An evaluation of the relationship between corporate entrepreneurship and success of automotive companies from selected Sub-Sahara African countries

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"It always seems impossible until it's done" ~ Nelson Mandela

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ABSTRACT

The study evaluated the relationship between corporate entrepreneurship and the success of automotive organisations across Sub-Sahara Africa. Corporate entrepreneurship is regarded as the umbrella term that integrates all aspects of entrepreneurship that occur inside the existing organisation, for example, entrepreneurial orientation, strategic entrepreneurship, corporate venturing and intrapreneurship. Corporate entrepreneurship can decidedly influence an organisation's capacity to compete, improve competitive positioning, transform industries and markets whenever value creation innovations are developed and exploited. However, there is no specified scientific stable measurement instrument or tool to measure the relationship between corporate entrepreneurship and the success of organisations.

This study developed an empirical measurement instrument using constructs from organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success factors. Organisational antecedents (top management support, autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries) were used as independent variables, entrepreneurial orientation and corporate entrepreneurship as mediating variables and organisational success factors as dependent variables in the measurement instrument. The study explained the literature for entrepreneurship, corporate entrepreneurship, organisational success factors which were derived from the Balanced Scorecard and the overview of the automotive industry in Sub-Sahara Africa.

The information utilised in the investigation were gathered from five different countries in six automotive organisations; Kenya (Toyota Kenya), Malawi (Toyota Malawi), South Africa (Toyota Tsusho Africa and Subaru Southern Africa), Zambia (Toyota Zambia) and Zimbabwe (Toyota Zimbabwe). The investigation gathered 429 responses which were vigorously exposed to exploratory factor analysis and confirmatory factor analysis to confirm the reliability and construct validity before conducting structural equation modelling analysis. Structural equation modelling was

conducted to test the hypothesis of the study and produce a framework which is proposed for this study.

The discoveries of the investigation demonstrated that the measurement instrument was scientifically stable with acceptable construct validity and reliability. The measurement instrument produced the proposed framework of the study which produced evidence of the relationship between corporate entrepreneurship and the success of organisations. By and large, findings drawn from the study suggested that top management support, rewards or reinforcement and organisational boundaries were positively related to entrepreneurial orientation and entrepreneurial orientation was positively related to corporate entrepreneurship. As a result, corporate entrepreneurship activities were also found to be good indicators of the success of organisations. Additionally, new results that were not hypothesised by the study showed that rewards or reinforcement and entrepreneurial orientation were partially directly related to the success factors.

As a result, organisations need to promote positive top management support, rewards or reinforcement and organisational boundaries to create entrepreneurial orientation. The existence of entrepreneurial orientation in organisations can create corporate entrepreneurship a good indicator of organisational success.

Key words: Ambidextrous, Analysis of Moment Structures, Automotive, Corporate Entrepreneurship, Entrepreneurial Orientation, Organisational Antecedents, Organisational Success Factors, Structural Equation Modeling, Sub-Sahara Africa.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

Abbreviation	**Description of Abbreviation**
ACCA	Association of Chartered Certified Accountants
ACM	Automotive Component Manufacture
ADF	Asymptotically Distribution Free
AGFI	Adjusted Goodness of Fit Index
AMOS	Analysis of Moment Structures
Anzen	Safety
BMW	Bavarian Motor Works
CEAI	Corporate Entrepreneurship Assessment instrument
CEO	Chief Executive Officer
CFAO	Campaignie Francaise de l'Afrique Occidentale
CMIN/DF	Minimum Sample Discrepancy divided by Degrees of Freedom
CFI	Comparative Fit Index
DF	Degree of Freedom
DNA	Deoxyribonucleic acid
EDT	Elliptical Distribution Theory
EVA	Economic Value Add
FHI	Fiji Heavy Industry
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
Genba	Work station
Genchi	Going to the source
Gennjitsu	On site, hands on and in touch
GFI	Goodness of fit index
GLS	Generalised Least Square
IBM	International Business Machines
Jidoka	Stop work immediately when a problem occurs
JIT	Just In Time
KAIZEN	Continuous Improvement
KMO	Kaizer-Meyer-Olkin measure of sampling adequacy

LISREL	Linear structural relations
KPI	Key Performance Indicator
MAR	Missing At Random
MCAR	Missing Completely At Random
MD	Managing Director
NFI	Normal Fit Index
ML	Maximum Likelihood
MLE	Maximum Likelihood Estimate
NWU	North-West University
NMAR	Not Missing At Random
OEM	Original Equipment Manufacture
R & D	Research and Development
SCS	Statistical Consulting Services
RMSEA	Root Mean Square of Error Approximation
SEM	Structural Equation Modeling
Shokon	A passion for business (commercial spirit)
SPSS	Statistical Package for Social Sciences
SME	Small to Medium-Size Enterprises
SSA	Subaru Southern Africa
SWOT	Strengths, Weaknesses, Opportunities and Threats
TLI	Tucker-Lewis Index
TGSA	Toyoda Gosei South Africa
TMC	Toyota Motor Corporation
TPS	Toyota Production System
TSAM	Toyota South Africa Motors
TTAF	Toyota Tsusho Africa
TTSAP	Toyota Tsusho South Africa Processing
TTC	Toyota Tsusho Corporation
USA	United States of America
WEF	World Economic Forum

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

The contemporary business environment is continuously being characterised by turbulent and uncertain environments that are constantly mutating, thereby creating complexities in strategy and operations management (van Wyk & Adonisi, 2012:65). Several organisations have found themselves operating in a globalised dynamic and rapidly changing environments branded by aggressive competition, ever-increasing expectations and demands from various stakeholders (Albuhisi & Abdallah, 2018:1360). The ever-changing business environment is evidently pressurising organisations to become entrepreneurial in nature in order to seize new opportunities that emerge and ultimately create new value for organisations (Nkosi, 2011:2). Organisations are experiencing an entrepreneurial revolution globally, which is more forceful than the industrial revolution experienced in the 20th-century (Karmarkar, Chhabra & Deshpande, 2014:162).

Entrepreneurial actions propel organisations to continuously focus on ring-fencing their growth, survival and global competitiveness (Kuratko, 2011:9). Therefore, such kind of pressures is now demanding organisations to resort to a myriad of strategies to stay in business, such as concentrating on core business, outsourcing, downsizing, restructuring, decentralising and in general, endeavouring to reinvent themselves (Morris, Kuratko, & Covin, 2011:25; Shimizu, 2012:194). Turbulent conditions have mainly been the result of an assortment between external and internal variables of the business environment, such as technological changes, global challenges, heightened competitive intensity, internal inflexibility, bureaucratic structures, demographics, customer taste and demands (Ireland & Webb, 2009:473; Shimizu, 2012:194).

Consequently, sustained competitive advantage can now no longer be conserved by just offering quality products, good service and lower prices only (Kumar, Singh & Shankar, 2015:93). Morris, Kuratko and Covin (2008:7) postulated that such strategies have now been relegated to fundamental tactics because many organisations now have the ability and capabilities to produce high-quality products

and offer good services at lower prices due to improved technology, availability of knowledge and information. Against this backdrop, traditional management fashions have proven to be insufficient and ineffective to outperform competitors and create new sustainable value (Albuhisi & Abdallah, 2018:1360). Contemporary organisations are now continuously challenged by a new global reality that requires innovation, courage, risk-taking and entrepreneurial leadership (Kuratko, 2017:3). Accordingly, entrepreneurship within organisations could be one of the most reliable strategies for organisations' performance, growth and development (Antoncic[1] & Antoncic[2], 2011:589). According to Van Wyk and Adonisi (2012:65), fostering entrepreneurial activities in larger organisations is key in enhancing the success and sustainable competitive advantage. Henceforth, corporate entrepreneurship is vital for the continuous survival, renewal and vitality of organisations through securing higher levels of performance and efficiency (van Wyk & Adonisi, 2012:65). More so, organisations that embrace corporate entrepreneurship possess the ability to balance between the needs of today and tomorrow, a term referred to as ambidexterity (Kuratko, 2017:3; Morris *et al*., 2011:330).

The way in which organisations respond to turbulent pressures is important for their survival and sustainability in businesses (Hough, Thompson, Strickland & Gamble, 2011:295). Hereafter, the new form of organisations' survival requires strategies that are grounded in entrepreneurial culture through empowering employees, boosting innovation, taking risks, becoming proactive and competing aggressively. Entrepreneurial regeneration is now even more important, given the 2009 effects of the economic crisis and ever-increasing number of companies that are continuously being forced out of business (van Wyk & Adonisi, 2012:65). Constantly developing new products, services and processes and offering customers with updated performance and functionality is the new form of the competitive advantage derived from corporate entrepreneurship.

Van Wyk and Adonisi (2012:65) postulated that the primary role of management or organisational leadership is to be an antenna for organisations, to envisage future challenges and create countermeasures that sustain and improve business success. Managers have the capacity to influence their employees in ways that can achieve anticipated organisational goals (Karmarkar *et al*., 2014:156). Managers or

organisational leaders have an immense task to create and sustain organisations' functional success and performance (van Wyk & Adonisi, 2012:65). Alongside these pressures, organisational leaders often fail to effortlessly identify variables that lead to better business efficiencies and execution (Barrett, Balloun & Weinstein, 2012:204). Therefore, a good understanding of factors that pose threats to the survival of organisations, can help business managers to create environments that encourage corporate entrepreneurial behaviour (Morris *et al*., 2011:25). Moreover, organisations ought to similarly focus on inside organisational strategies in nurturing creative or innovative cultures as they do to outside economic and competitive forces (Kuratko, 2017:3; Barrett *et al*., 2012:202). Therefore, a need for a reliable measuring instrument that can precisely suggest strategies to rescue organisations from demise and correctly pinpoint the factors that lead to organisational success or demise is inevitable.

Generally, academics are also aware of the role that corporate entrepreneurship strategies play in improving the business performance of any scope of an organisation, even though many such studies have been conducted in many ways using different measuring instruments (Mungule & Van Vuuren, 2016:1). Additionally, Kuratko (2017:2) reinforced that the field of corporate entrepreneurship is a valid and effective area of research with real and tangible rewards for emerging scholars and their work will hugely impact emerging strategy. Organisations are increasingly considering entrepreneurial activities as a strategy for survival, sustainability and achievement of competitive edge in unfavourable, unpredictable and fast-paced global markets (Mungule & Van Vuuren, 2016:1). In this way, the accessibility of a scientifically rigorous measurement instrument to quantify the effect of the association between corporate entrepreneurship and the success of an organisation would both increase the current organisation’s hunger to execute corporate entrepreneurship strategies and learning of corporate entrepreneurship phenomenon (Mungule & Van Vuuren, 2016:1). As a result, developing an instrument that is scientifically sound, valid and reliable to measure the relationships between corporate entrepreneurship and the success of automotive companies could help to increase the implementation of corporate entrepreneurship and provide a clear relationship between corporate entrepreneurship and the success of automotive companies. Mungule and Van Vuuren (2016:1) suggested that there is yet more

scholarly work to be done in developing an appropriate measuring instrument for the relationship between corporate entrepreneurship and the success of organisations, consequently the primary object for this study.

Section 1.2 explains the definitions of corporate entrepreneurship, aspects of corporate entrepreneurship and entrepreneurship. The explanation includes the two forms of corporate entrepreneurship namely, corporate venturing and strategic entrepreneurship. Furthermore, brief overviews of entrepreneurial orientation and organisational success factors together with the process used to select success factors and their relevance to organisations are provided. Additionally, a brief background and the importance of the automotive sector to Sub-Sahara African economies are explained leading to the illumination of the problem statement for this study.

1.2 BACKGROUND OF THE STUDY

The purpose of this study was to establish the relationship between corporate entrepreneurship and success of organisations using automotive organisations from selected Sub-Sahara African countries. In no particular order, the identified building blocks of the hypothesis for this study are corporate entrepreneurship, entrepreneurial orientation and organisational success factors. The background of the study also provided an overview of the automotive industry to be investigated in this study.

1.2.1 Corporate entrepreneurship

Corporate entrepreneurship is supposedly a wider or a multidimensional concept that integrates all parts of entrepreneurship that occurs inside the established organisations like entrepreneurial orientation, strategic entrepreneurship, corporate venturing and intrapreneurship (Covin & Lumpkin, 2011:855; Mungule & Van Vuuren, 2016:3). Corporate entrepreneurship is the umbrella phenomenon that captures all aspects of entrepreneurial activities in established organisations and lies at the intersection of entrepreneurship and strategic management (De Jong, Parker, Wennekers & Wu, 2011:4).

Corporate entrepreneurship is generally a term used to designate entrepreneurial behaviours inside exiting established organisations ranging from small, mid-size and large organisations (Kuratko, 2017:2). Corporate entrepreneurship is now being considered as a valid and effective area of research with tangible and real benefits (Kuratko, 2017:2). According to Kuratko (2017:2), theoretical and empirical knowledge of corporate entrepreneurship has evolved in the last forty-five years, starting off very slowly and growing in importance throughout the decades. Consequently, research has escalated from traditional product and innovation activities to pioneering innovations in the value chain, processes, business models and functional management (Kuratko, 2017:3). Despite corporate entrepreneurship's expanded research, it is argued that the concept still requires further search of a clear definition and agreed terminologies (Corbett, Covin, O'Connor & Tucci, 2013:813).

Several scholars have commonly defined corporate entrepreneurship as entrepreneurship practised within an existing organisation and the scope of the phenomena has greatly expanded, becoming finer tuned (Corbett *et al*., 2013:812). In addition to this general definition, a wider range of activities like creation, managing a venture, adapting and founding have been used to define corporate entrepreneurship or entrepreneurial activities (Kusumsiri & Jayawardane, 2013:26). Defined by Guth and Ginsberg (1990:5), "corporate entrepreneurship encompasses two types of phenomena and the process surrounding them, i.e. the birth of new business within existing organisations, internal innovation or venturing and the transformation of organisations through the renewal of key ideas on which they are built". Sharma and Chrisman (1999:18) defined corporate entrepreneurship "as a process whereby employees together with an existing organisation create new organisations or instigate renewal or innovation within that organisation".

Covin and Miles (1999:50) defined corporate entrepreneurship "as a process of innovation, coupled with the presence of objectives to rejuvenate or purposefully redefine organisations, markets or industries in order to create or sustain competitive superiority". Closely analysing the definitions above, terms like the generation of new ideas, new businesses, innovation and creations resonate (Kuratko, 2011:11). According to Kuratko (2011:12), corporate entrepreneurship focuses on the

innovation of products, services, processes, administrative systems and employee activities.

Whereas the term entrepreneurship on its own is defined by Kuratko (2014:5) “as a dynamic process of vision, change and creation, a process by which new organisations come into existence”. Sahut and Peris-Ortiz (2014:663) postulated that entrepreneurship is associated with start-ups or small enterprises because small business provides an enabling environment for creativity and innovation. Entrepreneurship involves the introduction of new paradigm shift innovations, rather than engaging in a particular occupation within an existing organisation (Parker, 2018:6). Therefore, entrepreneurship is associated with terms like creation, adopting, innovation, flexibility and managing a new venture (Parker, 2018:6). The difference between corporate entrepreneurship and entrepreneurship is that the latter occurs outside existing organisations while corporate entrepreneurship occurs inside the existing organisations.

Corbet *et al*. (2013:812) suggested that corporate entrepreneurship encompassed two categories of phenomena, namely corporate venturing which refers to the creation of new business within existing organisations and strategic renewal which involves the transformation of an organisation through the renewal of the fundamental ideas on which they were founded. The strategic renewal was further expanded and described as strategic entrepreneurship by Kuratko *et al*. (2011:85). Kuratko *et al*. (2011:85) recognised the forms of corporate entrepreneurship as corporate venturing on one hand, which involves internal corporate venturing, cooperative corporate venturing and external corporate venturing, while strategic entrepreneurship, on the other hand, was hypothesised to have five distinct forms as indicated below (Morris *et al*., 2011:85):

- **Sustained regeneration**: this is when an organisation habitually and continuously introduces new services and products to new markets (Morris *et al*., 2011:100).
- **Organisational rejuvenation**: where organisations seek to improve or sustain their competitive standing by changing their internal processes, structure and capabilities (Morris *et al*., 2011:101).

- **Strategic renewal**: when organisations seek to redefine their relationship with the market or industries by primarily changing how they compete (Morris *et al*., 2011:98).
- **Domain redefinition**: where organisations proactively create a new market product arena that others have not known or actively sought to exploit (Covin & Miles, 1999:54).
- **Business model reconstruction**: when organisations apply entrepreneurial thinking to the design or redesigning its core business model to improve its operational efficiencies or differentiate itself from industry competitors in ways appreciated by the market (Morris *et al*., 2011:101).

Therefore, based on the above five distinct forms, corporate entrepreneurship is far greater than individual entrepreneurial activities performed by managers or employees in an organisation. It is incorporated into the entire fabric and captures the core of what an organisation is about and how it operates (Morris *et al*., 2011:52). In this respect, corporate entrepreneurship has a more straight forward positive influence on organisations' successes because the phenomenon is intertwined within organisations' missions, visions, strategies, objectives, structures, cultures and operations activities (Morris *et al*., 2011:52). It is basically the efforts of promoting corporate entrepreneurship activities in established organisations through product, process, strategy, culture and daily operational activities in order to identify, access and ultimately exploit attractive economic opportunities based on long-term standpoint (Mungule & Van Vuuren, 2016:2).

1.2.2 Entrepreneurial orientation

Entrepreneurial orientation is a topic from the field of entrepreneurship that is strongly regarded as an aspect of corporate entrepreneurship (Covin & Miller, 2014:13; Covin & Lumpkin, 2011:855; Mungule & Van Vuuren, 2016:3). In theory, entrepreneurial orientation has been conceptualised as the organisation’s activities that include new business venture activities, innovativeness and strategic renewal (Covin & Miller, 2014:13). According to Kasim and Altinay (2016:62), entrepreneurial orientation is a philosophy that influences business strategies and creates exploitative behaviours towards business opportunities with an objective of achieving

sustainability. In general, organisational success relates to entrepreneurial orientation (Kasim & Altinay, 2016:62). Therefore, organisations that engage in product innovation and risk-taking activities and those that are the first to come up with proactive innovation that astonish competitors are believed to embrace entrepreneurial orientation, while organisations who do not practice entrepreneurial orientation, are the ones that are highly risk-averse and only wait to copy others (Miller, 1983:771).

Although entrepreneurial orientation has several definitions, Lumpkin and Dess (1996:136) defined it as "processes, practices and decision-making activities that lead to new entry". While Wales (2016:4) defines it "as a firm's decision-making practices, managerial philosophies and strategic behaviours that are entrepreneurial in nature". Furthermore, Kasim and Altinay (2016:62) defined entrepreneurial orientation "as the propensity of entrepreneurs to pursue new market opportunities and renew their zones of operations".

Entrepreneurial orientation is understood to be a multidimensional construct comprised of five independent behavioural dimensions, namely innovativeness, risk-taking, autonomy, proactiveness and competitive aggressiveness (Covin & Miller, 2014:13). Innovative organisations are firms that engage in the pursuit of new concepts or ideas in service, product or process development (Kasim & Altinay, 2016:63). Organisations' support for creativity, novelty and experimentation which could result in new ideas and adaptation of new technology is mirrored in the innovativeness dimension (Kasim & Altinay, 2016:63). Organisations that commit certain percentages of their resources to new projects and in the process suffer financial risk are known to embrace the risk-taking dimension (Kasim & Altinay, 2016:63).

Organisations that tolerate failure, provide decision making leeway and delegate authority and decision making to lower staff are known to embrace the dimension of autonomy (Kuratko, Hornsby & Covin, 2014:39). Organisations that have the ability to predict change in their business environment and respond by altering their business strategies are known to embrace the proactiveness dimension (Kasim & Altinay, 2016:63). Organisations that are organised to take on competitors head-on and are willing to spend more on research and development in order to increase

manufacturing capacity, reduce product prices and sacrifice profitability to gain market share are known to embrace the competitive aggressiveness dimension (Dess & Lumpkin, 2005:151; Kungeke, 2016:50).

Entrepreneurial orientation is one of the contributing factors of organisational transformation and strategic renewal through the creation and combination of the organisation's tangible and intangible resources (Kasim & Altinay, 2016:63). Consequently, the five dimensions of entrepreneurial orientation are instrumental in the creation of corporate entrepreneurship organisations (Dess & Lumpkin, 2005:147; Urban, Barreria & Nkosi, 2012:305).

1.2.3 Organisational success factors

Organisational success factors are important factors that need to be managed closely by leaders so that organisations can achieve anticipated goals (Marais, du Plessis & Saayman, 2017:1). Organisational success factors are effects that must go well to ensure success and for an organisation to flourish and achieve the goals of management (Marais *et al*., 2017:1). Organisational success factors usually translate to good company brand image or reputation. Sandu (2015:1035) postulated that corporate reputation is the single key success factor of the automotive industry. Corporate reputation is considered as a very sensitive and imperative variable in the automotive industry. Consequently, automotive managers are always aware of their actions when dealing with customers on a daily basis (Sandu, 2015:1035).

Additionally, reputation being a valuable intangible asset of an organisation, it is a product of long-term investment value, financial soundness, management quality, product and service quality, innovation, ability to attract, customer satisfaction, employee development and retention. Although scholars have generally found or accepted that a link between reputation and organisational success exits, the link between reputation (success factor) and corporate entrepreneurship antecedents (drivers of success) is not yet clearly defined and a specific measurement instrument for the automotive sector has not been developed yet (Walker, 2010:357).

Organisational success factor strategy is a technique used by organisations to categorise important information that is required to be managed delicately by

managers for the success of an organisation (Marais *et al*., 2017:2). However, organisational success factors are too many and could be difficult to categorise. For purposes of this study, the Balanced Scorecard was used because it is conceptualised as a mechanism for measuring both financial and non-financial perspectives and it contains most of the success factors, i.e. customer relationships, innovation, the ability to learn, financial and the use of information (Dobrovic, Lambovska, Gallo & Timkova, 2018:41; Singh & Arora, 2018:875).

According to Albuhisi and Abdallah (2018:1362), the Balanced Scorecard is a performance measurement mechanism for managing, controlling, evaluating and monitoring both financial and non-financial performances of an organisation. A Balanced Scorecard is a visualisation tool that contains multiple perspective measures that provide a framework for monitoring current and future performance (Singh & Arora, 2018:874). It is furthermore a business performance measurement tool that covers several aspects of the business that leads to success and summarises them into four perspectives, namely financial, customer, internal business process and learning and growth (Dobrovic *et al*., 2018:42). More than 60% of the Fortune 1000 companies in the USA have experimented with the Balanced Scorecard and high levels of adoption have been reported in Finnish businesses (Perkins, Grey & Remmers, 2014:148). Increased uptake of the Balanced Scorecard shows that more than 50% of companies from advanced countries use the Balanced Scorecard (Niven, 2014:3).

The automotive sector and other companies such as 3M, Apple, Google and Procter & Gamble comprehend the significance of an internal environment that is supportive of innovative activities (Kuratko, *et al*., 2014:37). However, the challenge is how to identify the environment and measure it (Kuratko *et al*., 2014:37). This study centres around the five most important determinants of an environment conducive for entrepreneurial behaviours, i.e. top management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries (Kuratko *et al*., 2014:40). Organisations that seek to create a conducive environment for entrepreneurial activities, should find ways of measuring specific variables that are associated with an innovative internal environment.

In this investigation, a demonstrative apparatus, the Corporate Entrepreneurship Assessment Instrument (CEAI) was used to measure the five organisational antecedents as independent variables (Kuratko *et al*., 2014:37). The CEAI measuring tool provides an indication of an organisation's prospect of being able to successfully implement an innovative environment that leads to the success of an organisation. The CEAI instrument was expanded to link into corporate entrepreneurship through entrepreneurial orientation and adopt the Balanced Scorecard elements that represent the success factors of an organisation. The hypothesis for this study is that organisational antecedents measured by the CEAI can produce entrepreneurial behaviours or entrepreneurial orientation which in turn creates corporate entrepreneurship that is able to realise positive results in financial, customer, internal business process and learning and growth areas. The conceptual framework for this study was hypothesised in Figure 1.2, to help organisations to identify the crucial elements and ingredients that can drive financial, customer, internal business process and learning and growth success.

1.2.4 Automotive sector

The automotive industry is one of the most important monetary drivers of nations in Sub-Sahara Africa and the remainder of Africa. With a population of about 1.2 billion people, Africa has about 42.5 million vehicles registered with a motorisation rate of 44 vehicles per 1000 people (Thomas, 2018:14). The automotive industry is an important sector of any economy in the world and it consists of more than 5% of the world's manufacturing employment (Naudé & Badenhorst-Weiss, 2012:48). The automotive industry comprises of original equipment manufacturers (OEM) such as Toyota, Nissan, Mazda, Ford, BMW, Mercedes Benz, Kia, Hyundai, Subaru, Suzuki, Audi and Isuzu and a huge network of suppliers of parts known as automotive components manufactures (ACM) from various tiers of the automotive industry (Naudé & Badenhorst-Weiss, 2012:48).

Global annual passenger car sales were estimated at 78.6 million in 2017, where China and the USA were expected to be the largest markets and producers (Statista, 2017a). According to OICA (2017), automobile technology has enabled people to live, work and play in ways that were inconceivable a few years ago. Every trip made by an automobile or vehicle transforms into some form of economic advantage.

Hence, in the 1990s the number of cars worldwide grew three times faster than the human population and in the United States of America only, the number grew six times faster than the population between 1969 and 1995 (Sutherland, Gunter, Allen, Bauer, Bras, Gutowski, Murphy, Piwonka, Sheng, Thurston, & Wolff, 2004:87; Wedeniwski, 2015:v).

The vehicle population growth has significantly contributed to increased employment opportunities worldwide, foreign direct investments and cross-border trade (Sturgeon, Memedovic, Van Biesebroek, & Gereffi, 2009:9). The current estimation is that one direct automotive manufacturing job exponents to at least five indirect jobs in other tiers of the automotive sectors or manufacturing industries (OICA, 2017).

Although the automotive industry has largely hastened foreign direct investments and cross-border trade, as well as created both direct and indirect employment (Sturgeon *et al*., 2009:9), the sector is currently facing a number of challenges such as market regulation, changing consumer tastes and demands, labour costs, buying power, driving conditions, standard requirements, public policy and taxation (Nieuwenhuis & Wells, 2015:1; Sturgeon *et al*., 2009:14). Therefore, to address these challenges, it is only appropriate to equip automotive corporate leaders or managers with a measuring instrument that is able to predict the root cause of the challenges confronting them and prescribe possible countermeasure to resolve the challenges. According to Lotz and van der Merwe (2013b:188), corporate entrepreneurship could be a tool to improve the automotive industry or any form of business in areas that are related to revenue growth, product development and service and process improvement.

Changes affecting the automotive industry and its leaders demand that decision-makers successfully manage uncertainty and protect their organisation's resources to place their business in a position that allows adapting to business turbulence (Ireland & Webb, 2009:469). Since automotive organisations are associated with focusing on the achievement of good reputation in the market that is related to several measurable and non-measurable key performance indicators (KPIs) such as profitability, customer relations, customer satisfaction, innovation, process improvements, product and service quality, quality management, company

standards, relationships with partners and product knowledge, It is, therefore, imperative that organisational leaders easily identify the factors that influence success in their organisations (Sandu, 2015:1036).

This study focused on grouping all KPIs measured by the automotive industry into the four key areas of the Balanced Scorecard (Banker, Chang & Pizzini, 2011:260) and linking the KPIs with organisational antecedents to evaluate the successful relationships. The Balanced Scorecard is a performance measuring tool which was conceptualised and developed by Kaplan and Norton to supplement traditional financial measures with operating performance measures oriented towards customer, internal process and learning and growth (Arnaboldi, Lapsley, & Steccolini, 2015:9; Banker *et al*., 2011:261; Oliveira, Pinho & Silva, 2018:2589). Hence, the four perspectives of the Balanced Scorecard were used as dependent variables to measure the success of organisations in the automotive sector in Sub-Sahara Africa.

In a nutshell, to understand the association between corporate entrepreneurship and the success of automotive companies from selected Sub-Sahara African countries, a measuring instrument was developed to measure the five organisational antecedents as independent variables (Kuratko *et al*., 2014:40), entrepreneurial orientation and corporate entrepreneurship as a mediating variables and the four perspectives of the Balanced Scorecard (success factors) as dependent variables as shown in Figure 1.2 (Covin & Lumpkin, 2011:855; Dobrovic *et al*., 2018:42; Hamdy, 2018:425; Kaplan, 2010:4; Niven, 2014:3). The study expanded prior studies that investigated the relationship between corporate entrepreneurship and performance by incorporating the success factors of the automotive sector in the new measurement instrument.

The study developed an instrument which is an extension of the CEAI that included success factors unique to the automotive industry and added significant value to both the body of knowledge and the automotive industry. The proposition of this study was that managers will have an instrument to use when measuring the relationship between corporate entrepreneurship and the success of their organisations. Managers will become aware that automotive KPIs can be achieved if they are driven by corporate entrepreneurship internal organisational antecedents

(Ozdemirci, 2011:612). The result of this study was anticipated to encourage and accelerate the implementation of corporate entrepreneurship in the automotive sector and other sectors as well.

The following sections for chapter 1, introduces the problem statement to clarify to managers and scholars the importance of having a scientific stable measurement instrument for measuring the relationship between corporate entrepreneurship and organisational success. Primary and secondary objectives were established to demonstrate the ultimate goals of the study and a conceptual framework was developed using organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors. Furthermore, the scope of the study is provided, illustrating the geographical coverage and demarcations of the study. The research methodology is discussed, explaining how literature and empirical reviews were conducted to achieve the objectives of the study. Finally, the contributions and limitations of the study are clarified to pave the way for further studies and an outline of the study chapters was provided as a guide for the thesis.

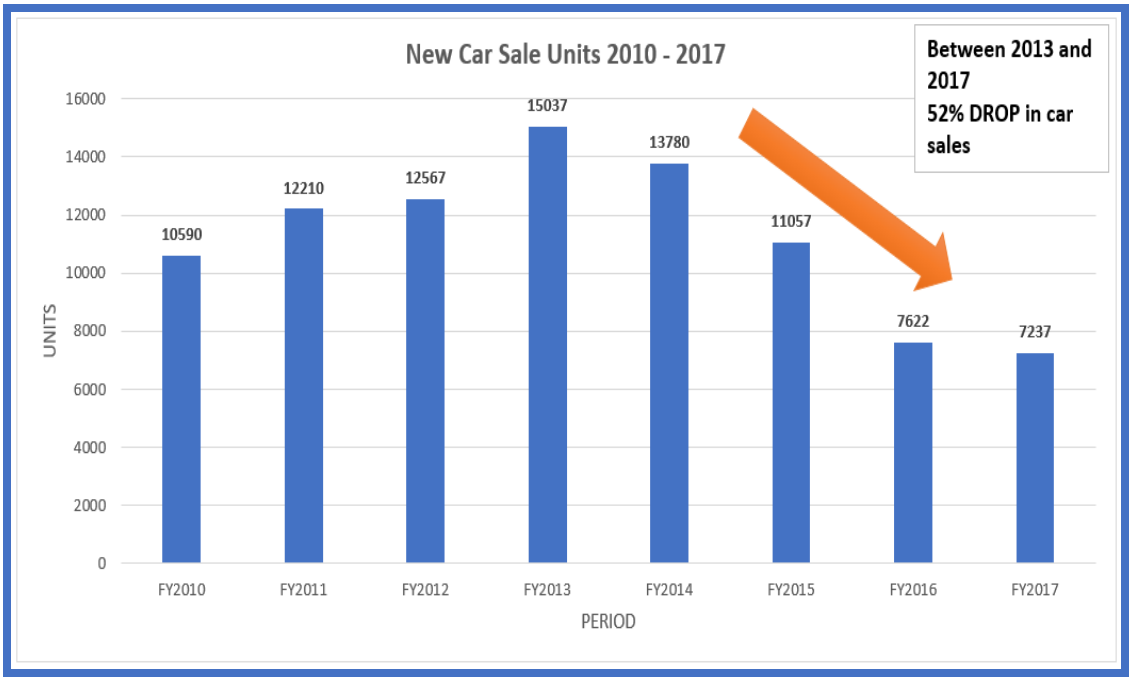
1.3 PROBLEM STATEMENT

The problem identified in this study was that not only automotive organisations, but several organisations face the challenge of easily grasping the relationship between corporate entrepreneurship and success of their organisations. The automotive sector chosen for this study plays a significant role in global economies, i.e. Sub-Sahara African countries included (Sturgeon *et al.*, 2009:9). Notwithstanding the automotive sector being a contributor to many countries' GDP, the sector has strong ties with other sectors such as transportation, steel, chemicals, engineering, agriculture, plastic, metal, rubber, agriculture and many more (Naudé & Badenhorst-Weiss, 2012:48). Simply put, the automotive sector permeates all sectors of the economy, for instance, any business or individual requires transportation of some form, either as a passenger or for goods. Hence, the automotive sector can be described as the engine of many economies. It provides a locus of stimulating the growth of other activities such as service sectors and achieving other specific results like employment creation and economic empowerment (AIEC, 2017:6). Accordingly, it is imperative for such vital organisations to easily grasp the relationship between corporate entrepreneurship and success and additionally easily visualise the

elements or variables of corporate entrepreneurship which lead to the success of organisations (Shimizu, 2012:194).

Nonetheless, the automotive sector in Sub-Sahara Africa is facing innumerable business challenges such as increased global competition, changes in the social environment, technological changes, government policy reforms on environmental regulations, skills shortages, intensified competition and complex consumer demands (Albuhisi & Abdallah, 2018:1360; Lotz & van der Merwe, 2013b:188; Nieuwenhuis & Wells, 2015:1; Shimizu, 2012:194). Such challenges are the main cause for the reduced number of new car sales, market share, profit margins and increased expenses of many automotive companies. Figure 1.1 below shows the reduction of new car sales of some randomly selected automotive organisations from Sub-Sahara Africa between 2010 and 2017 (OICA, 2018; TTAF, 2018). After the recession in 2010, Figure 1.1 shows new car sales trend starting to recover and by 2013, new car sales had grown by 42%. Prominently, 2013 become the peak of new car sales in Sub-Sahara Africa. Thus, in 2014, new car sales dropped by 8% and eventually, between 2013 and 2017, new car sales had dropped by 52%. The new car sales drop in Figure 1.1 had a significant impact on the automotive organisation's profitability and success. Unfortunately, whenever company revenue decreases, expenses continue to rise which negatively impacts on the longevity and success of the organisation.

Figure 1.1: New car sales of selected automotive organisations



Source: TTAF (2018)

Although a decline in market share and profit margin can show a need for a new strategy, the signs rarely suggest which strategy or direction to be pursued (Shimizu, 2012:194). Effectively measuring and predicting such challenges can help automotive companies to sustain and improve themselves, thereby avoiding losses that may cause demise to their organisations. Developing a measuring instrument that highlights challenges faced by organisations can help organisations to understand the relationship between corporate entrepreneurship and the success of organisations and easily identify elements or variables that can suggest which strategy or direction to pursue (Shimizu, 2012:194).

Empirical and theoretical knowledge of corporate entrepreneurship has evolved over the last four decades, initially, kicking off slowly but gradually gaining momentum and attention (Kuratko, 2017:2). The field of corporate entrepreneurship has emerged as an effective and valid area of research because of its significant impact on strategy (Kuratko, 2017:2). An accumulation of corporate entrepreneurship literature has focused on establishing a solid understanding of the domain and relationships between the domain and organisational performance (Kuratko, 2017:2).

Nonetheless, there is still a great need for further research about the domain in organisational settings (Kuratko, 2017:2).

Despite an increase in research on the relationship between corporate entrepreneurship and business performance or success, the topic is still underexplored, specifically in the areas of developing and validating a measuring instrument that could be relied upon as a suitable likeness of corporate entrepreneurship with the purpose of stimulating organisational success (Mungule & Van Vuuren, 2016:2). According to Ozdemirci (2011:12), several studies conducted on corporate entrepreneurship thus far, have mainly focused on the organisation's external and internal environments, while other researches have focused on performance, for instance, Combs, Crook and Shook, (2005); Corbett *et al*. (2013); Rauch, Wiklund, Lumpkin and Frese (2009); Ireland, Covin and Kuratko, (2009), the impact of the external environment on organisational performance (Rosenbusch, Rauch & Bausch, 2013; Zahra, 1991; Yang, 2012) and research endeavouring to perfect the CEAI (Hornsby, Holt & Kuratko, 2008; Hornsby *et al*., 2013; van Wyk & Adonisi, 2012). Similarly, exploratory work on corporate entrepreneurship from many scholars resulted in the conceptualisation of many theoretical frameworks or models, for instance a model of sustained corporate entrepreneurship (Kuratko *et al*., 2004), internally generated innovations in existing organisations (Ireland *et al*., 2009) and an interactive model of corporate entrepreneurship (Hornsby, Naffziger, Kuratko & Montagno, 1993). According to Kuratko (2017:3), research expansion in the sphere of corporate entrepreneurship and entrepreneurial behaviour still warrants a deeper understanding and further research.

In this respect, there has been no clear-cut research that focused on linking CEAI to the success factors of organisations such as financial wealth, high customer satisfaction, efficient internal business processes and continuous improvement through learning and growth. Furthermore, within the African continent, limited similar research has been conducted, specifically in the automotive sector. The study empirically explored organisational antecedents, entrepreneurial orientation and organisational success factors, using the four perspectives of the Balanced Scorecard. The results of this study could be immensely important and critical to

scholars, practitioners and organisational leaders with a proclivity to corporate entrepreneurship.

Therefore, this study focused on developing a scientific measurement instrument or tool that fuses the CEAI, entrepreneurial orientation, corporate entrepreneurship and the organisational success factors derived from the four perspectives of the Balanced Scorecard. The new measurement instrument was designed to bridge the gap for determining the relationship between corporate entrepreneurship and organisational success. Once clarity had been established on the relationship between corporate entrepreneurship and the organisation's success, the measurement instrument could be used by managers to efficiently identify causes of failures whenever their organisations are not successful and effectively prescribe strategies to achieve the success of their organisations (Shimizu, 2012:194).

1.4 RESEARCH QUESTIONS

The central question in this research was to determine whether the hypothesised measurement instrument for measuring the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors of organisations have acceptable attributes such as reliability, validity and unidimensional capacity (Hair, Black, Babin & Anderson, 2010:125). The following are the research questions of this study, which were answered through the achievement of the study objectives:

- Is there a measurement instrument for measuring relationships between corporate entrepreneurship and the success of an organisation with acceptable scientific attributes?
- Can organisations be able to link their success to their internal environment condition?
- Which organisation antecedents are stronger predictors of organisational success?

