Performance Financial and Business Performance Non-Financial as dependent variables, as well as entrepreneurial orientation, market orientation and opportunity exploitation (independent variables) was tested.

Table 24 presents the model summary for the moderation analysis for the dependent variable Business Performance Financial.

Table 24: Moderation model summary for Business Performance Financial

Variable	Model: Financial	Coeff	se	t	p	LLCI	ULCL	R2-change (X*W)/Unconditional interactions
Entr_2	Int_1	-0.050	0.053	-0.931	0.353	-0.155	0.056	0.003
Market_3	Int_1	-0.104	0.048	-2.169	0.031	-0.199	-0.010	0.018
Oppor_4	Int_1	-0.008	0.053	-0.148	0.883	-0.113	0.097	0.000

Interfunctional co-ordination as a moderator involving the independent variable Market orientation is shown to have a significant interaction effect of b= -0.10, 95%CI [-0.20, -0.01], t=2.17, p=0.03 over business performance financial (Field, 2017). The interaction effect of interfunctional co-ordination involving the independent variable of entrepreneurial orientation is very low, and non-significant b= -0.05, 95% CI[-0.16, -0.07], t=0.93, p=0.35. Opportunity exploitation (independent variable) and interfunctional co-ordination (moderator variable) also reported a low and insignificant interaction effect b= -0.008, 95% CI [-0.11, 0.10], t=0.15,

p=0.88. Table 25 presents the results of the moderation effects at varying conditional levels of 16th, 50th and 84th percentile (Hayes & Rockwood, 2017)

Table 25: Conditional effects of the focal predictor at values of the moderator(s)- Business Performance Financial

Financial	Conditioning Levels	Interf_5	Effect	se	t	p	LLCI	ULCI
Market_3	16th percentile	3.600	0.427	0.084	5.075	0.000	0.261	0.593
	50th percentile	5.000	0.281	0.078	3.622	0.000	0.128	0.435
	84th percentile	6.000	0.177	0.104	1.705	0.090	-0.028	0.382

Only market orientation (independent variable) and interfunctional co-ordination as a moderator reported a significant interactive effect, and the model indicates that at a 16th percentile conditioning level the moderating effect of interfunctional co-ordination on the relationship between market orientation and business performance financial is high (0.43%). Therefore at a 16th percentile conditioning level of interfunctional co-ordination, there is a significant and positive relationship between market orientation and Business Performance Financial b= 0.43, 95%CI [0.26, 0.59], t=5.08, p<0.001. When interfunctional co-ordination increases at the conditional level of 50th percentile, b= 0.28, 95%CI [0.13, 0.44], t=3.62, p<0.001, the interactive effects of interfunctional co-ordination are significant, at the impact level of 28%. Finally, when interfunctional co-ordination increases at the conditional level of 84th percentile, b= 0.18, 95%CI [-0.03, 0.38], t=1.71, p=0.090, the interactive effects of interfunctional co-ordination are non-significant, at the impact level of 18%. The conditional effects model suggests that only when interfunctional co-ordination is present at a lower level of 16th percentile, then the effects on business performance financial are higher, and as the conditional levels increases then the effects and impact of interfunctional co-ordination decrease, and are even insignificant at 84th percentile. The moderation analysis with Business Performance Financial as a dependent variable highlights the following hypothesis outcomes:

H4a: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Financial is not supported but not significant.

Figure 17 indicates that the increase in interfunctional co-ordination does not significantly boost the effect of entrepreneurial Orientation on Business Performance Financial. Hayes and Rockwood (2017) recommend the visualisation of interaction, through choosing various combinations of the independent variable, and the moderator, within the range of the data, and plugging these combinations into a regression analysis in order to produce the estimates for the dependent variable. The values can be 16th, 50th and 84th percentile combinations of the independent and moderating variable.

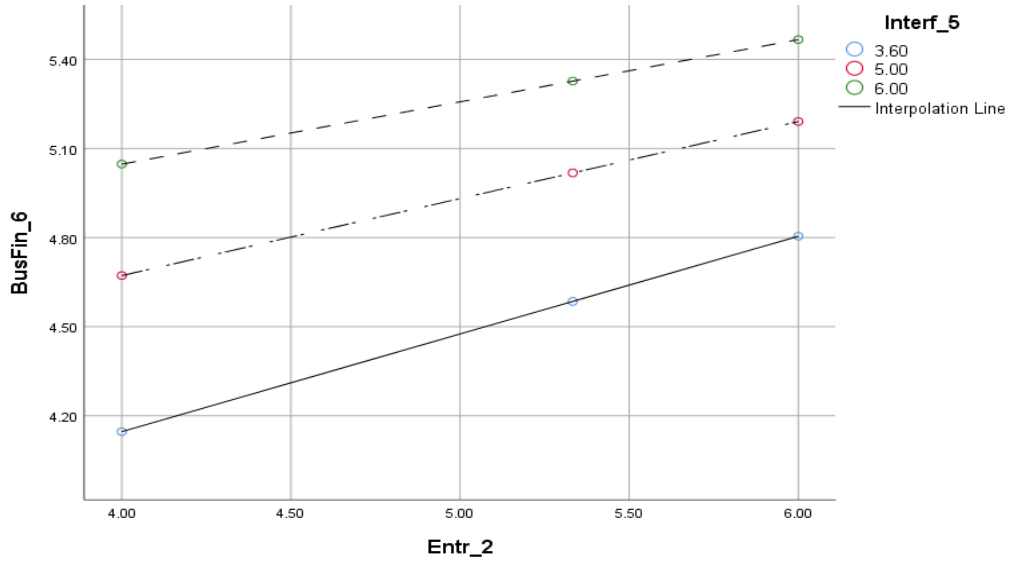

Figure 17: Moderation effect of interfuctional coordination on the relationship between Entrepreneurial Orientation and Business Performance Financial

H5a: Interfunctional Coordination significantly moderates the relationship between Market Orientation and Business Performance Financial, it is supported and significant. Figure 18 indicates that the increase in interfunctional co-ordination does significantly enhance the impact of market orientation on Business Performance Financial.

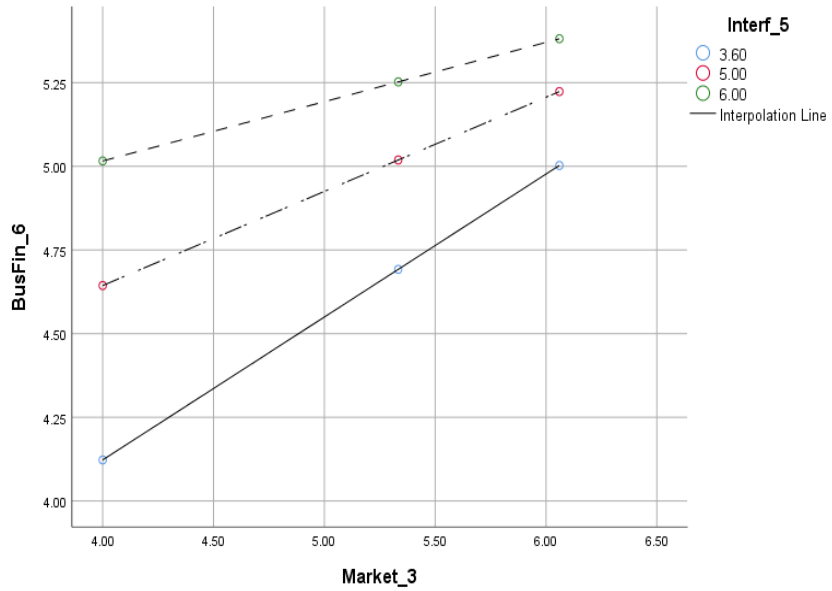

Figure 18: Moderation effect of interfunctional co-ordination on the relationship between Market Orientation and Business Performance Financial

H6a: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Financial, is not supported and not significant. Figure 19 indicates that the increase in interfunctional co-ordination does not significantly enhance the impact of opportunity exploitation on Business Performance Financial.

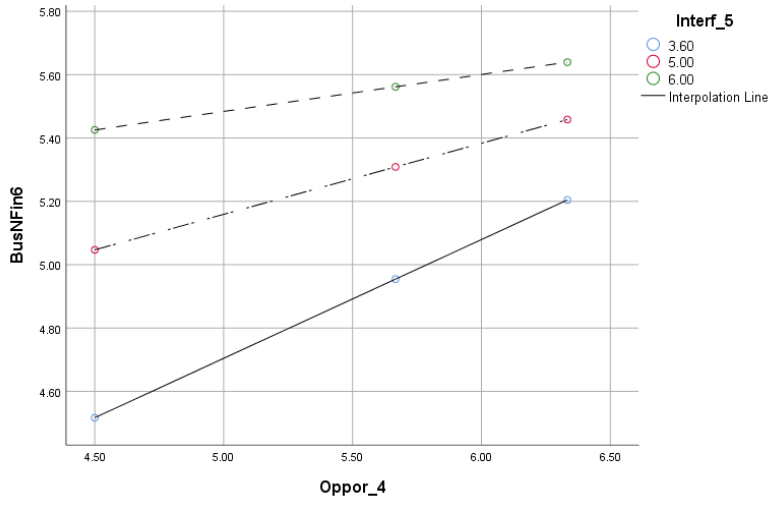

Figure 19: Moderation effect of interfunctional co-ordination on the relationship between Opportunity Exploitation and Business Performance Financial

Table 26 presents the model summary for the moderation analysis for the dependent variable Business Performance Non-Financial.

Table 26: Moderation model summary for Business Performance Non-Financial

Variable	Model: Non Financial	Coeff	se	t	p	LLCI	ULCL	R2-chng (X*W)/Unconditional interactions
Entr_2	Int_1	-0.038	0.047	-0.806	0.422	-0.130	0.055	0.002
Market_3	Int_1	-0.080	0.043	-1.873	0.063	-0.165	0.004	0.013
Oppor_4	Int_1	-0.108	0.044	-2.446	0.015	-0.194	-0.021	0.021

Moderation for the independent variable of opportunity exploitation is shown by the significant interaction effect b= -0.11, 95%CI [-0.19, -0.02], t=2.45, p=0.02 (Field, 2017). The interaction effect for the independent variable entrepreneurial orientation is very low, and non-significant b= -0.04, 95% CI[-0.13, 0.06], t=0.81, p=0.42. market orientation also reported low and insignificant interaction effect b= -0.08, 95% CI [-0.17, 0.004], t=1.87, p=0.06. Table 27 presents the results of the moderation effects at varying conditional levels of 16th, 50th and 84th percentile (Hayes & Rockwood, 2017)

Table 27: Conditional effects of the focal predictor at values of the moderator(s)- Business Performance Non-Financial

Non Financial	Conditioning Levels	Interf_5	Effect	se	t	p	LLCI	ULCI
	16th percentile	3.600	0.238	0.075	3.164	0.002	0.090	0.387
	50th percentile	5.000	0.126	0.070	1.808	0.072	-0.011	0.026
Market_3	84th percentile	6.000	0.045	0.093	0.486	0.628	-0.138	0.229
	16th percentile	3.600	0.375	0.073	5.162	0.000	0.232	0.518
	50th percentile	5.000	0.224	0.084	2.675	0.008	0.059	0.390
Oppor_4	84th percentile	6.000	0.117	0.114	1.026	0.306	-0.108	0.341

Based on the conditional effect model, Market orientation independent reported a significant interactive effect, and the model indicates that at a 16th percentile conditioning level, the moderating effect of interfunctional co-ordination on the relationship between market orientation and business performance non-financial is high (0.24%). Therefore at a 16th percentile conditioning level of interfunctional co-ordination, there is a significant and positive relationship between market orientation and Business Performance Non-Financial b= 0.24, 95%CI [0.09,

0.39], t=3.16, p<0.01. When interfunctional co-ordination increases at the conditional level of 50th percentile, b= 0.13, 95%CI [-0.01, 0.03], t=1.81, p=0.070, the interactive effects of interfunctional co-ordination are non-significant, at the impact level of 13%. Notably, when interfunctional co-ordination increases at the conditional level of 84th percentile, b= 0.05, 95%CI [-0.14, 0.23], t=0.49, p=0.63, the interactive effects of interfunctional co-ordination are non-significant, at the low impact level of 0.05%. The conditional effects model suggests that only when interfunctional co-ordination is present at a lower level of 16th percentile, then the effects on business performance non-financial are higher, and as the conditional levels increases then the effects and impact of interfunctional co-ordination decreases, and is even insignificant at both 50th and 84th percentile, when market orientation is the independent variable.

Based on the conditional effect model, opportunity exploitation (independent variable) reported a significant interactive effect on business performance non-financial, and the model indicates that at a 16th percentile conditioning level the moderating effect of interfunctional co-ordination on the relationship between opportunity exploitation and business performance non-financial is high (0.38%). Therefore at a 16th percentile conditioning level of interfunctional co-ordination is significant and positive in the relationship between opportunity exploitation and Business Performance Non-Financial b= 0.38, 95%CI [0.23, 0.52], t=5.16, p<0.001. When interfunctional co-ordination increases at the conditional level of 50th percentile, b= 0.22, 95%CI [0.06, 0.39], t=2.68, p<0.01, the interactive effects of interfunctional co-ordination are significant, at the impact level of 22%. Notably, when interfunctional co-ordination increases at the conditional level of 84th percentile, b= 0.12, 95%CI [-0.11, 0.34], t=1.03, p=0.31, the interactive effects of interfunctional co-ordination are non-significant, at the impact level of 0.12%. The conditional effects model suggests that only when interfunctional co-ordination (moderator) is present at a lower level of 16th percentile, then the effects on business performance non-financial are higher, and moderate at 50th percentile. The model suggests that as the conditional levels increases then the effects and impact of interfunctional co-ordination decreases, and is even insignificant at both 84th percentile, when opportunity is the independent variable.

The moderation analysis with Business Performance Non-Financial as a dependent variable highlights the following hypothesis outcomes:

H4b: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Non-Financial, is not supported and not

significant. Figure 20 indicates that the increase in interfunctional co-ordination does not significantly enhance the impact of Entrepreneurial Orientation on Business Performance Non-Financial.

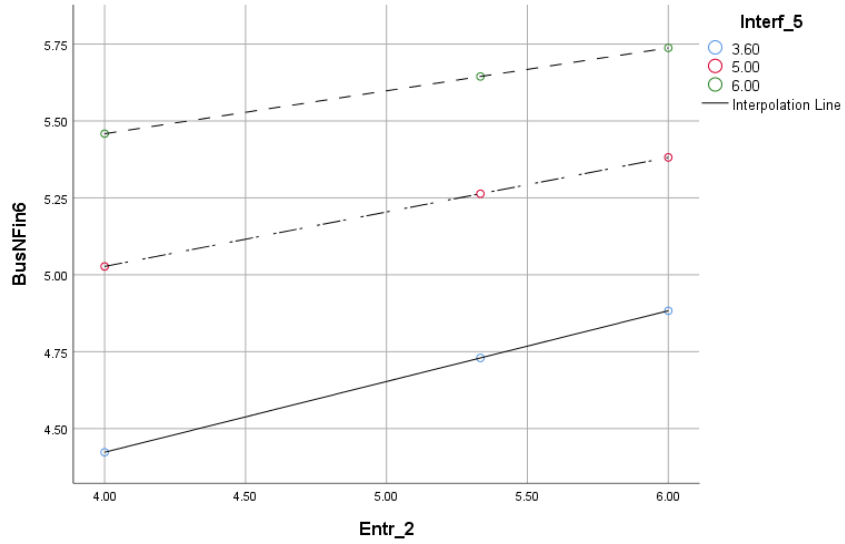

Figure 20: Moderation effect of interfunctional co-ordination on the relationship between Entrepreneurial Orientation and Business Performance Non- Financial.

H5b: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Non-Financial, it is supported and significant (only at conditional levels). Figure 21 indicates that the increase in interfunctional co-ordination does significantly enhance the impact of market orientation on Business Performance Non –Financial (at conditional low and medium levels).

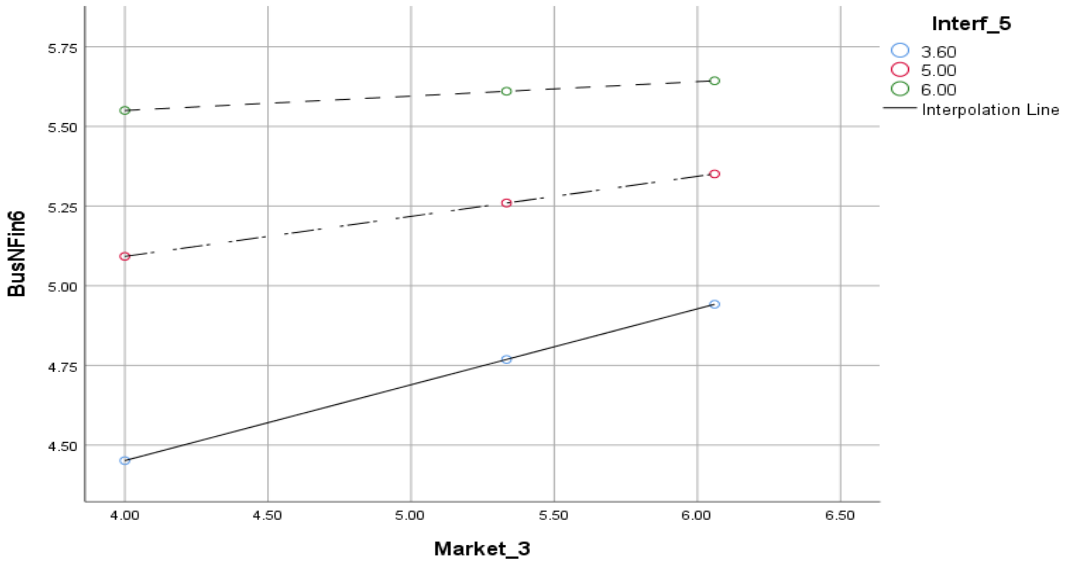

Figure 21: Moderation effect of interfunctional co-ordination on the relationship between market orientation and Business Performance Non- Financial.

H6b: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non -Financial, is supported and significant. Figure 22 indicates that the increase in interfunctional co-ordination does significantly enhance the impact of opportunity exploitation on Business Performance Non-Financial.

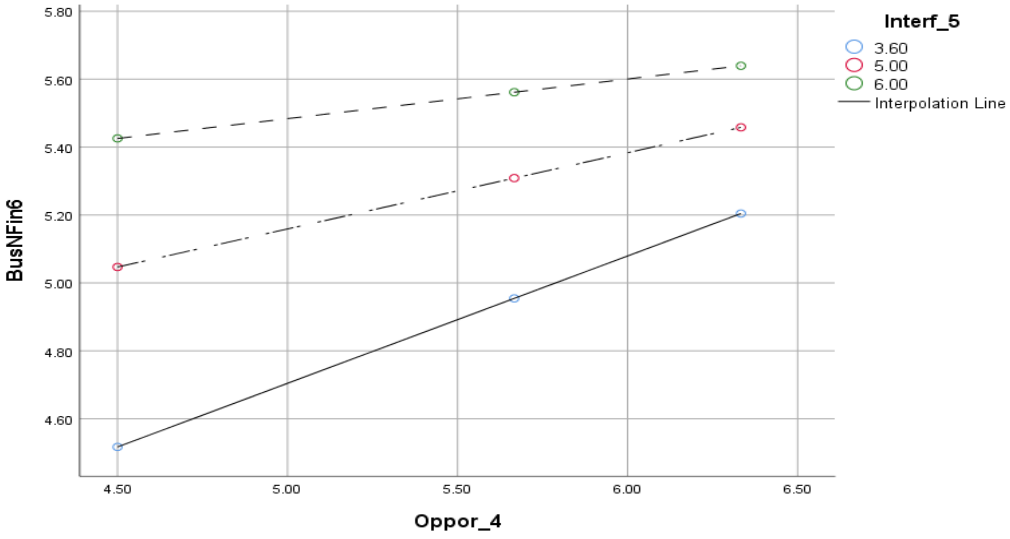

Figure 22: Moderation effect of interfunctional co-ordination on the relationship between opportunity exploitation and Business Performance Non- Financial

4.11 Chapter summary

In this chapter, the results of the data collected in order to test the research hypotheses were presented. The data was collected from the sample of employees in various revenue generating entities or companies, through the sale of goods or services, within the Gauteng province. A total of 225 responses were received, of which 22 cases were excluded from the analysis due to missing information after the data cleaning and screening process was completed. The demographic characteristics were analysed through the descriptive statistics.

The descriptive procedure was catagorised based on age, gender, ethnicity, occupational level, education, length of work experience, type of industry and the business size the repondents worked at. Most of the respondents are in the age ranges of 36-45 years and 46-55 years. The gender analysis consisted of 53% males and 45% females, and the remainder were not specified. The professionally qualified occupational category was highly represented at 43.7%, with the majority of the sample holding post graduate qualifications. Over 32% had more than 16 years of working experience. Employees were from diverse industries such as engineering, insurance, professional services, and wholesale.

Exploratory factor analysis was conducted to test for convergence validity. The initially proposed 35 scale items were reduced to 29 items, and five initial scales were increased to six. The scale for business performance was split into two factors namely, business performance financial and business performance non-financial. The revised scales had above acceptable factor loadings as well as good reliability results. Importantly, the hypotheses were revised in order to integrate the outcomes of the Exploratory factor analysis.

The data was deemed to be normally distributed based on the kurtosis and skewness parameters and the inspection of the Normal QQ Plots and histograms. Pearson correlation analysis reported mostly moderate and significant relationships among the independent and dependent variables.

The hypothesis testing was conducted through the linear regression analysis as well as moderation analysis. The summary of the hypothesis is testing results is presented in table 28.

Table 28: Summary of the hypothesis testing results.

Hypotheses	**Correlation**		**Regression**	
H1a: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Financial	Supported	Significant	Supported	Significant
H1b: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Non-Financial	Supported	Significant	Supported	Non-Significant
H2a: A strong focus on market orientation in an organisational context positively impacts Business Performance Financial	Supported	Significant	Supported	Significant
H2b: A strong focus on market orientation in an organisational context positively impacts Business Performance Non-Financial	Supported	Significant	Supported	Non-Significant
H3a: Higher levels of opportunity exploitation in an organisational context positively influencesBusiness Performance Financial	Supported	Significant	Supported	Significant
H3b: Higher levels of opportunity exploitation in an organisational context positively influence Business Performance Non-financial	Supported	Significant	Supported	Significant
Hypotheses: Moderation	**Moderation Model**		**Conditional Effects**	
H4a: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Financial	Not Supported	Non-Significant	Nil	Nil
H4b: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Non-Financial	Not Supported	Non-Significant	Nil	Nil
H5a: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Financial	Supported	Significant	Supported	Significant
H5b: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Non-Financial	Not Supported	Non-Significant	Supported	Significant
H6a: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Financial	Not Supported	Non-Significant	Nil	Nil
H6b: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non-Financial	Supported	Significant	Supported	Significant

CHAPTER 5: DISCUSSION OF THE RESULTS

5.1 Introduction

In this chapter, the results presented in chapter 4 are further expounded and discussed. The results are interpreted in alignment with the literature review presented in chapter 2. The chapter outline consists of the discussions of the demographics, followed by the individual hypothesis discussion. The chapter is drawn to a close with a conclusion.

5.2 Demographic profile of the respondents

5.2.1 Age

The age profile of the demographics consisted of mature adults as the majority, followed by those who are middle aged. The young adults were fairly represented, although in the minority. It is important to have a wide range of age groups in order to ensure diversity as well as balanced inclusivity. Based on the Department of Statistics, South Africa (2020c) approximately 3,5 million or 34,1% young people were not in employment, at least 30.1% of young people between the ages of 18-35 years old took part in the study.

5.2.2 Gender

There were slightly more males in this study than females. It is important to consider the gender balance of the respondents , mainly in workplaces as effforts have been made by government through legislation to improve workforce diversity, based on gender, race and other criteria (Samuel, Magwagwa & Mazingi, 2020).

5.2.3 Race and ethnicity

The majority of the respondents were African, followed by the coloured people, while the white and Asian/Indian populations were in the minority. Those who opted for ‘other’ were less than two percent.. The race representation of the study does not necessarily match with the Quarterly Labour Force Survey of Quarter 1 in 2020, the report highlights employment population ratio of Africans as 39.2%, coloured as 47.6%, Asian 52.6% and white population as 63.7%, as reported by the Department of Statistics, South Africa (2020a).

5.2.4 Occupational level

Professionally qualified, specialist and middle management were dominant in the study, followed by Senior management.Those who classified themselves as semi-skilled or discretionary decision making were fairly represented with the skilled or supervisory levels at the lower end. The repondents are mostly at higher occupational levels, which requires substantial experience as well as qualifications, this gives comfort that the construct items of the survey are most likely to have been understood and interpreted correctly. Furthermore the various and diverse occupational levels were well represented in the study in order to achieve a balance of views.

5.2.5 Education

The majority of the respondents hold a post graduate qualification, followed by degree holders. Those who hold a post school diploma are moderately represented, together with those who have grade 12 certification. Only a few repondents are without grade 12 certification. Educational levels of the respondents is of a high and good quality, which is likely to positively affect the quality of reponses.

5.2.6 Work experience

The majority of the repondents have more than six years work experience, and only a few (5.3%) had work experience which is equal to or less than three years. The higher the length of work experience in the commercial environment, the more insightful and knowledgeable one is about business dynamics impacting on performance. Tesluk and Jacobs (1998) are of view that work experience at varying levels translates into work related knowledge skills, and organisational performance outcomes, and it is enhanced by performance management, training, exposure to complex and challenging work tasks, feedback and quality of supervision.

5.2.7 Industry type- context

The respondents reported to be employees in various industries such as engineering, education, insurance, wholesale and retail, professional services and marketing, manufacturing, and information technology. The respondents are spread across various sectors such as primary (extractive industries), secondary (manufacturing) and tertiary (commercial services) sectors of the economy (Industrial Development Corporation, 2010).

5.2.8 Business Size

Company sizes in which the respondents are employed are mostly medium, followed by small and large enterprises, with micro enterprises only being a fairly small percentage. Although the South African market structures are characterised by large corporate companies playing a dominant role (World Bank, 2018), it is interesting to note that both micro and small company employees took part in the study.

5.3 Discussion of findings

5.3.1 Discussion pertaining to hypothesis 1a and 1b

Hypothesis 1a states that Entrepreneurial Orientation positively impacts Business Performance Financial, the hypothesis was supported and significant. The findings showed a moderate and significant relationship between Entrepreneurial Orientation and Business Performance Financial. Furthermore the Regression analysis reported a low unique contribution of 16 %, at a statistically significant level. The results are aligned with Wardi, et al. (2018), indicating that a strong entrepreneurial orientation focus improves performance, and specifically, financially.