1.5 OBJECTIVES OF THE STUDY

The study aims to empirically and theoretically explore organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and to measure their success using both financial and non-financial perspectives (Singh & Arora, 2018:875). The hypothesis is that the study findings could be significant to scholars, practitioners and organisations' managers interested in understanding the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success. The intentions of this study focused on the antecedents of the internal corporate entrepreneurship environment in the automotive organisations from selected countries in Sub-Sahara Africa, entrepreneurial orientation dimensions, corporate entrepreneurship and the success factors from the four perspectives of the Balanced Scorecard. The following are the organisational antecedents developed by Kuratko *et al*. (2014:40) which were used in this study:

- Top management support
- Work discretion or autonomy
- Rewards or Reinforcement
- Time availability
- Organisational boundaries

Entrepreneurial orientation a term referred to as processes, practices and decision-making actions that lead to new market entry is a multidimensional construct that involves the following dimensions which were used in this study (Kasim & Altinay, 2016:62):

- Innovativeness
- Risk-taking
- Autonomy
- Proactiveness
- Competitive aggressiveness

The success factors contained in the Balanced Scorecard performance management mechanism developed by Kaplan and Norton in 1992 measures performance from

both a financial and non-financial perspective in the form of four perspectives to achieve a wholesome measurement for organisational success (Kaplan, 2010:4; Singh & Arora, 2018:874). The four perspectives that summarise organisational success factors and were identified for this study are:

- Financial
- Customer
- Internal business process
- Learning and growth

The objectives of this study were organised into two categories, namely primary and secondary.

1.5.1 Primary objective

The primary objectives of the study were:

- To develop an instrument that measures the success of automotive companies using organisational antecedents as independent variables, entrepreneurial orientation and corporate entrepreneurship as mediating variables and organisational success factors as dependent variables.
- To expand the CEAI instrument by adding success factors to the measurement instrument.
- To evaluate the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors of automotive companies in Sub-Sahara Africa.
- To propose a framework that helps automotive leaders to keep alive an entrepreneurial spirit in their organisations and at the same time easily visualise indicators of success or failures.
- Based on the study findings, to contribute to the domain of corporate entrepreneurship in the Sub-Sahara region.

1.5.2 Secondary objectives

The following secondary objectives were formulated with a view to achieving the primary objectives:

- To explain the background and relationship between entrepreneurship and corporate entrepreneurship.
- To explain the importance of corporate entrepreneurship in organisations.
- To explain the two forms of corporate entrepreneurship and conceptual models.
- To explain the importance of entrepreneurial leadership to internal environments of organisations.
- To provide an overview of the automotive industry in Sub-Sahara Africa.
- To explain the relationship between corporate entrepreneurship and success factors.

1.5.3 Conceptual framework

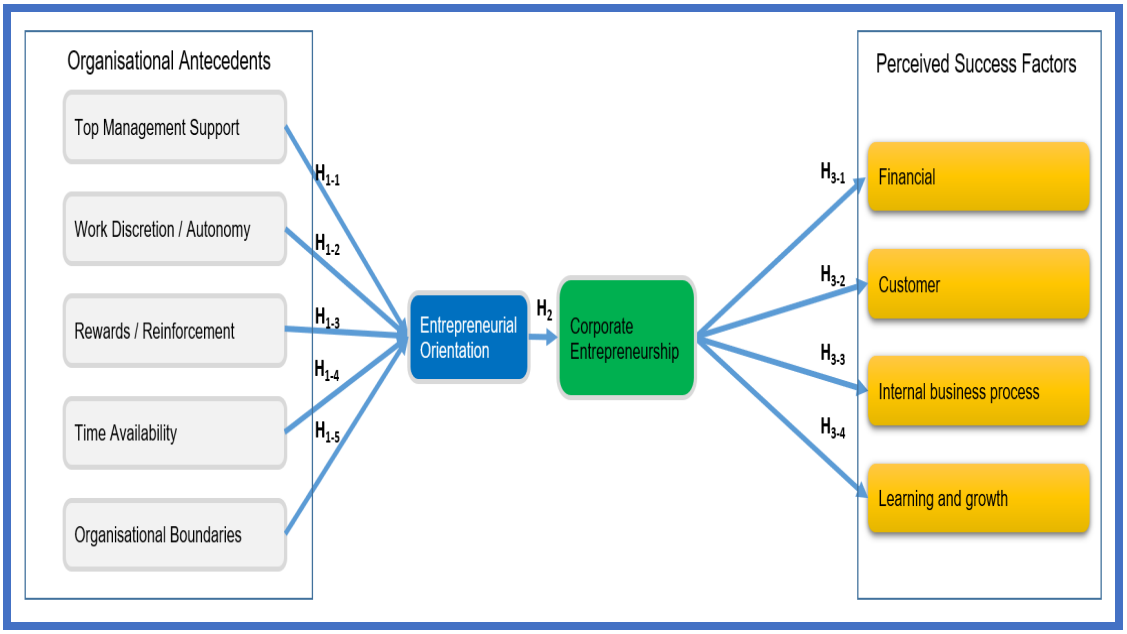
The research on corporate entrepreneurship has been mainly focused on the factors of organisations' external and internal environments without much consideration of the success factors of organisations (Ozdemirci, 2011:612). However, this study focused on understanding the organisational antecedents of corporate entrepreneurial climate within the parameters of an organisation as developed by Kuratko *et al.* (1990) and success factors. The five organisational antecedents (top management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries) were used in the model to measure the internal environments of organisations as predictors of success (Morris *et al*., 2011:51).

The hypothesis is that, if an organisation successfully implements organisational antecedents, entrepreneurial orientation manifests and corporate entrepreneurship is achieved. Hence, an environment that nurtures corporate entrepreneurship would lead to organisational success.

The success in this study was encapsulated by four key perspectives of the Balanced Scorecard, i.e. financial, customer, internal business process and learning

and growth (Anand, 2016:26; Dobrovic *et al*., 2018:42; Mathews, 2011:103; Niven, 2014:2; Singh & Arora, 2018:875). In Figure 1.2 below, a conceptual framework is provided to clarify the hypothesised relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and the success factors. It is hypothesised that all the five organisational antecedents, namely top management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries (Morris *et al*., 2011:51) are positively related to entrepreneurial orientation which is also positively related to corporate entrepreneurship and corporate entrepreneurship activities are good indicators of success of organisations, i.e. financial, customer, internal business process and learning and growth (Singh & Arora, 2018:875). The conceptual framework in Figure 1.2 clarifies and operationalises the study views and approach by showing a simple relationship between the variables to be considered in the study (Gerrish & Lathlean, 2015:22). More so, in reality, the relationship between both independent, mediators and dependent variables is intertwined or correlated as each variable influences the other to produce success. Creating a conducive internal environment that favours entrepreneurial activities can help organisations to achieve success, however, predicting key performance indicators and measuring them was the subject of this study (Kuratko *et al*., 2014:40). The results of this study could be important to organisations that are obsessive about improving their internal entrepreneurial activities and are concerned with measuring the effect of nurturing corporate entrepreneurship to produce the success of an organisation (Kuratko *et al*., 2014:40).

Figure 1.2: Hypothesis relationship framework



1.5.4 Variables

According to the conceptual framework in Figure 1.2 above, there are a total of 11 variables included in the measurement instrument. The five variables on the left are organisational antecedents (top management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries) (Morris *et al.*, 2011:51), the variables in the centre are entrepreneurial orientation and corporate entrepreneurship and the four variables on the right are organisational success factors derived from the four perspectives of the Balanced Scorecard performance management mechanism (Kaplan, 2010:4; Singh & Arora, 2018:874).

The organisational antecedents were used as independent variables, entrepreneurial orientation and corporate entrepreneurship were utilised as mediating variables and organisational success variables were utilised as dependent variables in the study. The arrows represent the relationship between the variables denoted by the hypothesis. According to Kaplan (2010:1), measuring the key driving forces of performance is important for both managers and the leadership of any organisation.

1.5.4.1 Independent variables

The independent variables for this study derived from prior studies conducted by Hornsby, Kuratko, Holt and Wales (2013:937) and Kuratko *et al*. (2014:37). The five independent variables are related to organisational antecedents of the firm's internal environment or climate. According to Hornsby *et al*. (2013:937), CEAI is an important instrument available for researchers to measure organisations' internal climate and is comprised of five variables, namely top management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries (Kuratko *et al*., 2014:40). Organisational antecedents are important variables that can be used by managers to create and assess organisational internal climate that enhances the cultivation of entrepreneurial behaviours (Kuratko *et al*., 2014:37). The CEAI instrument can predict the likelihood of being able to successfully implement an innovative strategy and identify weak internal areas that require development (Kuratko *et al*., 2014:37).

1.5.4.2 Mediating variables

The mediating variables for this study are entrepreneurial orientation and corporate entrepreneurship. Corporate entrepreneurship results from the implementation of organisational antecedents (Kuratko *et al*., 2014:39) and entrepreneurial orientation is element or aspect of corporate entrepreneurship (Covin & Lumpkin, 2011:856; Mungule & Van Vuuren, 2016:3). Organisational antecedents help managers to create internal environments that encourage innovation and nurture entrepreneurial behaviours (Kuratko *et al*., 2014:39). In this hypothesis, entrepreneurial orientation and corporate entrepreneurship were used to explain the relationship between organisational antecedents and organisational success.

1.5.4.3 Dependent variables

Dependent variables were derived from a list of key performance indicators (KPI) considered by automotive organisations as important for their business. KPIs typically help organisations to measure their successes in terms of making progress towards long-term organisational objectives (Mathew, 2011:88). The list of these success factors was summarised into the four key perspectives of the Balanced

Scorecard. Success factors are capabilities and activities that define the continuing success of an organisation (Mathews, 2011:88). Although success factors include KPIs, they are more focused on what leads to organisational success, for example, customer satisfaction, customer retention, innovation, service quality, growth, staff competencies and many more (Mathews, 2011:88). The Balanced Scorecard is a cutting-edge Morden tool that deals with absorbing both monetary and non-budgetary execution proportions of an organisation (Kaplan, 2010:4; Singh & Arora, 2018:875). Evaluation and monitoring of both the financial situation of an organisation and non-financial indicators are vital for achieving maximum competitiveness of an organisation (Dobrovic *et al*., 2018:41). Therefore, financial, customer, internal business process and learning and growth are the four factors identified as success factors in this study (Dobrovic *et al*., 2018:42).

1.5.4.4 Research hypothesis

In the normal daily routine people tend to make suggestions or provide reasons for certain manifestations by making rational guesses (Walliman, 2011:34). It is, therefore, important to formulate a prediction before conducting an experiment to determine the variables that would be tested and how to measure and control them (Walliman, 2011:11). it is thus significant to express the theory in the form of a statement called hypothesis which can be falsifiable before it is tested (Walliman, 2011:19). The process of hypothesis starts from problem identification, hypothesis development, plotting implication by deduction, testing the hypothesis both theoretically and practically and rejecting the hypothesis or modifying the hypothesis depending on the result obtained (Walliman, 2011:19).

Based on the literature review of corporate entrepreneurship and the conceptual framework in Figure 1.2 above, the study hypothesis shows the relationships and explains the interrelationship between organisational antecedents, entrepreneurial orientation effect on corporate entrepreneurship and causal linkage with the organisational success factors. The following are the hypotheses derived from the development of the conceptual framework (H_1, H_2, H_3):

I. Organisational antecedents' hypothesis (H_1): there is a relationship between organisational antecedents and entrepreneurial orientation.

a) H_{1-1} Top management support is positively related to entrepreneurial orientation.
b) H_{1-2} Work discretion or autonomy is positively related to entrepreneurial orientation.
c) H_{1-3} Rewards or reinforcement is positively related to entrepreneurial orientation.
d) H_{1-4} Time availability is positively related to entrepreneurial orientation.
e) H_{1-5} Organisational boundaries are positively related to entrepreneurial orientation.

II. Entrepreneurial orientation hypothesis (H_2): Entrepreneurial orientation is positively related to corporate entrepreneurship.
III. Corporate entrepreneurship hypothesis (H_3): corporate entrepreneurship activities are good indicators for the success of an organisation.

a) H_{3-1} corporate entrepreneurship will have a causal effect on the financial growth of an organisation.
b) H_{3-2} corporate entrepreneurship will have a causal effect on the customer perceptions of an organisation.
c) H_{3-3} corporate entrepreneurship will have a causal effect on internal business processes.
d) H_{3-4} corporate entrepreneurship will have a causal effect on the learning and growth of employees in an organisation.

The ultimate goal of the measurement instrument was that the instrument could be used to mediate current business challenges, sustain organisational performance and visualise success factors of organisations.

1.6 SCOPE OF THE STUDY

The scope of this study described the area of focus in this research, the industry or sector to be investigated and the geographical locations of automotive companies to be covered. The study aimed to conduct surveys on selected automotive companies from the Sub-Sahara African region.

1.6.1 Field of study

The field of study emanated from entrepreneurship, specifically entrepreneurial activities that exist within an established organisation. The topic in question is described as corporate entrepreneurship and it is an important aspect of strategic renewal, profitability, innovativeness and growth of organisations (van Wyk & Adonisi, 2012:66). Even though there is yet no consensus about the definition of corporate entrepreneurship a general acceptable agreement seems to exist that corporate entrepreneurship is characterised by the birth of new businesses within an established organisation, transformation of key areas of business and innovation and renewal within existing business (Corbett *et al*., 2013:812; Morris *et al*., 2011:11; van Wyk & Adonisi, 2012:66).

1.6.2 Study coverage

The study investigated the automotive industry or sector and the coverage was limited to the automotive car distributors and dealerships within the selected Sub-Sahara African countries. A total of six automotive companies were investigated in five different countries, namely: Kenya, Malawi, South Africa, Zambia and Zimbabwe. Table 1.1 shows the names of the countries, names of organisations and number of employees for each automotive company investigated in the study. An estimate of 1434 employees was expected to participate in the study.

Table 1.1: Automotive companies to be investigated

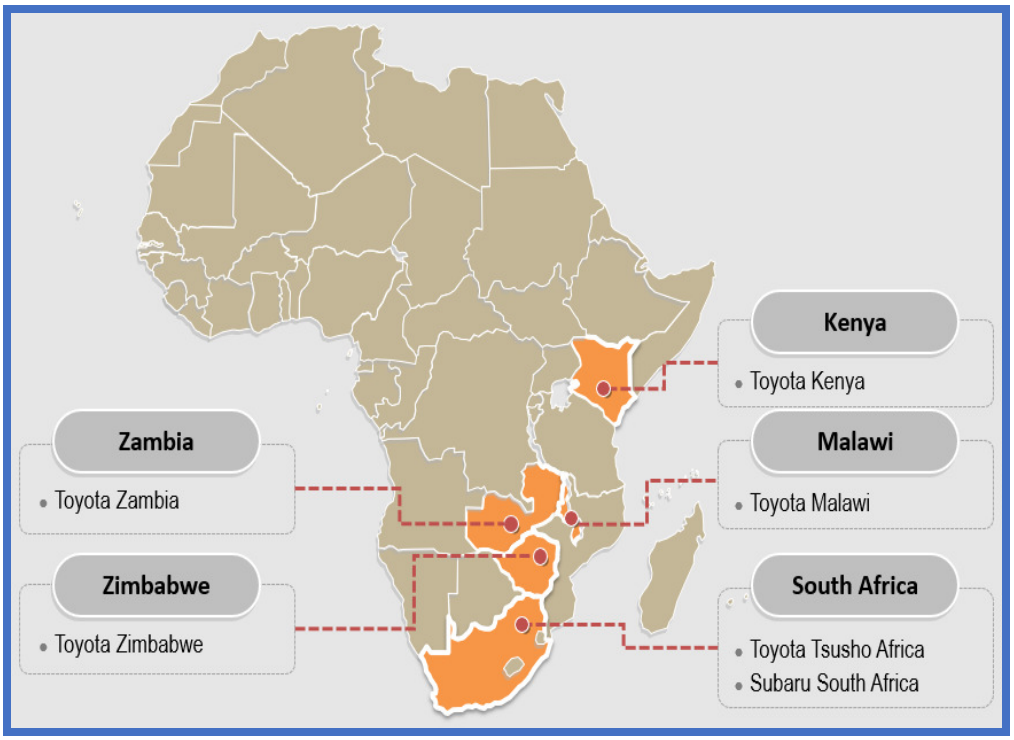
No.	Country	Company	No. of Employees
1	Kenya	Toyota Kenya	449
2	Malawi	Toyota Malawi	179
3	South Africa	Toyota Tsusho Africa	305
4	South Africa	Subaru Southern Africa	73
5	Zambia	Toyota Zambia	247
6	Zimbabwe	Toyota Zimbabwe	181
	Total		**1434**

Source: TTAF (2018)

1.6.3 Geographical demarcation

This study investigated the automotive companies from selected Sub-Sahara African countries stretching from South Africa, Zimbabwe, Zambia, Malawi to Kenya, as shown below in Figure 1.3. The technique used to select the countries and companies to be surveyed was a stratified random method (Krishnaswami & Satyaprasad, 2010:60). The population was subdivided into homogenous strata and from each stratum, a random sample was drawn (Krishnaswami & Satyaprasad, 2010:60). The stratified random technique was preferred over other techniques because the Sub-Sahara Africa region is comprised of a large heterogeneous population (Krishnaswami & Satyaprasad, 2010:61).

Figure 1. 3: Selected Sub-Sahara African countries



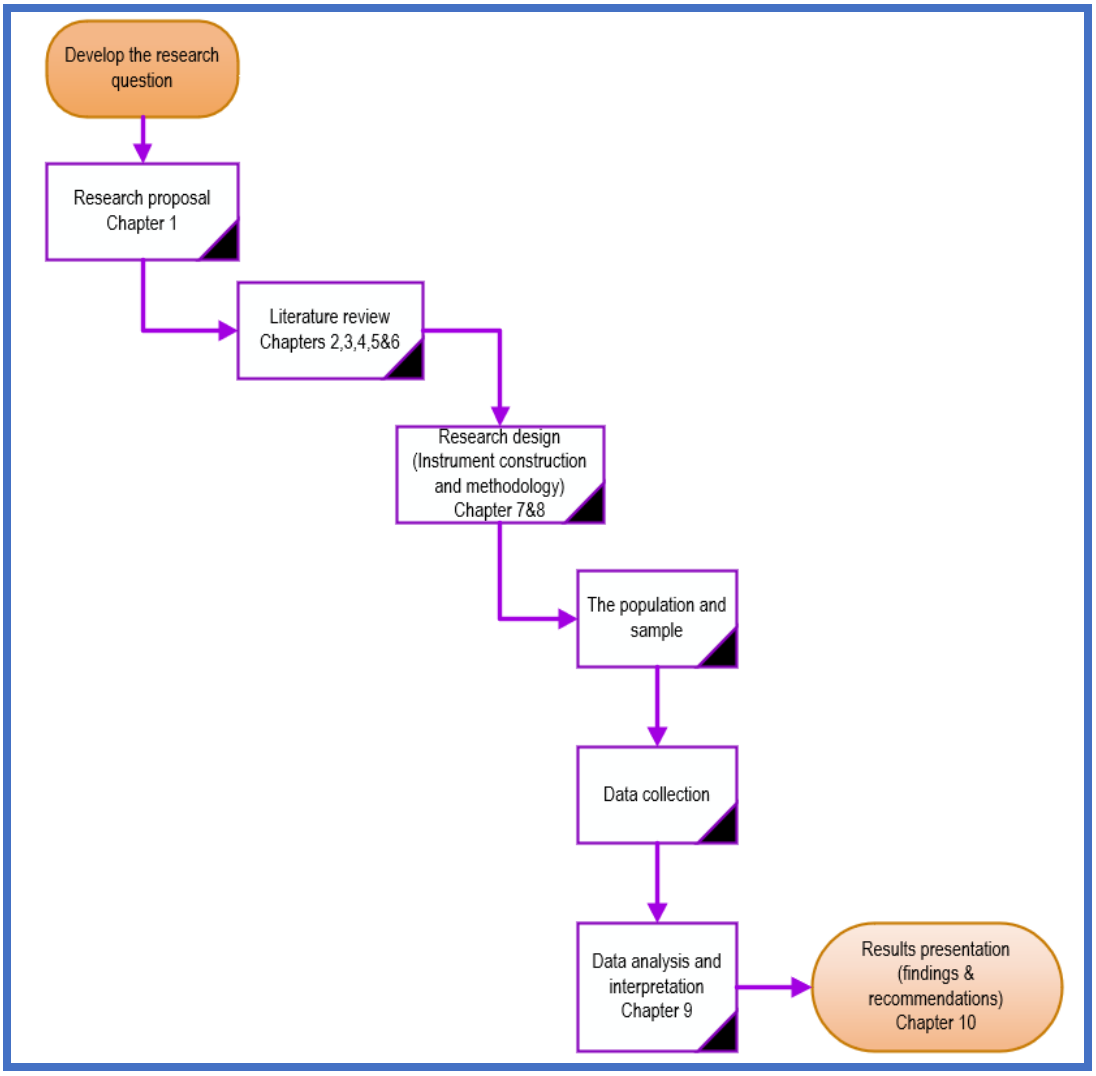
Source: TTAF (2018)

1.7 RESEARCH PARADIGM

The research paradigm for this study focused on the theory of knowledge known as epistemology (Walliman, 2011:16). Epistemology is the relationship between the researcher and reality and deals with how things are known by people and what is regarded as acceptable knowledge in a field of study (Walliman, 2011:17). The knowledge acquisition in this study was based on positivism (Walliman, 2011:21). Positivist scientific approaches are based on acceptance of the fact the world around us is real and these realities can be investigated using natural science methods (Walliman, 2011:21). Therefore, the study used sensory experience which was interpreted through logic and reason (Walliman, 2011:21). According to Walliman (2011:21), knowledge is a consequent of scientific methods that are based on sensory experience acquired through comparative analysis. The scientific facts were based on quantitative figures which are measurable and quantifiable (Walliman, 2011:21).

The hypothesis focused on both the literature and empirical studies i.e. literature review, research approach or design, the population and sample, data collection, data analysis and the presentation and discussion of the results (Gerrish & Lathlean, 2015:16). Figure 1.4 below shows the flow diagram indicating the research process adapted for this study.

Figure 1. 4*:* Research process flow diagram



Source: Adapted from Gerrish and Lathlean (2015:16)

1.7.1 Literature review

The Literature review provided experiences and comprehension of the examination issue and the expected foundation to aid the observation investigation. It explained the overviews of entrepreneurship, corporate entrepreneurship, entrepreneurial leadership, organisational success factors and the automotive sector. The outcome of the literature review provided a logical explanation of the relationship between corporate entrepreneurship and the success of organisations in the automotive sector. The objective of the literature review was to provide an overview of significant

literature available as well as clear arguments that contextualise and justifies the purpose of the study (Saunders & Lewis, 2012:40).

The literature was sourced from secondary information such as articles from Business Source Complete, Emerald, Wiley Online, Nexis, Google Scholar, entrepreneurship books, business books, company publications, dissertations and other recommended internet sources (Saunders & Lewis, 2012:40). The literature review provided a good understanding of the research topic being investigated and helped to prepare a strong empirical research presentation (Saunders & Lewis, 2012:38).

1.7.2 Measurement instrument

The measurement instrument of the study was constructed based on four literature key sources as below:

- Organisational antecedents' questions were drawn from several previous scholars who used similar questions in the process of refining the researches on the corporate entrepreneurship topic, e.g. (Adonisi, 2003; Brizek, 2003; Hornsby *et al*., 2013; Kuratko, Montagno & Hornsby,1990; Kuratko *et al*., 2014; Mungule, 2015 and van Wyk and Adonisi, 2012). The questionnaire was largely based on the CEAI Kuratko *et al*. (2014) and additional new questions developed by Mungule (2015).
- Entrepreneurial orientation questions were drawn from the work of Van der Merwe and Malan (2013:36) adopted from the work of Lumpkin and Dess (2001:442). Entrepreneurial orientation was measured on its five dimensions namely autonomy, innovation, risk-taking, pro-activeness and competitive aggressiveness (Covin & Lumpkin, 2011:857).

- Corporate entrepreneurship questions were drawn from the work of Covin and Miles (1999) and Morris *et al*. (2011). The questions were based on one of the alternative forms of corporate entrepreneurship called strategic entrepreneurship (Morris *et al*., 2011:97).
- Success factors questions were derived from various previous scholarly work that researched on organisational success factors, the Balanced Scorecard

and organisational performance and new questions were developed by the researcher of this study based on prior work of Matsuno, Mentzer and Ozsomer, (2002); van der Merwe and Oosthuizen (2011); Kumar *et al*. (2015); Valmohammadi and Servati (2011); Aswani, Were and Odhiambo (2016); Singh and Arora (2018); Dobrovic *et al*. (2018) and Albuhisi and Abdallah (2018).

The measurement instrument was developed on the concept of the 5-point Likert scale. The 5-point Likert scale comprises a rating scale that ranges from 1 to 5, where 1 refers to strongly disagree and 5 refers to strongly agree (Taylor, 2018:65). According to Welman and Kruger (1999:155), survey respondents were required to show their level of agreement by selecting a single point on the Likert scale. The selected points were then transformed into quantitative data which was used for the research analysis.

The questionnaire was developed based on the research question that sought to understand if a relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and the organisational success of the automotive industry truly exists.

The cover page of the questionnaire explained what corporate entrepreneurship is and clarified the implications of ethics. The questionnaire contained questions related to organisational antecedents, entrepreneurial orientation, corporate entrepreneurship, organisational success factors, biographical information e.g. sex and gender and the structure of the organisations surveyed e.g. level of employment and department (Lotz & van der Merwe, 2013a; Lotz & van der Merwe, 2013b).

Since the study aims to empirically evaluate the instrument for measuring the relationship between corporate entrepreneurship and the success factors of the automotive sector, reliability, validity and unidimensional of the measuring scale were assessed. According to Hair *et al*. (2010:706), the consistency of a specific measurement instrument score is referred to as the measurement of reliability. A standardised loading is used to measure individual indicator reliability with an ideal threshold of at least 0.7 (Mungule, 2015:201). Construct validity is the extent to which a set of measured items reflects the theoretical latent construct that is meant

to be measured (Hair *et al*., 2010:708). This is when the accuracy of the measurement tool is tested. Reliability testing is achieved by examining discriminants, convergent and face validity (Hair *et al*., 2010:709). Furthermore, Hagell (2014:256) reinforced that hypothesis requires unidimensionality and that stable estimation instruments must meet the conditions of unidimensionality of being valid and genuine. Additionally, Nazim and Ahmad (2013:4) posited that unidimensional measurement models should not contain redundant items, i.e. items with factor loading <0.5 or items highly correlated to each other. Unidimensionality helps to ensure that the basic assumptions of valid calculations of total scores are in place. Therefore, scientifically sound measurement tools must pass the following tests: validity, reliability and unidimensionality (Awang, 2015:54).

1.7.3 Research design

The design for this study was a correlation method which sought to measure relationships between two or more concepts (Walliman, 2011:10). The correlation design measured variables that have an influence on the other or causal relationships where one variable can cause changes to occur in the other variables (Walliman, 2011:10). Based on the research problem, a measuring tool for corporate entrepreneurship was developed to help automotive managers to quickly identify elements that encourage entrepreneurial activities. The research design pursued a scientific approach which used logical and systematic techniques that were aimed at discovering new facts, verifying them, testing old facts, analysing interrelationships, providing causal explanations and presentation of recommendations (Krishnaswami & Satyaprasad, 2010:3).

The research approach for this study was a quantitative analysis because quantitative research methods are based on quantity or amount and are represented through monetary or numerical terms, e.g. numbers or percentages (Krishnaswami & Satyaprasad, 2010:6; Saunders & Lewis, 2012:85). Quantitative research designs are focused on numerical data collection and are amenable to statistical analysis (Gerrish & Lathlean, 2015:22). According to Krishnaswami and Satyaprasad (2010:6), quantitative research is a method used to respond to questions about relationships between measured variables with a view of explaining independent and dependent variables. A quantitative method was used in this study to produce a

more objective finding that is clearer and more empirical than previous conceptual models that were never empirically tested or concluded based on case studies (Kuratko *et al*., 1990:55). The quantitative approach is an inferential method that requires the collection of data containing uniform characteristics, with set standard variables conducted through surveys (Krishnaswami & Satyaprasad, 2010:7). The quantitative approach also includes the use of statistical measurement techniques such as arithmetic mean, standard deviation, Structural Equation Modeling (SEM), Confirmatory Factor Analysis and Exploratory Factor Analysis (Krishnaswami & Satyaprasad, 2010:7).

1.7.3.1 The study population and sample

Population in this study was defined as a collective term used to describe the total quantity of cases and consists of certain types of objects, people or organisations (Walliman, 2011:94). The population consists of individuals about which the research wants to reach conclusion e.g. sales transactions for a particular period or all good music (Levine, Stephan & Szagat, 2014:53). The target population was drawn from Sub-Sahara Africa in the automotive industry and the sampling frame focused on organisations that have been in existence for 15 years or more (Walliman, 2011:94; Krishnaswami & Satyaprasad, 2010:51).

The research sample which is a portion of the population selected for analysis comprised of employees from Toyota Tsusho Africa (TTAF) and Subaru Southern Africa (SSA) from South Africa, Toyota Malawi from Malawi, Toyota Zimbabwe from Zimbabwe, Toyota Zambia from Zambia and Toyota Kenya from Kenya. All employees of all ages and levels of employment were included in the research and an estimate of about 1434 employees was expected to participate in the survey (Levine *et al*., 2014:53; Saunders & Lewis, 2012:123). According to Walliman (2011:95), It is generally recommended to collect data from larger samples because results from larger samples are more convincing than the ones from smaller samples. The data was collected using questionnaires distributed to multiple groups of people from the selected organisations comprising of both male and female from all levels of the organisations (Saunders & Lewis, 2012:124).

Automotive organisations surveyed in this study were chosen using a stratified random sampling technique where the sampling frame was split into relevant separate strata or groups using company revenue, age of organisation and accessibility (Krishnaswami & Satyaprasad, 2010:60; Saunders & Lewis, 2012:137; Walliman, 2011:95). According to Saunders and Lewis (2012:136), "a stratified random sampling technique is a type of probability sampling which requires the sampling frame to be divided into relevant strata and select sample members at random from within each stratum using either simple random or systematic random sampling". Stratification ensures inclusion of all relevant subgroups of the population, increases the sample's statistical efficiency and provides adequate data for analysing the various sub-populations (Krishnaswami & Satyaprasad, 2010:61).

1.7.3.2 Data collection

Secondary data was utilised for conducting the literature study and the information was searched from entrepreneurship books, journals, databases and internet (Saunders & Lewis, 2012:40), while empirical data was collected through conducting surveys that were sent to participants from the selected automotive organisations (Saunders & Lewis, 2012:141).

Meetings with all the managing directors of the surveyed organisations were held to request permission to conduct research in their organisations. As soon as authorisation was granted, the Statistical Consultation Service (SCS) of the North-West University (NWU) was requested to develop a web-based questionnaire which was emailed to all employees. An up-to-date collection of email addresses was done, and questionnaires were emailed with a web link to the targeted participants (Saunders & Lewis, 2012:149). The general guidelines of the internet were followed where emails were sent only to user groups. Only one email was sent to a participant and emails did not contain attachments (Saunders & Lewis, 2012:149). As for employees without access to email, printed questionnaires were hand-delivered.

1.7.3.3 Statistical analysis

The Statistical Package for Social Sciences (SPSS) was used to analyse the data collected in the study (Saunders & Lewis, 2012:36). Using the Analysis of Moment

Structures (AMOS), Exploratory Factor Analysis, Confirmatory Factor Analysis and Structural Equation Modeling (SEM) were conducted.

According to Khine, Ping and Cunningham (2013:158), “exploratory factor analysis is used to produce information about the nature of factors determined by the researcher instead of testing the hypothesis”. Exploratory factor analysis focuses on determining whether the covariance or correlations between a set of observable variables can be explained in terms of smaller numbers of unobserved constructs (Khine *et al*., 2013:153).

Confirmatory factor analysis has been widely used in test development processes carried out by social sciences researchers (Khine *et al*., 2013:152). It measures causality relations among determining factors for a study (Khine *et al*., 2013:152). Thus, it measures if constructs structured by the researcher are consistent, suitable and divulges causality relationships (Khine *et al*., 2013:152).

SEM is a technique used to model the first moment of data that represents mean structures and the second moment of data that represents the covariance matrix of variables when the data is multivariate normal (Cheung, 2015:14). SEM is an ideal technique for measuring correlations that seek to measure relationships between two concepts (Ullman & Bentler, 2013:661; Walliman, 2011:10). SEM is a collection of statistical techniques that allows a set of relationships between one or more independent variable or dependent variables, either continuous or discrete, to be examined (Ullman & Bentler, 2013:661). The SEM technique is basically a confirmatory process that provides a wide-ranging means for validating the measurement model of latent constructs (Awang, 2015:54). Therefore, SEM can be assumed to be an add-on of confirmatory factor analysis and focuses on measuring relationships among several constructs based on their prior stated measurement structure (Khine *et al*., 2013:4; Yang, 2003:157). SEM comprises of general linear models and meta-analysis and is highly favoured by users because it contains similarities and different techniques under the same SEM framework (Cheung, 2015:6). It can also incorporate latent and observed variables while other multivariant techniques are only able to use observed variables and can model multivariant relationships and estimate direct and indirect effects of variables (Khine *et al*., 2013:4). Before conducting SEM, biographical information, descriptive

statistics, exploratory factor analysis and confirmatory factor analysis were conducted to validate if the data achieved the required reliability and construct validity (Awang, 2015:54; Levine *et al*., 2014:36).

1.7.3.5 Ethical consideration

Ethics was an important consideration for this study. According to Saunders and Lewis (2012:74), "ethics is a standard of behaviour that guides the choices made by people and governs people's behaviour and relationships with others". The onus of being ethical was for both the researcher and the participants. Both parties were faced with numerous ethical obligations that if breached, would discount the quality and usefulness of the study (Hair, Celsi, Money, Samouel and Page, 2011:64). On the part of the researcher, the following obligation, according to Hair *et al*. (2011:65), applied:

- To maintain scientific rigour.
- To maintain confidentiality between the researcher and the participants.
- To search the truth using facts derived from the survey.
- To explicitly show limitations of the study
- To explain the study results in a simple and understandable format.

On the part of participants obligation, voluntary and faithful participation was required. Participants were requested to be honest and to respect the research privacy (Hair *et al*., 2011:65).

1.7.4 Referencing

The study used the Harvard referencing technique. Referencing allows researchers to acknowledge and give credit to other people's work (Saunders & Lewis, 2012:48).

1.8 CONTRIBUTIONS AND LIMITATIONS

1.8.1 Contributions

The primary contribution of this study was the development and testing of a measuring instrument which expanded the CEAI by including success factors that

empirically helped to comprehend the relationship between corporate entrepreneurship and the success of organisations. The following were the contributions of this study to the field of entrepreneurship literature:

- The study expanded prior studies that investigated the relationship between corporate entrepreneurship and performance by incorporating organisational success factors as additional variables to the CEAI.
- The study developed an empirical measurement instrument to be used for assessing internal organisation antecedents that leads to the success of organisations.
- The study provided organisations with practical guidelines on how to use resources for establishing effective corporate entrepreneurship strategies and direction on how to develop an entrepreneurial climate.
- Scholars now have the theoretical knowledge that could help them to progressively re-examine the variables that predict, clarify and outline the internal environment in which corporate entrepreneurship thrives.
- The new measurement instrument opened new avenues for further research in the field of corporate entrepreneurship because of the inclusion of the four perspectives of the Balanced Scorecard as success factors. The study ignited novel inquiry due to additional variables.
- The study contributed to Sub-Sahara African literature on corporate entrepreneurship and entrepreneurship.
- Scholars and practitioners both have empirically tested variables to use when working with corporate entrepreneurship environments.

1.8.2 Limitations

The main aim of this study was to evaluate the relationship between corporate entrepreneurship and organisational success for automotive organisations in Sub-Sahara Africa and to provide recommendations on how to implement corporate entrepreneurship to enable organisations to sustain their competitive advantages. However, a few limitations were identified that could constrict the acceptability of the results derived from the study and could also become starting points for future research. The following are some of the limitations:

- The fact that the research was conducted in selected automotive organisations, the results from these organisations might not be generalised because of differences in internal organisational cultures and values of the investigated organisations.
- The research was conducted in five different countries from Sub-Sahara Africa that are experiencing different levels of political, economic, technological and social challenges. The research was influenced by the impact of the external environmental business challenges on each country which was not considered in the study.
- The costs of conducting the study restricted coverage to gather more information.
- The study focused on only internal factors that influence corporate entrepreneurship and did not cover the external environment (Heinonen & Toivonen, 2008:258). Therefore, the external environment influences were not included in the measurement instrument.
- Organisational based factors such as strategy, vision and communication were not be explored in detail and related to organisational success factors.
- Little or no consensus on the underlying factors of the dimensions of success impacted the generalisation of results derived from the study. Additional research will be necessary to clarify the underlying factors of organisational success. In a positive way, this study ignited more inquiry due to additional variables added to the measurement instrument.
- Individual countries' cultural factors were not be explored in detail in this study.

1.9 CHAPTER LAYOUT

The investigation was organised in a manner that pursues a legitimate movement to develop the specific research problem and research objectives and were divided into ten chapters as shown below:

- Nature and scope of the study
- An overview of entrepreneurship
- An overview of corporate entrepreneurship
- An overview of entrepreneurial leadership

- Organisational success factors
- The automotive sector in Sub-Sahara Africa
- The research instrument construction
- Empirical research
- Discussion and results
- Conclusion and recommendations

Table 1.2 below shows the title of the study, the chapter titles and a detailed explanation for each chapter.

Table 1. 2: Chapter layout

Thesis title	Chapter No.	Chapter title
An evaluation of the relationship between corporate entrepreneurship and success of automotive companies from selected Sub-Sahara African countries	1	NATURE AND SCOPE OF STUDY
	2	AN OVERVIEW OF ENTREPRENEURSHIP
	3	AN OVERVIEW OF CORPORATE ENTREPRENEURSHIP
	4	AN OVERVIEW OF ENTREPRENEURIAL LEADERSHIP
	5	ORGANISATIONAL SUCCESS FACTORS
	6	THE AUTOMOTIVE SECTOR IN SUB-SAHARA AFRICA
	7	THE RESEARCH INSTRUMENT CONSTRUCTION
	8	EMPIRICAL RESEARCH
	9	DISCUSSION AND RESULTS
	10	CONCLUSION AND RECOMMENDATIONS

1.9.1 Chapter 1: Nature and scope of the study

The first chapter of the study explained the broader overview of the subject of research. The introduction of the chapter provided the background of the current business environment and its negative impact on the business. The concept of corporate entrepreneurship and its importance to the business were also explained. Furthermore, the problem statement which identified the need to develop a sound measurement instrument and the need to scientifically evaluate the association between corporate entrepreneurship and the success factors of automotive organisations was clarified.