Hypothesis 1b states that Entrepreneurial orientation positively impacts Business Performance Non-Financial was supported but not significant. The findings highlighted a significant and small relationship between Entrepreneurial Orientation and Business Performance Non-Financial. Whilst the regression analysis results reported the low contribution of Entrepreneurial Orientation towards Business Performance Non-Financial as being 10%, however this contribution was found not to be statistically significant. The results of the analysis partially corroborates with the literature, as Eze (2018) asserts that entrepreneurial activities in a corporate context, which incorporates risk taking, innovativeness, proactivity, strategic renewals and corporate venturing improve the firms' non-financial performance. According to Eze (2018), non-financial performance indicators improve financial performance in the long run, for instance, customer satisfaction, brand image, good reputation and the acceptance of new products and services by customers are likely to translate into financial returns.

The findings are supported by previous studies of Covin and Miles (2007) Ireland, Covin and Kuratko (2009) and again Octavia and Ali (2017), through the attribution of competitiveness, sustainability and performance of firms to entrepreneurial orientation . The elements of

innovativeness, risk taking as well as proactiveness, based on Lumpkin and Dess (1996) would be supportive of performance outcomes .

Moreover, Rauch, Wiklund, Lumpkin and Frese's (2009) empirical results as well as Saeed, Yousafzai and Engelen (2014); Chaudhary and Batra (2018) iterate the criticality of entrepreneurial activities in pursuit of growth opportunities for the purposes of improving the overall business performance.

5.3.2 Discussion pertaining to hypothesis 2a and 2b

Hypothesis 2a states that Market Orientation positively impacts Business Performance Financial, the results are both supported and found to be statistically significant. The findings indicated a moderate and a significantly positive relationship between market orientation and Business Performance Financial. Furthermore, the Regression analysis results indicate a fairly significant and moderate unique contribution of 26% towards business performance financial. In substantiating the results, Ho, Nguyen, Adhikari, Miles and Bonnie (2018) highlight that the extent to which the organisations apply their market orientation approaches in their business strategies which create superior customer value and increase competitive capacity, will better position them in realising financial performance outcomes. Kohli and Jaworski (1990) argue that market orientation activities pertaining to intelligence generation, intelligence dissemination and responsiveness prove to be critical in impacting organisational outcomes positively. The results are supported by Day (1994) who asserts that organisations who implement the marketing concept, have superior market sensing capabilities which are able to better link and connect them with the customers. Furthermore, such organisations are able to improve their performance through growing of the market share and also by delivering to the customers more effectively and efficiently, better than the competititors. Therefore the results corrobotate the findings of Greenley (1995) and Jaworski and Kohli (1993).

Hypothesis 2b states that Market Orientation positively impacts on Business Performance Non-Financial and is supported but not significant. Interestingly, the Correlation analysis found a moderate, positive and significant relationship between market orientation and Business Performance Non-Financial. Nonetheless, the regression analysis results reflected a low unique contribution of 13% of market orientation towards Business Performance Non-Financial, although it is non-significant. The results are partially aligned with the literature findings of Babu (2018)

asserting that Market orientation contributes towards business performance, mainly through the identification of the needs of the customer, in order to create customer value. Masadeh, Al-Henzab, Tarhini and Obeidat (2018) strongly advocate for market orientation to be critical towards business success. In alignment with the results, Chaudhary and Batra (2018) highlight the positive implications of market orientation on the firm's success.

5.3.3 Discussion pertaining to hypothesis 3a and 3b

Hypothesis 3a states that Opportunity Exploitation positively influence Business Performance Financial, the hypothesis is supported and significant. The correlation analysis indicated a significant and moderate relationship between Opportunity Exploitation and Business Performance Financial. The Regression analysis highlights a moderate unique contribution of 21%, which is also statistically significant. Beniteza, Llorensb, and Braojosb (2018) corroborate the results by explaining dynamic capabilities theory's role in activating opportunity exploitation, for example, through creating business flexibility, the development of operational competence, the ability to re-configure resources, exercise of new capabilities relevant to respond to the environment in order to create value and commercial viability.

Hypothesis 3b states that Opportunity Exploitation positively influences Business Performance Non-financial, the hypothesis is supported and significant. The results of the correlation analysis indicate a significant and moderate relationship between Opportunity Exploitation and Business Performance Non-financial. Regression analysis results report a medium unique contribution of 40% by Opportunity Exploitation which is also statistically significant. The literature is aligned with the results of the study. Rangus and Slavec (2017) advocate for the firm's investment in the development of absorptive capacity which includes the element of opportunity exploitation which is a means to contributing to competitiveness and performance. Based on Camisón and Forés (2010), opportunity exploitation is reflective of the organisational capacity to transform acquired knowledge into routines and operational practices which enable refinement, improvement and expansion of competencies, product offerings, organisational forms and the creation of new opportunities. Organisational ability to exploit new knowledge and leverage on technological developments , improve their customer service, reputation and potential product success.

The findings further clearly support Ireland, Covin and Kuatko (2009) in that Entrepreneurial behaviours and processes pertaining to opportunity exploitation are central to organisational performance.

Business performance according to Choi, Lévesque and Shepherd (2008) is realised through opportunity exploitation by means of the development of full scale and efficient operations where products and services can be created and be delivered in order to generate revenue. George, Parida, Lahti and Wincent (2016) iterate that the outcomes of opportunity exploitation, which lead to overrral performance can be in the form of new markets, products, technological applications, new material and also resource combinations which brings improvements and better ways of working.

5.3.4 Discussion pertaining to hypothesis 4a and 4b

Hypothesis 4a states that Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Financial, the hypothesis is not supported and also not significant. The moderation analysis results indicate a negative, very low and insignificant interactive effect.

Hypothesis 4b states that Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Non-Financial, the hypothesis is not supported and it is found to be non-significant. The moderation analysis results shows a low and non-significant interaction effect.

The results for both hypothesis 4a and 4b, are contrary to the literature which highlights that Interfunctional co-ordination is an enabling mechanism to strengthening and aligning entrepreneurial efforts within an organisation (Menguc, 2005) with the purpose of enhancing performance. Given South Africa's contextual issues faced by small and medium enterprises, the implementation of corporate entrepreneurship may be affected by various factors such as limited resources, scarce skills and expertise, few and limited customers, and low marketing budgets. Other systemic barriers are due to economic recessions, regulatory burdens as well as access to financial resources (Kwinje, Mwando-Gukushu & Zengeni, 2020). The Internal corporate environment is important in realising entrepreneurial orientation, these, among others, include the development of a flexible organisational culture characterised by interdepartmental communication and free flow of information which is central to cultivating innovativeness and creativity (Brettel, Chomik & Flatten, 2015). Van Wyk and Adonisi (2011) consider the elements of developing a clear entrepreneurial strategy, empowering and supportive management, conducive entrepreneurial climate, competency development, vision communication

and also employee participation to be critical in a South African corporate context. Although the results are contrary to the literature, interfunctional co-ordination may be instrumental in the implementation of organisational corporate entrepreneurial strategy which is build upon the elements of entrereprenurial strategic vision (Ireland, Covin & Kuatko 2009), pro-entrepreneurship organisational architecture (Ireland, Kuratko & Morris, 2006) and also entrepreneurial processes and behaviours (Choi, Lévesque & Shepherd 2008).

Another factor which could explain the findings is that previous studies have identified interfunctional co-ordination as a moderator based on several studies (Auh & Menguc, 2005; Babu, 2018; Chebet, Gabriel & Bonuke, 2018), those particular studies did not have a focus on the interacting role of interfunctional co-ordination with the complemetory variables of entrepreneurial orientation, market orientation and opportunity exploitation. Therefore interfunctional co-ordination has the potential to be instilled into corporate entrepreneurial operations of innovativeness, risk taking and proactiveness (Covin & Slevin, 1989).

Given the fact that interfunctional co-ordination requires co-operation of all members of the organisation, and enables communication with employees in aligning them to goals towards performance improvement (Hübnerová, Tomášková & Bednář (2020), the extent to which it is understood and practiced in the South Africa context remains unanswered. Also Trainor, Rapp, Beitelspacher and Schillewaert (2011) assert that interfunctional co-ordination requires management to understand the importance of how employees deliver customer value. As a consequence, both entrepreneurial orientation and interfunctional co-ordination are total organisational interventions which require the involvement and participation of all at varying levels of responsibility.

5.3.5 Discussion pertaining to hypothesis 5a and 5b

Hypothesis 5a states that Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Financial, the hypothesis is supported and significant. Moderation analysis results shows a moderate and yet significant interactive effect. Furthermore, the conditional moderation analysis indicates a medium moderating effect of 43% at a 16th percentile conditional level, and a moderate 28% interactive effect at a 50th percentile conditional level. Importantly, the results were all significant. Interestingly, the more the conditional level increases the less the moderation effect becomes. In alignment with the results,

Ho, Nguyen, Adhikari, Miles and Bonnie (2018) iterate that market orientation concentrates on customers and competitors in order to deliver sustainable competitive advantage, therefore the integration of the organisation's resources strengthens value creation efforts, which has performance implications. Moreover Interfunctional co-ordination plays a critical role in ensuring the information and knowledge flow among the various functions which will help with the generation of new insights and creating a conductive climate for the application of market insight to the business. By implication, collaborative efforts and integrated approaches would then enhance performance outputs.

Hypothesis 5b states that Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Non-Financial. The overall moderation model's results do not support the hypothesis and also the results are non-significant. Notably, when conditional moderation is introduced at the 16^{th} and 50^{th} percentile levels, the moderation effects are present and results support hypothesis 5b at a significant level. Conditional moderation analysis model reflects the moderate 24 % moderation effect at 16^{th} percentile conditional level, and a low 13 % moderation effect with the conditional level of 50^{th} percentile. Notably, the more the conditional levels increases, the less the moderation effect becomes. The literature partially corroborates the findings of hypothesis 5b, more specifically the results of the conditional moderation analysis, in that interfunctional co-ordination facilitates and activates market orientation, through the integration of the internal resources, business insights and knowledge with the aim of customer value creation. Well integrated market oriented activities would inevitably result in improved business performance through synergistic efforts of addressing market needs and leveraging on the interfunctional strengths and capabilities (Babu, 2018).

5.3.6 Discussion pertaining to hypothesis 6a and 6b

Hypothesis 6a states that Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Financial, the hypothesis is not supported and also non-significant. The moderation analysis results indicate a very low effect and is non-significant. The results are not supported by the literature, as Tajeddini, Altinay and Ratten (2017) highlight the importance of interfunctional co-ordination in enabling the effective exploitation of market insights which inevitably lead to innovativeness for product and service improvements and enhanced performance in the long term.

Hypothesis 6b states that Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non-Financial. The hypothesis is supported and significant, as the moderation analysis reported a low interactive effect.

Additionally, the conditional moderation analysis shows the medium 38% moderation effect at 16th percentile conditional level, and a moderate 22% moderation effect at the conditional level of 50th percentile. Interestingly, the more the conditional levels increases, the less the moderation effect becomes. Based on Webb, Ireland, Hitt, Kistruck and Tihanyi (2011), interfunctional co-ordination facilitates an organisational settings where knowledge boundaries across various functions can be overcome in order to modify internal processes to linked performance, such as opportunity exploitation. Furthermore, interfunctional co-ordination plays a critical role in improving the transforming of market knowledge and insights into organisational capabilities and processes in order to enable their exploitation for commercial ends and value add, based on Patel (2018). Whilst Flatten, Engelen, Zahra and Brettel (2011) assert that improved organisational performance flows from an integrated and well co-ordinated responsiveness to customers and also the leveraging from first mover advantages. Opportunity exploitation is best described as transformation capabilities, in which new processes or existing ones are developed into new products and services which creates value, thus the importance of resource alignment.

5.4 Key findings pertaining to the constructs of the study

Business performance was the main dependent variable of the study. The exploratory factor analysis indicated that Business Performance has both Financial and Non-Financial Indicators, this finding is consistent with the literature of Rodrigues and Pinho (2012) and Rajapathirana and Hui (2018), highlighting the applicability of both financial and non-financial measures in analysing business performance. The financial performance indicators were reported as follows: 61% of the respondents reported better profitability than the competitors, 65 % reported growth in sales volumes to be better than the competitors, 70% indicated to have performed better as far as growth in market share is concerned, while the non-financial aspects comprised the reporting by 72.4% of respondents for customer satisfaction, 71.9% of respondents for brand image and reputation as well as 72.9% of respondents for new product or service success.

5.4.1 Entrepreneurial Orientation

The strengths of entrepreneurial activities that are present in organisations, as indicated by the respondents, were as follows: The introduction of important and significant new changes in the product services, with a mean score of (5.31), and the sum of agree and strongly agree responses is 49.1%. Also, the adoption of an aggressive and competitive attitude during uncertainty in order to exploit potential opportunities with a mean score of (5.13) and the sum of agree and strongly agree responses is 55.2%.

Entrepreneurial Orientation positively impacts on Business Performance Financial, the hypothesis was supported and significant. Furthermore, Entrepreneurial Orientation was found to positively impact on Business Performance Non-Financial, and this result is supported but not significant. The results for Business Performance Non-Financial are partially supported by Oladimeji, Abosede, and Eze (2019), who found that entrepreneurial orientation in a corporate context significantly improves non-financial performance. These non-financial outcomes are in the form of market share, customer satisfaction, efficiency and product quality.

5.4.2 Market Orientation

The strengths of market orientation activities that are present in organisations as indicated by the respondents were as follows: Being informed promptly about the complaints and suggestions of the customer, with a mean score of (5.38), and the sum of agree and strongly agree responses is 57.6%. The premise for new product development is mainly for customer satisfaction as opposed to only taking advantage of productive capabilities, with a mean score of (5.38) and the sum of agree and strongly agree responses is 57.9%.