The study objectives were explained, followed by the research paradigm. The quantitative technique was chosen as the research method for this study which uses questionnaires to collect data. A conceptual framework was developed as shown in

Figure 1.2 and research hypotheses were outlined in three categories. Contributions and limitations of the research were also discussed to illuminate the pros and cons of the study and the study's chapter layout was provided to demonstrate the scope of the study.

1.9.2 Chapter 2: An overview of entrepreneurship

Chapter 2 introduced the concept of entrepreneurship with a view of clarifying the nature of entrepreneurship. Definitions of entrepreneurship, entrepreneur and characteristics of entrepreneurs were explained. In addition, an explanation of the difference between exploration and exploitation was provided together with the definitions of innovation and creativity. Furthermore, a brief overview of entrepreneurship barriers and a detailed explanation of the current state of entrepreneurship levels in South Africa, Kenya, Malawi, Zambia and Zimbabwe were provided.

1.9.3 Chapter 3: An overview of corporate entrepreneurship

Chapter 3 focused on the overview of corporate entrepreneurship, the focal point of this study. The chapter explained the variations of corporate entrepreneurship definitions identified by several scholars from the field, the differences between entrepreneurship and corporate entrepreneurship, forms of corporate entrepreneurship which include corporate venturing and strategic entrepreneurship. A detailed explanation of corporate entrepreneurship models was also provided to illustrate the relevance of the concept for this study and in addition, an explanation of corporate entrepreneurship barriers in the organisation was explained in detail. A description of organisational antecedents was provided to justify the importance of the antecedents to this study and their relationship with the entrepreneurial orientation five dimensions was clarified. Organisational antecedents and entrepreneurial orientations dimensions were provided to specify the background information which was used for the development of the measurement instrument in Chapter 7.

1.9.4 Chapter 4: An overview of entrepreneurial leadership

Chapter 4 focused on explaining the concept of entrepreneurial leadership. Entrepreneurial leadership definitions and differences between leadership and management were clarified. Furthermore, a detailed explanation of entrepreneurial leadership, entrepreneurial leadership competencies and characteristics were provided. The main aim of the entrepreneurial leadership explanation was to highlight the importance of leadership in terms of creating a conducive environment that supports innovation and creativity in organisational settings and its impact on the organisational antecedents and entrepreneurial orientation.

1.9.5 Chapter 5: Organisational success factors

An introduction and definition of success factors were provided in chapter 5, together with a brief background of performance management tools and the Balanced Scorecard. Organisations' success factors were explained in detail and linked to the four perspectives of the Balanced Scorecard. A general overview of performance management tools was provided, and a comparison of the performance management tools was explained to qualify the reason for choosing the Balanced Scorecard for this study. The relationship between mission, vision and strategy was clarified and a detailed explanation of the four perspectives of the Balanced Scorecard concept, adoption rate of the Balanced Scorecard and implementation challenges were specified. In addition, the Balanced Scorecard's strengths and weaknesses were explained in detail.

1.9.6 Chapter 6: The automotive sector in Sub-Sahara Africa

An overview of the automotive sector in Sub-Sahara Africa was introduced in chapter 6, clarifying the origins of the automobile industry and the new vehicle market demographics. Additionally, a brief background of Sub-Sahara Africa and Africa was discussed. The selected countries designated for this study were introduced individually, namely Kenya, Malawi, South Africa, Zambia and Zimbabwe. An overview of each organisation was provided detailing the backgrounds of the selected automotive organisations' history, their business philosophies and values.

1.9.7 Chapter 7: Research instrument construction

The objective of Chapter 7 was to construct the measurement instrument for this study. An overview of the concept of the structural equation modelling (SEM), highlighting its origin, advancement and integration of algorithms in software programs were explained in detail. The definition of SEM and its advantages over other methods were clarified. The most common types of models in SEM literature were introduced, e.g. path analytic models, confirmatory factor analysis, structural regression models and latent change model. Additionally, the five stages of SEM were also explained, together with the process of assessing the measurement instrument, unidimensionality, validity and reliability.

The research questions were outlined, together with the objectives of the study. A conceptual framework was developed showing the variables and study hypothesis. The hypotheses of the study were delineated in detail, leading to the development of the measurement instrument. The measurement instrument was developed using the organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success factors variables. The observed variables were developed using previous research and new information from the researcher of this study.

1.9.8 Chapter 8: Empirical research

Chapter 8 focused on the research methodology, where the definitions of the term research, research paradigm and the problem statement were provided. A detailed explanation of the research paradigm, research approaches and research strategies were specified. A detailed explanation of how the questionnaire was designed, its layout and the distribution process were also provided. Furthermore, the population, samples size, data collection and data analysis techniques were explained.

1.9.9 Chapter 9: Discussion and results

The research findings were presented in Chapter 9. The statistical techniques used for data interpretation were provided. Chapter 9 focused on unpacking the data collected in the study using exploratory factor analysis, confirmatory factor analysis,

descriptive statistics, comparison of biographical effects on constructs, correlations between constructs and the SEM analysis. The statistical tabulation was analysed using the SPSS software.

1.9.10 Chapter 10: Conclusion and recommendations

Chapter 10 focused on summarising the research findings. Research findings were concluded, and recommendations made in line with the study objectives and hypothesis. The achievement level of primary and secondary objectives was assessed and the relationship between the study objective and the results was illuminated through a proposed framework. A proposed framework to work as a guideline for automotive leaders was provided based on the findings from the SEM analysis results. Finally, study recommendation, contributions, limitations and future research suggestions were proposed.

In conclusion, this research focused on understanding the relationship between corporate entrepreneurship and organisational success through introducing a new scientifically sound measurement instrument that is valid and reliable. The results of this research were achieved through a detailed analysis of a literature study, data collection, the analysis of the results, conclusion and recommendations.

CHAPTER 2: AN OVERVIEW OF ENTREPRENEURSHIP

2.1 INTRODUCTION

Contemporary organisations are sluggishly grasping that corporate entrepreneurship could be the most effective strategy to achieve acceptable levels of organisational performance (Kuratko *et al*., 2013:323). Botha and Nyanjom (2011:30) postulated that corporate entrepreneurship can impel the organisation to identify and seize new opportunities, thereby developing blue ocean industries and achieving higher levels of organisational success. To fully understand the corporate entrepreneurship construct, knowledge of the entrepreneurship construct is mandatory to possess.

Corporate entrepreneurship originates from the field of entrepreneurship and very often referred to as organisation entrepreneurship, entrepreneurship or corporate venturing (Kuratko, 2017:2). Entrepreneurship signifies the creation of new ventures and introduction of new paradigm innovations brought about by individuals such as Bill Gates, Mark Zuckerberg, Steve Jobs and many more (Parker, 2018:6; Spinelli & Adams, 2012:35; Morris *et al*., 2011:35). Generally, entrepreneurship is associated with small businesses, because small businesses provide conducive environments for entrepreneurship to thrive (Sahut & Peris-Ortiz, 2014:663).

Chapter 2 focuses on defining the terms entrepreneurship, an entrepreneur, explains the differences between exploration and exploitation, forms of entrepreneurship, innovation and creativity, barriers of entrepreneurship and provides brief overviews of entrepreneurship activities in Kenya, Malawi, South Africa, Zambia and Zimbabwe. Entrepreneurship is a concept widely likened to small businesses created by individuals not connected to larger organisations (Parker, 2018:6). Whereby corporate entrepreneurship can simply be defined as entrepreneurship within existing organisations, large or small (Morris *et al*., 2011:11; Kuratko, 2017:2). Corporate entrepreneurship is a process whereby individuals or groups of employees within an existing organisation, small or large initiate renewal of the same organisation, innovate or completely create a new organisation outside the existing one (Sharma & Chrisman,1999:18; Corbett *et al*., 2013:812). Corporate entrepreneurship the focus of this study is introduced in chapter 3 together with its constructs.

2.2 CHARACTERISATION OF ENTREPRENEURSHIP

The toughest challenge in the field of entrepreneurship is to define the term entrepreneurship (Parker, 2018:6). In principle, a general agreement on the definition of entrepreneurship does not exist yet (Parker, 2018:6). The concept of entrepreneurship has generally been broadly characterised by many researchers, scholars and policymakers.

According to Kusumsiri and Jayawardane (2013:26), the concept of entrepreneurship is knotted with multifaceted sets of overlapping constructs and perspectives, as a result, overcrowding the term with numerous definitions. For instance, Schumpeter (1947:151) postulated an entrepreneur "as being responsible for developing new things or doing things that are already being done in a new way". Based on this Schumpeter's argument, entrepreneurship entails on the introduction of new paradigm shift innovations rather than engaging in an occupation within an existing organisation (Parker, 2018:6).

Entrepreneurship has been used to explain a wide range of activities e.g. founding, creation, adapting and managing a new venture (Kusumsiri & Jayawardane, 2013:26). Amid a myriad of entrepreneurship definitions, self-employment and new venture creation are significantly mentioned in the definitions (Berglann, Moen, Roed & Skogstrom, 2011:180; Parker, 2018:6).

2.3 ENTREPRENEURSHIP OPERATIONAL DEFINITION

Although the term entrepreneurship is filled with a myriad of interpretations, it is an important element of economic growth of many nations. Entrepreneurship plays an important role in improving the lives of many people the world over. Kuratko (2011:10) suggested that entrepreneurship is an integrated concept that innovatively permeates an individual's business and achieves the following benefits:

- Entrepreneurship is an integral part of the renewal process that pervades and defines market economies (Kuratko, 2011:9).
- Entrepreneurship plays a critical role in innovation and leads to technological change and productivity growth (Kuratko, 2011:9).

- Entrepreneurship creates or enable people from all walks of life such as women, men, migrants and minorities to access the pursuit of economic success (Kuratko, 2011:9).
- Entrepreneurship generates wealth, for instance about 20 - 40% of labour growth in eight major industrialised countries was directly linked to the reallocation of inputs arising from the entry of new and existing of an old organisation (Berglann *et al*., 2011:180).
- Entrepreneurship necessitates externalities, which in turn initiates policy changes (Berglann *et al*., 2011:180).
- Entrepreneurship is an important source of labour market flexibility (Berglann *et al*., 2011:180).

The above merits of entrepreneurship are the reason why the concept has attracted lots of attention both in business and academic. Table 2.1 below shows a summary of some notable definitions of entrepreneurship from several sources in their chronological order starting from Schumpeter's definition.

Table 2.1: Entrepreneurship definitions and authors

Year	Definition	Biographer
1934	Entrepreneurship is a process of carrying out of new combinations of organisation in the form of new products, new services, new sources of raw material, and new methods of production, new markets and new forms of organisation.	Schumpeter
1949	Entrepreneurship is a purposeful activity to initiate, maintain and aggrandise a profit-oriented business.	Cole
1982	It is a process of new venture creation.	Vesper
1983	Entrepreneurship has been strongly identified with a dominant organisational personality, generally an independent-minded owner who makes the strategic decisions of the organisation.	Miller
1985	Innovation and change behaviours.	Drucker
1988	Entrepreneurship is the creations of new enterprises.	Low and MacMillan
1988	Entrepreneurship is the creation of new organisations.	Gartner
1989	Entrepreneurship is a process of creating something different with value by devoting the necessary time and effort.	Hisrich and Peters
1990	The process by which individuals, either on their own or inside an organisation pursue opportunities without regard to the resource they currently control.	Stevenson and Jarillo
1991	Entrepreneurship is the process of creation, founding, adapting and managing a venture.	Cunningham and Lischeron

1993	Entrepreneurship is an innovative and change-oriented behaviour, task-related to motivation, expertise and expectation of gain for self.	Bull and Willard
1995	Entrepreneurship is the creation of an innovative economic organisation for the purpose of gain under conditions of risk and uncertainty.	Dollinger
1995	The discontinuous process of combining resources to produce new goods or service.	Stoner, Freeman and Gilbert
1996	Entrepreneurship is an act of forming a new organisation of value.	Bateman and Snell
1996	The essential act of entrepreneurship is new entry.	Lumpkin and Dess
1998	Entrepreneurship is how new organisations are formed with their resultant job and wealth creation.	Carton, Hofer and Meeks
1998	Entrepreneurship is the creation of new enterprises.	Bartol and Martin
2000	Entrepreneurship involves the discovery and exploitation of opportunities.	Shane and Venkataraman
2004	Entrepreneurship is the pursuit of opportunity beyond the resource you currently control.	Stevenson
2008	Entrepreneurship is the process of creating something new with value by devoting the necessary effort and time, assuming the accompanying financial, psychic and social risk and receiving the resulting rewards of monetary and personal satisfaction and independence.	Hisrich, Peters and Shepherd
2012	Entrepreneurship is a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach and leadership balanced for the purpose of value creation and capture. Entrepreneurship results in the creation, enhancement, realisation and renewal of value, not just for the owners.	Spinelli and Adams
2013	Entrepreneurship is primarily an economic function that is carried out by individuals, entrepreneurs, acting independently or within organisations, to perceive and create new opportunities and introduce their ideas into the market, under certainty, by making decisions about location, product design, resource use, institutions and rewards systems. The entrepreneurial activity and the entrepreneurial ventures are influenced by socioeconomic environment and result ultimately in economic growth and human welfare.	Carlsson, Braunerhjelm and McKelvey
2014	Entrepreneurship is a dynamic process of vision, change and creation and requires an application of energy and passion toward the creation and implementation of new ideas and creative solution.	Kuratko

According to Naudé (2011:5), there are many entrepreneurship definitions as revealed in Table 2.1. However, zooming in on the definitions in Table 2.1, the differences in the entrepreneurship definitions are relatively minor and some of them inconsequential (Davidsson, 2016:5). Hereafter, many scholars from the business management field tend to agree that the defining feature of entrepreneurship is

innovation (Naudé, 2011:6). The reason why the term entrepreneurship has enticed varied definitions could be that entrepreneurship is seen as a subfield within several disciplines, each with its own view on the subject matter (Carlsson *et al*., 2013:915). For instance, economists define entrepreneurship from an occupational, behavioural or an outcome point of view (Naudé, 2011:5).

The occupational definition is the most extensively used definition relative to economic development (Naudé, 2011:6). The occupational point of view states that entrepreneurs are those who are self-employed or business owners (Naudé, 2011:5). The occupational definition is based on the established economic theory of occupation choices. In this theory, individuals decide to whether to stay unemployed, become self-employed or be employed in formal or informal employment (Naudé, 2011:5).

From the behavioural definition of entrepreneurship, an entrepreneur is defined according to certain critical functions that are supposed to be carried out by an entrepreneur (Naudé, 2011:6). Entrepreneurship needs to be differentiated from other allied activities such as business management or business financing more so functions like risk-taking and exploitation of opportunities have been added (Naudé, 2011:6).

The varied definitions of entrepreneurship in Table 2.1 above and the approaches to define entrepreneurship tend to have resonating themes and keywords. According to Morris *et al*. (2011:9), entrepreneurship is a process, which involves values creation where there was none, it's an exceptional way of assembling resources and involves opportunity-driven behaviour. The common themes and keywords from the myriad entrepreneurship definition are, for example, the creation of wealth, the creation of enterprises, the creation of innovation, the creation of change, the creation of employment, the creation of value and the creation of growth (Morris *et al*., 2011:10). Such resonating themes and keywords were summarised as the seven common perspectives on the nature of entrepreneurship in Table 2.2 below (Morris *et al*., 2011:10).

Table 2.2: Seven perspectives on the nature of entrepreneurship

No.	Perspective	Definition of Entrepreneurship
1	Creation of wealth	Entrepreneurship involves assuming the risk associated with the facilitation of production in exchange for profit.
2	Creation enterprises	Entrepreneurship entails the founding of a new business where none existed before.
3	Creation of innovation	Entrepreneurship is concerned with unique combinations of resources that make existing methods or products obsolete.
4	Creation of change	Entrepreneurship involves creating change by adjusting, adapting and modifying one's personal repertoire, approaches and skills to meet different opportunities available in the environment.
5	Creation of employment	Entrepreneurship is concerned with employing, managing and developing the factors of production, including the labour force.
6	Creation of value	Entrepreneurship is a process of creating value for customers by exploiting untapped opportunities.
7	Creation of growth	Entrepreneurship is defined as a strong and positive orientation towards growth in sales, income, assets and employment.

Source: Morris *et al*. (2011:10)

The seven common perspectives on the nature of entrepreneurship resonate with several entrepreneurship definitions. For instance, Kuratko (2014:5), in his definition uses terms such as dynamic process, vision, change and creation, while Kusumsiri and Jayawardane (2013:26) used terms such as creation, adapting, founding and managing a venture. In addition, Kusumsiri and Jayawardane (2013:26) postulated that entrepreneurship is a multifaceted field which is interwoven with complex arrangements of overlapping constructs and points of view. Examples of such overlapping constructs are technology, new product development, change management, small business management and individualism (Kusumsiri & Jayawardane, 2013:26).

The above entrepreneurship definitions and common terms in Table 2.2, can be summarised in terms of exploitation and exploration with a view to identifying opportunities. Given this dilemma, entrepreneurship is thought to be not a useful or legitimate field until it offered a theoretical framework to explain and envisage phenomena neither explained nor predicted by other fields (Shane, 2012:11).

Shane (2012:11) suggested five dimensions of entrepreneurship that explains and predicts a set of empirical occurrences as below:

- Entrepreneurship observes many results other than business performance only, for instance, it emphasises identification and exploitation of opportunities (Shane, 2012:11).
- Entrepreneurship does not need the existence of an organisation, can occur before organisations are established, exist in settings where organisations do not exist and can occur at lower levels than the organisational level of analysis (Shane, 2012:11).
- Entrepreneurship is concerned with individuals or groups of individuals (Shane, 2012:11).
- Entrepreneurship stresses on efforts to identify and exploit opportunities (Shane, 2012:11).
- Entrepreneurship is concerned with many non-strategic activities such as operations management and resource management (Shane, 2012:11).

2.4 EXPLORATIVE AND EXPLOITATIVE DOMAINS OF ENTREPRENEURSHIP

Entrepreneurship has generally evolved as the process of opportunity exploration and exploitation comparative to changes in the external environment, leading to moderately healthy and sustainable business propositions (Goel & Jones, 2016:94). It involves the process of exploring new opportunities and producing value from them consequently creating wealth and sustained competitive advantage (Goel & Jones, 2016:95).

Entrepreneurial exploration and exploitation are usually presented in relation to results such as competitive advantage, organisation performance and sustainability (Goel & Jones, 2016:94). Entrepreneurial exploration and exploitation are concerned with creating resources and identifying new applications for existing resources that are not wholly visible due to dispersed knowledge about the means-ends relationship (Goel & Jones, 2016:95).

2.4.1 Exploration

Exploration entrepreneurship involves a variation from an organisation's current knowledge base and skills such as new opportunities, skills, market expertise, external relationships, innovation and venture creation (Goel & Jones, 2016:95; Carlsson *et al*., 2013:915). The process of exploration always includes activities such as discovery, risk-taking, experimentation and flexibility (Goel & Jones, 2016:95).

Exploration entrepreneurship is concerned with characteristics of individuals working independently or in teams within an existing organisation. Individuals identify opportunities and innovations that lead to new or founding of new organisation (Carlsson *et al*., 2013:914). These exploited opportunities will reorient the organisation competencies towards the new opportunities discovered as a source of competitive advantage (Goel & Jones, 2016:95). Consequently, exploration involves discovering new opportunities and needs to be accompanied by exploitation to leverage existing competencies (Goel & Jones, 2016:95).

2.4.2 Exploitation

Exploitation entrepreneurship is more concerned with organisations current knowledge base and competencies. Exploitation delivers results within the organisation using the firm’s current core competencies (Goel & Jones, 2016:96). The objective of the entrepreneurs is to strengthen the core competencies of the organisation and leverage them across related existing opportunity sets (Goel & Jones, 2016:95). Exploitation entrepreneurship can lead to organisational internal transformation, creation of new processes and products, socioeconomic development and can ultimately benefit stakeholders (Carlsson *et al*., 2013:914).

According to Goel and Jones (2016:95), exploitation actions helps the organisation to benefit longevity provided by using known and successful strategies. The aims of exploitation entrepreneurship focus on improving quality, efficiencies, fostering existing knowledge, technology, skills and capabilities (Goel & Jones, 2016:95). However, exploitation actions generally contribute to short-term gains, unlike explorative actions that are more of long-term strategic focus with high costs and risks. Similarly, exploitation activities are not enough alone. Without the willingness

to pursue new opportunities in the market, there is no insurance for the survival of the organisation given that the external environment is constantly dynamic (Goel & Jones, 2016:95).

In summary exploitation and exploration, entrepreneurship constructs are captured in several definitions in Table 2.1. For instance, Stevenson (2004:3), defined entrepreneurship "as the pursuit of opportunity beyond the resource you currently control" while Kuratko (2014:5), defined entrepreneurship "as a dynamic process of vision, change and creation". These definitions technically embraced both the exploration and exploitation borders of entrepreneurship.

2.5 THE ENTREPRENEUR

2.5.1 Defining the entrepreneur

The word entrepreneur was taken from the French word entreprendre, which means "to undertake" (Kuratko, 2014:4). Thus, an entrepreneur is a person who conducts all the exchanges and bears risk because of buying at a certain price and selling at an uncertain price (Parker, 2018:32). Entrepreneurs are often referred to as paradigm pioneers, innovators and visionaries (Fernald, Solomon & Tarabishy, 2004:1).

According to Karmarkar *et al*. (2014:159), entrepreneurs are engines of their organisations, they are the driving force of their vision and mission and tremendously impact organisational systems, processes, procedures and culture. Ideally, entrepreneurs are people who receive inconsistent income and if they become successful can play an important role in an economy by relieving the paralysis stimulated by market ambiguities, permitting production and exchange to occur and market equilibrium to be achieved (Parker, 2018:32). Entrepreneurs are vital contributors to monetary growth through their leadership, innovation, management job creation, productivity and creation of new industries (Karmarkar *et al*., 2014:162). Therefore, entrepreneurs exploit, explore and discover new things and are agents of change. Entrepreneurs are aggressive catalysts for change in the arena of business (Kuratko, 2014:4). Entrepreneurs have meaningfully contributed to economic growth, national employment, the renewal of economies around the world and have improved health, lifestyles and wellbeing of people the world over (Miller, 2014:1).

In this respect, entrepreneurs can be viewed as agents of production in an economy or arbitrageurs who balance supply and demand in an economy and they prevail in the world of equilibrium by calculating the best possible opportunity and marshal diverse resources needed to develop new markets and engage the inevitable competition (Thai & Turkina, 2014:492; Spinelli & Adams, 2012:35). In addition, entrepreneurs can also be viewed as innovators who push back the production possibility frontier by creating new assortments and identifying novel opportunities (Thai & Turkina, 2014:492).

Due to the unpredictability of an entrepreneurial venture, an entrepreneur must acquire a varied set of resources and characteristics (Huang & Knight, 2017:80). Successful entrepreneurs are intrinsically motivated, energetic and can tolerate ambiguity, mitigate risk, effectively commercialise, dominant, autonomous, powerful, independent, have a need for achievement and innovative (Kuratko, 2014:5; Miller, 2014:3; Spinelli & Adams, 2012:35).

Given that entrepreneurs have contributed enormously through their breakthrough innovation to national wealth, it has become imperative to understand their personalities, capabilities and characteristics (Miller, 2014:1). For example, Miller (2014:2), stated that entrepreneurs tend to gravitate towards the need for achievement, autonomy, power, independence and demonstrate high levels of locus of control. In addition, entrepreneurs must be willing to take calculated risks, be able to build an effective venture team, bootstrap resources and have the vision to recognise opportunities (Kuratko, 2014:5). Since entrepreneurs emerge from a diverse business background, communities and personal upbringing, they have certain comparable characteristics amongst them.

2.5.2 Characteristics of an entrepreneur

Generally, personality traits conventionally studied by psychologists and freshly embraced by economists, are a probable means to explain employment status or describing self-employment and entrepreneurship (Caliendo, Fossen & Kritikos, 2014:787). According to Rauch and Frese (2007:35), personality traits are character traits that kindle certain reactions and are present across several situations, acting as prognosticators of entrepreneurial behaviours in companies. These personality

traits are psychological factors of human capital and incorporate knowledge, experience and skill accrued over a period.

The personality structure of an entrepreneur is very different in comparison to the personality structure of a manager (Caliendo *et al*., 2014:787). Spinelli and Adams (2012:35), postulated that psychological motivation of entrepreneurial behaviour has largely been accepted by entrepreneurship literature and the philosophy states that people are generally stirred by three essential needs; the need for achievement, the need for power and the need for affiliation. In addition, Caliendo *et al*. (2014:787) stated that specific characteristics such as the need for achievement, risk tolerance and locus of control are also important in predicting entrepreneurial performance than the big five; openness, conscientiousness, extraversion, agreeableness and neuroticism.

To summarise the characteristics of entrepreneurs, Spinelli and Adams (2012:38) identified the following seven common overriding themes; commitment and determination, courage, leadership, opportunity obsession, tolerance of risk, creativity and motivation.

The following are some the common characteristics that have been studied by Spinelli and Adams (2012:38) in Table 2.3 below.

Table 2.3: The seven themes of desirable and acquirable attitudes and behaviours

No.	Theme	Behaviour
1	Commitment and Determination	• Tenacity and decisive, able to recommit/commit quickly. • Intensely competitive in achieving goals. • Persistence in solving problems and disciplined. • Willing to undertake personal sacrifice. • Immense in the mission.
2	Courage	• Moral strength. • Fearless experimentation. • Not afraid of conflict and failure. • Intense curiosity in the face of risk.

3	Leadership	• Self-starter; high standards but not a perfectionist. • Team builder and hero maker who inspires others. • Treat others as you want to be treated. • Shares the wealth with all the people who help create it. • Honest and reliable, builds trust and practice fairness. • Not a lone wolf. • Superior learner, teacher and courageous. • Patient and urgent.
4	Opportunity obsession	• Leadership in shaping the opportunity. • Has intimate knowledge with the customer needs and wants. • Market-driven. • Obsessed with value creation and enhancement.
5	Tolerance of risk, ambiguity and uncertainty	• Calculated risk-taker. • Risk minimiser. • Manages paradoxes and contradictions. • Tolerate uncertainty and lack of structure. • Tolerate stress and conflict. • Able to resolve problems and integrate solutions.
6	Creativity, self-reliance and adaptability	• Non-conventional, open-minded and lateral thinker. • Restless with the status quo. • Able to adapt, change and creative problem solver. • Quick learner. • No fear of failure. • Able to conceptualise and sweat details.
7	Motivation to excel	• Goal and result-oriented. • High, but realistic goals. • Drive to achieve and grow. • Low need for status and power. • Interpersonally supporting (versus competitive). • Has perspective and sense of humour. • Aware of weakness and strength.

Source: Spinelli and Adams (2012:38)

Although in an ideal world, no entrepreneur can possess all the attributes of a good entrepreneur, entrepreneur teams are a vital ingredient in a high potential venture (Spinelli & Adams, 2012:98). Having good and talented people in the team can potentially change a product or the way things are done and change people's lives (Spinelli & Adams, 2012:98). Nonetheless, new venture creation requires entrepreneurs who possess characteristics listed in Table 2.3 above.

Entrepreneurship literature research has gradually confirmed that some characteristics, attitudes, behaviours and knowledge can be acquired at the same time by a single person and that some of these attitudes are more useful than others (Spinelli & Adams, 2012:45). More so, apprenticeship has been identified as an essential element of entrepreneurship, making it clear that entrepreneurs can be cultivated through a process of learning and know-how development (Spinelli & Adams, 2012:45). In this respect countries that have a high affinity for entrepreneurs should create an enabling environment to incubate and nurture entrepreneurs.

Once entrepreneurs are cultivated, their roles or functions in such an environment will be to cartel resources such as people, money, materials, technology, procedures, facilities and distribution channels in an inimitable way and produce value where there was none (Morris *et al*., 2011:9). This view acknowledges the definition of entrepreneurship, which states that entrepreneurship is a dynamic process of vision, change and creation that requires an application of energy and passion toward creation and implementation of new ideas and creative solutions (Kuratko, 2014:23).

Entrepreneurship can only exist where there is self-motivation, energy, passion, creativity and innovation because entrepreneurs thrive through small gradual changes to existing production methods (Parker, 2018:34). Entrepreneurs develop new or breakthrough technologies that make discrete sporadic changes which shift the paradigm, break organisational monotonous and propels economic development (Parker, 2018:34). Creativity is a vital human resource requirement. Without it, people would be continuously repeating processes and there would be no development or improvement (Serrat, 2017:903).

2.6 CREATIVITY AND INNOVATION

Creativity and innovation have been at the centre of anthropological endeavour and innovation which creates unpredicted value are now recognised at the heart of organisations, now linked to organisational success (Serrat, 2017:904; Baron & Tang, 2011:49). Contemporary organisations have been gradually developing an interest in creativity and innovation in the workplace (Serrat, 2017:904). This trend is

pressuring the organisation to nurture and develop intellectual and social capital, converting it into novel products and relevant things (Serrat, 2017:904).

Creativity and innovation have now become fundamental requirements for organisations and entrepreneurs are responsible for developing new products or improving existing products, for instance, the creation of new products, new methods or processes of production, new markets, new sources of supply and introduction of completely new industries (Parker, 2018:34). Entrepreneurship requires creative thinking, novel and useful ideas are the lifeblood of entrepreneurship (Lu, Eastwick, Maddux, Hafenbrack, Wang & Galinsky, 2017:1092).

2.6.1 Creativity

According to Serrat (2017:904), creativity is the mental and social process fuelled by conscious or unconscious insights of generating ideas, concepts and association. Creativity is the ability to generate ideas that are both new and useful for an organisation's success (Lu *et al*., 2017:1092). Research suggests that there is a general agreement that the two sides of the brain formation, the left side, on one hand, performs rationale and logical function while the right side, on the other hand, operates the intuitive and nonrationality modes of thoughts (Spinelli & Adams, 2012:135). The utilisation of ideas creatively and maximising the control of either side of the brain could add value to an entrepreneur (Spinelli & Adams, 2012:135). Hence, creative thinking is of great importance in identifying opportunities (Spinelli & Adams, 2012:135).

Creativity flourishes in organisations that encouraging idea generation and are open to suggestion (Spinelli & Adams, 2012:135). Small to medium organisations generally encourages creativity, but the larger organisation can be found to throttle creativity due to rules or policies and procedure put in place for control purposes (Spinelli & Adams, 2012:135). According to Lu *et al*. (2017:1092), CEO's from 60 countries and 33 industries ranked creativity as the most important leadership quality over integrity and global thinking. In addition, both theoretical and empirical studies support the idea that creativity plays a facilitating role in innovation performance (An, Zhang, You & Guo, 2017:3).

Novel ideas and concepts serve as fundamental material for innovation (Baron & Tang, 2011:51). Furthermore, the founding entrepreneur should create an organisational culture that values creativity and innovation. Such a culture, if encouraged to exist in an organisation can permeate throughout the organisation (Baron & Tang, 2011:51).

Although creativity is a vital characteristic of an entrepreneur, it is sometimes not sufficient because many commercially generated creative ideas are not practicable and quite often people who generate these ideas fail to take them to fruition (Baron & Tang, 2011:51). According to Baer (2012:1102), ideas are worthless unless they are implemented and created value that did not exist. Many organisations reject creative ideas because they lack the capacity to implement them (An *et al*., 2017:3). For that reason, organisations must understand the process of creative idea implementation so that they can be translated into firm-level innovation (An *et al*., 2017:3).

Although there is no general agreement that creativity and implementation are two unique activities of an innovation process, prior research and more contemporary work have treated creativity and implementation as indicative of the same fundamental concept of innovation (Baer, 2012:1103).

2.6.2 Innovation

Innovation is usually the result of creativity and it is a prerequisite for acquiring competitive advantage (Bhardwaj & Momaya, 2011:188). Innovation is increasingly being considered as the most significant source of sustainable competitive advantage in the dynamic business environment because it directly points to process and product improvement, continuous improvement of productivity and efficiency which eventually enhance profitability and growth of organisations (Atalay, Anafarta & Sarvana, 2013:226).

Innovative ideas once implemented can upgrade present company advantages and maximum value can be derived from innovation (Bhardwaj & Momaya, 2011:188). Innovation can introduce a new feature to products, processes, service for producing an existing product service and market (Bhardwaj & Momaya, 2011:188). For instance, William Ford Jr. adopted innovation as the core business strategy of Ford,

General Electric has been pursuing many breakthrough projects to drive growth through innovation and Microsoft stated that innovation is the only way that Microsoft can keep its customers happy and competitors at bay (Sawhney, Wolcott & Arroniz, 2006:75). Many organisations and individual entrepreneurs view innovation as a critical success factor for organisational success (Sawhney *et al*., 2006:75; Serrat, 2017:906).

Innovation can be defined as the successful exploitation of novel ideas and it is a lucrative result of the creative process which involves generating and applying in a specific context product, service, procedures and processes that are required and worthwhile (Serrat, 2017:904).

An *et al*. (2017:3) defined innovation as the introduction of new products, process and organisational systems or the improvement of internal process within the corporate context. In a more general term, innovation begins with creativity and has often been identified as the main ingredient in the new venture success (Baron & Tang, 2011:49). Depicted from great entrepreneurs and innovators such as Thomas Edison, Bill Gates, Steve Jobs and Ben Franklin, innovative spirit is at the core of the entrepreneurial process (Spinelli & Adams, 2012:14).

All available products and process are exposed to constantly changing customer needs and wants, tastes, technology changes, shortened product life cycle and increased global competition (Atalay *et al*., 2013:227). Consequently, the contemporary dynamic business environment has made it mandatory for organisations to become innovative to improve performance and enjoy a sustainable competitive advantage (Atalay *et al*., 2013:226). Innovative activities are not only limited to profit-making originations only but also include non-profit organisations and nations. It is evident that countries that continuously innovate and demonstrate the highest patent activity and research and development (R&D) investment intensity contribute significantly to economic growth and are the leaders of the economic development ladder e.g. Japan, United States of America (USA) and Germany (Atalay *et al*., 2013:227).

They are two main types of innovation; incremental and radical innovation (Serrat, 2017:906). Both incremental and radical innovation have an impact on product,

service and process innovation. According to Serrat (2017:906), the following are the seven sources of innovation identified by Drucker:

- Innovation can develop from unexpected occurrences.
- Innovation can originate from incongruities of various kinds.
- Innovation can be derived from process requirements.
- Innovation can emerge from changes in the industry or market.
- Changes in demographics can create innovation.
- Changes in perception of products or service can create innovation.
- Innovation can emerge from new knowledge.

Sewhney *et al*. (2006:78) developed the innovation radar that identified the twelve dimensions of business innovation; offerings, platforms, solutions, customers, customer experience, value capture, processes, organisation, supply chain, presence, networking and brand. The innovation radar was developed based on interviews conducted to individuals who worked for large organisations that had been actively involved in innovative actives across industries such as Microsoft, eBay, FedEx, Boeing and DuPont (Sewhney *et al*., 2006:76). Table 2.4 below shows the twelve dimensions of business innovation.

Table 2. 4: Twelve dimension of business innovation

No.	Dimension	Definition	Examples
1	Offerings	Create innovative new products or services.	• Gillette Mach3 Turbo razor. • Apple iPod music player iTunes music services.
2	Platform	Utilise similar components or building blocks to create derivate offering.	• General Motors OnStar telematics platform. • Disney animated movies.
3	Solutions	Create integrated and customised offerings that solve end-to-end customer problems.	• UPS logistic services supply chain solutions. • DuPont building innovations for construction.
4	Customers	Discover unmet customer needs or identify unserved customer segments.	• Enterprise Rent-A-Car focus on replacement car renters. • Green mountain energy focus on “green power”.
5	Customer experience	Redesign customer interaction across all touchpoints and all moments of contact.	• Washington Mutual retail banking concept. • Cabela’s “store as entertainment

			experience" concept.
6	Value capture	Redefine how a company gets paid or create an innovative revenue stream.	• Google paid search. • Blockbuster revenue-sharing with movie distributors.
7	Processes	Redesign core operating processes to improve efficiency and effectiveness.	• Toyota Production System for operations. • General Electric Design for Six Sigma (DFSS).
8	Organisation	Change form, function or activity scope of the organisation.	• Cisco partner-centric networked virtue organisation. • Procter & Gamble front-back hybrid organisation for customer focus.
9	Supply chain	Think differently about sourcing and fulfilment.	• Moen ProjectNet for collaborative design with suppliers. • General Motors Celta use of integrated supply and online sales.
10	Presence	Create a new distribution channels or innovative points of presence, including the places where offerings can be bought or used by customers.	• Starbucks music CD sales in coffee stores. • Diebold Remote Teller System for banking.
11	Networking	Create network-centric intelligent and integrated offerings.	• Otis Remote Elevator Monitoring services. • Department of Defence Network Centric Warfare.
12	Brand	Leverage a brand into new domain.	• Virgin Group "branded venture capital". • Yahoo! as a lifestyle brand.

Source: Sewhney *et al*. (2006:78)

The above twelve dimensions of business innovation in Table 2.4 are not an exhaustive list for innovation. Entrepreneurs and managers require other expert skills and motivation skills apart from just encouraging creative thinking in organisations (Serrat, 2017:906). Entrepreneurs or managers can make a significant difference by boosting the intrinsic motivation of personnel (Serrat, 2017:907).

In summary, creativity is referred to as the development of ideas that are new and useful, either for short or long-term, can be viewed as the first stage of an innovation process (Baer, 2012:1102). Hereafter, innovation can be theorized as encompassing two activities; development of new ideas that are useful and implementing the ideas (Baer, 2012:1102).

2.7 ENTREPRENEURSHIP BARRIERS

Entrepreneurship is slowly being considered as an important element of global economic growth through wealth and job creation (Antonicic & Antonicic, 2011:594). Entrepreneurship activities have a habit of contributing to the economic success of many nations through introducing change, innovation, job creation, rivalry and competition (Antonicic & Antonicic, 2011:594). Entrepreneurial activities can disrupt most industrial sectors, imposing momentous changes in products and services offerings, novel logistic services and creating completely new business models (Singer, Herrington & Manipaz, 2017:16). As a result, accelerated entrepreneurial activities in a country can significantly enhance the nation's capacity to produce goods and service, in the process create employment and economic growth. In addition, according to Antonicic and Antonicic (2011:594), entrepreneurial activities also can have the ability to influence the performance of huge corporation resulting in wealth creation, an increase of job opportunities and improvement of the standard of living (Antonicic & Antonicic, 2011:594). Entrepreneurship activities can be said to have a direct impact on employment creation, increase in production, improved societal structures, improved social services, improved business performance, the introduction of new products and service and an increase in the gross domestic product (GDP) (Kuratko, 2011:9; Naudé, 2011:6).

Despite the importance of entrepreneurship activities in an economy or a nation, several constraints hinder entrepreneurial activity (Singer *et al*., 2018:20). Entrepreneurs face many challenges when venturing into entrepreneurship such as situational factors, personal background, commitment, lack of self-belief, fear of unknown, corruption, government policies, lack of education, industry entry regulations, administrative barriers, poor quality of legal system, challenges with enforcement of receivables, high taxation, finance and research and development (R&D) (Burns, 2014:8; Samitowska, 2011:46; Singer *et al*., 2018:17).

Singer *et al*. (2017:17) conducted research that focused on environmental factors that were assumed to have a significant impact on entrepreneurial attitude and activities. The research divided the 54 countries surveyed into three categories; factor-driven, efficiency-driven, and innovation-driven (Singer *et al*., 2017:20). A factor-driven economy is an economy that is dominated by subsistence agriculture

and extraction business, an efficiency-driven economy is an economy that has become more competitive with more efficient production processes and increased product quality and an innovation-driven economy is an economy driven by businesses that are more knowledge intense with an expanding service sector (Singer *et al*., 2017:20).

The following are constraints identified by Singer *et al*. (2017:20) according to the World Economic Forum (WEF) classification of economies:

2.7.1 Factor driven

- Entrepreneurship education at school age.
- R&D transfer.
- Government policies on tax and bureaucracy.
- Lack of government entrepreneurship programs.
- Internal markets – Burdens of entry regulation.

2.7.2 Efficient driven

- Entrepreneurship education at school age.
- Government policies on taxes and regulation.
- R&D transfer.
- Government policies - support and relevance.
- Lack of government entrepreneurship programmes.

2.7.3 Innovation-driven

- Entrepreneurship education at school age.
- Government policies on taxes and regulation.
- R&D transfer.
- Entrepreneurial finance.

Results produced in the survey showed that countries in the factor-driven (developing nations or emerging economies) scored below the mean of 4.3 indicating that the above factors are constraints that need to be addressed to improve entrepreneurial activities in these developing nations.

2.8 OVERVIEW OF ENTREPRENEURSHIP IN SUB-SAHARA AFRICA

Sub-Sahara Africa is a phrase coined to describe the area of the Africa continent that is found south of the Sahara Desert (UNDP, 2017). Sub-Sahara Africa is comprised of many developing nations that are faced with both opportunities and challenges (UNDP, 2017).

In the last few years, there has been a noticeable wave of new technology spreading across the African continent leading to considerable improvement in information and communication (UNDP, 2017). In the process many African countries have discovered natural resources such as oil and gas, human capital has also progressively improved and a significant drop in poverty levels since 1999 has been documented (UNDP, 2017). However, these opportunities have also come with lots of challenges and many of these have been grown at different speeds, with some countries strongly achieving middle-class economic status and other stuck in conflicts, poverty and low capacity (UNDP, 2017). For instance, challenges such as high poverty, unacceptable unemployment and high levels of crime could be resolved by creating an enabling environment that encourages entrepreneurial activities in a country (Herrington & Kelly, 2012:6).

Government reforms or policies are a key gateway or block to starting new business and entrepreneurship development in a nation (Abid, 2016:86; World Bank Group, 2018:6). In this respect, global trends have continuously indicated that that entrepreneurial activities continue to grow the world over (Singer *et al*., 2017:4). According to World Bank Group (2018:5), from the 264 business reforms measured across the 10 measured indicators, Sub-Sahara Africa came out with 83 reforms, the highest amongst all countries in the survey. Furthermore, the Sub-Sahara African region went on to make 75% of economic reforms between 2016 and 2017 (World Bank Group, 2018:6).

The doing business indicators; starting a business, labour market regulation, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, trading across borders, paying taxes, enforcing contracts and resolving insolvency are used to measure easiness of starting a business in a country (World Bank Group, 2018:2). Relaxed regulations can

encourage untapped business ideas to come to life, e.g. if an individual decides to develop an idea and discovers that it is also easy to set up a company with affordable costs and less bureaucracy, they may opt to start a new business that will create wealth and jobs (World Bank Group, 2018:1).

According to Herrington and Kelly (2012:8), levels of intentional entrepreneurs in Sub-Sahara Africa are at an average of 53% and consistent with their positive insights about capabilities and opportunities. Therefore, community attitudes towards entrepreneurship are most favourable in many Sub-Saharan Africa countries (Herrington & Kelly, 2012:8). Generally, many countries within the Sub-Sahara Africa view entrepreneurship as a good career choice (Herrington & Kelly, 2012:8). Table 2.5 below shows the list of countries within the Sub-Sahara Africa area. The five countries highlighted in yellow in Table 2.5 were the surveyed countries selected for this study; Kenya, Malawi, South Africa, Zambia and Zimbabwe.

Table 2. 5: Sub-Sahara Africa countries

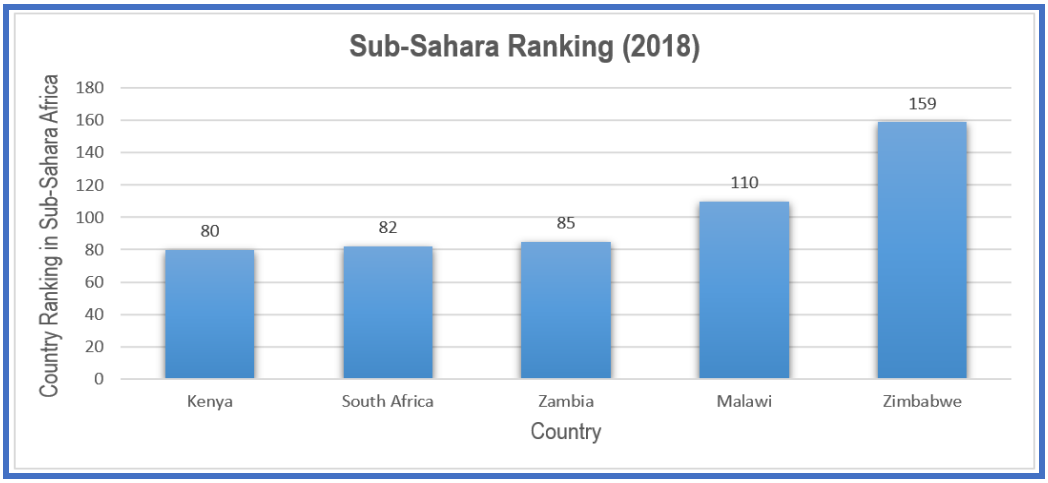
No.	Country	No.	Country	No.	Country	No.	Country
1	Angola	13	Cote d'Ivoire	25	Madagascar	37	Seychelles
2	Benin	14	Equatorial Guinea	**26**	**Malawi**	38	Sierra Leone
3	Botswana	15	Eritrea	27	Mali	**39**	**South Africa**
4	Burkina Faso	16	Ethiopia	28	Mauritania	40	South Sudan
5	Burundi	17	Gabon	29	Mauritius	41	Swaziland
6	Cameroon	18	Gambia	30	Mozambique	42	Tanzania
7	Cape Verde	19	Ghana	31	Namibia	43	Togo
8	Central Africa Republic	20	Guinea	32	Niger	44	Uganda
9	Chad	21	Guinea - Bissau	33	Nigeria	**45**	**Zambia**
10	Comoros	**22**	**Kenya**	34	Rwanda	**46**	**Zimbabwe**
11	Democratic Republic of Congo	23	Lesotho	35	Sao Tome and Principe		
12	Republic of Congo	24	Liberia	36	Senegal		

Source: UNDP (2017)

This study was focused on five countries from the Sub-Sahara Africa region; Kenya, Malawi, South Africa, Zambia and Zimbabwe. Figure 2.1 below, shows how Sub-Sahara African countries are classified and ranked among 190 nations in the world in terms of the easiness of starting a new business (World Bank Group, 2018:4). Amongst the five countries to be surveyed in this study Kenya is number 80, South

Africa 82, Zambia 85, Malawi 110 and Zimbabwe 159. The bigger the number the tougher the conditions to start a business in that country.

Figure 2.1: Easy of doing business ranking



Source: World Bank Group (2018:4)

2.8.1 Entrepreneurship in Kenya

Kenya has a population of 45.5 million with a gross national income per capita of US $ 1380 and is classified as a lower middle income (World Bank Group – Kenya, 2018:4). Kenya ranks 80 amongst the 190 countries in the world and is the best country with easiness to doing business among the five countries identified for this study (World Bank Group – Kenya, 2018:4). Kenya is generally considered as the economic hub of East Africa and has the highest adult literacy rate of 87% (In on Africa, 2016:55).

Even though many tourists chose Kenya as their preferred tourist destination amongst Sub-Sahara Africa countries, lack of job opportunities and unmodernised small-scale farming remain a challenge (In on Africa, 2016:54). Starting a business in Kenya takes longer than many other countries in East Africa, but the cost of starting a business is much less compared to the other four countries surveyed in this study (In on Africa, 2016:55). Kenya's concerns are Al-Shabaab terrorist attack that negatively impacts on tourism, the government not serious about eradicating corruption and ethnic tensions (In on Africa, 2016:54).

Kenya's economy is reliant on agriculture and extraction business with a huge dependence on unskilled labour and natural resources (Singer *et al*., 2017:20; Herrington & Kelly, 2012:25). Due to the lack of work opportunities, many Kenyan people show intentions of starting a business. This is evident from the number of informal entrepreneurs in Kenya.

In the period between 2017 and 2018, Kenya has implemented many positive changes to improve its position on the ease of doing business. The following are some of the changes made by Kenya:

- Starting a business – Kenya merged procedures required to start a business and formally operate a business (World Bank Group – Kenya, 2018:70).
- Getting electricity – Kenya invested in the distribution lines, transformers and established a team to restore power whenever there was outage (World Bank Group – Kenya, 2018:70).
- Getting credit – Access to credit information was improved by starting to distribute data from two utility companies (World Bank Group – Kenya, 2018:70).
- Paying tax – An on-line platform called iTax was implemented for filling and paying corporate tax (World Bank Group – Kenya, 2018:70).
- Trading across borders – An on-line platform was introduced to allow electronic submission of documentation of customs entries (World Bank Group – Kenya, 2018:70).
- Registering property – Kenya increased transparency at the land registry and cadastre (World Bank Group – Kenya, 2018:70).

2.8.2 Entrepreneurship in Malawi

Malawi has a population of 18 million with a gross national income per capita of US $ 320 and is categorised as low income (World Bank Group – Malawi, 2018:4). Malawi ranks 110 amongst the 190 countries in the world and is fourth on the list of countries surveyed in this study (World Bank Group – Malawi, 2018:4). The GEM 2013 report classified Malawi as a factor-driven economy together with Angola, Zambia, Nigeria, Botswana and Ghana (Amoros & Bosma, 2013:25). A factor-driven economy is an economy in its early stages of economic development, mainly

dependent on agriculture and extraction business with a huge dependence on unskilled labour and natural resources (Singer *et al*., 2017:20; Herrington & Kelly, 2012:25).

Expectations to start a business amongst the ages between 18 to 64 years in Malawi are extremely high with a 40% necessity driven early-stage entrepreneurs (Amoros & Bosma, 2013:25). Though the percentage of necessity driven early-stage entrepreneurs can fluctuate over time more specifically in tandem with the unemployment rate it is still a good indicator of entrepreneur intentions (Amoros & Bosma, 2013:32). According to Amoros and Bosma (2013:48), Malawi has little support from government-related policy regulation.

In 2018 Malawi implemented changes both positive and negative. The following are some of the changes introduced:

- Starting a business – Malawi increased the cost of starting a business with the registrar general (World Bank Group – Malawi, 2018:64).
- Dealing with construction permits – The fees charged by the city council to process building plans approvals were reduced by 50% (World Bank Group – Malawi, 2018:64).
- Getting credit – Malawi introduced a new law to strengthen access to credit. The new law clarified priority rules inside and outside bankruptcy procedures and set up a new credit bureau to provide access to credit information (World Bank Group – Malawi, 2018:64).
- Trading across borders – Malawi introduced a web-based customs data management platform to allow electronic submission of customs documentation (World Bank Group – Malawi, 2018:64).

2.8.3 Entrepreneurship in South Africa

South Africa has a population of 55.9 million with a gross national income per capita of US $ 5480 and is classified as an upper middle income (World Bank Group – South Africa, 2018:4). South Africa ranks 82 amongst the 190 countries in the world and is second from Kenya in the surveyed countries group (World Bank Group – South Africa, 2018:4). The GEM 2017 report classified South Africa as an efficiency-

driven economy together with Egypt and Morocco (Singer *et al*., 2017:20). An efficiency-driven economy is an economy that has become more competitive with more efficient production processes and increases product quality (Singer *et al*., 2017:20).

According to Singer *et al*. (2017:102), 69.4% South Africans consider entrepreneurship as a good career choice and 74.9% consider entrepreneurship as high status. Although Africa as a region reported the highest rate of established businesses at 11.9%, the rate of established businesses in South Africa is 2.2% (Singer *et al*., 2017:37). More so, 0.5% of adults in South Africa are engaged in entrepreneurial employee activities (Singer *et al*., 2017:38). Entrepreneurial employee activities are important for business sustainability and renewal through the successful introduction of novel service, products of setting up of new business ventures (Singer *et al*., 2017:38).

In the period between 2015 and 2018, South Africa has implemented both positive and negative changes towards the easiness of doing business. The following are some of the changes made:

- Starting a business – an online portal was implemented in 2017 to search for company names (World Bank Group – South Africa, 2018:71).
- Enforcing contracts – The monetary jurisdiction of lower courts was amended and introduced voluntary mediation. This made it easier to enforce contracts (World Bank Group – South Africa, 2018:71).
- Paying taxes – In 2017 South Africa made paying taxes more expensive by increasing the rates of vehicle and property taxes and the time it takes to prepare for value-added tax return was also increased (World Bank Group – South Africa, 2018:71).
- Registering property – Property transfer tax was increased in 2017 (World Bank Group – South Africa, 2018:71).
- Getting credit – Access to credit information was made more difficult when South Africa introduced regulation that mandated credit bureaus to remove negative credit information from their database e.g. adverse information on consumer behaviour (World Bank Group – South Africa, 2018:71).

2.8.4 Entrepreneurship in Zambia

Zambia has a population of 16.5 million with a gross national income per capita of US $1300 and is classified as a lower middle income (World Bank Group - Zambia, 2018:4). In 2018 Zambia was ranked 85 among 190 countries in the world and ranks third amongst the surveyed countries (World Bank Group, 2018:4). Zambia was classified as a factor-driven economy by the GEM report 2012. Factor driven economies are economies in their early stages of economic development, mainly dependent on agriculture and extraction business with a huge dependence on unskilled labour and natural resources (Herrington & Kelly, 2012:25; Singer *et al*., 2017:20).

Total early-stage entrepreneurial activities measure the percentage of adults between 18 and 64 years who are in a process of starting a business and Zambia in 2012 was at 41% higher than Ghana 37%, Nigeria 35% and Angola 32% (Herrington & Kelly, 2012:26). Close to one-third of Zambian entrepreneurs showed that they had completed secondary education and tertiary education. It is imperative that such high intentions of entrepreneurial activities are accompanied by high levels of easiness of doing business variables to encourage entrepreneurs to start a new business. Furthermore, between 82% and 96%, of entrepreneurs in Zambia are employers of average of five employees (Herrington & Kelly, 2012:35). According to Herrington and Kelly (2012:35), 81% of Zambian entrepreneurs projected growth of one and five jobs in five years while 13% projected to create more than five jobs. However, the gap between established business ownership in Zambia versus entrepreneurship business is 41% vs 4% (Herrington & Kelly, 2012:8).

To create a conducive environment for entrepreneurs to easily start businesses and realise their dreams, Zambia has been making changes over time. The following are some of the changes made between 2017 and 2018 (World Bank Group - Zambia, 2018:64):

- Getting credit – Zambia introduced a movable property act and established a collateral registry to solidify access to credit for entrepreneurs (World Bank Group - Zambia, 2018:64).

- Paying taxes – Zambia reduced property transfer taxes to reduce tax costs and introduced an online tax filing system (World Bank Group - Zambia, 2018:64).
- Trading across borders – Zambia introduced a web-based customs data management system for import and export (World Bank Group - Zambia, 2018:64).
- Labour market regulation – Zambia disregarded fixed term contract for permanents jobs (World Bank Group - Zambia, 2018:64).

2.8.5 Entrepreneurship in Zimbabwe

Zimbabwe has a population of 16 million with a gross national income per capita of US $ 940 and is categorised as low income (World Bank Group - Zimbabwe, 2018:4). In 2018 the World Bank doing business report ranked Zimbabwe 159 out of 190 countries that participated in the survey and it is the lowest-ranked nation amongst the five countries considered for this study (World Bank Group - Zimbabwe, 2018:4). Zimbabwe can also be categorised as a factor-driven economy because its economy is highly reliant on agriculture and extraction business with a huge dependence on unskilled labour and natural resources such as platinum and diamonds (Singer *et al*., 2017:20; Herrington & Kelly, 2012:25).

In early 2000, Zimbabwe experienced economic collapse to the extent that the manufacturing sector shrunk to over 47% (Thebe & Ncube, 2015:128). At one point in June 2008, hyperinflation was estimated at one million per cent (Thebe & Ncube, 2015:128). The Zimbabwean economy has remained fragile with an unsustainable debt of 8.4 billion at the end of 2014 (In on Africa, 2016:113). Hence, many people lost their jobs due to deindustrialisation, some left the country to seek employment resulting in brain drain, and others resorted to cross border trading and informal entrepreneurship (Thebe & Ncube, 2015:128).

The current Zimbabwe economy is mainly characterised by a large percentage of informal economy perpetuated by high levels of poverty and unemployment rate (Thebe & Ncube, 2015:128). It is estimated that more than five million people earn their livelihood through informal entrepreneurship (Thebe & Ncube, 2015:128). Formerly the breadbasket of Africa, according to In on Africa (2016:112), Zimbabwe

consistently scores amongst the worst performing economies in Sub-Sahara Africa. Zimbabwe is rated as the worlds least free economies, such that the business environment and regulatory frameworks are bureaucratic and expensive (In on Africa, 2016:113). Zimbabwe thrives in an environment of policy inconsistency, funding constraints and corruption which hinder investment and business operations (In on Africa, 2016:113).

Despite all these challenges the Zimbabwe government designated a dedicated Ministry, Ministry of Small to Medium Enterprise and Cooperative Development to monitor and support the development of entrepreneurship in Zimbabwe (Thebe & Ncube, 2015:128). The ministries primary role was to disburse loans and offer financial support to small and medium enterprise (Thebe & Ncube, 2015:128).

Between 2017 and 2018 Zimbabwe implemented regulation that was both positive and negative towards easiness of doing business in Zimbabwe. The following are some of the changes implemented:

- Starting a business – Zimbabwe eliminated the obligation to advertise the application for a business license (World Bank Group - Zimbabwe, 2018:67).
- Dealing with construction permits – Zimbabwe streamlined the building plan approval process (World Bank Group - Zimbabwe, 2018:67).
- Registering property – An official web site was implemented containing information on the list of documents and fees for completing a property transaction including specific time frames for delivering a legally binding document that proves property ownership (World Bank Group - Zimbabwe, 2018:67).
- Trading across borders – Zimbabwe made it more difficult for cross border trading by introducing a mandatory pre-shipment inspection for imported products (World Bank Group - Zimbabwe, 2018:67).
- Getting credit – Zimbabwe established a credit registry to improve access to credit information, contrary wise credit scoring was discontinued minimising access to credit information (World Bank Group - Zimbabwe, 2018:67).

2.9 SUMMARY

The field of entrepreneurship has been antagonized by numerous theories on what constitutes entrepreneurship and the technique in which it is being researched (Audretsch, Kuratko & Link, 2015:704). Although there have been many studies conducted since the 18th century, debate and controversy continue among researchers regarding basic issues such as the definition of an entrepreneur and the role of entrepreneurship in an economy and social development (Cieslik, 2017:13). This diversion of views in the entrepreneurship field has attracted innumerable definitions of entrepreneurship, making entrepreneurship a complex and multidimensional phenomenon (Cieslik, 2017:13).

Entrepreneurship is tangled with multifaceted sets of overlapping constructs and perspectives, as a result, overcrowding the term with numerous definitions (Kusumsiri & Jayawardane, 2013:26). However, the approaches to the entrepreneurship of researchers, opinion leaders and the public have been hugely prejudiced by the scholarly work of Joseph Schumpeter (Cieslik, 2017:13).

Entrepreneurship is generally perceived as doing things that are not generally done in the ordinary course of business routine which includes initiative-taking, organising or reorganising of social-economic mechanisms to transform resources and acceptance of the risk of failure (Kuratko, 2014:5). Additionally, entrepreneurship includes terms such as innovation, ideas, creativity, discovery, exploitation, exploration (Audretsch *et al*., 2015:704).

Amid entrepreneurship definition muddle, entrepreneurship has produced many positive bearings on both economic and social fronts through creating wealth for both the entrepreneurs and nations, created new enterprises, created innovative products and services, brought about change in products and processes, created employment, created value and growth (Morris *et al*., 2011:9). Out of entrepreneurship, new products and services have been developed and many people now consider entrepreneurship as a pioneer-ship on the frontier of business (Kuratko, 2014:5).

According to Amoros and Bosma (2013:16), entrepreneurship entails going past perceiving entrepreneurship as an independent occupation or start-up but considering entrepreneurial behaviours such as entrepreneurial employee activities or corporate entrepreneurship as well. An organisation can enhance its possibilities of future success if it embraces an entrepreneurial culture in its organisational DNA (Morris *et al*., 2011:147).

Entrepreneurship is concerned with the exploration and exploitation of opportunities to enhance organisational performance, sustainability and gaining competitive advantage (Goel & Jones, 2016:95). Exploration involves the process of identifying new opportunities while exploitation involves the process of increasing utilisation of the available resource or opportunities. In the process of exploitation and exploration entrepreneurs generally, engage in creativity and innovation. According to Serrat (2017:904), creativity is a mental and social process fuelled by conscious insights of generating ideas, concepts and association while innovation is the exploitation of new ideas.

Entrepreneurship implementation varies according to the external environmental conditions of each country. According to the World Bank Group (2018:4), a study conducted comprising of 190 countries in the world to measure the easiness of doing business, Kenya was ranked 80, South Africa 82, Zambia 85, Malawi 110 and Zimbabwe 159. The result of the report in Figure 2.1 clearly shows that it's more challenging to do business in Zimbabwe than in Kenya. Such limiting environmental conditions are prone to be barriers that can hinder entrepreneurship both in the country and within the established organisations. However, the expectation to start a business amongst the ages between 18 to 64 years in Sub-Sahara Africa are high, for instance, in Malawi where its more than 40% (Amoros & Bosma, 2013:25).

In a nutshell, an entrepreneur can be an individual starting a business, found in both a new venture or large existing corporation (Kuratko, 2014:23). Regardless of the shape or form of entrepreneurship, there are little or no differences whether the entrepreneur is a profit-making business, non-profit business, public service or government institution (Kuratko, 2014:23). Therefore, entrepreneurship is a phenomenon that can occur in many kinds of organisational context (Morris *et al*., 2011:11).

Chapter 3, the focus of this study, explains corporate entrepreneurship, a term used to describe entrepreneurial behaviours inside the existing organisation (Morris *et al*., 2011:11). The chapter unpacks the definitions of corporate entrepreneurship, differences between corporate entrepreneurship and entrepreneurship, the two main forms of corporate entrepreneurship, conceptual models of corporate entrepreneurship, barriers, organisational antecedents and entrepreneurial orientation.

CHAPTER 3: AN OVERVIEW OF CORPORATE ENTREPRENEURSHIP

3.1 INTRODUCTION

Chapter 2 introduced entrepreneurship as a field of study. The definitions of entrepreneurship and characteristics of entrepreneurship were explained. Additionally, the differences between exploration and exploitation were provided together with the definitions of innovation and creativity. General entrepreneurship adaptations levels in Kenya, Malawi, South Africa, Zambia and Zimbabwe were explained. Chapter 3 presents the varying definitions of corporate entrepreneurship, the two main forms of corporate entrepreneurship and corporate entrepreneurship models. Furthermore, corporate entrepreneurship barriers, organisational antecedents and entrepreneurial orientation are specified in more detail.

The focus of this study is about corporate entrepreneurship with an objective of developing a measurement instrument that measures the relationship between corporate entrepreneurship and the success of automotive companies using organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success variables based on the Balanced Scorecard using SEM technique to analyse relationships among several constructs based on their a priori stated measurement structure (Yang, 2003:157).

Drawing from the theory from Chapter 2, corporate entrepreneurship comes from the field of entrepreneurship (Kuratko, 2017:2). Corporate entrepreneurship is a subject that is captivated on entrepreneurship that happens within existing established organisations and is quite often referred to as organisation entrepreneurship, intrapreneurship, strategic entrepreneurship and corporate venturing by other scholars (Kuratko, 2017:2). The need for organisational renewal has generally propelled business leaders and scholars to consider how entrepreneurial processes can be introduced within the established organisations for the purposes of achieving competitive advantage and organisational success (Corbett *et al*., 2013:812). Consequently, corporate entrepreneurship pursues renewal of established

organisations thereby increasing longevity and sustainability of an organisation (Corbett *et al*., 2013:812).

3.2 CORPORATE ENTREPRENEURSHIP RESEARCH

Corporate entrepreneurship has become a key strategy for all types of organisations and is proving to be a valid and effective area of research that has tangible benefits for emerging scholars (Kuratko, 2017:2). Corporate entrepreneurship theoretical and empirical knowledge has evolved over the last forty-five years, initially, taking off on a slow start and now its importance maturing with time (Kuratko, 2017:2). At the same time organisations have adopted entrepreneurial behaviours both in formal and informal ways because of the new global realities of requiring innovation, risk-taking, courage and entrepreneurial leadership (Kuratko, 2017:2).

These developments have expanded the domain of entrepreneurship. The early scholars of corporate entrepreneurship adopted somewhat ambiguous views for instance, an entrepreneurial phenomenon under investigation was either not explicitly defined or was not completely differentiated from other phenomena commonly associated with innovative organisations (Corbett *et al*., 2013:812).

Guth and Ginsberg (1990) advocated that corporate entrepreneurship be viewed as encompassing two categories of the phenomenon; corporate venturing and strategic renewal (Corbett *et al*., 2013:812). Corporate venturing is defined as the birth of new business within existing organisations and it concludes activities such as add to, creating or investing in new business (Corbett *et al*., 2013:812; Morris *et al*., 2011:86). While strategic renewal is the transformation of an organisation through changing firm's key ideas on which it was built such as products, markets, organisational structures, processes, capabilities and business models (Corbett *et al*., 2013:812; Morris *et al*., 2011:98).

Corporate entrepreneurship was defined by Sharma and Chrisman (1999:5) "as a process whereby an individual or group of individuals, in association with an existing organisation create a new organisation or instigate renewal or innovation within that organisation". Both scholar's viewpoints include corporate venturing and strategic renewal in their definitions. Additionally, Morris *et al.* (2011:86) developed two

categories of phenomena; corporate venturing and strategic entrepreneurship (Corbett *et al*., 2013:812). Strategic entrepreneurship includes a broad array of entrepreneurial activates that do not necessarily involve new additional business to the organisation (Corbett *et al*., 2013:812). According to Morris *et al*. (2011:99), the forms of strategic entrepreneurship are; strategic renewal, sustained regeneration, domain redefinition, organisation rejuvenation and business model reconstruction.

As research for corporate entrepreneurship continues, high interest in two identical phenomena has dissected theoretical development; corporate venture capital and entrepreneurial orientation (Corbett *et al*., 2013:813). Corporate venture capital is when an organisation has internal venture capital funds that are used to invest in external new ventures deemed strategically important or financially attractive (Morris *et al*., 2011:92). Such investments are specifically targeted on technology or product market arena of interest (Morris *et al*., 2011:92). While entrepreneurial orientation which has been generally referred to as the engine that drives specific behaviours of corporate entrepreneurship such as risk-taking, innovativeness, proactiveness, autonomy and competitive aggressiveness (Corbett *et al*., 2013:813). Covin and Lumpkin (2011:855) proposed that "within the arena of entrepreneurship, there is now greater attention paid to the topic of entrepreneurial orientation than corporate entrepreneurship even though many scholars still regard entrepreneurial orientation as an aspect of corporate entrepreneurship".

Corporate entrepreneurship knowledge has been accumulating at a fast rate and research has escalated from traditional product and innovation to championing innovation in value chains, process, business models and all functions of management (Kuratko, 2017:3). Continued research on the topic has discovered new theoretical avenues that needs further exploration and raised important research questions such as cognitive processes of corporate entrepreneurship, the role of national culture and institutional factors influencing processes and outcomes in corporate entrepreneurship, the role of personal and organisation network in the corporate entrepreneurship process and relationship between organisational success and corporate entrepreneurship (Kuratko, 2017:3).

According to Kuratko (2017:3), a more global methodical approach is needed to comprehend the moderators, mediating processes and what constitutes the

outcomes of corporate entrepreneurship. Although corporate entrepreneurship research has expanded over the years, consequently it has increased scholarly interest and can still be argued that corporate entrepreneurship is a concept that is still in search of a clear definition and agreed terminologies (Corbett *et al*., 2013:813). Thus, theoretical and empirical knowledge about corporate entrepreneurship and the entrepreneurial behaviours are still issues that call for deeper investigation and understanding in the field of entrepreneurship (Kuratko, 2017:3).

3.2.1 Definitions of corporate entrepreneurship

The concept of corporate entrepreneurship is a topic that has been researched by many scholars, each with his or her definition of the phenomena (Kuratko, 2017:2). Corporate entrepreneurship has been interchangeably described as corporate venturing, intrapreneurship, strategic renewal, internal corporate entrepreneurship, strategic entrepreneurship and entrepreneurial orientation (Corbett *et al*., 2013:812). Table 3.1 below shows various definitions of corporate entrepreneurship and its aspects from various scholars in chronological order (Morris *et al*., 2011:11).

Table 3.1: Definitions of corporate entrepreneurship

Corporate entrepreneurship			
Year	Definition	Page No.	Author
1983	Corporate entrepreneurship refers to the process whereby the firm engages in diversification through internal development. Such diversification requires new resource combination to extend the firm's activities in areas unrelated, or marginally related, to its current domain of competence and corresponding opportunity set.	1349	Burgelman
1984	Corporate entrepreneurship involves employee initiative from below in the organisation to undertake something new. Corporate entrepreneurship is a form of innovation which is developed by employees without being asked, expected, or perhaps even given permission by higher management to do so.	295	Vesper
1988	Corporate entrepreneurship is the establishment of a separate corporate organisation (often in the form of a profit centre, strategic business unit, division or subsidiary) to introduce a new product, serve or create a new market, or utilise new technology.	149	Spann, Adams and Wortman

1989	Corporate entrepreneurship is the extent to which new products and/or new markets are developed. Firms are perceived to be entrepreneurial if they develop a higher than the average number of new products, service and/or new markets.	489	Jennings and Lumpkin
1990	Corporate entrepreneurship encompasses two types of phenomena and the process surrounding them: (1) the birth of new business within existing organisations, i.e. internal innovation or venturing; and (2) the transformation of organisations through the renewal of key ideas on which they are built, i.e. strategic renewal.	5	Guth and Ginsberg
1990	Corporate entrepreneurship involves the notion of birth of new business within an on-going business and the transformation of stagnant, on-going business in need of revival or transformation.	2	Schendel
1991	Corporate entrepreneurship is a process of creating new business within the established organisations to improve the company's profit and enhance the competitive position or strategic renewal of existing business.	260-261	Zahra
1991	Corporate entrepreneurship involves extending the firm's domain of competence and corresponding opportunity set through internally generated new resource combination.	7	Covin and Slevin
1993	Corporate entrepreneurship is a process of organisational renewal that has two distinct, but related dimensions; innovation and venturing and strategic renewal.	321	Zahra
1995	Corporate entrepreneurship – the sum of the company's innovation, renewal and venturing efforts. Innovation involves creating and introducing products, production processes and organisational systems. Renewal means revitalising the company's operations by changing the scope of its business, its competitive approaches or both. It also means building or acquiring new capabilities and then creatively leveraging them to add value for shareholders. Venturing means that the firm will enter new business by expanding operations in existing or new markets.	227	Zahra
1996	Corporate entrepreneurship is a process of creating new business within established firms to improve organisational profitability and enhance a company's position.	6	Carrier
1997	Corporate entrepreneurship is an organisational process for transforming individual ideas into collective action through the management of uncertainties.	14	Chung and Gibbons
1999	It is the presence of innovation plus the presence of objective rejuvenation or purposefully redefining organisations, markets, or industries in order to create or sustain competitive superiority.	50	Covin and Slevin
1999	Corporate entrepreneurship is a process whereby an individual or group of individuals in association with an existing organisation, create a new organisation or	18	Sharma and Chrisman

	instigate renewal or innovation within that organisation.		
2000	Corporate entrepreneurship is the totality of a company's venturing and innovative activities.	947	Zahra, Neubaum and Huse
2001	It is a process of organisational renewal through creating new business through market development or by undertaking product, process, technological and administrative innovation and redefinition of the business concept, reorganisation and the introduction of system-wide changes for innovation.	63	Ucbasaran, Westhead and Wright
2002	Corporate entrepreneurship centres on re-energising and enhancing the ability of a firm to acquire innovative skills and capabilities.	255	Hornsby, Kuratko and Zahra
Entrepreneurial orientation			
Year	Definition	Page No.	Author
1996	Entrepreneurial orientation are processes, practices and decision-making activities that lead to new entry.	136	Lumpkin and Dess
Internal corporate entrepreneurship			
Year	Definition	Page No.	Author
1977	Corporate venturing is an activity that seeks to generate new business for the corporation in which it resides through the establishment of external or internal corporate ventures.	163	Von Hippel
1979	A corporate venture is defined a business marketing a product or service that the parent company has not previously marketed and that requires the parent company to obtain new equipment or new people or new knowledge.	104	Biggadike
1982	Internal (or intra-corporate) entrepreneurship refers to all formalised entrepreneurial activities within existing business organisations. Formalised internal entrepreneurial activities are those which receive explicit organisational sanction and resource commitment for the purpose of innovative corporate endeavours – new product development, product improvement and new methods or procedures.	211	Schollhammer
1987	Corporate venturing was postulated to pursue a strategy of relatedness to present activities, to adopt the structure of an independent unit and to involve a process of assembling and configuring novel resources.	528	Ellis and Taylor
1992	Internal corporate entrepreneurship refers to entrepreneurial behaviour within one firm or the level of entrepreneurial behaviour.	734	Jones and Butler
1993	Corporate ventures become projects when the following happens; (a) involves an activity new to the organisation, (b) is initiated or conducted internally, (c) involves a significantly higher risk of failure or large losses than the organisation's base business, (d) is characterised by greater uncertainty than the base	14	Block and MacMillan

	business, (e) will be managed separately at some time during its life, (f) is undertaken for the purpose of increasing sales, profit, productivity and quality.		
Venture, internal ventures, internal corporate venturing, new business venturing			
Year	Definition	Page No.	Author
1985	Internal ventures are a firm's attempt to enter different markets or develop substantially different products from those of its existing base business by setting up a separate entity within the existing corporate body.	6	Roberts and Berry
1991	Internal corporate venturing involves the creation of an internally staffed venture unit that is semi-autonomous with the sponsoring organisation maintain ultimate authority.	171	Zajac, Golden and Shortell
1993	Venture may be applied to the development of new business endeavours within the corporate framework.	30	Hornsby, Naffziger, Kuratko and Montagno
1994	New business venturing occurs when 'individual and small teams form entrepreneurial groups inside an organisation capable of persuading others to alter their behaviour, thus influencing the creation of new corporate resources'. It is the creation of new business within the existing firm.	521	Stopford and Baden-Fuller
1996	Venturing means that the firm will enter new businesses by expanding operations in existing or new markets.	1715	Zahra
Intrapreneurship			
Year	Definition	Page No.	Author
1985	Intrapreneurs are any of the "dreamers who do". Those who take on hands-on responsibility for creating innovation of any kind within an organisation. They may be the creators or inventors but are always the dreamers who figure out how to turn a dream into a profitable reality.	ix	Pinchot III
1985	Intrapreneurship is the development within a large organisation of internal markets and relatively small and independent units designed to create, internally test market and expands and improve/or innovative staff services, technologies or methods within the organisation. This is different from the large organisation entrepreneurship/venture units whose purpose is to develop profitable positions in external markets.	181	Nielson, Peters and Hisrich
1990	It is entrepreneurship inside of an existing corporation.	50	Kuratko *et al*.
Strategic or Organisational renewal			
Year	Definition	Page No.	Author
1990	Strategic renewal involves the creation of new wealth through a new combination of resources.	6	Guth and Ginsburg

1993	Renewal has many facets, including the redefinition of the business concept, reorganisation and the introduction of system-wide changes for innovation. Renewal is achieved through the redefinition of a firm's mission through the creative redeployment of resources, leading to new combinations of products and technologies.	321	Zahra
1994	Organisational renewal alters the resource pattern of business to achieve better and sustainable overall economic performance. To be sustainable, more pervasive effort is needed involving more than a few individuals and the financial function.	522	Stopford and Baden-Fuller
2001	Corporate entrepreneurship is a process that occurs inside an existing organisation, regardless of its size and leads not only to new business ventures, but also to other innovative activities.	498	Antoncic and Hisrich

Source: Maes (2003:22); Sharma and Chrisman (1999:13)

In the last thirty to forty years, there has been an evolution of definitions for corporate entrepreneurship as shown in Table 3.1 above. There is still much research required to unearth the real definition of corporate entrepreneurship in organisational settings (Kuratko *et al*., 2013:323).

Many scholars have developed their own definition of corporate entrepreneurship based on their research and understanding, however, an in-depth analysis of the definitions in Table 3.1 shows that several scholars agree that corporate entrepreneurship involves generation of new ideas, development, implementation, new business and organisational behaviours (Morris *et al*., 2011:11). The concept of corporate entrepreneurship is pivoted on the innovation of products, services, processes, administrative systems and employees' activities in organisations (Morris *et al*., 2011:12). According to Corbett *et al*. (2013:812), innovation is now regarded as essential to effective management practice and the opinion that competitive advantage must be renewed replaces the idea that competitive advantage is indispensable.