Market Orientation positively impacts on Business Performance Financial, the results are both supported and found to be statistically significant. Notably, Market Orientation positively impacts on Business Performance Non-Financial, and the hypothesis is supported but not significant. The study by Rodrigues and Pinho (2012) found somewhat mixed results in assessing the impact of elements of marketing orientation on business performance financial and non-financial aspects. In particular, external information generation is significantly related to financial performance, while non-financial performance is not related to external information generation, while the market responsiveness element of market orientation is impactful at a significant level for both financial and non-financial outcomes. Shah and Dubey (2013) found a strong and

significant correlation between the financial aspects of performance, such as profitability, market share and growth to be attributed to market orientation.

5.4.3 Opportunity Exploitation

The strengths of market orientation activities that are present in organisations, as indicated by the respondents, were as follows: The company having the ability to respond to market demands and requirements of the market in response to the competitive pressures, with a mean score of (5.48), and the sum of agree and strongly agree responses is 59.6%. The company having the capacity to use and exploit new knowledge in the workplace, with a mean score of (5.46) and the sum of agree and strongly agree responses is 63.5%.

Opportunity Exploitation positively influences Business Performance Financial, the hypothesis is supported and significant. Interestingly, Opportunity Exploitation positively influences Business Performance Non-Financial, the hypothesis is supported by results and it is also found to be significant. Opportunity exploitation entails acting upon the perceived entrepreneurial opportunity, such as product service development and launch, organising and planning resources towards the alignment with customers and market requirements (Kuckertz, Kollmann, Krell & Stöckmann, 2017); these activities explain both financial and non-financial performance.

5.4.4 Interfunctional Co-ordination

Interfunctional co-ordination is the main moderator variables. The strengths of interfunctional co-ordination activities that are present in organisations, as indicated by the respondents, were as follows: Managers understand how employees from all functions can contribute to deliver customer value, with a mean score of (5.08) , and the sum of agree and strongly agree responses is 48.8%. Different company functions work in an integrated fashion to fulfil the needs of our objectives, with a mean score of (5.06) and the sum of agree and strongly agree responses is 47.8%.

5.4.4.1 Entepreneurial Orientation

Interfunctional Co-ordination does not moderate the relationship between Entrepreneurial Orientation and Business Performance Financial, the hypothesis is not supported and also not significant. Furthermore Interfunctional Co-ordination does not significantly moderate the relationship between Entrepreneurial Orientation and Business Performance Non-Financial, this

hypothesis is not supported and it is found to be non-significant. The results pertaining to the interaction between entrepreneurial orientation and interfunctional co-ordination refutes the speculations that the interactions would enhance performance. Although entrepreneurial orientation has a low and yet significant relationship with interfunctional co-ordination, as well as a medium relationship between interfunctional co-ordination and financial performance, and a strong relationship with non-financial performance, these still does not yield a positive and significant moderation effect.

5.4.4.2 Market Orientation

Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Financial, the hypothesis is supported and significant. Furthermore, the conditional moderation analysis indicated the moderation effect of 43% at 16th percentile conditional level, and 28% moderation effect at 50th percentile conditional level, importantly, the results were all significant.. At low interfunctional co-ordination of (16th percentile) there is a significant (43%) positive relationship between market orientation and Business Performance Financial.

Interfunctional Co-ordination in model 1, does not significantly moderate the relationship between Market Orientation and Business Performance Non-Financial. Nonetheless, the Conditional moderation analysis with market orientation as an independent variable reflects the 24% moderation effect at 16th percentile conditional level, and 13% moderation effect with the conditional level of 50th percentile. At the low interfunctional co-ordination of (16th percentile), there is a significant (24%) positive relationship between market orientation and Business Performance Non-Financial.

Kanovska and Tomaskova (2012) found interfunctional co-ordination to be critical in embedding a market oriented culture in an organisation. They noted that effective market orientation is implemented organisation wide, in thal all units must work as a collective to generate competitor and customer intelligence, disseminate and generate a rich response to gathered market information. Furthermore, advantages of closer co-operation and interdependency is the creation of superior value and goodprocesses' responsiveness to market.

5.4.4.3 Opportunity exploitation

Interfunctional Co-ordination does not significantly moderate the relationship between Opportunity Exploitation and Business Performance Financial, therefore the hypothesis is not supported and it is also non-significant.

Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non-Financial. The hypothesis is supported and significant as the moderation analysis reported. Additionally, the conditional moderation analysis shows the 38% moderation effect at 16th percentile conditional level, and 22% moderation effect at the conditional level of 50th percentile. Interestingly, the more the conditional levels increase the less the moderation effect becomes. When interfunctional co-ordination is introduced at a low (16th percentile), there is a significant (22%) positive relationship between Opportunity Exploitation and Business Performance Non-Financial.

Based on Zobel (2017), Opportunity exploitation is about the capacity to improve, extend, and apply the existing organisational processes and routines, competencies and technology to create new or improved products or services. Therefore it makes logical sense that performance would be enhanced through co-ordinated efforts in integrating its internal resources (Babu, 2018), and modification of practices, and processes, in promoting innovation and market needs based products and services (Webb, Ireland, Hitt, Kistruck & Tihanyi, 2011).

5.5 Summary of the chapter

The purpose of chapter 5 was to assess the extent to which effective interfunctional co-ordination significantly moderates the relationship between entrepreneurial orientation , market orientation, opportunity exploitation and business performance. In addition, to assess the extent to which the variables of entrepreneurial orientation, market orientation and opportunity exploitation determine the business performance.

The empirical findings presented in chapter 4, were reflected on and comprehensively discussed in relation to the literature review, which is presented in chapter 2. The chapter concludes that both entrepreneurial orientation, market orientation and opportunity exploitation are important contributors to business performance from a financial and non-financial perspective. Furthermore, interfunctional co-ordination moderates the relationship between market orientation and business performance financial. Additionally interfunctional co-ordination moderates the

relationship between market orientation and business performance non-financial only at a conditional moderation level. Moreover, interfunctional co-ordination does not moderate the relationship between entrepreneurial orientation and Business performance financial and Business Performance non-financial. Lastly, interfunctional co-ordination moderates the relationship between opportunity exploitation and business performance non-financial.

The implications of the findings are discussed in the next chapter, together with the recommendations.

CHAPTER 6: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

6.1 Introduction

The study examines pertinent factors which drive the company's ultimate performance, namely, entrepreneurial orientation , market orientation and opportunity exploitation, and the instrumentality of interfunctional co-ordination as a moderator. The chapter draws the conclusion about the study, furthermore the theoretical and practical implications, contributions, limitation are discussed and the recommendations for future research are summarised.

6.2 Conclusions of the study

The main aim of the study was to examine the extent to which interfunctional co-ordination significantly moderates the relationship between entrepreneurial orientation , market orientation, opportunity exploitation and business performance. In addition to assess the extent to which the variables of entrepreneurial orientation, market orientation and opportunity exploitation determine the business performance. The correlation analysis showed significant relationships between entrepreneurial orientation (Eze, 2018; Wardi, Susanto, Abror & Abdullah, 2018), market orientation (Octavia & Ali, 2017; Masadeh, Al-Henzab, Tarhini & Obeidat, 2018), opportunity exploitation (Rangus & Slavec, 2017; Chaudhary & Batra 2018) and business performance for both financial and non-financial elements. Whilst the regression analysis indicated that both entrepreneurial orientation , market orientation and opportunity exploitation significantly and positively impact business performance financial. Only opportunity exploitation significantly and positively influences business performance non-financial. On the other hand, entrepreneurial orientation and market orientation has some impact, although non-significant on business performance non-financial.

The moderation analysis indicated that interfunctional co-ordination significantly moderates the relationship between market orientation and business performance financial, this is not surprising as it aligns with the findings of Greenley (1995) and Jaworski and Kohli (1993) who emphasise market orientation to be critical towards business success. Such performance is better explained by capabilities pertaining to intelligence generation, intelligence dissemination and responsiveness to customers and markets (Kohli & Jaworski, 1990). Furthermore, Day (1994) iterates that marketing oriented organisations implement the marketing concept, again they have

superior market sensing capabilities which equips them to grow the market share and also deliver the customer value.

Moreover, interfunctional co-ordination was found not to significantly moderate the relationship between entrepreneurial orientation, opportunity exploitation and business performance financial. Notwithstanding the results, correctly implemented interfunctional co-ordination will strengthen and improve entrepreneurial efforts such as strategic renewal, creation of new ventures and products, as proposed by Jiménez-Barrionuevo, Molina and García-Morales (2019). Furthermore, Lwamba, Bwisa, and Sakwa (2014) advocate for entrepreneuship in the improvement of performance through the implementation of new ideas, such as new products and processes, entry into new markets, venturing into new and unknown eventualities, while calculating and mitigating risk in pursuit of value adding business opportunities. According to Lwamba, Bwisa, and Sakwa (2014), both financial and non-financial performance will be enhanced with the continued adoption of market strategies which will take opportunity exploitation ahead, in order to grow market share. Furthermore, the collective and integrated efforts associated with the proactivity of interfunctional co-ordination will see to the identification of new opportunities in order to create sustainable competitive advantage, and thus performance.

Furthermore, interfunctional co-ordination significantly moderates the relationship between market orientation (only conditional effects), opportunity exploitation and business performance non-financial. Due to the declining economic performance of South Africa, based on Mkhize (2019), there is a need for high growth and entrepreneurial firms, with performance characterised by competitiveness, new products and services in stimulating the economic activities (Dauda, Nyman, & Cassim, 2019). The results play a critical role in the identification of effective performance enhancing strategies in a South African corporate context.

6.2.1 Conclusions of sub-research question 1

To what extent does Entrepreneurial Orientation positively impact on Business Performance?

Entrepreneurial Orientation has a low but positive impact on Business Performance Financial, the hypothesis was supported and significant. Furthermore, Entrepreneurial Orientation was found to positively impact on Business Performance Non-Financial, however the impact is low. This results are supported but not significant. Partially consistent with the results, Tang,

Tang and Cowden (2017)'s literature analysis highlights a strong link between entrepreneurial orientation and performance at a financial and non-financial level. Wardi, Susanto, Abror and Abdullah (2018) indicate that organisations with a strong entrepreneurial orientation are likely to show better performance, and more specifically, in a financial sense. Eze (2018) argues that entepreneriral inclinations in the corporate context with elements of strategic renewal and corporate venturing will affect performance significantly.

Octavia and Ali (2017) attributes the performance of firms to entrepreneurial orientation , in that the firm is able to address competition and market threats quickly and timeously, as well as being able to capture opportunities.

6.2.2 Conclusions of sub-research question 2

To what degree does Market Orientation positively impact on Business Performance?

Market Orientation has a moderately positive impact on Business Performance Financial, the results are both supported and found to be statistically significant. Notably, Market Orientation positively impacts on Business Performance Non-Financial, however the impact is low, therefore the hypothesis is supported but not significant.

In alignment with the literarure, market orientation contributes towards business performance (Babu, 2018), through the processes of collecting customer insights that are critical in aligning organisational expertise and objectives to market opportunities. Chaudhary and Batra (2018) highlight the positive implications of market orientation on the firm's success, as market oriented firms are driven by the business philosophy and culture which prioritises and keeps the customers at the centre. Masadeh, Al-Henzab, Tarhini and Obeidat (2018) strongly argue for market orientation to be critical towards business success.

6.2.3 Conclusions of sub-research question 3

To what extent does Opportunity Exploitation positively influence Business Performance?

Opportunity Exploitation has a moderate positive influence on Business Performance Financial, the hypothesis is supported and significant. Interestingly, Opportunity Exploitation has a medium positive influence on Business Performance Non-Financial, the hypothesis is supported by the results and it is also found to be significant .

Rangus and Slavec (2017) advocate for the firm's investment in the development of absorptive capacity, which includes the elements of opportunity exploitation, as they are a critical competence and means to contributing to competitiveness and performance. Chaudhary and Batra (2018) assert that absorptive capacity, which includes opportunity exploitation, positively impacts business performance.

Beniteza, Llorensb, and Braojosb, (2018) argue that the capacity to explore and exploit opportunities provides an understanding of why and how some organisations perform better than the others.

6.2.4 Conclusions of sub-research question 4

To what extent does Interfunctional Co-ordination moderate the relationship between Entrepreneurial Orientation and Business Performance?

Interfunctional Co-ordination does not moderate the relationship between Entrepreneurial Orientation and Business Performance Financial , the hypothesis is not supported and also not significant. Opposite to these findings, Marjanova, Sofijanova, Davcev and Temjanovski (2015) found interfunctional co-ordination to be critical in improving profitability, performance and competitiveness of entreprenerial firms in a developing economy's context. Furthermore Interfunctional Co-ordination does not significantly moderate the relationship between Entrepreneurial Orientation and Business Performance Non-Financial, this hypothesis is not supported and it is found to be non-significant. Contrary to the empirical outcomes, Daud, Remli and Muhammad (2013) found interfunctional co-ordination to have a positive impact on organisational performance.

Lwamba, Bwisa, and Sakwa (2014) mention entrepreneurial efforts such as competitive strategies to outperform industry rivals, implementation of innovative ideas and translating them into tangible products and services, being proactive in the identification of new market demands, taking calculated risks and also finding risk mitigation tactics, and also introducing new products and services would improve performance, when these activities are well integrated and co-ordinated.

6.2.5 Conclusions of sub-research question 5

To what extent does Interfunctional Co-ordination moderate the relationship between Market Orientation and Business Performance?

Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Financial, the moderation effect is medium, whilst the hypothesis is supported and significant. The finding is not surprising, based on Trainor, Rapp, Beitelspacher and Schillewaert (2011), who perceive interfunctional co-ordination as a component of market orientation, together with customer and competitor orientation.