The definitions in Table 3.1 above are divided into subsections with headings i.e. intrapreneurship, corporate venture, internal corporate entrepreneurship and entrepreneurial orientation. These subsections are popularly related terms of corporate entrepreneurship (Morris *et al*., 2011:11).

Each definition of corporate entrepreneurship focuses on certain aspects of corporate entrepreneurship. Nevertheless, corporate entrepreneurship focuses on enhancing organisations' abilities to acquire and act upon innovative skills, competencies, renewal and capabilities to improve organisations' profitability (Morris *et al*., 2011:12). For example, Jennings and Lumpkin (1989:489) defined corporate entrepreneurship as the degree to which new products, services and markets are developed and assume that an organisation is said to be entrepreneurial if it develops a higher than the average number of novel products and markets. The focus in this definition is on new products and markets. Similarly, Guth and Ginsberg (1990:5) posited that corporate entrepreneurship includes two types of phenomena i.e. the birth of new business within existing organisations and transformation of organisations through the renewal of key ideas on which they are built on. Zahra (1995:227) suggested that corporate entrepreneurship is the sum of the organisation's innovation, renewal, venturing efforts. Similarly, Ling, Simsek, Lubatkin and Lyon (2008:557) reaffirmed that corporate entrepreneurship is the sum of organisational innovation, renewal and venturing efforts where innovation is the introduction of something new to the market, strategic renewal involves strategic and structural changes and venturing are entrepreneurial efforts that lead to creation of new business within existing corporations.

Zahra *et al*. (2000:947) reinforced that that corporate entrepreneurship is important for organisational renewal, creation of new business and improved performance. It encompasses formal or informal activities that are aimed at creating new business inside the established organisation (Zahra *et al*., 2000:962). These above definitions were further built on by Kuratko *et al*. (2011:11), who defined corporate entrepreneurship as entrepreneurial behaviours inside an established mid-sized or large organisation.

Corbett *et al*. (2013:812), stated that corporate entrepreneurship comprises two categories of phenomena i.e. corporate venturing and strategic renewal. Corporate entrepreneurship is the creation of new business within existing organisations and strategic renewal is the transformation of organisations through the renewal of key ideas on which they are built (Corbett *et al*., 2013:812).

3.2.2 Entrepreneurship and corporate entrepreneurship

Even though the term entrepreneurship has been in existence for the past 200 years, there has been no common agreement about its specific definition (Morris *et al*., 2011:9). Audretsch *et al*. (2015:703) hypothesised that entrepreneurship means diverse things to different people including scholars and thought leaders. However, according to Kuratko *et al*. (2011:9), entrepreneurship is about creating a new organisation, developing novel innovations, diversifying ways of doing things and wealth creation and includes terms such as starting a business, new venture creation, value creation, pursuing opportunities, resources, risk-taking and profit-seeking.

Corporate entrepreneurship also experiences the same definition dilemma. Corporate entrepreneurship is a phenomenon that exists in establishment setting. It is a term used to define entrepreneurial behaviours inside a mid-size or large organisation (Morris *et al*., 2011:11; Kuratko, 2017:2). Like entrepreneurship, corporate entrepreneurship is focused on innovation, risk-taking, value creation, pursuing opportunities, entrepreneurial leadership, resources, new venture creation and profit-seeking (Kuratko, 2017:2). As a result, entrepreneurship can occur in organisations of different sizes and capacities. It is the role of an entrepreneur to push boundaries, capitalise on opportunities, take risks and transform an innovative idea into reality (Morris *et al*., 2011:28). Entrepreneurship is a phenomenon that can exist both inside and outside an established organisation (Morris *et al*., 2011:28).

Although the two phenomena, entrepreneurship and corporate entrepreneurship are conducted in different environments and appear to look diverse on the surface, they are comparable in several aspects. In both phenomenon there is opportunity recognition, value creation of products, services, processes, strategies for leveraging resources, balancing vision with managerial skills, passion with pragmatism, teamwork, risk-taking and involves significant ambiguity (Morris *et al*., 2011:37).

Yet, the two phenomena, entrepreneurship and corporate entrepreneurship have some fine line differences depending on the setting of the phenomenon. When entrepreneurship is practised in a start-up business, the impact of its characteristic will differ from a corporate setting. For instance, both phenomena require risk-taking,

however, the risk falls solely on the laps of an entrepreneur in a start-up setting while in a corporate setting, the risk falls on the organisation as a whole (Morris *et al*., 2011:37). On the positive side, rewards come to the entrepreneur in a start-up setting while in a corporate setting rewards go to the organisation, not the entrepreneur. Corporate settings usually have the wherewithal to finance innovations while an individual entrepreneur usually experiences severe resource constraints that often result in significant modification of core concept and the direction taken by the business (Morris *et al*., 2011:40). These differences are noticeable based on the entrepreneurship environment. The fine line differences between corporate entrepreneurship and entrepreneurship are shown in detail in Table 3.2 below.

Table 3. 2: Corporate and Start-up entrepreneurship: Differences

No.	Corporate entrepreneurship	Start-up entrepreneurship
1	Company assumes the risk, other than career related risk.	Entrepreneur takes individual risk.
2	Company owns the concept and intellectual rights surrounding the concept.	Entrepreneur owns the intellectual rights of the innovative idea.
3	Entrepreneur may not have equity in the company.	Entrepreneur owns all or much of the business.
4	Clear limits are placed on the financial rewards entrepreneur can receive.	Potential rewards for entrepreneur are hypothetically unlimited.
5	Room for error, company can absorb the failure costs.	A single misstep can mean failure.
6	More insulated from outside influence.	Vulnerable to outside influence.
7	Interdependence of the champion with many others. May have to share credit with other people in the organisation.	Independence of entrepreneur, although successful entrepreneurs are usually supported by strong teams.
8	Rules, procedure and bureaucracy hinder entrepreneur creativity.	Flexibility in changing course, experimentation and continuous trial of new ideas.
9	Bureaucratic approval processes.	Quick decision making.
10	Job security	Little security.
11	Dependable benefit package.	No safety nets.
12	Extensive network for bouncing around ideas.	Few people to talk to.
13	Potential for sizeable scale and scope fairly quickly.	Limited scope and scale initially.
14	Access to capital, R&D, production facilities for prototyping. An established sales force, existing brand, distribution channels, data base, market research resources and ready market for the product.	Severe resource limitation.

Source: Morris *et al*. (2011:38)

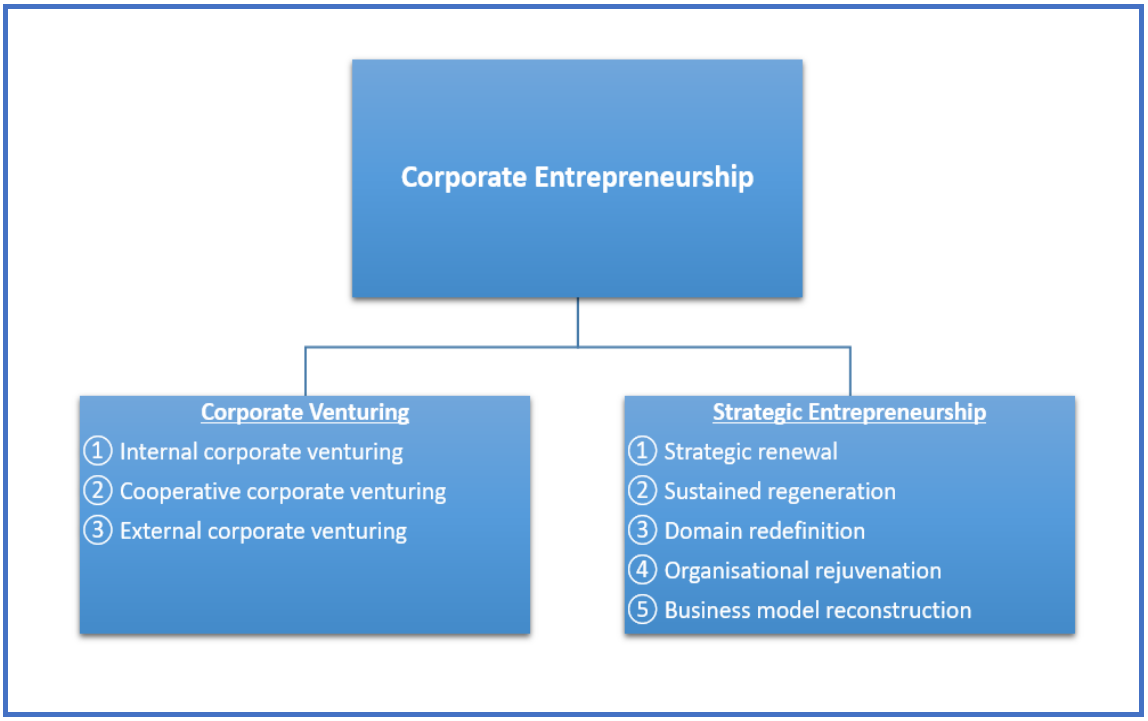
3.3 FORMS OF CORPORATE ENTREPRENEURSHIP

In the last four decades, corporate entrepreneurship has been wide-spreadly researched and the domain of the field has meaningfully expanded (Kuratko, 2017:2; Corbett *et al*., 2013:812). Corporate entrepreneurship research has gradually escalated from just understanding product and service innovation to championing

innovations in processes, value chains, business models and all functions of management (Kuratko, 2017:3). Organisations that practice such innovative activities are usually perceived to be dynamic, flexible and organised to take advantage of new business opportunities that appear on the horizon (Kuratko, 2017:3). Therefore, organisations that have ambitions of developing and nurturing competitive advantages through innovations of products, service, processes and new business acquisition or development will have to depend on corporate entrepreneurship (Kuratko, 2017:3). Depending on the level of entrepreneurial intensity in an organisation, the level of entrepreneurship within an organisation varies. There are basically two forms assumed by entrepreneurship in organisations (Morris *et al*., 2011:85).

According to Corbett *et al*. (2013:812), corporate entrepreneurship is viewed as encompassing two categories of phenomena; corporate venturing and strategic entrepreneurship. Corporate venturing tactic is the adding of new business to the organisation through internal corporate venturing, cooperative corporate venturing and external corporate venturing (Morris *et al*., 2011:85). On the other hand, strategic entrepreneurship tactic is the innovations that are adopted by an organisation in search of competitive advantage through organisational strategy, product offering, served markets, internal organisation and business model (Morris *et al*., 2011:85). Figure 3.1 below delineates the different forms that corporate entrepreneurship can take and the hierarchical structure of corporate entrepreneurship in organisations.

Figure 3.1: Forms of corporate entrepreneurship



Source: Morris *et al*. (2011:86)

3.3.1 Corporate venturing

Corporate venturing involves the birth of new business within existing organisations (Corbett *et al*., 2013:812). Corporate venturing is the process of creating, adding or investing in new business (Morris *et al*., 2011:86). Organisations develop new reasons for countless reasons such as exploiting underutilised resources, extracting further value from existing resources, exerting competitive pressure on internal suppliers, spreading the risk and costs of product development, learning about corporate venturing, upskilling their managers and growing their business (Morris *et al*., 2011:89).

According to Morris *et al*. (2011:85), the recognised forms of corporate venturing are internal corporate venturing, cooperative corporate venturing and external corporate venturing.

- Internal corporate venturing refers to new businesses that are birthed within exiting organisations and are owned by the organisation (Morris *et al*.,

2011:86). Such new ventures are usually located within the main organisation or may be located outside the firm or operate as a semiautonomous organisation (Morris *et al*., 2011:86).

- Cooperative corporate venturing, sometimes known as joint corporative venturing or collaborative venturing are entrepreneurial activities in which new ventures are birthed and owned by the main existing organisation together with one or more external partners (Morris *et al*., 2011:86). Cooperative venturing exists as separate external organisations beyond the organisational boundaries of the founding organisations (Morris *et al*., 2011:86).
- External corporate venturing is entrepreneurial activity in which new ventures are created by parties outside the organisation. External corporate venturing is new businesses mostly in their early stage (Morris *et al*., 2011:86).

New businesses can be developed through any one form of corporate venturing; internal corporate venturing, cooperative venturing and external corporate venturing (Morris *et al*., 2011:86).

3.3.2 Strategic entrepreneurship

Strategic entrepreneurship is the alternative form of corporate entrepreneurship. Strategic entrepreneurship is entrepreneurial activities that involve organisational consequential innovations that are embraced in pursuit of competitive advantage (Morris *et al*., 2011:97).

Strategic entrepreneurship entrepreneurial activities do not involve new creation and addition to the organisation. It is solely an approach that involves concurrent opportunity-seeking and advantage behaviour seeking (Morris *et al*., 2011:97). Strategic entrepreneurship is fundamentally an organisational mindset that is opportunity-driven where management seeks to achieve the competitive advantage of the organisation (Morris *et al*., 2011:97). Usually, organisations are measured by how much they have changed relative to where they were before or how much an organisation has changed relative to industry standards (Morris *et al*., 2011:97).

Like corporate venturing, strategic entrepreneurship can take one of the five forms (Morris *et al*., 2011:97); strategic renewal, sustained regeneration, domain redefinition, organisational rejuvenation and business model reconstruction as shown in Figure 3.1.

- Strategic renewal is defined as the transformation of an organisation through the renewal of key ideas on which they are built (Guth & Ginsberg, 1990:5). In addition, Guth and Ginsberg (1990:6) reinforced that strategic renewal involves the creation of new wealth through a new combination of resources. Strategic renewal is also known as strategic innovation, or value innovation, the objective of the entrepreneurial initiative is the organisational strategy (Morris *et al*., 2011:98). Strategic renewal applies when an organisation fundamentally decides to reposition its efforts within its competitive space, for instance, when a mass merchandiser retailer operating in a low-end space decides to move upmarket to a more high-end space (Morris *et al*., 2011:99).
- Sustained regeneration is a phenomenon where an organisation habitually and continuously introduces new services and products into new markets (Morris *et al*., 2011:100). While continuously improving, the organisation will be in constant pursuit of entrepreneurial opportunities and many of these innovations result in incremental products, processes and service improvement (Morris *et al*., 2011:100). Specially sustained regeneration entrepreneurial activities are adopted as a basis for sustaining competitive advantage under conditions of the short product life cycle, technological changes and changes in market space (Morris *et al*., 2011:100).
- According to Covin and Miles (1999:54), domain redefinition is when an organisation proactively create a new market product arena that others have not known or actively sought to exploit resulting in the creation of new business. The domain redefinition strategy enables an organisation to move into uncontested markets by offering completely new products (Morris *et al*., 2011:100). Such a move by an organisation can totally create new industries or change the boundaries of existing industries (Morris *et al*., 2011:100). Domain redefinition is also known as bypass strategy, market pioneering, white space marketing or blue ocean strategy (Morris *et al*., 2011:101).

- According to Covin and Miles (1999:52), organisational rejuvenation is a strategy where an organisation seeks to sustain or improve its competitive advantage by changing its internal processes, structure and capabilities. It is when an organisation focuses on rebuilding itself using entrepreneurial initiatives relating to internal structure, culture and process (Morris *et al*., 2011:101). Accordingly, the objective of the innovation efforts, organisational rejuvenation is a core attribute related to the organisation's internal operations (Morris *et al*., 2011:101). Ideally, the innovations conducted by the organisation should be able to transform and differentiate the firm from other organisations or industry rivals.
- Business model reconstruction is a strategy where an organisation applies entrepreneurial thinking to the designing or redesigning of its core business model to improve its operational efficiencies or differentiate itself from industry competitors in ways appreciated by the market, the industry they belong or completely new created domains (Morris *et al*., 2011:101). Organisations can introduce new business models in existing or new business domains. For instance, Dell computers introduced a direct sales model and eBay introduced an online auction model in their existing markets and were successful (Morris *et al*., 2011:101). Additionally, business model reconstruction can be extended to outsourcing where organisations rely on external suppliers for activities previously conducted internally e.g. Information technology and administrative functions (Morris *et al*., 2011:101). Business model reconstruction strategy can be applied successfully by an organisation if it understands how it creates value, whom it creates the value for, its core competencies, how it differentiates itself with competitors and its model for making money (Morris *et al*., 2011:101). Once an organisation is able to address these fundamental questions, it can implement successful new business models that can improve an organisation's performance, customer satisfaction, customer retention and profitability.

3.4 CORPORATE ENTREPRENEURSHIP CONCEPTUAL MODELS

Although Entrepreneurship has been identified as a characteristic that has no restrictions on where it occurs, corporate entrepreneurship is a unique characteristic

that happens within existing organisations (Morris *et al*., 2011:56). Thus, corporate entrepreneurship's legitimacy in established organisations can be enabled by ensuring that entrepreneurship is woven into the fabric of the organisation (Morris *et al*., 2011:49).

For entrepreneurship to occur, some fundamental factors must come together, hence the development of conceptual models to support the understanding of entrepreneurship within the established organisations (Morris *et al*., 2011:49). The development of these models has been necessitated by research conducted by leading scholars in the field of entrepreneurship such as Guth and Ginsberg (1990), Zahra (1991), Covin and Slevin (1991), Ireland, Hitt and Sirmon (2003), Kuratko, Hornsby and Goldsby (2004), Kuratko, Ireland, Covin and Hornsby (2005), Ireland *et al*. (2009) and Mokaya (2012) to mention a few.

The following corporate entrepreneurship models; model of strategic management, model of predictors and financial outcomes, model of strategic entrepreneurship, model of sustained corporate entrepreneurship, model of middle managers' entrepreneurial behaviour, model of strategic integration of entrepreneurship throughout the organisation and an integrated model for corporate entrepreneurship are explained in more detail to illustrate how corporate entrepreneurship functions in an established organisation and how relevant these models are in respect to this study.

3.4.1 Model of strategic management

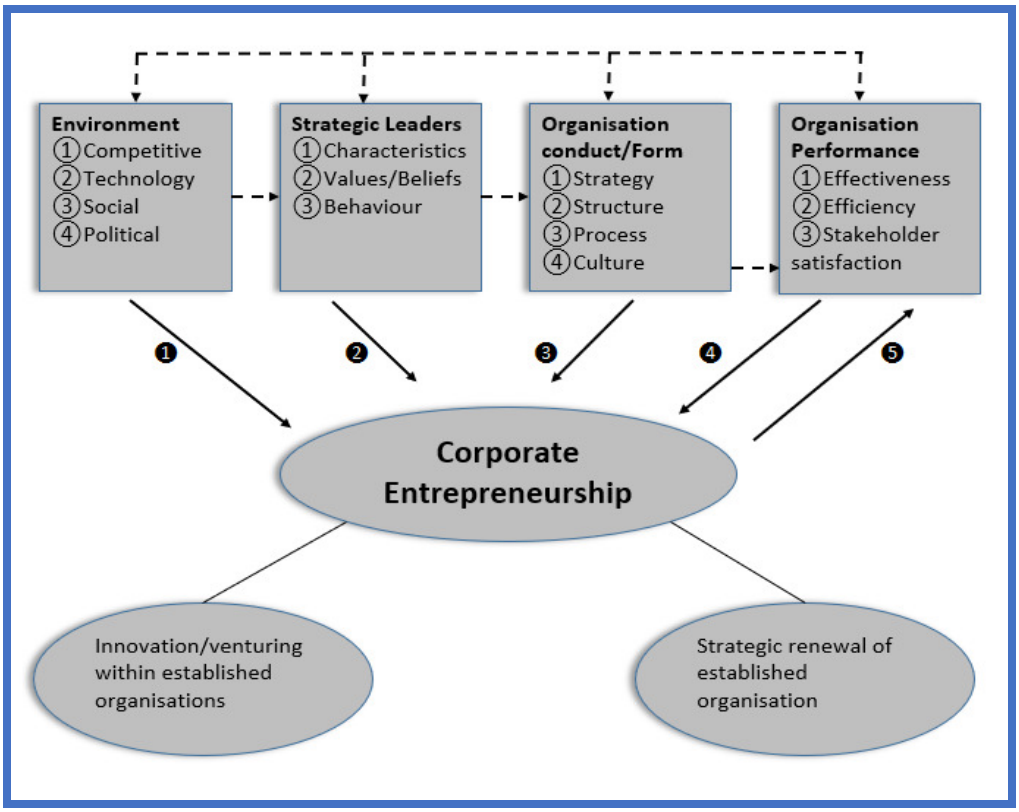
The model of strategic management was developed by Guth and Ginsberg (1990). The model of strategic management essentially integrates corporate entrepreneurship into the strategic management of an organisation on the premise that it encompasses two categories of processes i.e. internal innovation which is concerned with the creation of new business within an existing organisation and strategic renewal which is concerned with the design of corporate inventiveness that renovates organisations (Morris *et al*., 2011:49).

Guth and Ginsberg (1990) conceptualised that corporate entrepreneurship can be affected by both internal and external factors of the business environment. The

following are the key four factors that were considered in the model of strategic management i.e. the external environment, strategic leadership, organisation conduct and organisation performance (Morris *et al*., 2011:49).

The four factors according to the model of strategic management are interconnected in such a way that they influence one another. The model hypothesised that corporate entrepreneurship can flourish in organisations that have a good understanding of the external environment with good leadership that is driven by focused organisational conduct and is result-oriented. The external environment factor is regarded as the most important driver of entrepreneurship within or outside an organisation and requires leadership that possess characteristics that are opportunity orientated, coupled with strategies, structures, processes, a culture that can lead to organisational success (Morris *et al*., 2011:50). Figure 3.2 below shows how corporate entrepreneurship fits into strategic management.

Figure 3.2: Model of strategic management



Source: Guth and Ginsberg (1990:7)

3.4.1.1 Environment factors

The model of strategic management illustrates that the external environment is the springboard of entrepreneurship. The external environment which is everything, good or bad outside the organisation is comprised of factors such as competitive environment, technological environment, social environment and political environment (Morris *et al*., 2011:4). The influence that emerges from an organisation's macro-environment can sometimes have a strong adverse or encouraging impact on the company's direction e.g. customers are more concerned about fuel prices, hence automotive companies should adopt strategies that are focused on reducing fuel consumption of automobiles or creating new ideas that do not require the use of fossil fuels that are both expensive and harmful to the environment (Hough *et al*., 2011:57).

Competitive environment emerges from highly innovative competitors, competition from non-traditional sources, the threat from new entries or niche players and competitors who are also customers (Morris *et al*., 2011:50). It is the role of business leaders to appreciate an understanding of the company's competitive environment and all the information available and conduct analysis (Hough *et al*., 2011:58).

The technological factor accelerated the improvement in technology resulting in rapid product obsolescence and complicity in protecting intellectual property rights (Morris *et al*., 2011:50). Improvement in technology can dramatically change an industry landscape, enhancing the production of new and better products at a lower cost (Hough *et al*., 2011:86). Technological advancement can also lead to new venture creation or a completely new industry frontiers (Hough *et al*., 2011:57).

The social factor is because of complex and demanding customers that are from markets that are fragmented and narrowly segmented (Morris *et al*., 2011:5). The dynamics in customer demographics and new ways of using products can alter the state of competition (Hough *et al*., 2011:85). Besides the normal vehicle warranty offered by automotive companies, they also offer extended warranty, service or maintenance plans, credit facilities, technical support and roadside support (Hough *et al*., 2011:85).

Lastly, the political factor measures the level of impact of the government and government policy on an organisation. Organisations are mainly impacted by aggressive regulation, unlimited product liability, compliance costs, environmental regulatory and increasing focus on free and fair trade (Morris *et al*., 2011:5).

3.4.1.2 Strategic leader factors

Strategic leaders are leaders in organisations and are mainly concerned with understanding and alignment of the external and internal environment, they are multifunctional, generally depend on intermediaries to get the job done and are usually entrenched in ambiguity, complexity and information overload (Simsek, Jansen, Minichilli & Escriba-Esteve, 2015:466). Strategic leaders can affect the shape, form, fortunes and fate of an organisation through the development of strategic choices, when and how to implement the strategic choices (Simsek *et al*., 2015:463). Consequently, the characteristics and behaviours of strategic leaders impact an organisation and the level of impact can vary across entrepreneurial contexts, hence different entrepreneurial contexts may show a different kind of strategic composition and configuration (Simsek *et al*., 2015:466).

Strategic leaders should be able to generate a commitment to new strategic and entrepreneurial activities through the articulation of a compelling vision about the future state of the organisation (Simsek *et al*., 2015:467). Furthermore, strategic leaders should possess skills of sharing their vision from top management to the shop floor motivating employees to create and identify opportunities for resource exchange across business units (Simsek *et al*., 2015:467). Strategic leaders must possess the skill of ambidexterity, able to meet the current performance needs and at the same time ensuring that the organisation is set to generate future profits, serve future customers and shield itself from future competitive threats (Morris *et al*., 2011:330).

The contemporary environment is constantly demanding leaders to both possess the skills of exploitation and exploration and their effect on organisations can greatly fluctuate across entrepreneurial contexts and different entrepreneurial situations may create different strategic leadership configuration and composition (Simsek *et al*., 2015:466).

3.4.1.3 Organisation conduct or form

Organisation conduct pertains to the internal environment of an organisation. The key elements of organisation conduct are company strategy, internal structure, organisational policies and organisational culture.

A strategy is a futuristic visualisation of mid-term plan or long-term plan developed by an organisation's strategic leaders. Strategic planning requires visionary leaders, who can see employees for what they can be, not what they have been before (Morris *et al*., 2011:353).

A structure can be defined as a formal pattern of how jobs and employees are grouped and how activities of different employees and functions are related (Morris *et al*., 2011:184). Structure visualise hierarchical sets of relationships and is meant to bring logic and order in an organisation (Morris *et al*., 2011:184). Structures tend to breed hierarchies which bring about entrepreneurial barriers such as top-down management styles, bureaucratic and complicated communication lines and creation of silos (Morris *et al*., 2011:352).

Policies and procedures are organisational operational guidelines that are usually developed based on an organisation's experience with the aim of bringing order and consistency to everyday operations of the organisation (Morris *et al*., 2011:353). Policies and procedures tend to introduce bureaucratic approval processes of new business, for instance, the need for detailed business plan documentation and feasibility studies (Morris *et al*., 2011:353). Since entrepreneurial activities deal with unknown happenings, relaxed policies and procedure can facilitate innovation and accelerate implementation.

The values that permeate every characteristic of an organisation cumulatively create an organisational culture (Morris *et al*., 2011:355). Organisational values are the source of standards and direction for growth and development of an organisation (Morris *et al*., 2011:353). It is, therefore, imperative that organisational values are in rhythm with dynamic changes in the external environment.

3.4.1.4 Organisation performance

Organisational performance is a fundamental element of company existence. Successful organisation incline to have a much longer life span than an unsuccessful organisation. Organisations with above-average performance are likely to have gained their sustainable competitive advantage because of the core competencies of their resources (Slack, Brandon-Jones, Johnston, Singh & Phihlela, 2017:65). Organisation performance is mainly driven by leadership effectiveness, efficiency and satisfaction of stakeholders. Effectiveness which focuses on doing the right thing is the ability of a leader to choose appropriate objectives and ways of achieving those (Morris *et al*., 2011:13). While efficiency which focuses on doing things right is when the amount of work being done remains the same and the cost of the output reduces (Morris *et al*., 2011:13). As a result, organisational performance is driven by entrepreneurial activities that translate into novel products, services, processes and new business.

The model of strategic management illustrates how innovation and strategic renewal within an established organisation are related to the impact of the external and internal environment. The model of strategic management is relevant to this study because it identified the internal and external environmental aspects as the key factors that force organisations to adopt entrepreneurial activities. Eventually, a correct combination of favourable external environmental factors, internal environmental factors and strategic leadership is bound to lead to improved innovation and strategic renewal of an organisation.

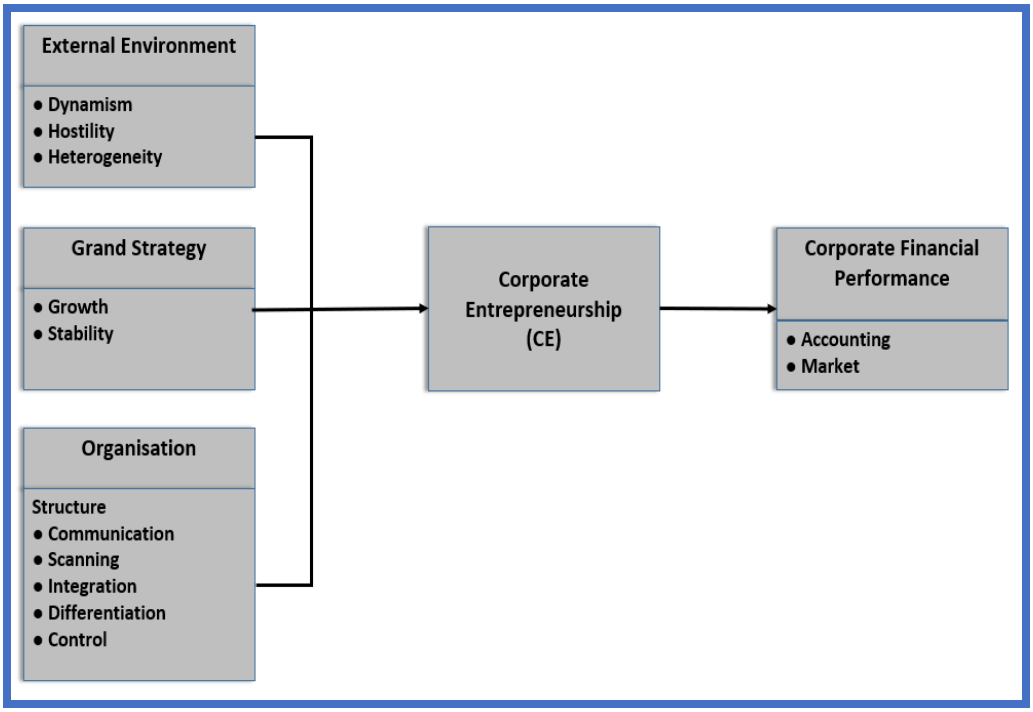
3.4.2 Model of predictors and financial outcomes

The model of predictors and financial outcomes of corporate entrepreneurship developed by Zahra (1991) identifies potential environmental, strategic and organisational factors that may enhance or throttle corporate entrepreneurship (Zahra, 1991:259). The model was developed with the assumption that the organisation's external environment, corporate strategy and internal organisational aspects which can have a combined effect on corporate entrepreneurship actions in organisations (Zahra, 1991:262). The factors identified in the model are composed of several sub-factors that can vary in their potential relatedness to corporate

entrepreneurship and knowledge of these factors can help business leaders to deal with these factors in sync and be able to identify opportunities that are brought about by dynamism and volatility.

The model of predictors and financial outcomes in Figure 3.3 below shows that external environment (dynamism, hostility and heterogeneity), grand strategy (growth and stability) and internal organisation (structure and values) once combined in a proper way can create corporate entrepreneurship which ultimately can result in positive financial performance and lead to success of organisations.

Figure 3.3: Model of predictors and financial outcomes



Source: Zahra (1991:262)

3.4.2.1 External environment

The external environment is comprised of three factors; dynamism, hostility and heterogeneity. According to Zahra (1991:263), dynamism is the unpredictability of an organisation market brought about by continuing changes and can be a source of opportunities that emerge from the dynamism of an industry where technological, political, social and economic changes convey new developments that can enrich the

organisations market. Dynamism can encourage an organisation to become innovative and produce new products, processes and service to maintain and sustain its competitive advantage in the industry. Furthermore, dynamism can make organisations diversify and enter new industries and sometimes completely altering their concept of business.

Hostility is the adverseness of the market environment of an organisation and can emanate from increasing rivalry in the industry. When an organisation is faced with a hostile environment, it may decide to differentiate its products and services through marketing and advertising activities or opt for new business ideas that can transform the organisation (Zahra, 1991:263).

Heterogeneity is when the signs of progress in one market create new pockets of demand for an organisation's product in related areas (Zahra, 1991:263). Postulated by Zahra (1991:263), the heterogeneous environment can be complex because of the multiplicity of the needs with which the organisation must contend. Heterogeneity shows the existence of multiple segments with diverse features and needs that are being served by the organisation.

3.4.2.2 Grand strategy

Grand strategy is the key predictor of corporate entrepreneurship and is the dominant theme in organisational mission, goals and aids the deployment of an organisation’s resources (Zahra, 1991:264). According to Zahra (1991:264), four strategies support grand corporate strategy; internal growth, external growth, stability and retrenchment.

Growth strategies focus on enhancing an organisation position in the industry by offering new products, product improvement and cost reduction (Zahra, 1991:264). Growth strategies enhance corporate entrepreneurship through innovation and venturing. External growth can widen the scope of organisations and industry through acquiring other organisation or new technologies that are developed internally or externally. Growth strategies enhance an organisation’s corporate entrepreneurship (Zahra, 1991:265).

Organisations that pursue stability strategies are usually expected to implement a few corporate entrepreneurship projects because the focus is only on the incremental increase within the scope of the business and maintain the past rates of financial performance (Zahra, 1991:265). While retrenchment strategies focus on measures that reduce assets, labour force and operations (Zahra, 1991:265). Retrenchment strategies negatively impact corporate entrepreneurship projects in organisations and may lead to organisations downsizing or demise.

3.4.2.3 Organisation

Organisation factors form the context with which managers and employees view opportunities for a new venture and are classified in two categories, tangible and intangible (Zahra, 1991:265). Tangible variables are properties of formal organisation structures such as communication, scanning, integration, differentiation and control, while intangible variables are dominant organisation values such as beliefs and norms (Zahra, 1991:265).

The model of predictors and the financial outcome is relevant to this study because it considers both the external and internal environments and assumes that the impact of both environments can intensify corporate entrepreneurship. In addition, growth strategies and organisation were also correlated with increased corporate entrepreneurship projects. The ultimate result of the model is a positive financial performance which is directly related to the objective of this study.

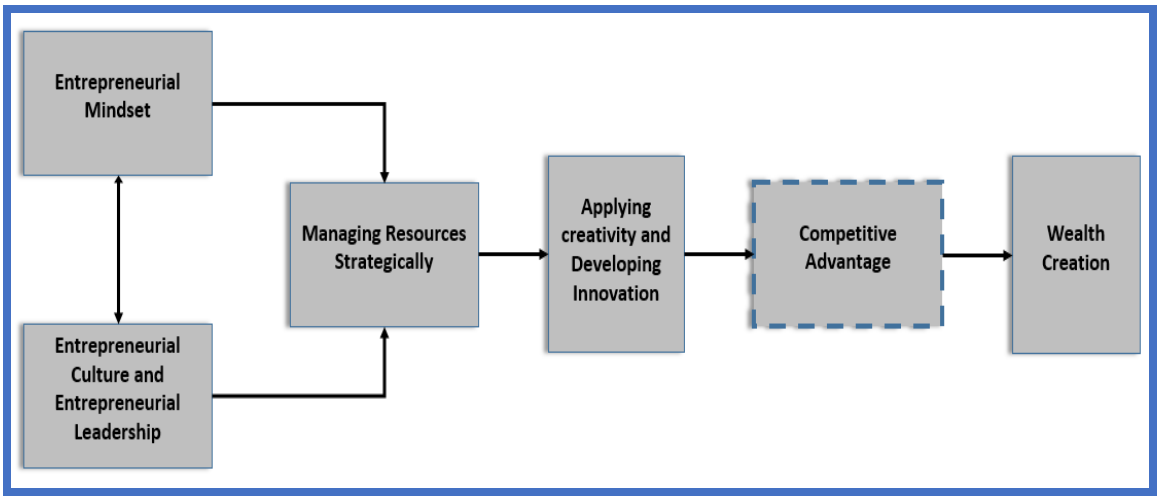
3.4.3 Model of strategic entrepreneurship

Strategic entrepreneurship is fundamentally focused on understanding the causes of variations amongst organisation's wealth creation within the same environment while entrepreneurship is deemed as a catalyst for wealth creation in emerging, developing and developed economies (Ireland *et al*., 2003:963). Both terms strategic entrepreneurship and entrepreneurship are basically concerned with wealth creation and are extremely difficult to be separated from each other (Ireland *et al*., 2003:963). Based on this thinking, Ireland *et al*. (2003) developed a model of strategic management aids for established organisation to enhance wealth creation through reviewing the scope entrepreneurship and strategic management fields and critically

examining the four dimensions of strategic management i.e. entrepreneurial mindset, an entrepreneurial culture and entrepreneurial leadership, strategic management of resources and applying creativity and developing innovation in an organisation (Ireland *et al*., 2003:964). Consequently, entrepreneurship is more concerned with effective opportunity-seeking, whilst strategic management is more focused on effective competitive advantage seeking (Ireland *et al*., 2003:966).

Figure 3.4 below shows a practical image of how entrepreneurship and strategic entrepreneurship can be integrated to create wealth and firm growth that enhances corporate entrepreneurship within an established organisation (Ireland *et al*., 2003:964).

Figure 3.4: A model of strategic entrepreneurship



Source: Ireland *et al*. (2003:967)

Entrepreneurial mindset and entrepreneurial culture and entrepreneurial leadership are the key fundamental ingredients of the strategic model of entrepreneurship. Entrepreneurship mindset is a phenomenon that applies to both individuals and teams in an organisation such as individual employees, team members and managers (Ireland *et al*., 2003:967). According to Ireland *et al*. (2003:968), an entrepreneurial mindset is a method of thinking about business that aims at capturing the benefits of uncertainty and its key elements are entrepreneurial opportunities, entrepreneurial alternatives, real options and an entrepreneurial framework. In this respect individual or teams within an organisation can embrace

flexibility, creativity, continuous improvement, innovation and strategic renewal (Ireland *et al*., 2003:968). An entrepreneurial mindset can facilitate an organisation to navigate uncertainties such as risk and ambiguity thereby outpacing organisations that are not able to do so, hence gaining competitive advantage (Ireland *et al*., 2003:968).

In tandem with an entrepreneurial mindset, entrepreneurial culture and entrepreneurial leadership are important factors of the model. Entrepreneurial culture is more concerned with how things are done, beliefs, values, organisation structure, norms and ethos of an organisation. Organisational culture is a system of common values within an existing organisation (Ireland *et al*., 2003:970). Therefore, an enabling culture within an organisation is characterised by several expectations such as strong commitment to concurrent opportunity-seeking and advantage seeking behaviours, a well-nurtured entrepreneurial culture is one that encourages novel ideas, creativity, risk-taking, learning, tolerance to failure, product, process and administrative innovation (Ireland *et al*., 2003:970). Consequently, a good entrepreneurial culture can promote entrepreneurial opportunity-seeking that can be exploited with competitive edge benefits (Ireland *et al*., 2003:970). Theorised by Ireland *et al*. (2003:970), entrepreneurial culture comprised of six elements, namely; shared basic assumption, invented, discovered and developed by a given group of people, learn to cope with external adaptation and internal integration, worked well enough to be regarded as validly, can easily to share with new group members and a correct way to perceive, think and feel in relation to those problems.