Secondly, Interfunctional Co-ordination in model 1, does not significantly moderate the relationship between Market Orientation and Business Performance Non-Financial. Nonetheless, the Conditional moderation analysis with market orientation as an independent variable reflects the 24% moderation effect at 16^{th} percentile conditional level, and 13% moderation effect with the conditional level of 50^{th} percentile. At low interfunctional co-ordination of (16^{th} percentile), there is a significant (24%) positive relationship between market orientation and Business Performance Non-Financial. Therefore the moderation effects are found to be moderate.

Daud, Remli and Muhammad (2013) emphasise that interfunctional co-ordination is critical for integrated and co-ordinated utilisation of company resources, improvement of communication across various departments, working together towards shared vision and goals, robust problem solving and innovation. Furthermore, interfunctional co-ordination was utilised as a moderator in studies seeking to improve innovation, customer and market orientation (Auh & Menguc, 2005; Babu, 2018; Chebet, Gabriel & Bonuke, 2018). Ho, Nguyen, Adhikari, Miles and Bonnie (2018) argue from a market orientation perspective that interfunctional co-ordination creates value for the customer, as it improves mutual sharing, and dissemination of critical information, which is pertinent for deliberations relating to product improvements, development and launching.

6.2.6 Conclusions of sub-research question 6

To what extent does Interfunctional Co-ordination moderate the relationship between Opportunity Exploitation and Business Performance?

Interfunctional Co-ordination does not significantly moderate the relationship between Opportunity Exploitation and Business Performance Financial, therefore the hypothesis not

supported and is also non-significant. Furthermore, Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non-Financial, the moderation effect is found to be medium The hypothesis is supported and significant as the moderation analysis highlighted.

Tajeddini, Altinay and Ratten (2017) highlight the moderating role of interfunctional co-ordination in enabling the effective exploitation of market insights which lead to innovativeness for product and service improvements. Menguc (2005) recognises the interactive and enabling effect of interfunctional co-ordination in improving business performance through innovative practices.

6.3 Implications of the findings and contributions of the study

The results of the exploratory factor analysis necessitated a split in the dependent variable of Business Performance to Financial and Non-Financial components (Shah & Dubey 2013; Rajapathirana & Hui 2018). Most of the studies in the field of entrepreneurship rarely assess both the elements of financial and non-financial aspects of performance. In general, the results suggests that there is a need to seriously consider the relationships of various strategies (such as entrepreneurial orientation , market orientation and opportunity exploitation, as well as interfunctional co-ordination) and their impact on business performance at both financial and non-financial levels since they yield heterogeneous performance outcomes.

At a glance, the findings relating to the role on interfunctional co-ordination in improving the business performance (financial and non-financial), highlight that the interactions with entrepreneurial strategies are both negative and non-significant. This means that entrepreneurial strategies do not work well with interfunctional co-ordination as a moderator. The results are counterintuitive, in that the literature asserts that interfunctional co-ordination leverages resources through collaborative efforts, improved communication and integration among the departments in adapting to market and customer demands (Rapp, Beitelspacher, Schillewaert &Baker 2012).

Nonetheless, as a distinction is made between various strategies (entrepreneurial orientation, market orientation, opportunity exploitation in the interaction with interfunctional co-ordination) confirmatory clarity is reached in that not all the independent variables involving the interactions of interfunctional co-ordination significantly enhance performance, although the literature reports

on the benefits of interfunctional co-ordination as a performance enhancer (Webb, Ireland, Hitt, Kistruck & Tihanyi, 2011; Babu, 2018) as well as a moderator (Trainor, Rapp, Beitelspacher & Schillewaert, 2011).

Of the six moderation scenarios analysed, only three have a significant impact on business performance (financial and non-financial). Results for significant moderation impacting business performance at both a financial and non-financial level is only realised with market orientation as an independent variable, this finding is consistent with Kanovska and Tomaskova (2012), who iterate that interfunctional co-ordination underpins and strengthens market orientation, while a significant interaction is realised with opportunity exploitation only at a non-financial level. The results suggests that the interactive effect of interfunctional co-ordination on business performance at a financial and non-financial level varies depending on the strategy being applied (eg. Entrepreneurial orientation , market orientation or opportunity exploitation).

Importantly, both entrepreneurial orientation and market orientation have a positive and significant impact on business performance financial. Furthermore, entrepreneurial orientation and market orientation have an impact, though non-significant on business performance non-financial. Opportunity exploitation, on the other hand, has a positive and significant impact on both business financial and non-financial aspects.

In strengthening entrepreneurship in the organisational context, Urban and Verachia (2019) emphasise the importance of alignment of internal corporate processes, systems, behaviours, structure and also the culture. Aspects such as rewards, senior management support and a clear articulation of goals provides an explicit signal about desired actions and behaviours related to outputs. Similarly, Scheepers, Bloom, Hough (2008b) assert that management can promote innovativeness through rewarding and recognising entrepreneurial behaviours, championing of creative ideas, providing resources to sponsor entrepreneurial opportunities.

6.3.1 Theoretical implications

Resource based view provides an explanation and foundation of how complementary strategies such as entepreneurship, market orientation and opportunity exploitation can be collectively

bundled in an organisational context in order to develop value generating capabilities in the organisation. Chuang and Lin (2017) assert that organisational strategic resources are valuable in that, when applied, they produce value adding solutions which positively impact on performance.

Moreover, the role of interfunctional co-ordination is better illustrated by the dynamic capability theory which put emphasis on collaboration, integration and effective communication. Furthermore, how resources, skills and capabilities can be deployed to increase capacity and ability to adapt to changing market needs, this dynamic capability enhances market responsiveness and utilimately, business performance. Importantly, dynamic capabilities enable the firms to modify, expand and reconfigure internal capabilities to meet external demands, such capabilities facilitate opportunity exploitation (Liu, Yu & Wu, 2019).

The human resource based view provides an insight into how organisational capabilities can be developed and resources be utilised and allocated in order to improve performance. Marvel, Davis and Sproul (2016) emphasise that it is through human capital that entrepreneurial activities are promoted. According to Chuang and Lin (2017), business resources alone cannot create value, however human resources which provide the business know-how, skills, knowledge, and ideas can be combined with other complementary resources to build unique and distinct capabilities.

6.3.2 Practical implications

The study informs practice by indicating the importance of both entrepreneurial orientation , market orientation, as well as opportunity exploitation, in the improvement of the financial performance of a business, additionally, that non-financial performance can be improved through opportunity exploitation strategies. As far as the moderating effect of interfunctional co-ordination is concerned, the results show that not in all cases is interfunctional co-ordination desirable, more specifically with entrepreneurial orientation as an independent variable for both financial and non-financial aspects as dependent variables. However, corporate entrepreneurs can consider the integration of interfunctional co-ordination when opportunity exploitation strategies are being implemented in order to achieve non-financial performance. Furthermore, market orientation strategies are better implemented effectively through interfunctional co-ordination, and yield both financial and non-financial performance outcomes.

6.3.3 Contributions of the study

The study makes critical contributions to the literature in terms of confirming the empirical evidence with regard to the relationships between organisational strategies such as entrepreneurial orientation , market orientation, opportunity exploitation, and their interactions with interfunctional co-ordination in contributing towards business performance. From a theoretical standpoint, the study contributes towards the literature in the area of corporate entrepreneurship, through illustrating how the resource based view, human capital theory and dynamic capability theory explain strategic capabilities (of entrepreneurial orientation , market orientation opportunity exploitation and interfunctional co-ordination) impact on business performance.

6.4 Limitations of the study

The study presents a few limitations, which provide potential avenues for future research. Firstly, the study was a cross-sectional design as the data was collected once-off at a point in time, as opposed to repeatedly over a reasonable and long timeframe. Therefore, causality is not feasible in the interpretation of the results and the findings must be viewed with an exploratory lense. Secondly, subjective measures of business performance were utilised as opposed to actual measures of performance, such as sales, profitability and market share percentages. Actual performance data would be potentially difficult to access due to confidentiality issues, therefore the subjective data is deemed as the best alternative which is accessible, as advised by Chaudhary and Batra (2018). Thirdly, the sample comprised employees from companies based mainly in Gauteng, and Johannesburg in particular, a wider sample from other provinces would enrich the study further with more depth and diversity in support of the generalisability of the findings.

6.5 Recommendations for future research

Future research could benefit from a study of this nature if a longitudinal design is adopted where the model is studied over time to provide more concrete and substantial insights. A qualitative research approach would be instrumental in unpacking and substantiating the findings of the study, and provide further clarification concerning the outcomes, in terms answering the ‘why’ and also ‘how’ questions. The unpacking of the reasons why entrepreneurial strategies do not interact productively with interfumctional co-ordination as a moderator in a South African, corporate context would add value to understanding more about performance enhancing

approaches. Moreover, the study would be richer if expanded geographically as well as in terms of the increase in the number of respondents for the purposes of generalisability. Finally, the scope of the study could be extended to test if the non-financial outcomes impact on financial performance.

LIST OF REFERENCES

African Development Bank Group (2019). *Southern Economic Outlook: Macro-economic performance and prospects. Regional integration and private sector development.* Tunis: The Bank.

Aliyu, A. A., Bello, M. U., Kasim, R. & Martin, D. (2014) Positivist and Non-Positivist Paradigm in Social Science Research: Conflicting Paradigms or Perfect Partners. *Journal of Management & Sustainability,* 4(3), 79-95.

Aljanabi, A. R. A. & Noor, N. A. M. (2015). The Mediating role of Market Orientation on Entrepreneurial Orientation, Absorptive Capacity and Technological Innovation Capabilities. *Asian Social Science,* 11(5), 219-234.

Arend, R. J. (2014). Entrepreneurship and dynamic capabilities: how firm age and size affect the 'capability enhancement–SME performance' relationship. *Small Business Economics,* 42(1) 33–57. DOI 10.1007/s11187-012-9461-9.

Atieno, O. P. (2009). An Analysis of The Strengths and Limitation of Qualitative and Quantitative Research Paradigms. *Problems of education in the 21st century,* 13-18.

Auh, S. & Menguc, B. (2005). Top management team diversity and innovativeness: The moderating role of interfunctional coordination. *Industrial Marketing Management,* 34, 249–261.

Babu, M. M. (2018) Impact of firm's customer orientation on performance: the moderating role of interfunctional coordination and employee commitment. *Journal of Strategic Marketing,* 26(8), 702-722. DOI: 10.1080/0965254X.2017.1384037

Baškarada, S. and Koronios, A.(2018). The 5S organizational agility framework: a dynamic capabilities perspective. *International Journal of Organizational Analysis,* 26 (2), 331-342.

Beniteza, J., Llorensb, J. Braojosb, J. (2018). How information technology influences opportunity exploration and exploitation firm's capabilities. *Information & Management,* 55, 508-523.

Bickel, P. J. & Lehmann, E. L. (2012). Descriptive Statistics for Nonparametric Models. *The Annals of Statistics,* 3(5), 1038-1044. Berlin: Springer Science Business Media.

Botma, Y., Greeff, M., Mulaudzi, F. M., & Wright, S. C. D. (2010). *Research in Health Sciences.* Cape Town: Pearson Education.

Bosma, N., Content, J.,Sanders, M. & Stam, E. (2018). Institutions, entrepreneurship, and economic growth in Europe. *Small Business and Economics*, 51, 483–499.

Brettel, M., Chomik,C. & Flatten, T.C. (2015). How Organizational Culture Influences Innovativeness, Proactiveness, and Risk-Taking: Fostering Entrepreneurial Orientation in SMEs, *Journal of Small Business Management*, 53(4), 868-885.

Brown, T., Davidsson, P., & Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of entrepreneurship as opportunity-based firm behavior. *Strategic Management Journal, 22* (10), 953–968.

Buli, B. M. (2017). Entrepreneurial orientation, market orientation and performance of SMEs in the manufacturing industry Evidence from Ethiopian enterprises. *Management Research Review*, 40 (3), 292-309.

Camisón, C. & Forés, B. (2010). Knowledge absorptive capacity: New insights for its conceptualization and measurement. *Journal of Business Research*, 63, 707–715.

Chaudhary, S. & Batra, S. (2018). Absorptive Capacity and Small Family Firm Performance: Exploring the Mediation Processes. *Journal Of Knowledge Management*, 22 (6), 1201-1216.

Chebet, S. C., Gabriel, S. & Bonuke, R. (2018). The Conditional Effect of Inter Functional Coordination on the Relationship between Customer Orientation and Firm Performance: Empirical Evidence from Manufacturing Firms, Nairobi, Kenya. *International Journal of Economics, Commerce and Management*, 6(9), 611-629.

Choi, Y.R. , Lévesque, M. & Shepherd, D.A. (2008). When should entrepreneurs expedite or delay opportunity exploitation? *Journal of Business Venturing* 23, 333–355.

Choi, J., Peters, M. & Mueller, R. O. (2010). Correlational analysis of ordinal data: from Pearson's r to Bayesian polychoric correlation. *Asia Pacific Educational Review*, 11, 459–466.

Chuang, S. H. & Lin, H. N. (2017). Performance implications of information-value offering in e-service systems: Examining the resource-based perspective and innovation strategy. *Journal of Strategic Information Systems*, 26, 22–38.

Cooper, D. & Schindler, P. (eds.) (2014). *Business Research Methods*. New York, NY: McGraw Hill/Irwin

Covin, J.G. & WalesW.J. , (2011). The Measurement of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice*, 677-702.

Covin, J. G., & Miles, M. P. (2007). Strategic use of corporate venturing. *Entrepreneurship Theory and Practice*, *31*(2), 183–207.