Implementation of an entrepreneurial culture that fosters entrepreneurial exploitation requires a vision and focused leadership. It is the duty of a leader to develop and nurture an entrepreneurial culture (Ireland *et al*., 2003:971). Stated by Ireland *et al*. (2003:971), entrepreneurial leadership is the capability to influence others, manage strategically with an objective of promoting opportunity-seeking and advantage seeking behaviours in an organisation. Entrepreneurial leaders must have a shared vision that motivates organisational members to create opportunities for resource exchange and combinations across distinct units (Simsek *et al*., 2015:467). Entrepreneurial leadership is unpacked in more detail in Chapter 4.

A good mix of an entrepreneurial mindset and entrepreneurial culture and entrepreneurial leadership can result in excellent management of resources in an organisation. Strategic management of resources is a concept drawn from the resource-based view of organisations that provides theoretical frameworks of how resources should be strategically managed (Ireland *et al*., 2003:972). Resources can be described as tangible or intangible assets that are rare, valuable, imperfectly imitable and non-substitutable (Slack *et al*., 2017:66). Strategically managing resources can create an environment that encourages employees, managers and teams to become creative and innovative.

Once resources are strategically managed and begin to manifest behaviours of opportunity and advantage seeking, creativity and development of innovation becomes part of an organisational culture where employees, teams and managers feel free to contribute their ideas because of leadership commitment.

Creativity is a work approach that leads to the generation of new ideas, process, solutions and includes skills that can manage matrices of information, pausing judgement as complexity increases, good memory and recognise patterns of opportunities (Ireland *et al*., 2003:981). Creativity is the source of innovation and can thrive if resources are strategically managed (Ireland *et al*., 2003:981). While innovation can be defined as the successful exploitation of new ideas and it is a profitable result of the creative process which involves generating and applying in a specific context product, service, procedures and processes that are required and useful (Serrat, 2017:904). An *et al*. (2017:3) defined innovation as the introduction of novel products, process and organisational methods or the improvement of internal process within the corporate context. Innovation can render processes, systems, products and administrative processes redundant.

Cumulatively, the elements of the model strategic entrepreneurship by Ireland *et al*. (2003), can foster an organisation to create wealth, the goal of any organisation. The dimensions identified by Ireland *et al*. (2003) are appropriate to this study because they focus on the entrepreneurial mindset, entrepreneurial culture and entrepreneurial leadership and managing resources strategically. Correspondingly, the models of strategic entrepreneurship encompass the same components as the

model of predictors and financial outcomes, even though the approaches to the models might seem different.

3.4.4 Model of sustained corporate entrepreneurship

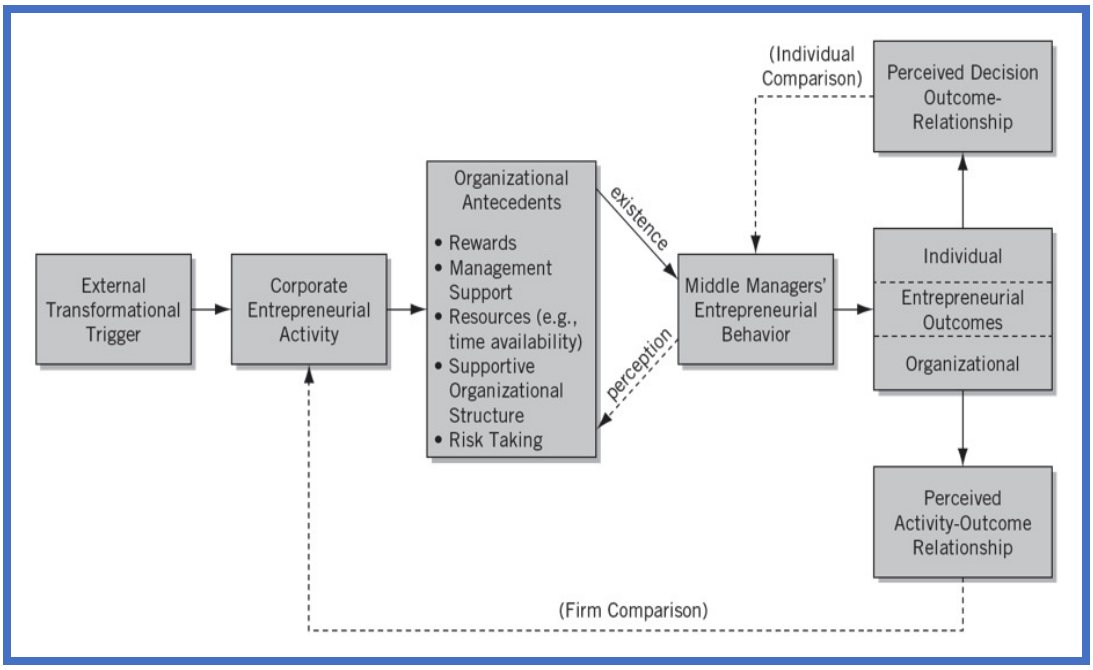
The model of sustained corporate entrepreneurship developed by Kuratko *et al*. (2004), is a combination of several previous models developed by corporate entrepreneurship scholars. The model blends and extends previous models that have studied individual or organisational elements of entrepreneurial activities (Kuratko *et al*., 2004:77). The model provides more theoretical foundations accentuating the importance of perceived implementation and result relationship between individual-level and organisational level (Kuratko *et al*., 2004:77). The model assesses the ability to sustain entrepreneurship on a continuous process (Morris *et al*., 2011:50). Kuratko *et al*. (2004) postulated that "sustainability is liable upon individual team members of the firm continuing to undertake innovative activities and positive perceptions of such activities by top management which in turn leads to additional allocation of necessary support and resources".

The model is purely driven by transformation triggers such as external or internal to the firm that creates opportunities or threats and motivates the need for change (Morris *et al*., 2011:50). Once the change is triggered, the organisation decides to develop corporate entrepreneurship strategies that are in line with environmental analysis conducted by the organisation. After corporate entrepreneurship strategy formulation, organisation executives should introduce organisational antecedents that promotes corporate entrepreneurial activities (Kuratko *et al*., 2004:81). Examples of organisational antecedents are; top management support, autonomy, rewards, resources e.g. time availability and flexible organisational boundaries (Morris *et al*., 2011:51). Accordingly, the result derived from organisation antecedents or entrepreneurial activities can be compared at both individual and organisational level to previous employee expectations (Morris *et al*., 2011:50). Ideally, both employees and the organisation must be pleased with the results or level of entrepreneurship to avoid deterioration (Morris *et al*., 2011:50).

Figure 3.5 below shows the process of the model of sustained corporate entrepreneurship developed as an extension of previous models that have examined

the individual or organisation level of entrepreneurial activities (Kuratko *et al*., 2004:77).

Figure 3.5: Model of sustained corporate entrepreneurship



Source: Kuratko *et al*. (2004:79)

External transformational triggers act as a catalyst for change in an organisation. Very often, environment factors shock organisations through causing abrupt changes that give organisations an opportunity to learning, administrative drama and introduction of unrelated changes (Kuratko *et al*., 2004:79). It is, therefore, imperative for an organisation to extrapolate past environmental trends in the face of organisational change, face-value discontinuous change might prove to be momentum change for the organisation (Kuratko *et al*., 2004:79).

Corporate entrepreneurship activity or strategy is derived from entrepreneurial activities i.e. product innovation, process innovation, service innovation and administrative process innovation. Such innovation changes carried out by the organisation can be part of the organisational strategy (Kuratko *et al*., 2004:80). The development of corporate entrepreneurship activities is the function of the top executive of the organisation (Kuratko *et al*., 2004:80).

Organisational antecedents are progressively becoming important in supporting the implementation of corporate entrepreneurship activities. Both individually or combined, organisational antecedents have been empirically proved to be critical for corporate entrepreneurship efforts because they impact the internal environment of an organisation that determines the support of entrepreneurial initiatives (Kuratko *et al*., 2004:80). The organisational antecedents are the key part of this study because they are used as fundamental ingredients in the measurement instrument to assess the relationship between corporate entrepreneurship and success of the automotive organisations in Sub-Sahara Africa.

Entrepreneurial outcomes are a result of individual entrepreneurial behaviour. To measure the results of entrepreneurial outcomes, entrepreneurial activities are compared with preceding expectations at both individual and organisational level (Morris *et al*., 2011:51). This happens when organisational leaders and staff start to perceive that results are equitable, meet and exceed expectation, feeling of continued and sustained entrepreneurial behaviours have been achieved (Morris *et al*., 2011:51).

Finally, satisfaction with performance results for both individual employees and organisation is important to complete the implementation cycle. Ideally, individuals as agents of change must be fulfilled with the intrinsic and extrinsic results they receive from entrepreneurial behaviour (Morris *et al*., 2011:51). The model of sustained corporate entrepreneurship postulates that for any change to happen, both employees and organisation must be prepared to embrace change (Morris *et al*., 2011:51).

Kuratko *et al*. (2004) model of sustained corporate entrepreneurship is important for this study because it focuses on the triggers from the external environment that bring about change in the organisation. The model further goes on to include organisational antecedents, a key focus of this study. The elements of this model endorse entrepreneurial behaviours and identify performance outcomes as a feedback apparatus.

3.4.5 Model of middle-level managers' entrepreneurial behaviour

The model of middle-level managers' entrepreneurship behaviour was developed with an objective to integrate corporate entrepreneurship and middle managers' behaviour. The purpose of the model was to use the results of the conceptual and empirical corporate entrepreneurship research to model the antecedents to middle-level managers' entrepreneurial behaviour, the behaviour itself and the outcomes resulting from it (Kuratko *et al*., 2005:700).

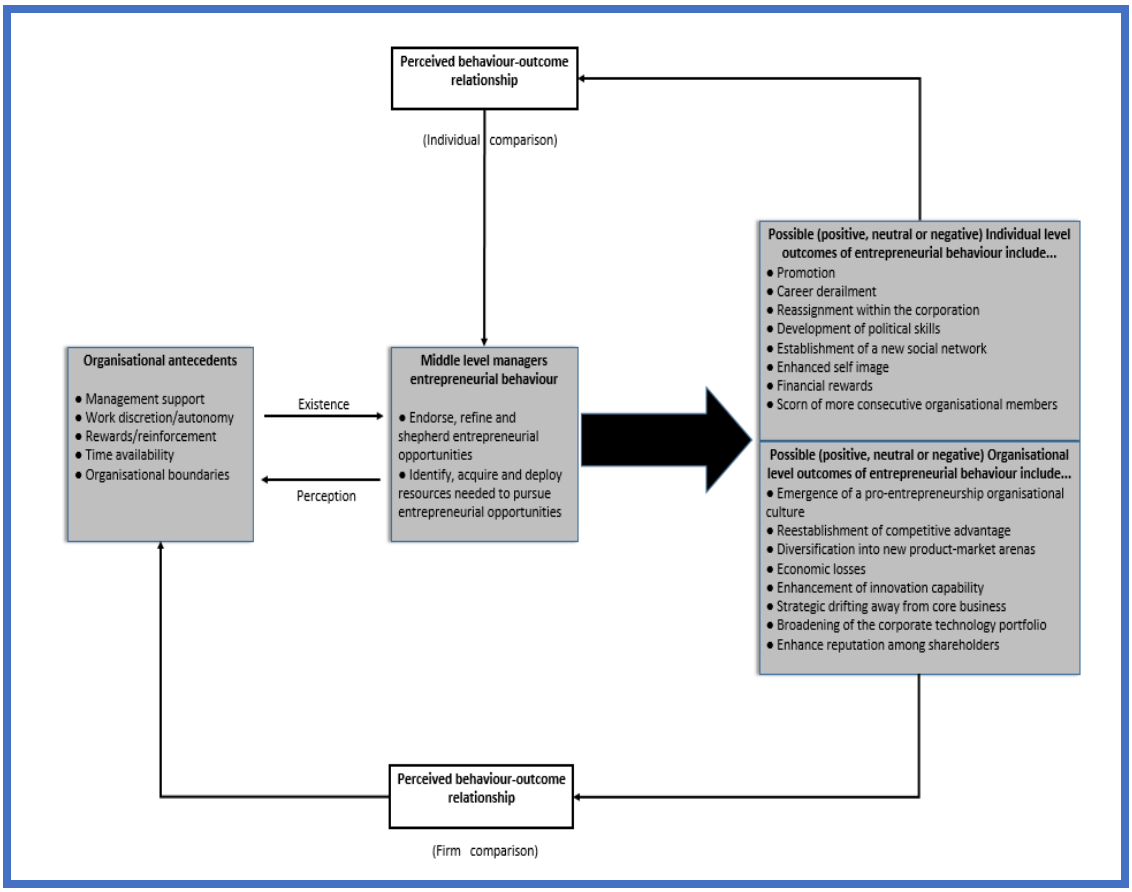
The model of middle-level manager's entrepreneurial behaviour is in concurrent with studies on strategic leadership and entrepreneurship that are increasingly considering the role of middle managers (Simsek *et al*., 2015:468). Middle-level managers play an important integrative role in an organisation because they are sandwiched between top management and lower-level employees (Kuratko *et al*., 2005:700). In many instances, middle managers are considered as strategic leaders in small to medium-size enterprises (SME) given their connecting role between organisation's tactical and strategic plans (Simsek *et al*., 2015:468).

Middle managers are instrumental in how the organisation's entrepreneurial activities are interpreted, structured and how processes are implemented at lower hierarchical levels (Simsek *et al*., 2015:468). Due to the nature of middle managers position in organisations, their main function is to reconcile top management perspectives with implementation issues that emerge from lower organisational levels (Kuratko *et al*., 2005:700). Middle-level managers perform the aspects of creating the work environment in an organisation, creating firm strategies, structures, processes and culture (Morris *et al*., 2011:50). The role played by middle managers is strongly linked to effective corporate entrepreneurship implementation, however, the antecedents that initiate middle managers to behave entrepreneurially and the results that influence the degree to which such behaviours are sustained has not yet been pinpointed (Kuratko *et al*., 2005:700).

Kuratko *et al*. (2005) model of middle-level managers' entrepreneurial behaviour was developed to increase knowledge of what influences middle managers to engage in entrepreneurial behaviour and to decide whether to sustain or not such a behaviour (Kuratko *et al*., 2005:700). The model of middle-level managers' entrepreneurial

behaviour highlights the importance of effective entrepreneurial behaviour by middle managers in achieving organisational goals of corporate entrepreneurship (Kuratko *et al*., 2005:700). Figure 3.6 below shows how middle managers are integrated into the implementation of corporate entrepreneurship in organisations. Middle managers focus on effectively communicating information between top management and operating level manager, they synthesise information, disseminate it for top management and operations managers are involved in championing projects that are intended to create newness such as products, services and processes (Kuratko *et al*., 2005:701). Organisational antecedents are on the input side of middle managers entrepreneurial behaviour and the outcomes are either organisational level that loop back into organisational antecedents or individual level that loop back into middle manager level entrepreneurial behaviour.

Figure 3.6: Model of middle-level managers' entrepreneurial behaviour



Source: Kuratko *et al*. (2005:701)

The model of middle-level managers' entrepreneurial behaviour visualises the activities that middle managers must take for entrepreneurship to meaningfully contribute to the organisation (Morris *et al*., 2011:332). For these entrepreneurship activities to exist in an organisation there must be existence or perception of organisational antecedents in an organisation. Organisational antecedents are management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries (Morris *et al*., 2011:333; Kuratko *et al*., 2004:81). The existence or perception of such organisational behaviours can ignite middle manager level entrepreneurial behaviours. Middle managers can embrace, refine and shepherd entrepreneurial opportunities within an organisation (Morris *et al*., 2011:333).

Additionally, middle managers have the capabilities to identify, acquire and deploy resources required to pursue entrepreneurial opportunities (Kuratko *et al*., 2005:705). Since entrepreneurship is often seen as the interaction of three factors: an entrepreneur, an opportunity and resources that are acquired and deployed in pursuit of opportunities, it is the role of middle managers to evaluate entrepreneurial activities that emerge from lower levels in an organisation (Morris *et al*., 2011:332). Thus, middle managers are inherently involved in entrepreneurial experimental activities in the organisation and influence on the shape and refinement of entrepreneurial opportunities (Morris *et al*., 2011:333). When middle managers create such an environment in an organisation, the employee will notice the impact through intrinsic or extrinsic behaviour such as promotions, career derailment, financial rewards and reassignment within the organisation (Morris *et al*., 2011:333). Likewise, on the organisational point of view, an entrepreneurship spirit will be manifested, hunger for competitive advantage in the industry and diversification into product-market arenas (Morris *et al*., 2011:333). Ideally, given the position of middle managers in organisations, they can redirect resources away from existing operation to entrepreneurial activities appearing to have a greater strategic value in the future (Morris *et al*., 2011:335).

The model suggests that middle-level managers are at the centre of entrepreneurial activities and that success of such activities is measured based on financial success, for instance, increase in revenue, market share, efficiency, utilisation and behaviour

is measured based on number of ideas suggested, the number of ideas implemented, and time spent. The fundamentals of this study were to understand the work environment created by middle-level managers, organisational antecedents and leaders' entrepreneurial behaviours. These key issues identified by Kuratko *et al*. (2005), qualifies this model for this study.

The model of middle-level managers' entrepreneurial behaviour is relevant to this study because it explains the importance of organisation antecedents and how middle-level managers can use the antecedents to promote a conducive environment that enhances corporate entrepreneurship. The organisational antecedents identified in the model are an important part of the instruments to be developed for this study to measure the connection between corporate entrepreneurship and the success of automotive organisations.

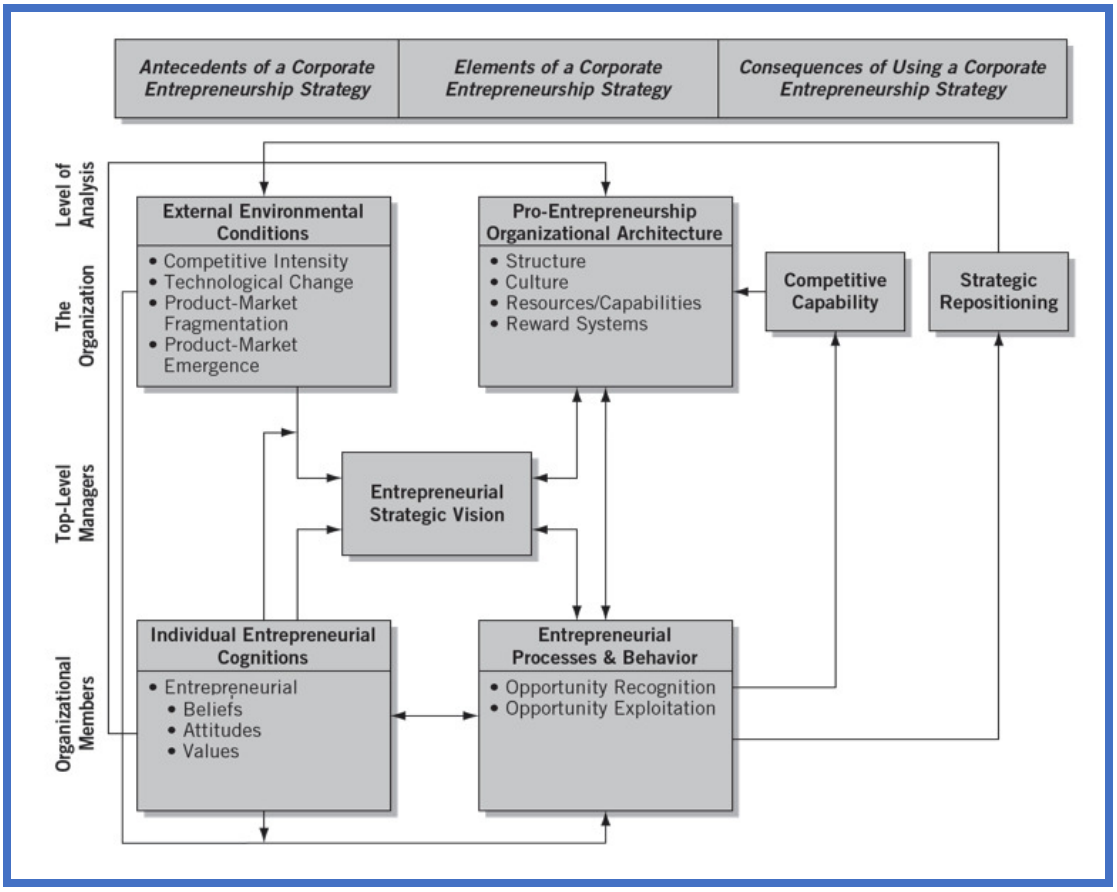
3.4.6 Model of strategic integration of entrepreneurship throughout the organisation

The model of strategic integration of entrepreneurship is based on the premise that corporate entrepreneurship knowledge is fragmented and non-cumulative (Ireland *et al*., 2009:19). The objective of Ireland *et al*. (2009) model of strategic integration of entrepreneurship throughout the organisation is to make corporate entrepreneurship an ongoing process throughout the organisation. The model integrates entrepreneurship in the entire fabric of the organisation rather than viewing it like an isolated behaviour or activity (Morris *et al*., 2011:52). Entrepreneurship in an organisation must become an activity that is continuously practised and improved within an organisation and should capture the spirit of what an organisation represents and functions (Morris *et al*., 2011:52).

Corporate entrepreneurship strategy is defined as a vision directed, organisation-wide reliance on entrepreneurial behaviour that purposefully and continuously rejuvenates the organisation and shapes the scope of its operations through the recognition and exploitation of entrepreneurial opportunity (Morris *et al*., 2011:52). The definition reaffirms the idea of bringing together entrepreneurship knowledge in an organisation and integrating it into the entire organisation's fabric.

The model comprises of three major components; antecedents of a corporate entrepreneurship strategy, elements of a corporate entrepreneurship strategy and consequences of using corporate entrepreneurship strategy (Ireland *et al*., 2009:19). The three components of the model of strategic integration of entrepreneurship throughout the organisation shown below in Figure 3.7 integrated into the entire fabric of organisation strategic areas.

Figure 3.7: Strategic integration of entrepreneurship throughout the organisation



Source: Ireland *et al*. (2009:24)

The antecedents of corporate entrepreneurship strategy include the external environmental condition i.e. competitive intensity, technological changes, product-market fragmentation and individual entrepreneurship cognitions i.e. entrepreneurial beliefs, attitude and values (Ireland *et al*., 2009:19). The elements of corporate entrepreneurship strategy include pro entrepreneurship organisation architecture i.e.

top management's entrepreneurial vision and organisational structures, culture resource capabilities and rewards systems and entrepreneurial processes and behaviour i.e. opportunity exploitation and recognition (Ireland *et al*., 2009:19). Lastly, the consequences of using corporate entrepreneurship strategy are focused on the results of entrepreneurial activities, including the development of competitive capabilities and strategic repositioning (Ireland *et al*., 2009:19).

The model is instrumental in helping organisation leaders to understand the current increase in entrepreneurial activities, revitalises individual creativity, product and process innovation and leadership developing with a view to creating an environment supportive of the entrepreneurial spirit (Morris *et al*., 2011:52). The model of strategic integration of entrepreneurship throughout the organisation was considered applicable to this investigation because it focuses on fusing corporate entrepreneurship into the entire fabric of the organisation and making it a permanent feature of organisations' strategy.

The model also mentions similar key factors highlighted by other models such as external environment, leadership, outcomes and organisation conduct. The strategic integration of entrepreneurship throughout the organisation is a well-constructed model of sustained corporate entrepreneurship that identifies the importance of organisational antecedents as internal factors that boost corporate entrepreneurship and the model of middle-level managers' entrepreneurial behaviour also identifies organisational antecedents as important elements for encouraging corporate entrepreneurship in organisations (Morris *et al*., 2011:349).

3.4.7 Proposed model for corporate entrepreneurship

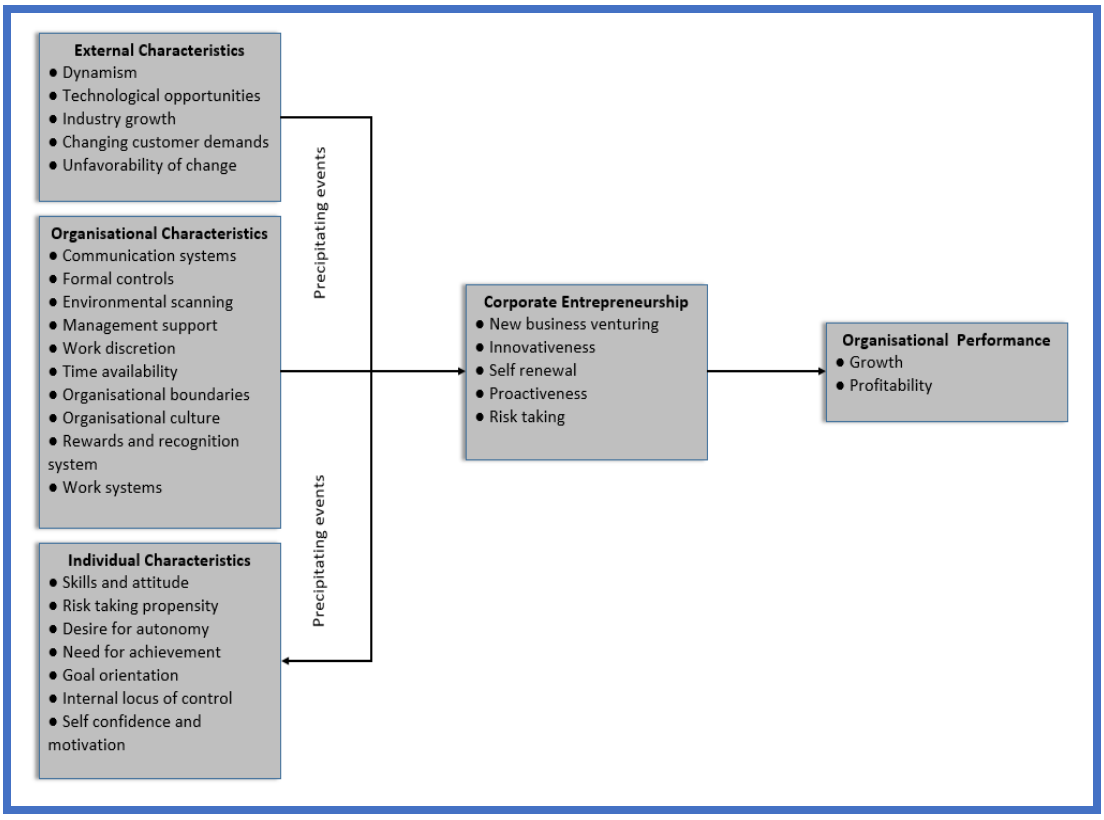
The proposed model for corporate entrepreneurship was developed by Mokaya (2012). In this study, the proposed model for corporate entrepreneurship is used to sum up all the models discussed because the concept of the model is borrowed from theories developed by corporate entrepreneurship scholars (Mokaya, 2012:139).

The model is built on the premise that corporate entrepreneurship can help organisations to achieve success. According to Mokaya (2012:139), organisations that engage in corporate entrepreneurship actions are expected to produce higher

levels of growth and profitability than those that do not. Corporate entrepreneurship can emerge in several ways such as business venturing, innovativeness, self-renewal and proactiveness (Mokaya, 2012:139). Therefore, for corporate entrepreneurship to flourish, the model posits that a good understanding of both the external and internal environmental factors is necessary.

A good understanding of these factors can help create an environment that stimulates and promotes corporate entrepreneurship (Mokaya, 2012:139). The hypothesis of the model in Figure 3.8 below shows that the mix of external characteristics, organisational characteristic and individual characteristics can produce corporate entrepreneurship leading to the success of the organisation.

Figure 3.8: An integrated model for corporate entrepreneurship



Source: Mokaya (2012:140)

The proposed model for corporate entrepreneurship is a mixture of several models of corporate entrepreneurship. The main ingredients of the model are external characteristics, i.e. dynamism, technological opportunities, industry growth,

organisational characteristics i.e. communication systems, formal controls, environmental scanning, management support, and individual characteristics i.e. skills and attitude, risk-taking, desire for autonomy and goal orientation can stimulate and promote corporate entrepreneurship environment that can help an organisation to grow and become profitable (Mokaya, 2012:139).

The proposed model for corporate entrepreneurship is relevant to this study because it sums up several models developed by previous scholars and is built on the premise that corporate entrepreneurship can result in organisational growth and profitability (Mokaya, 2012:139).

3.5 BARRIERS OF CORPORATE ENTREPRENEURSHIP

Kuratko *et al*. (2014:37) recognised the fact that organisations need to continuously innovate in terms of products, service, administrative routine and structure to effectively compete in the global market of the 21st-century. The innovation which is the result of corporate entrepreneurship actions is singled out as the most important footpath for organisations to fast-track their pace of change in the global market (Kuratko *et al*., 2014:37).

Innovation is now considered as a characteristic of effective management practice and the new assumption is that competitive advantage can be renewed or updated and replace the old way of thinking which considered competitive advantage to be a permanent feature (Corbett *et al*., 2013:812). Consequently, the pursuit of existence and justifiable advantage are the reasons why several organisations realise the importance of entrepreneurial actions (Morris *et al*., 2011:348). However, the challenge with corporate entrepreneurship concerns with how it should be implemented and how much organisations should let go in achieving positive implementation results (Morris *et al*., 2011:348).

When an organisation decides to adopt corporate entrepreneurship as a strategy, the objective of corporate entrepreneurship would be to facilitate the organisations to innovate constantly and cope effectively with competition realities (Kuratko *et al*., 2014:38). During the implementation of corporate entrepreneurship strategy, managers find themselves in unfamiliar terrains, where they lack experience and

guidelines regarding how to articulate entrepreneurial strategies, manage entrepreneurial employees or manage and redirect resource towards new entrepreneurial initiatives (Morris *et al*., 2011:348). In addition, very often the infrastructure of several organisations is put together without accommodating entrepreneurial mindset and behaviours (Morris *et al*., 2011:348).

Traditional management styles, for example, is known to enforce fixed procedures, implement controls against plans, apply a uniform compensation system and is risk unenthusiastic, such styles conflict with an entrepreneurial mindset that is innovative, creative, with high-risk appetite and highly motivated (Morris *et al*., 2011:349). The disruption caused by entrepreneurship can be enormously intimidating to managers who are used to routine processes and procedures. Deviation from such routine or the traditional way of doing things could result in managers becoming irritated, uncomfortable and distractive (Morris *et al*., 2011:349). Table 3.3 below shows the obstacles and the impact of traditional management practices in organisations.

Table 3.3: Obstacle and effects of traditional practices

No.	Traditional management practice	Adverse effects
1	Enforce standard procedures to avoid mistakes.	Innovative solutions blocked, funds misspent.
2	Manage resources for efficiency and ROI.	Competitive lead is lost, low market penetration.
3	Control against plan.	Facts that should replace assumptions are ignored.
4	Plan long-term.	Non-viable goals locked in, high failure costs.
5	Manage functionality.	Entrepreneur failure and/or venture failure.
6	Avoid moves that risk the base business.	Missed opportunities.
7	Protect the company's base business at all possible cost.	Venturing dumped when base business is threatened.
8	Judge new steps from prior experience.	Wrong decisions about competition and markets.
9	Compensate uniformly.	Low motivation and inefficient operations.
10	Promote compatible individuals.	Loss of innovators.

Source: Morris *et al*. (2011:349)

Based on the constraints caused by traditional management practices that make entrepreneurship seem like a hopeless pipeline dream, corporate entrepreneurship obstacles are characterised into six categories: systems, structure, strategic

direction, policies, people and climate (Morris *et al*., 2011:350). Systems in the organisation are implemented to provide stability, order and coordination within the organisation e.g. misdirected rewards and evaluation systems, oppressive control systems, inflexible budgeting system, overly rigid and formal planning systems (Morris *et al*., 2011:351). Structure introduces hierarchical levels into the organisational structure that can be accompanied by entrepreneurial barriers such as top-down management where management dictates what employees should do, communication channels are restrictive due to management layers, lack of accountability for innovation and change (Morris *et al*., 2011:351; Slack *et al*., 2017:58).

The strategic direction can be a source of sophisticated planning systems that can produce comprehensive strategies for marketing, production and finance, but ignore entrepreneurial actions and innovation (Morris *et al*., 2011:352). The strategic direction that is set by leaders who are not engaged in entrepreneurial processes and lack commitment of institutionalised entrepreneurship in the organisation and the direction set may contain no evidence of innovation goals and no formal strategy for entrepreneurship (Morris *et al*., 2011:351).

According to Hough *et al*. (2011:5), “crafting of strategy is a managerial commitment to track a set of actions in expanding the business, attracting and pleasing customers, competing successfully, conducting operations and improving the firm’s financial and market performance”. Strategic direction is often set at the corporate level, with no input from the middle or lower-level employees and has less room for changes (Slack *et al*., 2017:59). Strategic direction regulates entrepreneurial spirit in organisations because once the direction is set by top management, there is no room for flexibility which discourages lower-level employees to come up with fresh ideas that can change the course of the firm’s direction (Slack *et al*., 2017:58).

Policies and procedures can complicate, lengthen approval cycles, increase red tape documentation requirements, create unrealistic performance criteria and make management over-reliant on rules (Morris *et al*., 2011:351). Policies and procedures are often designed to bring order and consistency to everyday operations and are established based on the rules and experience. People often become content with

traditional ways of doing things and thrive in certainty and stability and are regularly cynical of the need to change (Morris *et al*., 2011:353).

Organisations that want to embrace entrepreneurial intensity must focus on changing people's attitude, perception and get employees to accept change and tolerant of failure in their work, avoid parochial bias, turf protection, complacency and short-term orientation (Morris *et al*., 2011:351). Lastly, culture is the norms and values of the organisation that pervades every aspect of the organisation's operations (Morris *et al*., 2011:355). Ideally, culture is the lifeblood of the organisation that creates standards and provide direction for growth and development (Morris *et al*., 2011:355).

Culture is the common denominator of what an organisation stands for, such as customer needs, quality, efficiency, service and reliability and organisations that do not have a well-defined culture will experience lack of consensus over values and norms, lack of fit of values with current competitive context and values that are incompatible with innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness (Morris *et al*., 2011:351).

Entrepreneurial implementation in an organisation is often met with traditional management practices that tend to slow down its momentum (Morris *et al*., 2011:349). It is imperative for the organisation to identify bottlenecks in systems, structures, strategic direction, policies and procedure, people and culture that can slow down entrepreneurial implementation (Morris *et al*., 2011:349). The six categories of corporate entrepreneurship obstacles can demotivate employees, block employees from contributing or generating ideas, exclude employees from the strategy, complicated approval processes, scare people and create a misunderstanding of company values (Morris *et al*., 2011:351).

Organisations should focus on identifying and nurturing inside organisational variables that can propel a dynamic entrepreneurial culture (van Wyk & Adonisi, 2012:65). An organisation must be aware of their environment both internal and external and create an environment that encourages entrepreneurship behaviours (van Wyk & Adonisi, 2012:66). Organisational managers that are serious about entrepreneurial activities must understand the importance of internal organisational

dimensions that promote and support an environment for innovation and must seek to measure specific dimensions that are related to innovative environments (Kuratko *et al*., 2014:57).

3.6 ORGANISATIONAL ANTECEDENTS

According to Kuratko (2017:2), corporate entrepreneurship is a term used to explain entrepreneurial behaviours within established small, medium and large size organisations and is now considered a major strategy of many organisations. Research on corporate entrepreneurship has also realised the importance of internal organisational dimensions to promote and support innovative environments (Kuratko *et al*., 2014:37). Organisations that have embraced corporate entrepreneurship as part of their strategy are viewed as firms that are dynamic, flexible and ready to take on new opportunities that appear on the horizon (Kuratko, 2017:3).

Contemporary organisations are daily facing challenges that require innovative thinking, courage, calculated risk-taking and strong leadership (Kuratko *et al*., 2014:38). This way of doing business will enable organisations to explore new spheres and new ways of doing business in existing spheres (Kuratko *et al*., 2014:38). Diversification of strategies, business model and operating conditions are likely in an organisation that have adopted corporate entrepreneurial behaviours (Kuratko *et al*., 2014:38).

Corporate entrepreneurship is a process that can enable organisations efforts to innovate constantly and cope or effectively outmanoeuvre competition (Kuratko *et al*., 2014:38). Several firms now rely on corporate entrepreneurship to develop and differentiate their products, services and processes from competitors (Hornsby *et al*., 2013:937). Examples of organisations that have embraced and nurtured corporate entrepreneurial activities are Apple, Procter & Gamble, Google and 3M (Kuratko *et al*., 2014:37).

The first step of a manager is to create a work environment conducive to innovation and entrepreneurial behaviours (Kuratko *et al*., 2014:39). A work environment is defined as a place or surrounding in which employees find themselves when they come to a job each day (Morris *et al*., 2011:247). Work environments are governed

by set conditions under which employees must operate as they try to accomplish firm tasks and personal goals (Morris *et al*., 2011:247).

The state of an internal environment of an organisation can order the perceived costs and benefits linked to taking personal risks, challenging current practices, dedicating time to unverified approaches, enduring the ambiguity and stress entrepreneurial behaviour can create (Kuratko *et al*., 2014:39). It, therefore, becomes mandatory for managers to utilise workplace design elements to develop innovative and friendly internal environments that identify and nature entrepreneurial behaviours.

The fundamental role of a Manager or leader is to support employees to understand the kinds of entrepreneurial behaviours sought out by the organisation, employee's ability to act in entrepreneurial ways and rewards available for entrepreneurial activities or disincentives for failing to implement entrepreneurial activities (Morris *et al*., 2011:247).

To support accurate measuring and monitoring of internal organisations environments research has identified five specific dimensions of organisational antecedents that are important determinants of internal working environments that are supportive of entrepreneurial behaviours (Kuratko *et al*., 2014:37).

Kuratko *et al*. (1990) developed the CEAI which was further refined by Hornsby, Kuratko, Shepherd and Bott (2009). The CEAI is an important diagnostic instrument used to evaluate manager's perceptions of the five organisational antecedents important for creating conducive internal environments to nurture entrepreneurial behaviours inside the established organisations (Kuratko *et al*., 2014:37). The instrument is designed to predict organisations likelihood of being able to successfully implement an innovative strategy and able to identify organisations internal environment weak areas that should be the focus of ongoing development efforts (Kuratko *et al*., 2014:37).