Covin, J. G. & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments, *Strategic Management Journal*, 10(1), 75-87.

Covin, J. G., & Slevin, D.P. (1991). A Conceptual Model of Entrepreneurship As Firm Behavior, *Entrepreneurship: Theory and Practice* 16(1), 7– 25.

Criado-Gomis, A., Iniesta-Bonillo, M. A. & Cervera-Taulet, A. (2018). Sustainable entrepreneurial orientation within an intrapreneurial context: effects on business performance. *International Entrepreneurship Management Journal*, 14, 295–308.

Czarniewski S.(2016). Small and Medium-Sized Enterprises in the Context of Innovation and Entrepreneurship in the Economy. Polish Journal ff Management Studies, 13(1), 30-39.

Daud, W. N. W., Remli, N. & Muhammad, H. (2013). Market Orientation and Performance: A Study of Takaful Performance in Malaysia. *Asian Social Science*, 9 (4), 240-247.

Dauda, S. Nyman, S. & Cassim, A. (2019). *Product Market Competition, Productivity, and Jobs: The Case of South Africa. Equitable Growth, Finance and Institutions Practice Group*.. Policy Research Working Paper 9084. Washington, DC.: The World Bank.

Day, G.S. (1994). The capabilities of market-driven organization. *Journal of Marketing*, 58, 37-52.

De Saá-Pérez, P. & García-Falcón, J. M. (2002). A resource-based view of human resource management and organizational capabilities development. *International Journal of Human Resource Management*, 13(1),123–140.

Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effectiev corporate entrepreneurship. *The Academy of Management Executive, 19*(1), 147-156.

Department of Labour, South Africa (2020). *20th Commission For Employment Equity* Annual Report 2019/20. Pretoria: The Department.

Department of Statistics, South Africa (2020a). *Quarterly employment statistics (QES) June 20*. Pretoria: The Department.

Department of Statistics, South Africa (2020b). *Business impact survey of the COVID-19 pandemic in South Africa.* Pretoria: The Department.

Department of Statistics, South Africa (2020c). *Vulnerability of youth in South Africa Labour Market.* Quarterly Labour Force Survey Q1 June 2020. Pretoria: The Department.

Department of Statistics, South Africa (2020d). *Quarterly employment statistics (QES) September 20*. Pretoria: The Department

Etikan, I., Musa, S. A. & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.

Eze, B. U. (2018). Corporate Entrepreneurship and Manufacturing Firms' Performance. *Emerging Markets Journal*, 8(1), 11-17. DOI 10.5195/emaj.2018.146.

Fallatah, M. (2019). Offshoring and Organizational Innovation: The Moderating Roles of Absorptive Capacity and Inter-Functional Integration. *International Business Research*, 12(10), 57-62.

Farooq, R. (2018). A conceptual model of knowledge sharing. *International Journal of Innovation Science*, 10(2), 238-260.

Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th Edition). London: Sage Publications.

Flatten, T. C., Engelen, A., Zahra, S. A. & Brettel, M. (2011). A measure of absorptive capacity: Scale development and validation. *European Management Journal*, 29, 98– 116

Fritsch, M. & Wyrwich, M. (2017). The effect of entrepreneurship on economic development an empirical analysis using regional entrepreneurship culture. *Journal of Economic Geography*, 17, 157–189.

Galawe, N. J. (2017). *Endogenous and Exogenous risk factors in the success of South Africa small enterprise*. PhD thesis. Johannesburg: University of Witwatersrand.

George, N.M., Parida,V., Lahti. T. & Wincent, J. (2016). A systematic literature review of entrepreneurial opportunity recognition: insights on influencing factors. *International Entrepreneurship and Management Journal*, 12, 309–350.

Goldman, A. & Grinstein, A. (2010). Stages in the development of market orientation publication activity: a longitudinal assessment. *European Journal of Marketing*, 44(10). 1384-1409.

Gonza´lez-Benito, O., Gonza´lez-Benito, J. & Mun˜oz-Gallego, P. A. (2009). Role of entrepreneurship and market orientation in firms' success. *European Journal of Marketing*, 43(4), 500-522

Granello, D. H. & Wheaton, J. E. (2004) Online Data Collection: Strategies for Research. *Journal of Counseling & Development***,** 82, 387-393.

Greenley, G.E. (1995). Market orientation and company performance: empirical evidence from UK companies. *British Journal of Management*, 6, 1-13.

Grinstein, A. (2008). The relationships between market orientation and alternative strategic orientations.AMeta-analysis. *European Journal of Marketing*, 42 (2), 115-134.

Hayes, A. F. & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations and implementation. *Behaviour Research and Therapy*, 98, 39-57.

Heale, R. & Twycross, A. (2015). Validity and reliability in quantitative research. *Evidence-Based Nursing*, 18(3), 66-67.

Ho, K. L. P., Nguyen, C. N., Adhikari, R., Miles, P. M. & Bonnie, L. (2018). Exploring market orientation , innovation, financial performance in agricultural value chain in emerging economies. *Journal of Innovation and Knowledge*, 3(1), 154-163.

Hornsby, J. S., Kuratko, D. F., Holt, D. T. & Wales, W. J. (2013). Assessing a measurement of organizational preparedness for corporate entrepreneurship. *Journal of Product Innovation Management*, 30(5), 937–955.

Hübnerová, Z. , Tomášková, E. & Bednář, J. (2020). Identification of Interfunctional Coordination Items Important for Business Performance of Smes. *Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, 17(1), 169-179.

Hult, G.T.M., Snow, C.C., & Kandemir, D. (2003). The role of entrepreneurship in building cultural competitiveness in different organizational types. *Journal of Management*, 29(3), 401–426

Hult, G.T. M., & Ketchen, D. J. (2001). Does market orientation matter? A test of the relationship between positional advantage and performance. *Strategic Management Journal* 22(9): 899–906.

Fu, M. & Shen, H. (2020). Covid-19 and Corporate Performance in the Energy Industry. Energy Research Letters, 1(1), 1-5.

Industrial Development Corporation (2010). *Sectoral Trends: Performance of the primary and secondary sectors of the South African economy*. Department of Research and Information 4th Quarter, 1-52. Johannesburg: IDC.

Ireland, R.D., Kuratko, D. F., Covin, J.G. (2003). Antecedents, Elements, and Consequences of Corporate Entrepreneurship Strategy. *Academy of Management Conference Paper*, 1-6.

Ireland, R. D., Kuratko, D. F., & Morris, M. H. (2006a). A health audit for corporate entrepreneurship:Innovation at all levels, Part I. *Journal of Business Strategy*, 27(1), 10-17.

Ireland, R.D., Covin, J.G. & Kuratko, D. F. (2009). Conceptualizing Corporate Entrepreneurship Strategy. *Entrepreneurship Theory and Practice*, 19-39.

Ireland, R.D., Hitt, M.A., & Sirmon, D.G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, *29*(6), 963–989.

Irtaimeh, H. J. (2018). Impact of Strategic Leadership Competencies on Enhancing Core Competencies in Organizations: Applied Study on Al-Manaseer Group for Industrial & Trading. *Modern Applied Science*, 12(11), 169-180.

Javalgi, R. G., Hall, K. D. & Cavusgil, S. T. (2014). Corporate entrepreneurship, customer-oriented selling, absorptive capacity, and international sales performance in the international B2B setting: Conceptual framework and research propositions. *International Business Review*, 23(1), 1193–1202.

Jaworski, B.J. & Kohli, A.K. (1993). Market orientation: antecedents and consequences. *Journal of Marketing*, 57, 53-70.

Jiménez-Barrionuevo, M. M., Molina, L. M. and García-Morales, V. J. (2019). Combined Influence of Absorptive Capacity and Corporate Entrepreneurship on Performance. *Sustainability*, 11, 1-26.

Jogaratnam, G. (2017). The effect of market orientation, entrepreneurial orientation andhuman capital on positional advantage: Evidence from the restaurant industry. *International Journal of Hospitality Management*, 60, 104–113. http://dx.doi.org/10.1016/j.ijhm.2016.10.002.

Kahn, K.B. (1998). Characterising Interfuctional Coordination and its Implications for Market Orientation and Performance. American Marketing Association, 321-327.

Kanovska, L. & Tomaskova, E. (2012). Interfunctional Coordination at Hi-Tech Firms. *Inzinerine Ekonomika-Engineering Economics*, 23(1), 70-76.

Kearney, C. & Hisrich, R. & Roche, F. (2008). A conceptual model of public sector corporate entrepreneurship. *International Entrepreneurship and Management Journal*, 4, 295–313.

Kelley, D. , Neck, H.M. , O'Conner, G.C. & Paulson, A. (2005). Corporate entrepreneurship through radical innovation: key organization and initiative level mechanisms. In Elfring, T. (2005) *Corporate Entrepreneurship and Venturing*. New York : Springer Science and Business Media , 23-48.

Khoza, R., Schachtebeck, C. & Groenwald, D. (2017). Corporate entrepreneurship climate: an investigation of South Africa acounting SMES. *Journal of Accounting and Management*, 7 (3), 1-13.

Kohli, A. K. & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of Marketing*, 54, 1-18.

Kollmann, T., Stöckmann, C., Niemand, T., Hensellek, S. & de Cruppe, K. (2020). A configurational approach to entrepreneurial orientation and cooperation explaining product/service innovation in digital vs. non-digital startups. *Journal of Business Research* (In Press). https://doi.org/10.1016/j.jbusres.2019.09.041

Kozubíková, L., Sopková, G., Krajčík, V. & Tyll, L. (2017). Differences in innovativeness, proactiveness and competitive aggressiveness in relation to entrepreneurial motives. *Journal of International Studies*, 10(4), 207-218.

Kuckertz, A., Kollmann, T., Krell, P. and Stöckmann, C. (2017). Understanding, differentiating, and measuring opportunity recognition and opportunity exploitation. *International Journal of Entrepreneurial Behavior & Research*, 23(1),78-97.

Kuratko, D. F., Hornsby, J. S., & Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global economic reality. *Small Business Economics*, 45(2), 245–253.

Kwinje, C., Mwando-Gukushu, M. & Zengeni, N. (2020). Corporate Entrepreneurship Strategy and the Survival of Small to Medium Tourism Enterprises in Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, 9(4) 732-746.

Leedy, P. D. & Ormrod, J. E. (2016). *Practical Research: Planning and Design*. (11th Edition). Boston: Pearson Education.

Liu, L., Yu , B. & Wu, W. (2019). The Formation and Effects of Exploitative Dynamic Capabilities and Explorative Dynamic Capabilities: An Empirical Study. *Sustainability*, 11, 1-21. doi:10.3390/su11092581.

Lu , Y., Wu, J., Peng, J. & Lu, L. (2020). The perceived impact of the Covid-19 epidemic: evidence from a sample of 4807 SMEs in Sichuan Province, China, *Environmental Hazards*, 19(4), 323-340, DOI: 10.1080/17477891.2020.1763902,

Lumpkin, G.T. & Dess, G.G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, 21 (1),135-172.

Lwamba, N. M., Bwisa, H., Sakwa, M. (2014). Exploring the Effect of Corporate Entrepreneurship on Financial Performance of Firms: Evidence from Kenya's Manufacturing Firms. *International Journal of Academic Research in Business and Social Sciences*, 4(1), 352-370.

McFadzean, E. , O'Loughlin, A. & Shaw, E. (2005). Corporate entrepreneurship and innovation part 1: the missing link. *European Journal of InnovationManagement*, 8 (3), 350-372.

María, R.M., Martina, M.B., & Luz, S.P. (2007). Entrepreneurial orientation and international commitment. *Journal of International Entrepreneurship, 5*(3-4), 65-84.

Marjanova, T. J., Sofijanova, E., Davcev L. & Temjanovski, R. (2015). Inter-Functional Coordination And Entrepreneurial Firms' Financial Performance: A Developing Economy. *Economic development and entrepreneurship in transition economies: Assessment of the last 25 years, going beyond the `transition`*, 4 (4), 844-854.

Marvel, M. R., Davis, J. L. & Sproul, C. R. (2016). Human Capital and Entrepreneurship Research: A Critical Review and Future Directions. *Entrepreneurship Theory and Practice*, 599-626.

Masadeh, R., Al-Henzab, J., Tarhini, A. & Obeidat, B.Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. *Benchmarking: An International Journal*, 25 (8), 3117-3142.

Matsuno, K., Mentzer, J.T. & Özsomer, A. (2002). The Effects of Entrepreneurial Proclivity and Market Orientation on Business Performance. *Journal of Marketing*, 66, 18–32.

Mcdonald, S., Gan, B.C., Fraser, S.S., Oke, A. & Anderson, A.R., (2015). A review of research methods in entrepreneurship 1985-2013. *International Journal of Entrepreneurial Behavior & Research*, 21 (3) 291 – 315**.**

Medeiros, S. A., Christino, J. M. M., Gonçalves, C. A., & Gonçalves, M. A. (2020). Relationships among dynamic capabilities dimensions in building competitive advantage: a conceptual model. *Gestão & Produção*, 27(1), e3680. https://doi.org/10.1590/0104-530X3680-20

Migliori, S., Pittino, D., Consorti, A. & Lucianetti, L. (2019). The relationship between Entrepreneurial Orientation, Market Orientation and Performance in University Spin-Offs.

International Entrepreneurship Management Journal, 15, 793–814. https://doi.org/10.1007/s11365-017-0488-x.

Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P.P., Morse, E.A. & Smith, J.B. (2004). The Distinctive and Inclusive Domain of Entrepreneurial Cognition Research. *Entrepreneurship: Theory and Practice* 28(6), 505–518.

Mkhize, N. I. (2019). The Sectoral Employment Intensity of Growth in South Africa. *Southern African Business Review*, 23, 1-24.

Morris, M. H., Kuratko, D. F., & Covin, J. G. (201 1). Corporate entrepreneurship and innovation (3rd ed.). Cincinnati: Cengage/SouthWestern Publishers.

Na, Y. K., Kang, S. & Jeong, H. Y. (2019). The Effect of Market Orientation on Performance of Sharing Economy Business: Focusing on Marketing Innovation and Sustainable Competitive Advantage. *Sustainability*, 11, 1-19.

Narteh, B. & Braimah, M. (2020). Corporate reputation and retail bank selection: the moderating role of brand image, *International Journal of Retail & Distribution Management*, 48(2), 109-127.

Narver, J.C. and Slater, S.F. (1990). The effects of a market orientation on business Profitability. *Journal of Marketing*, 54, 20-35.

Octavia, A. & Ali, H. (2017). The Model of Market Orientation, Entrepreneurial Orientation and Business Performance of Small and Medium Enterprises. *International Review of Management and Marketing*, 7(3), 331-337.

Ogunsiji, S. & Ladanu, W.K. (2017). A Theoretical Study of Performance Measures in the Strategic and Corporate Entrepreneurship of Firms. *International Journal of Life Sciences*, 1(1),49-57.

Oladimeji, M. S., Abosede, A. J., & Eze, B. U. (2019). Corporate Entrepreneurship and Service Firms' Performance In Nigeria. *Economic Review :Journal of Economics and Business*, 17(1),2-14

Oosthuizen, J. H. (2015). Corporate Entrepreneurship. In Venter, R. & Urban, B. (2015). *Entrepreneurship Theory in Practice* (3rd ed.). Cape Town: Oxford Southern Africa.

Omar, N.A., Aris, H. M. & Nazri, M.A. (2016). The Effect of Entrepreneurial Orientation, Innovation Capability and Knowledge Creation on Firm Performance: A Perspective on Small Scale Entrepreneurs. *Journal of Pengurusan 48, 187 – 200.*

Pallant, J. (2016). *SPSS Survival Manual*: *A Step by Step Guide to Data Analysis Using IBM SPSS*. (6th edition). Milton Keynes: Open University Press.

Pantouvakis, A. Vlachos, I. & Zervopoulos, P. D. (2017). Market orientation for sustainable performance and the inverted-U moderation of firm size: Evidence from the Greek shipping industry. *Journal of Cleaner Production*, 165, 705-720.

Patel, P. C. (2018). Opportunity related absorptive capacity and entrepreneurial alertness. *International Entrepreneurship and Management Journal*, 15, 63–73.

Pelham, A. M. (1997) Mediating Influences on the Relationsmp between Market Orientation and Profitability in Small Industrial Firms, *Journal of Marketing Theory and Practice*, 5(3), 55-76, DOI: 10.1080/10696679.1997.11501771

Pietersen, J. & Maree, K. (2012*). First Steps in Research*. (10th Eds). Hatfield, Pretoria: Van Schaik.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.

Rauch, A., Wiklund, J., Lumpkin, G.T. & Frese, M. (2009). Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.

Rajapathirana, R. P. J. & Hui,Y.(2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3, 44–55.

Ramadani, V., Abazi-Alili, H. Dana, L. P, Rexhepi, G. & Ibraimi, S. (2017). The impact of knowledge spillovers and innovation on firm-performance: findings from the Balkans countries. *International Entrepreneurship Management Journal*, 13, 299–325.

Ramon-Jeronimo, J. M., Florez-Lopez, R. & Araujo-Pinzon, P. (2019). Resource-Based View and SMEs Performance Exporting through Foreign Intermediaries: The Mediating Effect of Management Controls. *Sustainability*, 11, 2-26.

Rangus, K. & Slavec, A.(2017). The interplay of decentralization, employee involvement and absorptive capacity on firms' innovation and business performance. *Technological Forecasting & Social Change*, 120, 195–203.

Rapp, A., Beitelspacher, L. S., Schillewaert, N. & Baker, T. L. (2012). The differing effects of technology on inside vs. outside sales forces to facilitate enhanced customer orientation and interfunctional coordination**.** *Journal of Business Research***,** 65(7), 929-936**.**

Rodrigues, A. P. & Pinho, J. C. (2012). The impact of internal and external market orientation on performance in local public organisations. *Marketing Intelligence & Planning*, 30(3), 284-306

Roskos, S. & Klandt, H. (2007). Young technology ventures in Europe: aspects of market orientation and entrepreneurial orientation. *International Journal of Entrepreneurship and Small Business*, 4 (5), 543-563.

Rutberg, S. & Bouikidis, C. D. (2018). Focusing on the fundamentals: A simplistic differentiation between qualitative and quantitative research. *Nephrology Nursing Journal, 45*(2), 209-212.

Saeed, S., Yousafzai, S. Y. & Engelen, A. (2014). On Cultural and Macroeconomic Contingencies of the Entrepreneurial Orientation–Performance Relationship. *Entrepreneurship Theory and Practice*, 255- 290.

Sakhdari, K. (2016). Corporate Entrepreneurship: A Review and Future Research Agenda. *Technology Innovation Management Review*, 6(8), 5-18.

Samuel, O. M., Magwagwa, S. and Mazingi, A. (2020). Strategic career development of black engineering graduates in South Africa: the workplace experiential approach. *Higher Education, Skills and Work-Based Learning*, 10(1), 32-48.

Saunders, M. Lewis, P. & Thornhill, A. (2009). *Research Methods for Business Students*, (Fifth Edition). London: Pearson Education.

Scheepers, M.J. , Bloom, J.Z. & Hough, J. (2008a). The development of an instrument to assess the enacted environment for corporate entrepreneurship in South Africa. *Management Dynamics*, 17(4), 1-17.

Scheepers, M.J. , Bloom, J.Z. & Hough, J. (2008b). Nurturing the corporate entrepreneurship capability. *Southern African Business Review*, 12(3), 50-75.

Shan, P., Song, M. & Ju, X. (2016). Entrepreneurial orientation and performance: Is innovation speed a missing link? *Journal of Business Research*, 69, 683–690.

Shah, S. N. A. & Dubey, S. (2013). Market Orientation and Organizational Performance of Financial Institutions in United Arab Emirates. *Journal of Management & Public Policy*, 4(2), 17-26.

Shtal, T. V., Buriak, M. M. Amirbekuly, Y., Ukubassova, G. S., Kaskin, T. T. Zukhra G. & Toiboldinova, Z. G. (2018). Methods of analysis of the external environment of business activities. *Revista Espacios*, 39(12), 1-9.

Siddiqui, K. (2013). Heuristics for Sample Size Determination in Multivariate Statistical Techniques. *World Applied Sciences Journal*, 27(2), 285-287.

Slater, S.F. & Narver, J.C. (2000). Intelligence generation and superior customer value. *Journal of the Academy of Marketing Science*, 28 (1), 120-127.

Somekh, B. & Lewin, C. (2005). *Research Methods in the Social Sciences*. Thousand Oaks, CA: Sage.

Stevenson, H. H. (1983). A perspective on entrepreneurship. *Harvard Business School Working Paper*, 9, 384-131.

Syriopoulos, K. (2020). The Impact of Covid-19 on Entrepreneurship and SMEs. *Journal of the International Academy for Case Studies*, 26(2), 1-3.

Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management* (IJARM), 5(2), 18-27.

Taheri, B. , Bititci, U. , Gannon, M. J. & Cordina, R. (2018). Investigating the influence of performance measurement on learning, entrepreneurial orientation and performance in turbulent markets. *International Journal of Contemporary Hospitality Management*, 31(3), 1224-1246.

Tajeddinia, K., Altinay, L. & Ratten, V. (2017). Service innovativeness and the structuring of organizations: Themoderating roles of learning orientation and inter-functional coordination. *International Journal of Hospitality Management*, 65, 100–114.

Tang, J., Tang, Z. & Cowden, B. J. (2017). Exploring the Relationship Between Entrepreneurial Orientation, CEO Dual Values, and SME Performance in State-Owned vs. Nonstate-Owned Enterprises in China. *Entrepreneurship Theory and Practice*, 883- 908.

Tesluk, P. E. & Jacobs, R. R.(1998). Toward An Integrated Model Of Work Experience. *Personnel Psychology*, 321-355.

Tinarwo, R. (2016). An investigation into the challenges faced by small to medium enterprises in Zimbabwe: A case of Gazaland market. *IOSR Journal of Business and Management*, 18 (9), 148–153.

Todorovic, Z. W., Todorovic, D. & Ma, J. (2015). Corporate Entrepreneurship And Entrepreneurial Orientation in Corporate Environment: A Discussion. *Academy of Entrepreneurship Journal, 21(1), 83-94.*

Tomaskova, E. (2018). Interfunctional Coordination and its Influence on Customer Success. *Open Economics*, 1, 105–114

Torchiano, M., Fernández, D. M., Travassos, G. H. & De Mello, R. M. (2017). *Lessons Learnt in Conducting Survey Research.* IEEE/ACM 5th International Workshop on Conducting Empirical Studies in Industry (CESI), 33-39.

Trainor, K. J., Rapp, A., Beitelspacher, A. & Schillewaert, N. (2011). Integrating information technology and marketing: An examination of the drivers and outcomes of e-Marketing capability. *Industrial Marketing Management,* 40, 162–174.

Ungerman, O., Dedkova, J. & Gurinova, K. (2018). The Impact of Marketing Innovation on The Competitiveness of Enterprises In The Context Of Industry 4.0. *Journal of Competitiveness, 10(2), 132-148.*

Urban, B. & Verachia, A. (2019). Organisational antecedents of innovative firms: a focus on entrepreneurial orientation in South Africa. *International Journal of Business Innovation and Research*, 18(1), 128–144.

Urban, B. (2015). Corporate Entrepreneurship. In Venter, R. & Urban, B. (2015). *Entrepreneurship Theory in Practice* (3rd ed.). Cape Town: Oxford Southern Africa, 512-547.

Van Wyk, R. & Adonisi, M. 2011. 'An eight-factor solution for the Corporate Entrepreneurship Assessment Instrument', *African Journal of Business Management*, **5**(1): 3047-3055.

Van Wyk, R. & Adonisi, M. (2012) . Antecedents of corporate entrepreneurship, *South African Journal of Business Management,* 43 (3), 65-78.

Venkatraman, N. (1989). Strategic orientation of business entreprises: The construct, dimensionality, and measurement. *Management Science*, 35(8), 942–962.

Verbeke, A., Chrisman, J.J., & Yuan, W. (2007). A Note on Strategic Renewal and Corporate Venturing in the Subsidiaries of Multinational Enterprises. *Entrepreneurship Theory and Practice*, 585-599.

Wardi, Y., Susanto, P., Abror, A. & Abdullah, N. L. (2018). Impact of Entrepreneurial Proclivity on Firm Performance: The Role of Market and Technology Turbulence. *Journal of Social Science and Humanities*, 26 (5), 241 – 250.

Webb, J. W., Ireland, R. D., Hitt, M. A., Kistruck, G. M & Tihanyi, L.(2011). Where is the opportunity without the customer? An integration of marketing activities, the

entrepreneurship process, and institutional theory. *Journal of the Academy of Marketing Science,* 39, 537–554.

Wiklund, J. & Shepherd, D. 2005. Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing* 20(1), 71-91.

Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal*, 24(13), 1307–1314.

Woodside, A. G. (2011). Responding to the severe limitations of cross-sectional surveys: Commenting on Rong and Wilkinson's perspectives. *Australasian Marketing Journal*, 19, 153–156.

World Bank. (2018). *South Africa - Systematic Country Diagnostic: An Incomplete Transition - Overcoming the Legacy of Exclusion in South Africa* (English). Washington, D.C.: World Bank Group.

Zobel, A. K. (2017). Benefiting from Open Innovation: A Multidimensional Model of Absorptive Capacity. *Journal of Product Innovation and Management*, 34(3), 269–288.

Yoruk, E. & Jones, P. (2020). Firm-environment alignment of entrepreneurial opportunity exploitation in technology-based ventures: A configurational approach. *Journal of Small Business Management*, DOI: 10.1080/00472778.2020.1800354

APPENDICES

Appendix A: Respondents Cover Letter

Participant Information Sheet

Dear Sir / Madam,

My name is Rose Mathafena and I am a Masters student in **Master of Management Degree Entrepreneurship and New Venture Creation** at the University of the Witwatersrand, Johannesburg. As part of my studies, I have to undertake a research project, and I am investigating ***Entrepreneurial orientation , market orientation and opportunity exploitation in driving business performance: Moderating effect of interfunctional coordination*** under the supervision of Dr ***Jabulile Msimango-Galawe***. The aim of this research project is to find out the extend in which interfunctional coordination moderates the relationship between entrepreneurship, market orientation and organisational opportunity exploitation and business performance.

As part of this project, I would like to invite you to take part in answering a questionnaire. This activity will involve you clicking on the link provided to access questionnaire on the secure site of Wits Qualtrics and this will take around 20- 25 minutes.

There will be no personal costs to you if you participate in this project, You will not receive any direct benefits from participation but there are no disadvantages or penalties if you do not choose to participate or if you withdraw from the study. You may withdraw at any time or not answer any question if you do not want to. The questionnaire response will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely and not disclosed to anyone else. I will be using aggregated statistics to represent the data collected from various respondents in my final research report. If you experience any distress or discomfort at any point in this process, you may resume at another time.