The five important organisational antecedents that are important determinants of an environment favourable to entrepreneurial behaviours are top management support, work discretion or autonomy, rewards or reinforcement, time availability and

organisational boundaries (Kuratko *et al*., 2014:37). Organisational antecedent; top management, organisational structure and rewards were identified by Kuratko *et al*. (1990) and Hornsby, Kuratko and Montagno (1999), extended the organisational antecedents with two more factors; work discretion and time availability. The hypothesis for the organisational antecedents $H_{1,}$ is proposed:

$H_{1:}$ There is a relationship between organisational antecedents and entrepreneurial orientation.

3.6.1 Top management support

Top management is fundamental in an organisation's management and operations and plays an important role in facilitating corporate entrepreneurship (Kuratko *et al*., 2014:39). The objective of top management support is to organise staff, roles and functions in a fashion that enhances entrepreneurial actions (Bhardwaj & Momaya, 2011:188).

According to Hough *et al*. (2011:5), top management sets the path of how to grow the business, how to build a loyal clientele, how to outperform rivals, how each function of the business e.g. finance, production, marketing, sales, distribution, human resource will operate and how performance should be furthered. Research has shown that top management support has a direct positive correlation with innovative results (Kuratko *et al*., 2014:39). The more supportive top management is, the more innovative employees will be. Hence, top management support is the degree to which employees observe that top managers support, facilitate and promote entrepreneurial behaviours (Kuratko *et al*., 2014:39). The antecedent of top management support is an indicator of the willingness of managers to encourage employees to increase their appetite for innovation (Bhardwaj & Momaya, 2011:189).

Innovative environments are incubated when top managers are involved in championing innovative ideas and providing resources required to achieve entrepreneurial activities. This form of support from top management can manifest in various ways such as promoting innovative ideas, providing resources necessary for the new ideas to be implemented, expertise and institutionalising the entrepreneurial activity within the organisation system and processes (Bhardwaj & Momaya,

2011:189). Therefore, top management support is one of organisational antecedent instrumental in promoting corporate entrepreneurship and the hypothesis $H_{1\text{-}1,}$ is proposed:

$H_{1\text{-}1}$: Top management support is positively related to entrepreneurial orientation.

3.6.2 Work discretion or autonomy

Work discretion or autonomy is a factor that is directly impacted by top management support. According to Kuratko *et al*. (2014:39), work discretion or autonomy is the degree to which employees perceive that the firm tolerates failure, provides decision-making latitude, freedom from excessive oversight, delegates authority and responsibility to lower-level managers and employees.

According to Bhardwaj and Momaya, (2011:190), employees derive satisfaction through having total control of the success of the projects with which they are involved and being in control of their destiny. Entrepreneurial opportunities are usually identified by employees who have discretion over how to perform their task and those that are encouraged to participate in experimentation (Kuratko *et al*., 2014:39).

Tolerance of failure encourages employees to become bold and continue trying to improve. In the process, the organisation will eventually benefit because employees will be at liberty to contribute and become innovative. When employees have enough support from top management and have autonomy in their job, the hypothesis $H_{1\text{-}2}$ is proposed:

$H_{1\text{-}2}$: Work discretion or autonomy is positively related to entrepreneurial orientation.

3.6.3 Rewards or reinforcement

Top management support in line with rewards and resources required for entrepreneurial activities is an important ingredient for corporate entrepreneurial behaviours. Rewards or reinforcement is the degree to which employees perceive how the organisation uses methods that rewards based on entrepreneurial activities

and success (Kuratko *et al*., 2014:39). The rewards system is an important success factor for stimulating entrepreneurial behaviours (Bhardwaj & Momaya, 2011:190).

According to Bhardwaj and Momaya (2011:190), intrinsic rewards that are based on employee competitiveness are an important element that motivates employees to develop new ideas. Furthermore, individual propensities to behave in an entrepreneurial manner are usually motived by rewards systems that encourage risk-taking and innovation (Kuratko *et al*., 2014:39). Therefore, the use of reward systems that are grounded in performance, demonstrate momentous achievements and encourage the pursuit of challenging work (Hornsby *et al*., 2013:939). Examples of incentives that elicit entrepreneurial behaviours are; recognition systems and rewards, bonus, promotion, salary increase, company benefits, equity and equity equivalents (Bhardwaj & Momaya, 2011:190). Employees who feel correctly rewarded and have enough resources to do their jobs are highly committed and the hypothesis $H_{1-3,}$ is proposed:

H_{1-3}: Rewards or reinforcement is positively related to entrepreneurial orientation.

3.6.4 Time availability

Top management support in assessing workloads to ensure that employees and teams have enough time required to pursue innovation is important for encouraging innovation (Hornsby *et al*., 2013:939). In addition, Job functions must be structured in ways that support efforts to achieve both long and short-term goals of the organisation (Hornsby *et al*., 2013:939).

Time availability is the degree to which employee's perception of workload schedule ensure extra time for employees to pursue creativity and innovation (Kuratko *et al*., 2014:39). Top management that provides unstructured or free time to employees can encourage corporate innovators to identify opportunities during their unstructured time (Kuratko *et al*., 2014:39). The unstructured or free time provided to employees is an important resource for generating entrepreneurial creativities (Kuratko *et al*., 2014:39). The unstructured time given to employees can help employees introduce new ideas in the organisation and the hypothesis $H_{1-4,}$ is proposed:

H_{1-4}: Time availability is positively related to entrepreneurial orientation.

3.6.5 Organisational boundaries

Organisational boundaries are outcomes expected from organisational work and development mechanisms for evaluating, selecting and utilising innovations (Hornsby *et al*., 2013:939). According to Kuratko *et al*. (2014:39), organisational boundaries is the degree to which employees perceives their flexible organisational boundaries that are useful in encouraging entrepreneurial actions because they enhance the flow of information between the external environment and internal environments of the organisation. Furthermore, the flow of information can be extended to divisions within the organisation and between departments to reduce silo structures (Kuratko *et al*., 2014:39).

Organisational boundaries that persuade, direct and inspire coordinated innovative behaviour across the organisation can produce productive outcomes that enhance organisations competitive advantage. Organisational boundaries aid organisations to ensure productive use of innovation enabling resources (Kuratko *et al*., 2014:39). Organisational boundaries can enhance entrepreneurial activities in an organisation and the hypothesis $H_{1-5,}$ is proposed:

H_{1-5}: Organisational boundaries are positively related to entrepreneurial orientation.

The five-organisational antecedent, top management, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries are important elements of the CEAI used to measure the internal environment of organisations. Organisational antecedents are believed to be important factors of corporate entrepreneurship both individually or in combination, because they directly impact on the internal environment which determines interest in and support of entrepreneurial actions inside the established organisations (Hornsby *et al*., 2013:939).

Managers can control organisational antecedent because they exist inside organisations, however, without the CEAI it would be difficult for managers to evaluate the antecedents as perceived by employees (Kuratko *et al*., 2014:40). It is

imperative that managers assess the existence of these organisational antecedents through the eyes of employees (Kuratko *et al*., 2014:40).

Organisational antecedents are the key elements of this study that aimed at understanding the relationship between corporate entrepreneurship and the success of automotive organisations. The organisational antecedents were used to measure the existence and employee perceptions of internal environments of selected automotive companies from Sub-Sahara Africa (Kuratko *et al*., 2014:40).

3.7 ENTREPRENEURIAL ORIENTATION

According to Kungeke (2016:i), "entrepreneurial orientation is a process of re-energising and enhancing an organisation's ability to acquire innovative skills and capabilities with an objective of creating new businesses within existing organisations". Entrepreneurial orientation germinated within the field of entrepreneurship and is strongly considered as an aspect of corporate entrepreneurship (Covin & Lumpkin, 2011:855; Kungeke, 2016:2; Mungule & Van Vuuren, 2016:3). Entrepreneurial orientation is regarded as principles that influence business approaches and creates exploitative behaviours towards business opportunities in order to gain and sustain competitive advantage and longevity (Kasim & Altinay, 2016:62). Organisations that are able to create conducive internal environments have greater chances of providing their businesses with a clear direction that would help the organisations understand the needs and want of its customers making them become pro-active, hence staying ahead of the competition (Kasim & Altinay, 2016:62). Generally, scholars agree that organisations need to implement entrepreneurial orientation to achieve success in terms of business performance (Kasim & Altinay, 2016:62).

Entrepreneurial orientation is present in an organisation where strategic leader generates an impetus to innovate, act aggressively and take risks (Kungeke, 2016:41). Leaders that have the ability to motivate their employees to be innovative, creative, pro-active, take risks, become flexible in decision making can drive their organisations towards success (Kungeke, 2016:41). Entrepreneurial orientation is characterised as a multidimensional construct in which risk-taking, autonomy, innovativeness, proactiveness and competitive aggressiveness are treated as

independent behavioural dimensions that explain entrepreneurial orientation (Covin & Miller, 2014:13). According to Miller (1983:771), entrepreneurial firms engage in product innovation, risk activities and are the first to come up with proactive innovation that astonishes competitors, while organisations who do not practice entrepreneurial orientation are the ones that are highly risk-averse and only wait to copy others. Thus, in literature, entrepreneurial orientation is consistently defined and viewed as a phenomenon associated with corporate entrepreneurship conceptualised as organisational activities that include new business, venture activities, innovativeness, self or strategic renewal (Covin & Miller, 2014:13). Thus, the implementation of organisational antecedents in a business can produce entrepreneurial orientations (Dess & Lumpkin, 2005:147; Urban *et al*., 2012:305).

Similar to entrepreneurship and corporate entrepreneurship, entrepreneurial orientation has numerous definitions, however, the most common definition defines entrepreneurial orientation as organisation's decision-making practices, managerial philosophies and strategic behaviours that are entrepreneurial in a form (Wales, 2016:4). While Lumpkin and Dess (1996:136) defined entrepreneurial orientation as processes, practices and decision-making activities that lead to the new entry.

Miller (1983:771), identified the three dimensions of entrepreneurial orientation that have been captured as entrepreneurial orientation firm-level overarching strategic posture, innovativeness, proactiveness and risk-taking. With further research, Lumpkin and Dess (1996:139), added two more dimensions that are critical to entrepreneurial orientation, competitive aggressiveness and autonomy. Therefore, the five dimensions of entrepreneurial orientation are innovativeness, proactiveness, risk-taking, autonomy and competitive aggressiveness. The five dimensions of entrepreneurial orientation are known to work together in improving organisational behaviours and can be assumed to germinate from organisational antecedents (Kungeke, 2016:42). Morris *et al*. (2008:49), suggested that entrepreneurial orientation had a direct effect on the performance of an organisation because it is tangled with the vision, mission, culture, structure of organisation, strategy and daily operations of the business. Therefore, the five dimensions of entrepreneurial orientation should not be seen as separate behaviours or activities, but must all be continuously integrated into the daily activities of organisations (Morris *et al*.,

2008:49). Nonetheless, organisations that are strong in fewer dimensions can also demonstrate success. Thus, organisations that want to implement successful corporate entrepreneurship need to have an entrepreneurial orientation culture (Dess & Lumpkin, 2005:147). Table 3.4 below explains the definitions of the five dimensions of entrepreneurial orientation (Dess & Lumpkin, 2005:148).

Table 3. 4: Definitions of dimensions of entrepreneurial orientation

No	Dimensions	Definitions
1	Autonomy	Independent action by a team or individual aimed at bringing forth a business concept or vision and carrying it through to completion.
2	Innovativeness	A willingness to introduce newness and novelty through experimentation and creative processes aimed at developing new products and services, as well as new processes.
3	Proactiveness	A forward-looking perspective characteristic or market place leader that has a foresight to seize opportunities in anticipation of future demand.
4	Competitive aggressiveness	An intense effort to outperform industry rivals. It is characterised by a combative posture or an aggressive response aimed at improving position or overcoming a threat in a competitive market place.
5	Risk-taking	Making decisions and acting without certain knowledge of probable outcomes; some undertaking may also involve making substantial resource commitments in the process of venturing forward.

Source: Dess and Lumpkin (2005:148)

3.7.1 Innovativeness

According to van der Merwe and Oosthuizen (2011:544), innovativeness can be used to identify trends and patterns that define an opportunity and is required to shape innovative business notions. Innovation is thus important because organisational performance in the current business environment mainly shapes skills of continuous improvements and the ability to compete in global markets (van der Merwe & Oosthuizen, 2011:544). Innovativeness's significant role in entrepreneurship makes it an important element of the entrepreneurial orientation dimensions (van der Merwe & Oosthuizen, 2011:544).

According to Serrat (2017:904), innovativeness is a result of a creative process and a way of exploiting new ideas. Innovativeness is the ability and tendency for entrepreneurial organisations to think creatively and develop new and practical ideas

concerning opportunity acknowledgement, problem-solving and resource utilisation (Pihie, Asimiran & Bagheri, 2014:3). It is a process of changing, creating products, ideas, effective processes and potentials of business opportunities (Australian Government, 2019). It involves changing or creating new effective processes, new products and ideas and can be a catalyst for growth and the success of an organisation (Australian Government, 2019). Although innovation is considered to be a vital element of entrepreneurial action, it is one of the possible drivers and outcomes within the domain of entrepreneurship (Goel & Jones, 2016:97).

3.7.2 Proactiveness

Proactiveness is a direct opposite of reactiveness and includes forward-looking, opportunity-seeking, branded by the introduction of new products and services (Kungeke, 2016:49; Morris *et al*., 2008:66). It is basically when organisation anticipates the needs and wants of its customers by going ahead of the competitors in providing new services and products and in establishing new standards for the industry (Kasim & Altinay, 2016:62). Organisations that are proactive usually take the lead, have the prudence to grab new opportunities in the horizon and are the ones that anticipate a change in the business environment and immediately respond by changing their business strategies (Kasim & Altinay, 2016:63). The forward-looking perspective helps strategic managers to have their eyes on the future in search of new possibilities for the growth and success of their organisations (Dess & Lumpkin, 2005:150).

Organisations that are proactive effectively create competitive advantage because they put the competition in a position of having to respond to their success initiative and proactiveness is achieved through careful monitoring the environment (Dess & Lumpkin, 2005:151).

3.7.3 Risk-taking

Risk-taking is an important element and appropriate ingredient for innovativeness and proactiveness (Kungeke, 2016:47). All entrepreneurial actions involve some level of risk-taking (Kasim & Altinay, 2016:95). According to Dess and Lumpkin (2005:152), “risk-taking is the willingness of an organisation to grab a venture

opportunity even though the organisations have no idea whether the venture would be successful and to act boldly without knowing the end result". It is when an organisation pledges a certain percentage of their resources to brand new projects thereby incurring some financial risk (Kasim & Altinay, 2016:63). Organisations that desire to become successful through the implementation of corporate entrepreneurship are bound to take riskier alternatives, even though it means forging the processes or products that have worked before (Kasim & Altinay, 2016:63; Dess & Lumpkin, 2005:151).

Organisations that have high risk-taking appetite tend to seize any opportunities that could lead to success without considering the dangers that might befall them (Kasim & Altinay, 2016:63). Therefore, risk-taking activities demand a great deal of thinking outside the box which involves a courageous decision, uncertainty and actions that are regularly vital for achieving innovative results (Garcia-Granero, Llops, Fernandez-Mesa, Alegre, 2015:1094). In addition, although the manager's risk appetite depends on individuals, research has shown that managers' preferences for risk behaviours are positively correlated with achieving higher innovative results (Garcia-Granero *et al.,* 2015:1094). Therefore, entrepreneurial organisation experiences higher innovative activities and non-entrepreneurial organisations experience less or no innovative activities.

3.7.4 Autonomy

Dess and Lumpkin (2005:148), defined autonomy as an Independent action taken by a team or individual aimed at bringing forth a business concept or vision and carrying it through to completion. While Kuratko *et al*. (2014:39), defined autonomy as the level to which employees perceive that their organisation tolerates failure, provide decision making leeway, freedom from excessive oversight, delegate authority and delegate responsibility to lower-level employees. Organisations geared to adopt an entrepreneurial mission use the top-down and bottom-up approaches to stimulate entrepreneurial activities through their leaders who support entrepreneurial programmes and incentives that foster entrepreneurial climate (Dess & Lumpkin, 2005:149; Lotz & van der Merwe, 2013b:193; Slack *et al*., 2017:58). In the top-down approach, top management encourages staff to become entrepreneurial by owning the projects introduced by the organisation and in bottom-up approach top

managements are welcoming to receiving suggestion and ideas from lower staff (Lotz & van der Merwe, 2013b:193; Slack *et al*., 2017:58).

When employees have the autonomy, they derive satisfaction through having total control of the projects they are involved in (Bhardwaj & Momaya, 2011:190). Having autonomy is a good occasion for employees to identify entrepreneurial opportunities and conduct experimentation without fear to fail (Kuratko *et al*., 2014:39). Even though autonomy was included as one of the dimensions of entrepreneurial orientation, very few studies have investigated autonomy as an element of entrepreneurial orientation (Lotz & van der Merwe, 2013b:194). However, following logic, organisations that are focused on adopting corporate entrepreneurship must encourage entrepreneurial behaviours by allowing their staff to think and act independently (Lotz & van der Merwe, 2013b:194). Therefore, according to Lotz and van der Merwe (2013b:194), autonomy is an important process that can be used to leverage organisation's existing strength, improving business processes, identifying opportunities, customer satisfaction and development of new business ventures.

3.7.5 Competitive aggressiveness

Competitive aggressiveness is an aggressive orientation undertaken by an organisation to fight competition with an objective of outperforming them. Competitive aggressiveness is an intense effort to outperform industry rivals (Dess & Lumpkin, 2005:151). It is a positive way of leveraging the results of other entrepreneurial activities like proactiveness and innovativeness (Dess & Lumpkin, 2005:151). Competitive aggressive organisations are usually prepared to take on competitors head-on and are willing to spend more in research and development in order to increase manufacturing capacity, reduce product prices and sacrifice profitability to gain market share (Dess & Lumpkin, 2005:151; Kungeke, 2016:50).

It's important for a successful organisation to compellingly defend their position in the market and often need to be aggressive to ensure their advantage by capitalising on servicing new markets needs and new technologies (Dess & Lumpkin, 2005:151).

Although the five dimensions of entrepreneurial orientation: autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness might

occur in different combinations depending on the type of entrepreneurial opportunity pursued by the organisation, entrepreneurial orientation dimensions are vital for the creation of a corporate entrepreneurship organisation (Dess & Lumpkin, 2005:147; Urban *et al*., 2012:305). Based on the discussion above, the following hypothesis H_2, is proposed for entrepreneurial orientation:

H_2: Entrepreneurial orientation is positively related to corporate entrepreneurship.

3.8 SUMMARY

Corporate entrepreneurship is a term that has been subjected to several definitions by scholars of the field. However, many scholars share the same understanding about the importance of entrepreneurship in organisations, that it enhances organisations position in the market and can improve performance, profitability and success. Zahra (1991:260) defined corporate entrepreneurship as a process of creating new business within an established organisation to improve company's profit and enhance the competitive position or strategic renewal of existing business and Kuratko (2017:2) describes corporate entrepreneurship "as a term that designates entrepreneurial behaviours inside the existing small, mid-size and large organisation".

The accrual of corporate entrepreneurship definitions involves basic terms such as generation, development and implementation of new ideas and behaviours by organisations (Morris *et al*., 2011:12). Corporate entrepreneurship strategy has generally been propelled by turbulent external environments that are forcing managers or business leaders to rethink literally every aspect of organisational life (Morris *et al*., 2011:25). As organisations strive for sustainable competitive advantage, the nature of competitive landscape continually redefines itself, corporates find themselves becoming too slow, too reactive and too complacent (Morris *et al*., 2011:25).

The corporate entrepreneurship domain has significantly expanded in the last forty years and can now be viewed as encompassing two categories of phenomena, namely corporate venturing which involves the birth of new business within existing organisations and strategic renewal which involves the transformation of

organisations through renewal of key ideas on which they are built (Corbett *et al*., 2013:812). Corporate venturing is focused on additional or new businesses and can be accomplished through internal corporate venturing, cooperative corporate venturing and external corporate venturing (Morris *et al*., 2011:84). On the other hand, strategic entrepreneurship approaches can be accomplished through strategic renewal, sustained regeneration, domain redefinition, organisational rejuvenation and business model reconstruction (Morris *et al*., 2011:85).

To understand entrepreneurship as an organisation-wide phenomenon corporate entrepreneurship models were developed (Morris *et al*., 2011:49). Several models were discussed and linked to the study objectives. The models helped to visualise the factors that must come together for corporate entrepreneurship to materialise in the form of improved performance and the success of organisations (Morris *et al*., 2011:49).

Although corporate entrepreneurship has been identified as one of the remedies for prolonging the life span of an organisation, its implementation processes are usually slowed down by obstacles that exist in firms. As managers are busy implementing corporate entrepreneurship strategies, they find themselves in uncharted territories, where they lack guidelines, regarding how to formulate entrepreneurship strategies and manage entrepreneurial employees (Morris *et al*., 2011:348). Corporate entrepreneurship obstacles were broken down into six categories namely; systems, structure, strategic direction, policies, people and culture (Morris *et al*., 2011:350). Overcoming these obstacles would render corporate entrepreneurship a success or vice versa.

Organisational antecedents were identified as key elements for measuring an organisational internal environment. Kuratko *et al*. (2014:57) identified five specific dimensions that are important determinates of an environment favourable for entrepreneurial behaviour, namely top management support, discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries (Kuratko *et al*., 2014:57). The five dimensions are instrumental in promoting and supporting an environment for innovation, risk-taking, autonomy, competitive aggressiveness and proactiveness. They were found to be relevant to this study and were used to develop an instrument for measuring the relationship between corporate

entrepreneurship and the success of automotive organisations. The five organisational antecedents are mainly driven by the organisation's managers or leaders. It is the function or duty of firm leaders to provide support to their employees through several ways; provide employees with enough space to be creative, reward creativity, provide ample time to employees to look for new value and encourage a free flow of information between departments and the external environment.

A good combination of organisational antecedents creates entrepreneurial orientation. Entrepreneurial orientation is considered as principles that influence business approaches and creates exploitative behaviours towards business opportunities in order to gain and sustain competitive advantage and longevity (Kasim & Altinay, 2016:62). Entrepreneurial orientation stems from well implemented and managed internal organisation environments. Entrepreneurial orientation involves multiple dimensions as such as innovativeness, autonomy, risk-taking, competitive aggressiveness and proactiveness (Kasim & Altinay, 2016:62). The five dimensions of entrepreneurial orientation are assumed to result in corporate entrepreneurship when implemented correctly.

Chapter 4 focuses on entrepreneurial leadership a subject identified as an important ingredient for creating a conducive internal environment for breeding entrepreneurship inside the existing organisations. The chapter introduces the term leadership and explains the differences between leadership and management, comparisons between leadership and management styles and clarifies entrepreneurial leadership definitions. Furthermore, the characteristics of entrepreneurial leadership and competencies are explained in detail.

CHAPTER 4: AN OVERVIEW OF ENTREPRENEURIAL LEADERSHIP

4.1 INTRODUCTION

Chapter 3 focused on the definitions of corporate entrepreneurship and the two forms of corporate entrepreneurship. Models of corporate entrepreneurship and barriers to corporate entrepreneurship were explained to support the motive of this study. Organisational antecedents and entrepreneurial orientation dimensions were explained in detail to motivate the reason why the variables were used to develop the measurement instrument of this study. Chapter 4 discusses the importance of entrepreneurial leadership in business organisation and furthermore, specifies the differences between leadership and management, characteristics of entrepreneurial leadership and competencies.

Leadership has been a hot topic of discussion in politics, business, academic and many other fields. As organisations are facing unprecedented dynamic environmental, economic, technological and social changes, the need for strong and effective leaders is now greater than ever (Balser, 2014:1065). Sustaining and improving the business organisation is slowly becoming complex, requiring adaptive and flexible leadership at the forefront (Balser, 2014:1065). Entrepreneurial research shares a common core with research on leadership in several areas, for instance, leadership vision, social influence, uncertainty, ambiguity and based on appropriate literature many constructs found in entrepreneurship are also found in leadership theories. Entrepreneurship leadership is within a thin and specific context, the discoveries in entrepreneurship are yet to reliably identify non-linear connections or incoherent forms of context-specific results and lastly, there is lack of research on entrepreneurial categories (Simsek *et al*., 2015:464).

Discussions about leadership have been in existence for over a century and its roots can be traced back to the philosopher of ancient Greece, however, contemporary realities have escalated leadership discussions to the level of researching the need for effective leadership, strategic leadership, entrepreneurial leadership, where success of individuals, organisations, communities and nations substantially depend on the ability and capabilities of a leader (Gumus, Bellibas, Esen & Gumus, 2018:25).

Effective leadership is the amount of influence a leader has on a group or individual member's satisfaction, performance and overall effectiveness (Karmarkar *et al*., 2014:159). Furthermore, research conducted by scholars from public-traded organisation continually shows that leadership i.e. chief executive officers, top management, the board of directors can impact the fortunes and fate of their organisations by deciding what strategic choices these organisations make, how and when they make these choices (Simsek *et al*., 2015:463). A new need is now emerging for leadership that is not born of the industrial age, but more of organic, flexible, adaptive and nonlinear (Balser, 2014:1065).

Generally, leadership has been viewed as a function of power and influence in which the flow of power is top-down, a hierarchical form focused more on the position of leading the process that delivers customers satisfaction (Balser, 2014:1065). Leadership mindset that is pivoted on power, procedure, influence and privilege is now obsolete, commonly known as the industrial age has now been superseded by the conceptual age that requires thought leaders and idea generators together with those who ensure that operations are carried out in line with customer requirements (Balser, 2014:1065).

The complexities that are being faced by today's leaders in business are less linear and more unidirectional requiring leadership processes that involve flexibility, collaboration, crossing boundaries and collective leadership (Balser, 2014:1065). More specific in new or emerging organisations, there are fewer or no hierarchical levels, leaders tend to be more central to the organisation's strategy, tactical, operations and consequently, the leaders influence on such organisations is more profound (Simsek *et al*., 2015:463).

Entrepreneurial organisations that are focused on stimulating wealth and growth through new product development, innovation, innovative business models and focused competitive strategies require leadership that is connected to context-specific behaviours and results (Simsek *et al*., 2015:464).

In respect to this study entrepreneurial leadership is the subject to be discussed. Entrepreneurial leadership is a unique leadership skill needed for resolving crisis and challenges of current organisational settings (Pihie *et al*., 2014:1). Entrepreneurial leadership has a huge influence on leader's competence in realising opportunities that arise to improve organisations performance and has been recommended for creating an enabling environment for nurturing innovation and change in organisations (Pihie *et al*., 2014:1).

Karmarkar *et al*. (2014:159) suggested that entrepreneurial leadership is pivoted on building up long-term reciprocal relationships along the value chain of the organisation, where leadership effectiveness is measured by the ability to influence others, set direction, communicate, encourage, develop change, manage resources strategically and motivate members to act in a competitively advantageous and opportunity-seeking way. In addition to this, scholars are generally accepting that business leaders require entrepreneurial characteristics, competencies, knowledge and behaviour to be able to execute their roles and responsibilities (Pihie *et al*., 2014:2).

To fully appreciate entrepreneurial leadership, leadership and management definitions are clarified and comparison between leadership and management are explained in detail.

4.2 LEADERSHIP AND MANAGEMENT DEFINITIONS

Irrespective of the importance of leadership in business, politics, communities and nations, there is no specific definition in literature for leadership or a leader that exists (Gumus *et al*., 2018:25). The leadership definition dilemma makes it difficult to narrow down the definition of entrepreneurial leadership. Leadership involves changing and is mainly focused with styles that embrace flexibility, crossing boundaries, collaboration and collective leadership that focuses on future activities (Balser, 2014:1065), while management is the controlling of things and people and has been singled out as the largest constraint on business performance (Joubert & Roodt, 2011:88).

Chinese philosopher defined an effective leader in the 6th century BCE, as a selfless, honest, fair and hardworking person, while Plato the Greek philosopher appealed that great leaders possess wisdom and superior capacity for logical thinking (McShane & Von Glinow, 2010:361). Chhokar, Brodbeck and House (2013:6) described a leader as a group member whose influence on group attitude, performance and decision making greatly surpasses that of the regular group member.

Leadership is a social influence process in which a leader pursues the voluntary involvement of subordinates to achieve the firm's goals (Kreitner & Kinicki, 2004:595). Gupta, MacMillan and Surie (2004:242) posited that it is the leaders challenge to mobilise resources and gain commitment needed for value creation, which involves creating a vision and a cast of supporters capable of enacting that vision. Ideally, leaders should be continuously focusing on elevating their subordinates through coaching, building self-confidence, ensuring that employees not only see the vision, but live and breathe it, establish trust, be transparent, radiate positive energy and optimism to employees, have the courage to make unpopular decision, inspire risk-taking and learning by setting examples and walking the talk and ensure that employees questions are addressed with and acted upon timeously (Welch, 2005:63).

Leadership is the ability to formally or informally influence a group towards the achievement of a vision or set goals of an organisation (Robbins, Judge, Odendaal & Roodt, 2009:290; Spinelli & Adams, 2012:40). Leaders emerge within a group through formal processes by the possession of managerial ranks or informal processes where team members possess leadership characteristic that easily influence others (Robbins *et al*., 2009:290; Spinelli & Adams, 2012:40).

Any person may be a leader in various ways in an organisation, a team or work unit may have more than one leader at the same time (McShane & Von Glinow, 2010:360). A leader could be anyone who exerts influence over other members and this form of leadership emerges where leaders are willing to delegate power and encourages employees to take initiative and risk without fear of failure (McShane & Von Glinow, 2010:360).

Leadership that occurs in several communications face-to-face every day, in any multifaceted organisation can make a dramatic and positive difference to organisational performance (Robbins *et al*., 2009:290). Robbins *et al*. (2009:289) suggested that, if organisations get leadership and strategy right, most of the other things will fall in place because leaders create a vision, the meaning with which others work and live.

Leadership is the act of influencing, motivating and enabling others to contribute towards the effectiveness and success of the organisations of which they are members (Chhokar *et al*., 2013:6; McShane & Von Glinow, 2010:360). Furthermore, McShane and Von Glinow (2010:360) emphasised that leaders use forms of persuasion and related tactics that build commitment to ensure that followers have the motivation and role clarity to achieve specific organisational goals. It is also the role of leaders to organise the work environment through allocating resources and varying communication patterns ensuring that employees easily achieve organisational goals (McShane & Von Glinow, 2010:360).

Leadership is the behaviour of an individual directing activities of a group towards a shared goal, it requires moving beyond the practice of management (Hough *et al*., 2011:285). Leadership is the ability of individuals to step outside the culture parameters of an organisation to influence, motivate and enable others to start evolutionary changes processes that are more adaptive and that will contribute towards the effectiveness and success of the organisation (Hough *et al*., 2011:285).

Burke-Litwin also defined leadership as an executive behaviour that motivates others to take appropriate action and is associated with responsibility and influence (Hough *et al*., 2011:285). Additionally, leadership is a process by which a person establishes a goal or direction to one or more people and determines them to act with competence and full commitment to their realisation (Costea & Nita, 2016:143). For that reason, the level of organisational success is solely dependent on the leadership ability reflected in an organisation i.e. the more the organisation desires to become successful, the more it requires leaders with a greater amount of influence over the employees (Hough *et al*., 2011:285).

Leadership has an immediate association with employee engagement and is pinned on coping with change through establishing a vision of the future and inspiring followers to buy-in and overcome hurdles (Robbins *et al*., 2009:290). Leadership scholar agrees that transformational leadership which includes charismatic and affective leadership elements is the most ideal for organisations undergoing change because they inspire members of the organisation towards achieving the firm's vision (Bezuidenhout & Schultz, 2013:280).

Contrary to leadership whose focus is centred on influencing, motivating and empowering others to contribute towards the effectiveness and success of an organisation (McShane & Von Glinow, 2010:360), management is focused on bring order and consistency through development of plans, designing of rigid organisation structures and monitoring results against plan (Robbins *et al*., 2009:290). Management is formally appointed to positions and utilises authority inherent in their designated formal rank to obtain compliance from team members (Robbins *et al*., 2009:290). Management roles are usually conducted by managers who typically perform functions related to planning, organising, and control and are required to focus on vision and strategy implementation (Kreitner & Kinicki, 2004:596). Managers develop detailed organisational plans, create efficient organisational structures and oversees operations daily (Robbins *et al*., 2009:290).

According to Robbins *et al*. (2009:290), management is about coping with complexities. Complexity is usually found in large organisations that have many aspects that need to be managed effectively daily. Managers develop detailed steps and schedules for achieving the required results and allocate the resources necessary to achieve such results (Spinelli & Adams, 2012:36).

4.3 COMPARISONS BETWEEN MANAGEMENT AND LEADERSHIP

Chhokar *et al*. (2013:6) defined leadership as the ability of an individual to influence, motivate and enable others to contribute towards the effectiveness and success of the organisation of which they are members and Robbins *et al*. (2009:290) defined management as the process of implementing the vision and strategy provided by leaders, coordinating and staffing the organisation and handling daily operations. The two definitions clearly show that a distinction between leadership and

management exists. Table 4.1 below shows a more detailed comparison between management and leadership (Spinelli & Adams, 2012:36).

Table 4.1: Comparing management and leadership

No.	Item	Management	Leadership
1	Creating agenda	Planning and budgeting – establish detailed steps and time tables for achieving needed results, and then allocating the resources necessary to achieve these results.	Establishing direction – developing a vision of the future, often the distant future and strategies for producing the changes needed to achieve that vision.
2	Developing a human network for achieving agenda	Organising and staffing – establish some structure for accomplishing plan requirements, staffing that structure with individuals, delegating responsibility and authority for carrying out the plan, providing policies and procedures to help guide people and creating methods of systems to monitor implementation.	Aligning people – communicating the direction by words and deeds to all those whose cooperation may be needed to influence the creation of teams and coalitions that understand the vision and strategies and accept their validity.
3	Execution	Controlling and problem solving – monitoring results versus plans in some detail, identifying deviations and then planning and organising to solve these problems.	Motivating and inspiring – energising people to overcome major political, bureaucratic and resource barriers to change by satisfying very basic, often unfulfilled needs.
4	Outcomes	Producing a degree of predictability and order and having the potential of consistency producing key results expected by various stakeholders.	Producing change, often to dramatic degree and having the potential of producing extremely useful change.

Source: Spinelli and Adams (2012:36)

Managers deal with complexity through using controls and discipline and are more focused on logic and detail while leaders are more focused on building long-term give-and-take relationships (Roomi & Harrison, 2011:20). Leadership, as shown in Table 4.1 above, is mainly concerned with establishing directions, aligning people, motivating and inspiring people and ultimately producing dramatic changes that are useful, whereas management is concerned with planning, budgeting, organising,

staffing, controlling, problem-solving and prevails in a more predictable manner (Spinelli & Adams, 2012:36).

In respect to the differences in Table 4.1, leadership is the art of working with people, knowing how to lead them and knowing how to convince people to work for a common goal (Costea & Nita, 2016:143). Leadership function, on one hand, is mainly carried out by a leader and management function is mainly carried out by a manager. In the same vein, leaders are more original, innovative, focus on people, inspire trust, have a longer-range view and do the right things (Pansegrouw, 2017:29). On the other hand, managers usually are more of a copy, administrators, focus on systems and structures, rely on control, have a short-range view and do things right (Pansegrouw, 2017:29).

Although Table 4.1 clarifies the differences between leadership and management the phenomenon is both equally relevant to organisations operations. The two phenomena differ regarding the behaviour, action and process involved in each role, nevertheless, careful inspection of important leadership actions such as establishing direction, aligning people, motivating and inspiring may be conceptualised as extensions of the management process (Pansegrouw, 2017:31).

4.4 ENTREPRENEURIAL LEADERSHIP DEFINITIONS

Entrepreneurial leadership can be defined as an opposite to managerial leadership, specifically not in terms of skill sets that can be taught or learnt (Roomi & Harrison, 2011:5). Leaders and managers possess different personalities and experiences (Fernald *et al*., 2005:3).

Entrepreneurial leadership is a function mainly conducted by entrepreneurs both inside and outside of organisations. It is now becoming almost mandatory for individual involved in entrepreneurial ventures or activities and entrepreneurs to possess a sound understanding of leadership practices (Fernald *et al*., 2005:1). Entrepreneurial leadership is a unique type of leadership style desirable for dealing with crisis and challenges faced by 21st-century businesses (Pihie *et al*., 2014:1).

Entrepreneurship leadership styles stimulate organisations leader's competencies in identifying opportunities to improve the firm's performance, success and is an enabler for successfully pointing organisations in the right direction and solving problems through different stages of the organisation's life cycle (Pihie *et al*., 2014:1). In addition, entrepreneurial leadership is a perfect leadership style supportive for nurturing an environment that enhances change and innovation to add value to the organisations (Pihie *et al*., 2014:1).

Entrepreneurs usually focus on creating energy and excitement in their firms (Spinelli & Adams, 2012:479). Entrepreneurial leaders demonstrate high work ethics, integrity, honesty, and fairness that appeals and keep the best talent in the organisation (Spinelli & Adams, 2012:479).

Entrepreneurs respond positively to good performance and are swift in giving credit (Spinelli & Adams, 2012:479). Consequently, entrepreneurs have been acknowledged to be opportunity-seekers, goal achievers, are independent-minded, take risks and are innovative (Fernald *et al*., 2005:2). It is from this background that employees tend to gravitate from being managed by their manager to being led by entrepreneurs. Entrepreneurs discovered the concept of leading people through mind share and talent, their creativity and innovation through recognising opportunities and producing new products or services perpetually winning the confidence and enthusiasm of employees (Spinelli & Adams, 2012:479).

The term entrepreneurship leadership like entrepreneurship and corporate entrepreneurship has also suffered definitional challenges. Few scholars have truly or clearly defined the term entrepreneurial leadership (Roomi & Harrison, 2011:1). Entrepreneurial leadership is a phenomenon which draws relevant literature from both the fields of entrepreneurship and leadership (Roomi & Harrison, 2011:1).

The concept of entrepreneurial leadership combines entrepreneurship, entrepreneurial orientation, and entrepreneurial management with leadership (Gupta *et al*., 2004:243). Entrepreneurial leadership is underpinned on taking strategic approaches to entrepreneurship for entrepreneurial initiatives to support the development of enhancing capabilities for continuously creating and appropriating value in the organisation (Gupta *et al*., 2004:243).

Fundamentally, entrepreneurship has been defined as the pursuit of opportunity beyond the resources one currently controls, and leadership has been associated to the strategic vision and the ability to influence and motivate others through systems, processes and culture of organisations (Roomi & Harrison, 2011:1). Thus, based on entrepreneurship and leadership definitions, entrepreneurial leadership is defined as a leadership style that communicates the vision to engage teams, identify, develop and take advantage of an opportunity to gain competitive advantage (Roomi & Harrison, 2011:1).