If you have any questions during or afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report which will be available online through the university library website. If you wish to receive a summary of this report, I will be happy to send it to you. The data collected from this research project will be stored in a computer which is password secure and will be kept for 5 years.. If you have any concerns or complaints regarding the ethical procedures of this

study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrec-medical.researchoffice@wits.ac.za

Yours sincerely,

Rose Mathafena

Researcher:

Rose B. Mathafena , email: 1957827@students.wits.ac.za .

Supervisor:

Dr Jabulile Msimango-Galawe, jabulile.galawe@wits.ac.za, 011 717 3980.

Appendix B: Research Instrument

Please indicate how much agree or disagree with the following statements by circling one option in each line: Please rate the following statements in terms of how much you agree.	**Strongly disagree**	**Disagree**	**Somewhat disagree**	**Neither agree/disagree**	**Somewhat agree**	**Agree**	**Strongly agree**
1. Entrepreneurial Orientation Measurement							
1.1We have launched many new products/services on the market during the last five years	1	2	3	4	5	6	7
1.2The changes introduced in our products/services are usually important	1	2	3	4	5	6	7
1.3We usually beat our competitors in developing innovative actions	1	2	3	4	5	6	7
1.4We usually adopt an aggressive attitude towards our competitors	1	2	3	4	5	6	7
1.5We are prone to carry out risky projects when they involve profitable opportunities	1	2	3	4	5	6	7
1.6When uncertainty is high, we adopt a brave and aggressive attitude to exploit possible opportunities	1	2	3	4	5	6	7
2. **Market Orientation** Please rate the following statements in terms of how much you agree.	**Strongly disagree**	**Disagree**	**Somewhat disagree**	**Neither agree/disagree**	**Somewhat agree**	**Agree**	**Strongly agree**
2.1 We continuously gather information about the trends in our target market	1	2	3	4	5	6	7
2.2 We continuously gather information about our competitors' strategies	1	2	3	4	5	6	7
2.3 We collect information about our customers' satisfaction	1	2	3	4	5	6	7

2.4 We collect information about our customers' satisfaction	1	2	3	4	5	6	7
2.5 We regularly contact marketing/sales managers to discuss the trends in the market	1	2	3	4	5	6	7
2.6 We are promptly informed about any complaint or suggestion from our customers	1	2	3	4	5	6	7
2.7 We frequently meet other functional units in order to anticipate a response to the changing environment	1	2	3	4	5	6	7
2.8 Our strategies are based on market knowledge rather than on productive capabilities	1	2	3	4	5	6	7
2.9 Our premise for new product development is customer satisfaction, instead of taking advantage of our productive capabilities	1	2	3	4	5	6	7
3. **Absorptive Capacity_ Opportunity Exploitation** Please rate the following statements in terms of how much you agree.	**Strongly disagree**	**Disagree**	**Somewhat disagree**	**Neither agree/disagree**	**Somewhat agree**	**Agree**	**Strongly agree**
3.1 Our management supports the development of product/service prototypes	1	2	3	4	5	6	7
3.2 Our company regularly reconsiders technologies and adapts them accordant to new knowledge	1	2	3	4	5	6	7
3.3 Our company has the ability to work more effective by adopting new technologies	1	2	3	4	5	6	7
3.4 The company has the capacity to use and exploit new knowledge in the workplace	1	2	3	4	5	6	7
3.5 The application of knowledge and experience acquired is prioritised in the business strategy that enables the company to be at the leading technological edge.	1	2	3	4	5	6	7
3.6 The company has the capacity to put technological knowledge into product and process patents.	1	2	3	4	5	6	7
3.7 The company has the ability to respond to the requirements and demands due to the competitive pressures	1	2	3	4	5	6	7

3.8 The company innovates to gain competitiveness by broadening the portfolio of products, capabilities and technology ideas.	1	2	3	4	5	6	7
4. Interfunctional Coordination Please rate the following statements in terms of how much you agree.	**Strongly disagree**	**Disagree**	**Somewhat disagree**	**Neither agree/disag**	**Somewhat agree**	**Agree**	**Strongly**
4.1 Information about our customer is communicated freely throughout the company	1	2	3	4	5	6	7
4.2 Different company functions work in a integrated fashion to fulfil the needs of our objectives	1	2	3	4	5	6	7
4.3 Managers understand how employees from all functions can contribute to deliver 'customer value'	1	2	3	4	5	6	7
4.4 We share "resources" between different business units	1	2	3	4	5	6	7
4.5 Managers from different company functions visit customers regularly	1	2	3	4	5	6	7
4.6 Management does not to see the importance of employee contribution to customer centricity®	1	2	3	4	5	6	7
5. Business Performance **Rate your company performance in relation to the competitor's performance**	**Much worse that**	**Moderately worse than the**	**Slightly Worse than the**	**About the same as the competitors**	**Slightly better than the competitors**	**Moderately better than the competitors**	**Much better than competitors**
5.1 Profitability	1	2	3	4	5	6	7
5.2 Sales Growth	1	2	3	4	5	6	7
5.3 Market Share Growth	1	2	3	4	5	6	7
5.4 Customer Satisfaction	1	2	3	4	5	6	7
5.5 Image and Reputation	1	2	3	4	5	6	7
5.6 New Product Success	1	2	3	4	5	6	7
6. The impact of Covid 19 on the business							

6.1 What is the impact of covid 19 on the sales of products and/or services ?	Below the normal range 1	Within the normal range 2	Above the normal range 3
6.2. What is the impact of covid 19 on the overall business profit ?	Below the normal range 1	Within the normal range 2	Above the normal range 3
6.3 What is the effect of covid 19 on the business operations ?	Negatively affected 1	Not affected at all 2	Positively affected 3

Appendix C: Consistency matrix

Title of the study: Entrepreneurial orientation , market orientation and opportunity exploitation in driving business performance: Moderating effect of inter-functional coordination.

Consistency Matrix – Entrepreneurial Orientation , Market orientation, Opportunity Exploitation, Interfunctional Co-ordination and Business Performance							
Objectives	**Literature Review**	**Hypotheses**	**Research Questions**	**Variables Independent and Dependent**	**Sources of data**	**Type of Data**	**Analysis**
Determining the impact of entrepreneurial orientation on Business Performance.	Chaudhary and Batra (2018) Jiménez-Barrionuevo, Molina and García-Morales (2019) Masadeh, Al-Henzab, Tarhini and Obeidat(2018 Octavia and Ali (2017) Saeed, Yousafzai and Engelen (2014) Tang, Tang and Cowden (2017). Wardi, Susanto, Abror, and Abdullah (2018)	H1a: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Financial H1b: Higher levels of entrepreneurial orientation in an organisational context positively impact Business Performance Non-Financial	To what extent does Entrepreneurial orientation positively impact on Business Performance?	Independent variable =Entrepreneurial orientation Dependent variable = Business Performance	Primary data from the data collection instrument: Q2. Entrepreneurial orientation Measurement Q 2.1 - 2.6 Q6. Business Performance Q6.1- Q6.6	Ordinal Data Seven-point Likert scale	**Inferential Statistics** Correlation analysis Multiple regression
Examining the impact of Market Orientation on Business Performance.	Masadeh, Al-Henzab, Tarhini and Obeidat(2018) Octavia and Ali (2017) Babu (2018)	H2a: A strong focus on market orientation in an organisational context positively impact Business Performance Financial H2b: A strong focus on market orientation in an organisational context	To what degree does Market Orientation positively impact on Business Performance	Independent variable = Market Orientation Dependent variable = Business Performance	Primary data from the data collection instrument: Q3. Market Orientation Q3.1- Q3.9 Q6. Business Performance Q6.1- Q6.6	Ordinal Data Seven-point Likert scale	**Inferential Statistics** Correlation analysis Multiple regression

		positively impact Business Performance Non-Financial					
Analyse the influence of Opportunity Exploitation on Business Performance	Rangus and Slavec (2017) Chaudhary and Batra (2018)	H3a: Higher levels of opportunity exploitation in an organisational context positively influences Business Performance Financial H3b: Higher levels of opportunity exploitation in an organisational context positively influences Business Performance Non-financial	To what extentdoes Opportunity Exploitation positively influence Business Performance?	Independent variable = Opportunity Exploitation Dependent variable = Business Performance	Primary data from the data collection instrument: Q4. Opportunity Exploitation Q4.1-4.8 Q6. Business Performance Q6.1-Q6.6	Ordinal Data Seven-point Likert scale	**Inferential Statistics** Correlation analysis Multiple regression
Examine the moderating role of Interfunctional Co-ordination on the relationship between Entrepreneurial Orientation and Business Performance.	Auh and Menguc (2005) Jiménez-Barrionuevo, Molina and García-Morales (2019). Tang, Tang and Cowden (2017) Webb, Ireland, Hitt, Kistruck and Tihanyi (2011)	H4a: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Financial H4b: Interfunctional Co-ordination significantly moderates the relationship between Entrepreneurial Orientation and Business Performance Non-Financial	To what extent does Interfunctional Co-ordination moderate the relationship between Entrepreneurial Orientation and Business Performance.	Independent variable =Entrepreneurial Orientation Moderating Variable =Interfunctional co-ordination Dependent variable = Business Performance	Primary data from the data collection instrument: Q5. Interfunctional Co-ordination Q5.1-Q5.6 Q2. Entrepreneurial Orientation Measurement Q 2.1 - 2.6 Q6. Business Performance Q6.1-Q6.6	Ordinal Data Seven-point Likert scale	**Inferential Statistics** Regression: (moderation analysis)

Determine the moderating role of Interfunctional Co-ordination on the relationship between Market Orientation and Business Performance.	Tajeddini, Altinay and Ratten (2017) Trainor, Rapp, Beitelspacher and Schillewaert (2011)	H5a: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Financial H5b: Interfunctional Co-ordination significantly moderates the relationship between Market Orientation and Business Performance Non-Financial	To what extent does Interfunctional Co-ordination moderate the relationship between Market Orientation and Business Performance?	Independent variable = Market Orientation Moderating Variable =Interfunctional Co-ordination Dependent variable = Business Performance	Primary data from the data collection instrument: Q5. Interfunctional Co-ordination Q5.1-Q5.6 Q3. Market Orientation Q3.1- Q3.9 Q6. Business Performance Q6.1-Q6.6	Ordinal Data Seven-point Likert scale	**Inferential Statistics** Regression: (moderation analysis)
Analyse the moderating role of Interfunctional co-ordination on the relationship between Opportunity Exploitation and Business Performance.	Baškarada and Koronios (2018) Fallatah(2019)	H6a: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Financial H6b: Interfunctional Co-ordination significantly moderates the relationship between Opportunity Exploitation and Business Performance Non-Financial	To what extent does Interfunctional Co-ordination moderate the relationship between Opportunity Exploitation and Business Performance	Independent variable = Opportunity Exploitation Moderating Variable =Interunctional co-ordination Dependent variable = Business Performance	Primary data from the data collection instrument: Q5. Interfunctional Co-ordination Q5.1-Q5.6 Primary data from the data collection instrument Q4. Opportunity Exploitation Q4.1-4.8 Q6. Business Performance Q6.1-Q6.6	Ordinal Data Seven-point Likert scale	**Inferential Statistics** Regression: (moderation analysis)

Appendix D :Ethical Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

SCHOOL OF GRADUATE SCHOOL OF BUSINESS ADMINISTRATION ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE **PROTOCOL NUMBER:** **WBS/BA1957827/362**

PROJECT TITLE Entrepreneurial orientation, market orientation and opportunity exploitation in driving business performance: Moderating effect of inter-functional coordination.

INVESTIGATOR	Dr Rose Mathafena
SCHOOL/DEPARTMENT OF INVESTIGATOR	MM (Entrepr & New Venture Creation)
DATE CONSIDERED	09 October 2020
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	LOW RISK
EXPIRY DATE	30 JUNE 2021

ISSUE DATE OF CERTIFICATE 23 October 2020 **CHAIRPERSON** _____
(Dr MDJ Matshabaphala)

cc: Supervisor: Dr Msimango-Galawe

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I fully understand the conditions under which I am are authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

_____ 24 / 10 / 2020
Signature **Date**

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

Appendix E: List of instruments utilised

Q#	Construct	Abbreviation	# Items	References
1	Entrepreneurial Orientation Measurement	**EO**	6	Gonza´lez-Benito, O., Gonza´lez-Benito, J. and Mun˜oz-Gallego, P.A. (2008). Role of entrepreneurial orientation and market orientation in firms' success. *European Journal of Marketing*, 43(4): 500-522
2	Market Orientation	**MO**	9	Gonza´lez-Benito, O., Gonza´lez-Benito, J. and Mun˜oz-Gallego, P.A. (2008). Role of entrepreneurial orientation and market orientation in firms' success. *European Journal of Marketing*, 43(4): 500-522
3	Absorptive Capacity_ Opportunity Exploitation	**ACE -OE**	8	Camisón, C. , & Forés, B. (2010). Knowledge absorptive capacity: New insights for its conceptualization and measurement. *Journal of Business Research*, 63 707–715. Flatten,T.C. Engelen, A. Zahra, S.A. and Brettel, M. (2011). A measure of absorptive capacity: Scale development and validation. *European Management Journal*, 29, 98– 116
4	Interfunctional co-ordination	**IFC**	5 +1 Reverse Item	Trainor, K. J. , Rapp, Beitelspacher , A. & Schillewaert, N. (2011). Integrating information technology and marketing: An examination of the drivers and outcomes of e-Marketing capability. *Industrial Marketing Management* 40 , 162–174.
4	Business Performance	**BP**	6	Gonz**a**´lez-Benito, O., Gonza´lez-Benito, J. and Mun˜oz-Gallego, P.A. (2008). Role of entrepreneurial orientation and market orientation in firms' success. *European Journal of Marketing*, 43(4): 500-522