Karmarkar *et al*. (2014:156), posited that entrepreneurial leadership is a fresh way of understanding entrepreneurs and the concept combines and explores both leadership and entrepreneurship behaviour. Previous scholars considered entrepreneurship as a branch of leadership while contemporary scholars are now considering leadership as a branch of entrepreneurship (Karmarkar *et al*., 2014:156), supporting Fernald *et al*.'*s* (2005:4) argument that the organisational archetype of the future will be entrepreneurial. Karmarkar *et al*. (2014:156) defined entrepreneurial leadership as a precise leadership capability required for successfully leading competitive and challenging activities, recently emerged as important in the success of entrepreneurial activities, both in new start-ups and existing organisations.

According to Gupta *et al*. (2004:242), entrepreneurial leaders are required to envision and enact proactive transformations in their firms and in the process are faced with challenges of mobilising resources and gaining commitment required for value creation which includes creating a vision and followers capable of fulfilling the vision. In this regard, Gupta *et al*. (2004:242) defined entrepreneurial leadership as a form of leadership that creates visionary scenarios that are used to assemble and mobilise supporting cast members who become committed by the vision to the discovery and exploration of strategic value creation. Building a cast of competent and committed members and developing a vision is mutually inclusive (Gupta *et al*., 2004:242).

Fernald *et al*. (2005:4) posited that entrepreneurial leadership is a term devised after realising that a change in leadership style was needed to enhance the competitive edge of American businesses. Therefore, leaders or entrepreneurs of contemporary business must be able to provide strategic leadership, problem-solving skills, timely

decision making, and willingness to accept a risk and should possess good negotiating skills (Fernald *et al*., 2005:5). These characteristics must reflect entrepreneurial thinking through a firm's leadership, structure and strategies (Fernald *et al*., 2005:4).

Generally, entrepreneurial leadership is a hybrid of entrepreneurship and leadership fields and is characterised by leaders who are motivated, ambitious, energetic, have tenacity, honesty, integrity, self-confidence, cognitive abilities and possesses knowledge of the business (Fernald *et al*., 2005:4; Spinelli & Adams, 2012:40).

4.5 CHARACTERISTICS OF ENTREPRENEURIAL LEADERSHIP

The belief that leaders are born not made is a myth that continues to exist, however, research has continually proven that leadership is an extraordinarily complex and interconnected phenomenon that relies on the leader, task, situation and the people being led (Spinelli & Adams, 2012:35). Basically, theory states that people are motivated by three principles i.e. need for achievement which is the need to excel and the need for measurable personal achievements, the need for power, which is the need to influencing others and to attain an influential goal and the need for affiliation, which is the need to attain an affiliation goal (Spinelli & Adams, 2012:35).

Several characteristics have been identified by scholars that constitutes a successful entrepreneur in both start-ups and established organisations such as being visionary, understanding the business, risk-bearing, innovativeness, initiative, internal locus of control, building a cast of supporters, problem-solving, encouraging teamwork and change agent (Spinelli & Adams, 2012:36).

Although entrepreneurial leaders perform the function of an entrepreneur where they are involved in opportunity-seeking and innovation, they shape organisational processes, strategies and results (Simsek *et al*., 2015:466). The bigger role of entrepreneurial leaders is to develop a commitment to new strategies and entrepreneurial initiatives by enunciating an appealing vision about the future state of the organisation (Simsek *et al*., 2015:466).

Entrepreneurial leadership characteristics paying attention to recognising and choosing opportunities, allocating resources motivating employees and maintaining control and at the same time creating an environment that encourages the innovative activities that can result in the success of the business (Spinelli & Adams, 2012:493). Below in Table 4.2 below are comparisons of typical general management practices and entrepreneurial leadership and organisation. Traditional management practices are rigid with strict processes, procedure and are hierarchical while entrepreneurial leadership practices are flexible, fearless and disruptive (Spinelli & Adams, 2012:493).

Table 4. 2: Comparison of traditional general management and entrepreneurial leadership organisation

No.	Traditional general management	Entrepreneurial leadership and organisation
1	Pyramidal/hierarchical.	Flat, flexible, think, act like an owner.
2	Incremental improvement.	Stepwise and disruptive change.
3	Risk avoidance/embrace stability.	Fearless relentless experimentation.
4	Avoid and punish failure.	Specialise in new mistakes.
5	Resource allocation, budget driven.	Opportunity obsessed.
6	Central command and control.	Front line, customer driven.
7	Resource optimisation.	Creativity = capital.
8	Cost oriented.	Resource frugality and parsimony.
9	Linear, sequential.	Systems and non-linear.
10	Local focus.	Global perspective.
11	Compensate and reward.	Create and share the wealth.
12	Manage and control.	People want to be led, not managed.
13	Zero defects/error free.	Manage risk, reward and fit.

Source: Spinelli and Adams (2012:493)

Even though Entrepreneurial leadership requires some elements of traditional management styles, it clearly shows that it is more focused on gaining the competitive edge through grabbing every opportunity that goes by, taking fearless relentless experiments, specialising in new mistakes and taking a global perspective.

Spinelli and Adams (2012:40), provided an entrepreneurial leadership paradigm that identified three distinct areas that elucidate the basic driving forces of entrepreneurial leadership theory i.e. lead entrepreneur, venture team and external environmental influences. The supposition was that entrepreneurial leaders must be well rounded in

the three distinct areas with considerable experience, domain knowledge of the market place in which they compete and good management skills (Spinelli & Adams, 2012:40).

According to Spinelli and Adams (2012:40), the three distinct areas are metaphorically allied to the troika, a Russian vehicle pulled on three wheels by horses of equal strengths, where each horse represents a group of success factors. The three distinct areas of the entrepreneurial leadership paradigm are shown below in Table 4.3.

Table 4. 3: The entrepreneurial leadership paradigm

The lead entrepreneur	
Self-concept	Has a realistic attitude rather than one of invincibility.
Intellectual honest	Trustworthy: his/her word is his/her contract/ Admits what and when he/she does not know.
Pacemaker	Display a high energy level and a sense of urgency.
Courage	Capable of making hard decisions: setting and beating high goals.
Communication skills	Maintains an effective dialogue with the venture team, in the market place and with other venture constituents.
Team player	Competent in people management and team-building skills.
The venture team	
Organisation style	The lead entrepreneur and the venture team blend their skills to operate in a participative environment.
Ethical behaviour	Practice strong adherence to ethical business practice.
Faithfulness	Stretch commitment are consistently met and bettered.
Focus	Long-term venture strategies are kept in focus, but tactics are varied to achieve them.
Performance/rewards	High standards of performance are created, and superior performance is rewarded fairly and equitably.
Adaptability	Responsive to rapid changes in product/technological cycles.
External environmental influences	
Constituent needs	Organisation needs are satisfied, in parallel with those of the other publics the enterprise serves.
Prior experience	Extensive prior experiences are effectively applied.
Mentoring	The competences of others are sought and used.
Problem resolution	New problems are immediately solved and prioritised.
Value creation	High commitment is placed on long-term value creation for backers, customers, employees and other stakeholders.
Skills emphasis	Marketing skills are stressed over technical ones.

Source: Spinelli and Adams (2012:40)

Entrepreneurial leaders must possess a well-developed capacity to exert influence without formal authority or use of rank in an organisation (Spinelli & Adams, 2012:40). In addition to this characteristic, an entrepreneurial leader must also be able to handle conflict, know when to use logic, persuasion or make a concession and learn how to work with many different constituencies such as customers, suppliers and financial supporter (Spinelli & Adams, 2012:40). Entrepreneurial leaders also need to possess competencies that can help them to grow their businesses so that they are able to compete in the global market.

4.6 ENTREPRENEURIAL LEADERSHIP COMPETENCE

Even though there is no clear definition of entrepreneurial leadership, what's certainly clear is that scholars have a common consensus on the distinct competencies that encourage and enable leaders to lead a successful organisation (Pihie *et al*., 2014:2). Entrepreneurial leadership competence is basically a collection of characteristics, traits, skills and behaviours explained in the above sections. This study focused on the personal competencies, functional competencies identified by Swiercz and Lydon (2002) and ambidextrous competence identified by (Morris *et al*., 2011:329; Pihie *et al*., 2014:3).

4.6.1 Personal competencies

Personal competencies that entrepreneurial leaders must possess are both indicators of entrepreneurial orientation at a personal and organisational level (Pihie *et al*., 2014:3). Personal competencies identified by Swiercz and Lydon (2002) are proactiveness, innovativeness and risk-taking (Pihie *et al*., 2014:3).

Proactiveness is when entrepreneurial leaders can act on rather than reacting to their environment (Morris *et al*., 2011:71). Proactiveness can be viewed in the following three areas: following versus leading, favouring the tried and tested versus emphasising on growth, innovation and development and cooperating with competitors versus trying to outdo them (Morris *et al*., 2011:71). Proactiveness is a catalyst for entrepreneurial leader's creativity, desire, opportunity recognition, intent to initiate entrepreneurial actions and determination in achieving their vision (Pihie *et al*., 2014:3). Proactiveness can help entrepreneurial leaders to explore new

opportunities for entrepreneurial activities and exploit the opportunities to improve their organisation's performance (Pihie *et al*., 2014:3). Proactiveness competence can manifest when entrepreneurial leaders start seeking new opportunities that may or may not be correlated to the current operations or when entrepreneurial leaders introduce products ahead of the competition or strategically eliminate operations that are in the mature or declining stages of the life cycle (Morris *et al*., 2011:72).

Innovativeness is an important competence needed by an entrepreneurial leader. Innovativeness is a result of a creative process, it is a way of exploiting new ideas (Serrat, 2017:904). According to Pihie *et al*. (2014:3), it is the ability and tendency for entrepreneurial leaders to think creatively and develop new and practical ideas concerning opportunity acknowledgement, problem-solving and resource utilisation. There are seven sources of innovation that can be used by entrepreneurial leaders; unexpected occurrences, incongruities of various kinds, process requirements, variations in the market or industry, demographic changes, changes in perceptions and emergence of new knowledge (Serrat, 2017:906).

Risk-taking is the willingness to track opportunities that have a reasonable probability of resulting in a loss or significant performance inconsistencies (Morris *et al*., 2011:66). Entrepreneurial leaders are usually involved in new product introduction or entry into a new market which is moderately risky if the chance of loss is small, but the magnitude of loss is large (Morris *et al*., 2011:66). Awareness of risk should be well calculated and prudent that is, entrepreneurial leaders must possess the willingness to face uncertainties and endeavour into vague spaces despite the probabilities of costly failures (Pihie *et al*., 2014:3). Resource allocation decisions made by entrepreneurial leaders together with choices of products, services and markets reflect risk-taking actions (Morris *et al*., 2011:67).

4.6.2 Functional competencies

Personal competencies of entrepreneurial leaders are not enough to help leaders lead a successful organisation. Personal competencies need to be complemented by functional competencies (Pihie *et al*., 2014:3). Functional competencies are capabilities of entrepreneurial leaders that enhances them to act differently from other types of leaders (Pihie *et al*., 2014:3). Entrepreneurial leaders are usually

instrumental in how an entrepreneurial vision is translated, structure and processes are applied in an organisation (Simsek *et al*., 2015:468). They provide motivation to different types of entrepreneurial opportunities, acting both as initiative assessors and initiative sellers (Simsek *et al*., 2015:468). Entrepreneurial leaders must have experience and knowledge of the market place they operate and sound knowledge on task performance such as operations, finance, marketing, human resources and information technology (Spinelli & Adams, 2012:40). In the process of implementing functional competencies, entrepreneurial leaders face two challenges: scenario enactment and cast enactment (Pihie *et al*., 2014:3).

Entrepreneurial leaders usually encounter the challenge of envisioning the future and developing situations of innovative possibilities (Pihie *et al*., 2014:3). The process of envisioning the future and developing scenarios of innovative possibilities is called scenario enactment (Pihie *et al*., 2014:3). To conquer this challenge, entrepreneurial leaders need to possess and use their competencies of proactiveness, innovativeness and risk-taking (Pihie *et al*., 2014:4).

Entrepreneurial leaders must possess a capacity to exert influence on people without using formal authority such as hierarchy and should be adept at conflict resolution (Spinelli & Adams, 2012:40). The challenge faced by entrepreneurial leaders to influence and inspire a group of competent and committed members of the organisation to implement the envisioned future is called cast enactment (Pihie *et al*., 2014:4). Functional competencies help entrepreneurial leaders to learn how to build commitment among organisation's members and specify limitations in their path to achieve the vision (Pihie *et al*., 2014:4). Personal and functional competencies are both cultivated through involvement in entrepreneurial activities and are correlated when applied to business operations (Pihie *et al*., 2014:4).

4.6.3 Ambidextrous competence

Ambidextrous is the ability of entrepreneurial leaders to be versatile or balance between the new and the old way of doing things (Morris *et al*., 2011:330). The ambidextrous competence is important for entrepreneurial leaders to possess because it helps leaders to effectively balance the appropriation of value from

present business activities and the search for new value as realised through innovation (Morris *et al*., 2011:330).

Entrepreneurial leaders must simultaneously be able to serve current customers, address competitive threats and ensure that the organisation is well-positioned to create future success, find and serve future customers and fend for future competitive threats (Morris *et al*., 2011:330).

Entrepreneurial leaders must possess the competence of balancing between the mainstream operations and the new stream innovations (Morris *et al*., 2011:330). Juggling between the mainstream also known as exploitation and new stream also known as exploration is shown in Table 4.4 below.

On one hand, entrepreneurial leaders should be able to support current customers, respond to current competitors, correctly utilise available resources, sharpen current employee skills and capabilities and improve current products and services and generate optimum revenue from current business (Morris *et al*., 2011:330). While at the same time, think about future innovations, new markets, predict future competition, discover new skills and competencies and explore new and emerging technology (Morris *et al*., 2011:330).

Table 4. 4: Entrepreneurial leadership and ambidextrous management: balancing competing demands

No.	*"Mainstream" Exploitation*	*"New stream" Exploitation*
1	Pressure to generate revenue from current business operations.	Pressure to search for innovations that will provide revenue in the future.
2	Pressure to serve current customers.	Pressure to create new markets.
3	Pressure to respond to current competitors.	Pressure to anticipate future competitors.
4	Pressure to efficiently utilise current resources.	Pressure to identify resources that will be relevant in five years.
5	Pressure to refine current employees' skills and capabilities.	Pressure to develop entirely new skills set.
6	Pressure to improve current products and services.	Pressure to invest entirely new products and services.
7	Pressure to invest in advancing current technologies.	Pressure to explore new, emerging technology.

Source: Morris *et al*. (2011:330)

Entrepreneurial leaders need to use ambidextrous competence to balance the application of personal and functional competencies. Resolving the paradox of change and preservation is the most important responsibility of entrepreneurial leaders of the 21st-century business environment (Morris *et al*., 2011:330).

4.7 SUMMARY

Leadership has generally been a subject of discussion in both the fields of leadership and entrepreneurship. Leadership research has been in existence for over a century and its roots can be traced back to the philosophers of ancient Greece (Gumus *et al*., 2018:25). The requirement for effective leadership has been necessitated by a dynamic business environment that has been caused by changes in demographics, technology, social, political and economics (Balser, 2014:1065).

The challenges faced in business today are less linear and more unidirectional requiring leadership processes that involve flexibility, collaboration and collective leadership (Balser, 2014:1065). Despite leadership being viewed as a function of power and influence in which the flow of power is top-down (Balser, 2014:1065), the term leadership has suffered definitional challenges (Gumus *et al*., 2018:25).

According to Balser (2014:1065), leadership involves changing and is mainly focused on styles that embrace flexibility, crossing boundaries and collaboration. Leadership is the act of influencing, motivating and enabling others to contribute towards the effectiveness and success of an organisation in which they are members or belong to (McShane & Glinow, 2010:360), while a leader is a member of a group whose influence on the group attitude, performance, and decision making greatly surpasses that of a regular member (Chhokar *et al*., 2013:6). Furthermore, entrepreneurial leadership a leadership style within the entrepreneurship spheres is a new way of understanding an entrepreneur (Karmarkar *et al*., 2014:156). Entrepreneurial research shares a common area with leadership research such as vision, social influence, and ambiguity.

Compared to leadership, management focuses on bringing order and consistency through the development of plans, organisational structures and monitoring plans against results produced (McShane & Glinow, 2010:360). Management is formally

designated to positions of authority and compliance runs through the chain of command (Robbins *et al*., 2009:290). Management produces a level of predictability and order, having a potential of consistency producing key results expected by various stakeholders while leadership produces change, often to a dramatic degree and having a potential of producing extremely useful change (Spinelli & Adams, 2012:36).

More specific, entrepreneurship requires its own leadership style because entrepreneurship characteristics that demand flexibility, speed, agility and adaptability. The idea of entrepreneurial leadership embraces and explores both leadership and entrepreneurship behaviour (Karmarkar *et al*., 2014:156).

Although previous scholars considered entrepreneurship as a branch of leadership, today's scholars now consider leadership as a branch of entrepreneurship (Karmarkar *et al*., 2014:156). Entrepreneurial leadership is a specific leadership style necessary for successfully leading competitive and challenging activities in both start-ups and existing organisations (Karmarkar *et al*., 2014:156). Compared to traditional management styles which are hierarchical, risk avoidance, linear in operations and central command or control, entrepreneurial leadership is nonlinear, disruptive, flexible, causes disruptive changes, is fearless, specialise in new mistakes and is opportunity obsessed (Spinelli & Adams, 2012:493).

Entrepreneurial leaders need to possess competencies which are a collection of characteristics, traits, and behaviours. Competencies needed by an entrepreneurial leader are personal competencies, functional competencies and ambidextrous competencies. Personal competencies are indicators of entrepreneurial orientation; proactiveness, innovativeness and risk-taking (Pihie *et al*., 2014:3). Functional competencies assist entrepreneurial leaders to act differently from other leaders in terms of how the vision is interpreted, structure and processes of the organisation are applied (Simsek *et al*., 2015:468). Functional competencies build commitment among organisational members and achieve the vision (Pihie *et al*., 2014:4). While ambidextrous is the ability of a leader to be versatile (Morris *et al*., 2011:330). Ambidextrous helps leaders to effectively balance the appropriation of value from current business activities and the search for new value as realised through innovation (Morris *et al*., 2011:330).

Entrepreneurial leadership, though a new leadership style and a way of understanding an entrepreneur have become an important leadership element required to grow contemporary enterprises and economic development (Pihie *et al*., 2014:1). Entrepreneurial leadership can impact an organisation form, fortunes and shape (Pihie *et al*., 2014:1; Spinelli & Adams, 2012:479). It is, therefore, imperative that entrepreneurial organisation adopt the leader's styles and characteristics of entrepreneurial leadership (Spinelli & Adams, 2012:493).

Chapter 5 elucidates the success factors of organisations using the balanced scorecard approach as the basis of this study hypothesis. The Balanced Scorecard, a performance management mechanism was identified as the tool that summaries the success factors of organisations and its four perspectives; financial, customer, internal business process and learning and growth. The chapter introduces the success factors of an organisation, performance management tools and the background of the Balanced Scorecard concept. A detailed explanation of how the Balanced Scorecard is being adopted by organisations, the four perspectives of the Balanced Scorecard and the challenges encountered by organisations leadership during implementation are presented in more detail.

CHAPTER 5: ORGANISATIONAL SUCCESS FACTORS

5.1 INTRODUCTION

Chapter 4 focused on the definitions of leadership, management and entrepreneurial leadership and clarified the differences between management and leadership. Furthermore, the characteristics of entrepreneurial leadership and entrepreneurial competencies were provided in detail to justify the significance of entrepreneurial leadership in an organisational setup. Chapter 5 introduces the organisational success factors, the attention of this study. The chapter is built around the Balanced Scorecard perspectives where a detailed background, adoption levels and its relationship with mission, vision and strategy are presented. The four perspectives of the Balanced Scorecard are individually clarified, and the elements required to support its implementation are explained. A critical analysis of the Balanced Scorecard is provided by highlighting its strengths and weaknesses.

Organisational success factors are factors that require close attention from management or business leaders, for organisations to achieve the desired success and are also popularly known as key success factors, critical success factor, limiting factors, key result areas, strategic variables and strategic success factors (Marais *et al*., 2017:2). The following are some of the benefits of organisational success factors to an organisation: to enhanced quality management, increase in revenue, efficient allocation of resources, positioning of organisation, customer satisfaction, employee satisfaction, sustainability, improved customer experience, higher return on equity, increase opportunities, competitive advantage, growth and development, process improvement, product and service improvement (Marais *et al*., 2017:2). Several of these benefits are evident in factors that make up a good reputation for an organisation. Reputation is the reason why individual customers, business customers or business to business customers choose to conduct business with an organisation (Sandu, 2015:1036). Corporate reputation reflects how customers perceive an organisation and are important for the success of an organisation (Sandu, 2015:1035). Corporate reputation is related to several financial and non-financial variables such as adverting, marketing, public relations, innovation, quality, organisational standards, customer relationships and relationships with business

partners (Sandu, 2015:1036). An organisation's good reputation will have the same results as organisational success factors (Walker, 2010:357). According to Walker (2010:357), several scholars have consistently identified the relationship between corporate reputation and organisational success. Therefore, reputation or success has now become a critical intangible asset of all organisation (Walker, 2010:357).

Organisational success factor strategy is a way to categorise important information that is needed to be monitored closely and applied exceptionally well by organisational leaders for organisations to be successful (Marais *et al*., 2017:2). Marais *et al*. (2017:2), defined organisational success factors as things that must go well or right to ensure success, for the firm to flourish and accomplish the goals of management. Thus, organisational success factors are characteristics, conditions, circumstances, events, activities, actions, strategic areas or variables that require special attention because of their importance (Marais *et al*., 2017:2). When organisations manage, maintain and sustain organisational success factors, they can exert a significant impact on the success of individuals, teams, departments, divisions and the whole organisation in terms of financial and non-financial performance or profits (Marais *et al*., 2017:2). Identification of organisational success factors has been used to list and describe factors vital for organisational success and helps to focus on leadership effort and responsibility (Marais *et al*., 2017:2). According to Dobrovic *et al*., (2018:42), the level of success of an organisation is determined by key success factors and special indicators are there to evaluate if success factors are doing what they are supposed to do. Measuring or evaluating success factors is an important aspect of understanding the performance levels of an organisation, as the saying goes "what gets measured gets done" (Niven, 2014:112).

The list for organisational success factors in most instances can be long and difficult for business managers or leader to comprehend and highlight specific factors to concentrate on. Since organisational success factors include financial and non-financial variables, business leaders do not only need to pay attention to financial aspects only, but also focus on non-financial aspects such as customer relationships, innovation, ability to learn, process improvement and use of information (Dobrovic *et al*., 2018:41). Furthermore, in the midst of managing organisational success factors, business leaders also need to measure the results of

their efforts (Dobrovic *et al*., 2018:41). To resolve this dilemma, the Balanced Scorecard is one of the performance measurement mechanism identified for this study that recapitulates the organisational success factors and can measure both financial and non-financial aspects. The Balanced Scorecard is a strategic system used by organisations to make decisions in all multi-layered levels and helps organisations to focus on both performance measures and desired outcomes to be achieved (Aswani *et al*., 2016:1583). Consequently, the objective of the Balanced Scorecard is to support managers or business leaders with a set of measures that provides a quick snapshot of the business (Aswani *et al*., 2016:1583).

The Balanced Scorecard is a modern business performance measurement tool that can continually evaluate the performance of business processes (Dobrovic *et al*., 2018:41). The Balanced Scorecard helps not only to understand the financial soundness of an organisation, but also to evaluate non-financial aspects which are important for achieving maximum competitiveness of an organisation (Dobrovic *et al*., 2018:41). Several of these non-financial aspects such as customer relationships, learning and growth, process improvements emerge from corporate entrepreneurial activities such as top management support, autonomy, rewards systems, organisational boundaries and available time for employee creativity and innovation.

5.2 PERFORMANCE MANAGEMENT MEASUREMENT TOOLS

The key focus of business leaders is to ensure the existence of organisational solvency and sustainability (Oliveira *et al*., 2018:2592). Performance management is a challenge facing business leaders of the 21st-century (Arnaboldi *et al*., 2015:1). Performance measurement spans from a simple component of the planning and control cycle to an independent system of monitoring and measuring key organisational success factors (Aswani *et al*., 2016:1583). Performance measurement supports strategy development and implementation through the illumination of relationships between strategy, objectives, goals, lag and lead indicators (Aswani *et al*., 2016:1583). The demand upon business leaders is to produce more with less (Arnaboldi *et al*., 2015:1). Performance management is a complex management mechanism that poses challenges to implement especially for organisations that are exposed to dynamic customer demands (Oliveira *et al*., 2018:2592).

To facilitate efficient adoption of performance management systems, organisations are encouraged to utilise management information systems as an internal communication medium to allow shared information within firms and standard process and practices (Oliveira *et al*., 2018:2593). According to Gorman, Meriac, Roch, Ray and Gamble (2017:193), performance management is a wide range of activities that organisations engages in to improve performance of individuals or teams, with a final goal of enhancing organisational performance. Performance management involves an ongoing process of identifying, measuring and developing the performance of individuals or teams and can be performed in formal or informal processes (Gorman *et al*, 2017:193). Therefore, the constant change of customer demands, and the dynamic business environment is the genesis of the requirement for effective performance management systems and processes (Arnaboldi *et al*., 2015:2). Competitive advantage is championing change in organisational paradigm with business leaders consistently pursuing to sustain or even improve firm competitive advantage (Oliveira *et al*., 2018:2593). The objective of the performance management tools is to monitor the achievement of a value proposition that is expected by shareholders (Oliveira *et al*., 2018:2593). Accomplishing organisational goals is a fundamental expectation of shareholders from management or leadership, therefore performance management tools ought to guide managers in their strategic decisions related to innovation, operations and investments (Oliveira *et al*., 2018:2593).

Another challenge that business leaders are facing is to select an appropriate performance management tool to use in the organisation (Arnaboldi *et al*., 2015:7). Ideally, business leaders require a capable performance management tool that is built on relevant and systematic information that is supported by logic and follows the trends demonstrated by indicators (Oliveira *et al*., 2018:2593). The search for appropriate and effective performance management tools led to the introduction of several tools such as Budgetary, Benchmarking, Balanced Scorecard and Lean Management tools (Arnaboldi *et al*., 2015:7).

Table 5.1 below shows the common performance management tools explaining the type of tool, its attributes and comments (Arnaboldi *et al*., 2015:7). The Budgetary tool focuses on the accounting function and budgetary process, ignoring non-

financial aspects of the business, thus the tool is viewed as narrowly focused on financials (Arnaboldi *et al*., 2015:7). Benchmarking is a system where comparable firms are identified, and performance information is shared among them (Arnaboldi *et al*., 2015:9). The challenge with Benchmarking has been identifying appropriate comparators that focus on performance, sharing correct information and generally embracing the concept of benchmarking (Arnaboldi *et al*., 2015:9). The Balanced Scored developed by Kaplan and Norton received prevalent interest from scholars and practitioners in both late 20th-century and beginning of the 21st-century (Arnaboldi *et al*., 2015:9). The Balanced Scorecard focus is wider as it looks at both financial and non-financial aspects of the business such as financial, customer, internal business process and learning and growth (Arnaboldi *et al*., 2015:9; Oliveira *et al*., 2018:2589). The Balanced Scorecard is viewed as a performance management tool that can link financial planning and strategic planning (Arnaboldi *et al*., 2015:9). Lean management performance management was developed in the 1960s by Toyota as the Toyota Production System (TPS) (Arnaboldi *et al*., 2015:10). Several organisations recently are adopting the lean management system as an operation process i.e. in manufacturing, hospitals, universities and government departments (Arnaboldi *et al*., 2015:10). Lastly, the managerial checklists introduced by Jackson as a performance management tool (Arnaboldi *et al*., 2015:10). Managerial checklist has nine important concepts for managers to manage performance (Arnaboldi *et al*., 2015:10). However, the performance management tool has been marred with criticism that it's not readily operational and is highly susceptible to the tick box mentality of the audit culture (Arnaboldi *et al*., 2015:10).

Table 5. 1: Performance management technology

No.	Technology	Key Attributes	Comments
1	Budgetary Control	Traditional accounting.	Crude limited
2	KPI's & Benchmarking	Partial performance indicators in comparable settings.	What gets measured gets included.
3	Balanced Scorecard	The Harvard model of performance management.	Identifies multiple dimensions but is over specified.
4	Lean Management	The Toyota Production model.	Negative side effects.
5	Managerial Checklists	An exercise in reductionism.	Susceptible to box ticking legitimations.

Source: Arnaboldi *et al*. (2015:8)

Accordingly, based on Table 5.1 above, from key attributes and comments, the Balanced Scorecard is the most ideal performance management mechanism. Therefore, for this study the Balanced Scorecard was identified as a tool capable of summarising the key success factors of the automotive organisations.

5.3 BALANCED SCORECARD BACKGROUND AND CONCEPT

The roots of the Balanced Scorecard can be traced through the work of practitioners and management thinkers such as Abraham Maslow and Peter Drucker (Niven, 2014:1). However, the definite term Balanced Scorecard was developed in 1992 by Robert Kaplan, a Harvard business school professor and David Norton, a business theorist and consultant (Anand, 2016:25). The Balanced Scorecard is defined as a strategic management technique or mechanism for communicating and evaluating the achievement of the mission, vision and strategy of a firm (Hamdy, 2018:425). The Balanced Scorecard has progressed from being just a basic performance measurement tool to an important performance management tool (Perkins *et al*., 2014:148). The key objective of the Balanced Scorecard is to translate firms strategic and vision into operational objectives and performance measures for visible perspectives (Hamdy, 2018:425). The current business environment that is characterised hyper-competitive scenes escalates performance to be one of the most important concepts in management (Oliveira *et al*., 2018:2584). Table 5.2 below illustrated a few definitions that have been developed by scholars who have been involved in championing the Balanced Scorecard concept in profit-making businesses, non-profit organisations and governments.

Table 5. 2: Balanced Scorecard definitions

No.	Balanced Scorecard definitions	Author
1	Balanced Scorecard is one of the appropriate strategic performance measurement tools.	Kaplan and Norton (1992)
2	Balanced Scorecard communicates targets and strategic ways to understand and reach objectives.	Kaplan and Norton (1996,1992)
3	Balanced Scorecard orientates strategic decision, because it links objectives to organisational strategy.	Lipe and Salterio (2000)
4	Balanced Scorecard is an integrated system to measure performance.	Kerssens-Van Drongelen, Nixon and Pearson (2000)
5	Balanced Scorecard is considered as the best approach to assist organisations in measuring and accomplishing performance.	Neufeld, Simeoni and Taylor (2001)
6	Balanced Scorecard is a corporate tool with a focus on development, communication, target setting and feedback.	Anthony and Govindarajan (2003)
7	Balanced Scorecard is a very relevant management tool to achieve the company's objectives.	Wegmann (2009)
8	Balanced Scorecard can be viewed as a vehicle within firms, improving its development.	Atkinson (2006)
9	Balanced Scorecard is one of the tools that provides focused and useful information to managers.	Hu, Leopold-Wildburger and Strohhecker (2017)

Source: Oliveira *et al*. (2018:2590)

Considering the definitions in Table 5.2 above, the function of the Balanced Scorecard is not only to measure performance, but it is also a strategic management tool that enhanced performance management, is a tool that can be used to align organisational strategy at multiple levels of an organisation and can also function as a corporate communication tool that enhances communication of present performance of the organisation , goals or targets set by organisation and any form of strategic changes in the organisation (Oliveira *et al*., 2590). In essence, the Balanced Scorecard is considered as the most valuable guide for managers or business leaders (Oliveira *et al*., 2590).

Before the Balanced Scorecard came to light, several organisations focused on measuring financial metrics and collected information on generic customer metrics such as customer satisfaction, market share, efficiency and quality data (Niven, 2014:1). According to Niven (2014:1), the Norton consulting firm conducted a project that investigated performance measurement in companies whose value creation rigorously relied on intangible assets. The results of the project were that intangible assets can output results similar to tangible assets such as financial results if they

are integrated into measurement systems (Niven, 2014:1). Additionally, Kaplan and Norton identified that many organisations failed to execute strategy due to misaligned competencies, lack of clear vision, more focus on financial results and poor communication (Anand, 2016:25). Hence, the development of a framework for strategy execution now popularly referred to as the Balanced Scorecard (Anand, 2016:25).

The Balance scorecard covers the financial view i.e. financial investments of stakeholders who expect a return on investment and increase in the value of the organisation and the firm's social-economic system i.e. internal and external relations with business partners (Dobrovic *et al.*, 2018:42). The Balanced Scorecard is fundamentally a paradigm shift from conventional performance evaluation to a new approach of integrating both financial and non-financial measures (Singh & Arora, 2018:875). Conventional performance measurements used to heavily rely on financial targets or goals, neglecting non-financial assets (Singh & Arora, 2018:874). Furthermore, the Balanced Scorecard is perceived as a measure that provides a structure for monitoring current performance as well as adopting sustainable innovations important for future performance (Singh & Arora, 2018:874). Essentially, the Balanced Scorecard is a business-performance measurement tool that takes into cognisant several important aspects of the business (Dobrovic *et al.*, 2018:42). A Balanced Scorecard is a framework for measuring performance from both financial and non-financial aspects and was conceived to be a benchmarking tool that can offer a quick but comprehensive view of the business (Singh & Arora, 2018:875). The tool has the capability of providing numerous measures to present a balanced view of a firm's performance (Singh & Arora, 2018:875). In recent years the Balanced Scorecard has been viewed as a management and strategic tool rather than as a measurement and balanced tool (Rosolofo-Distler & Distler, 2018:129; Singh & Arora, 2018:875). The Balanced Scorecard facilitates the processes of planning, setting targets and alignment of strategic initiatives (Rosolofo-Distler & Distler, 2018:129).

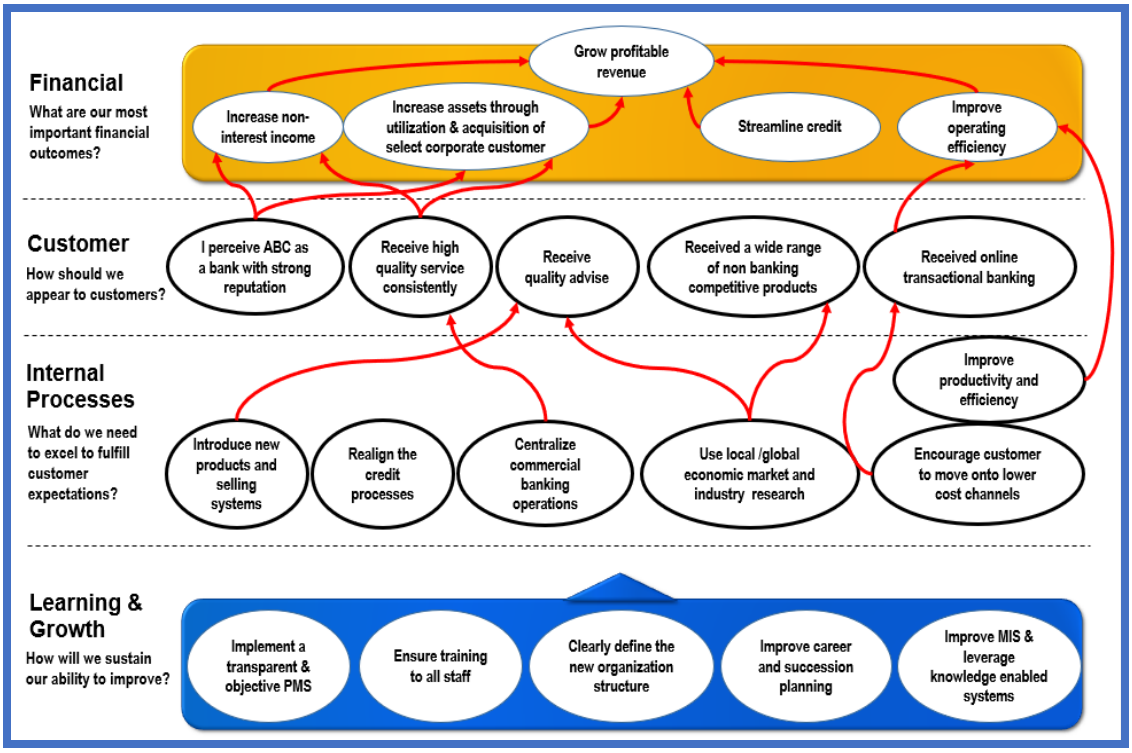
The Balanced Scorecard is a conceptual tool that can be easily customised to suit each organisational goals and strategy (Dobrovic *et al.*, 2018:42) and has been realised to be a vital tool for creating a competitive advantage for an organisation

(Hamdy, 2018:424). In the Balanced Scorecard, an organisation can measure performance areas such as financial, innovation, learning, customer satisfaction, employee satisfaction, capabilities, skills, quality, efficiency, productivity and information use (Dobrovic *et al*., 2018:42). The areas mentioned are corresponding to success factors and the Balanced Scorecard is flexible to accommodate these factors in its four broad perspectives; Financial, customer, internal business process and learning and growth (Anand, 2016:26; Dobrovic *et al*., 2018:42; Niven, 2014:2; Singh & Arora, 2018:875).

The four perspectives of the Balanced Scorecard can provide a wholesome measure of organisational performance and is an all-inclusive control mechanism and an efficient way of controlling costs (Singh & Arora, 2018:875). The Balanced Scored can be viewed in two dimensions; the strategic map and the Balanced Scorecard itself (Anand, 2016:26). Strategic maps usually identify key strategic objectives that an organisation is seeking to accomplish in the areas of finance, customer, internal business process and learning and growth (Anand, 2016:26). The introduction of the Balanced Scorecard encountered some early challenges regarding selecting appropriate performance measures (Niven, 2014:2). Further analysis by Kaplan and Norton in search of measures that would gauge strategic execution which led to the introduction of strategic objectives in the strategic maps (Niven, 2014:2). A strategic map is a visualised schematic representation that illustrates how a firm can create value through linking strategic objectives in a cause and effect relationship (Malagueno, Lopez-Valeiras, Gomez-Conde, 2018:223) and is based on the four perspectives of the Balanced Scorecard (Anand, 2016:26; Singh & Arora, 2018:877). Strategic maps help firms to analyse unique strategic path and formulate performance measures that would clearly show whether an organisation is executing its chosen strategy and is linked to scorecards that monitor the progress of strategic objectives (Niven, 2014:2). As shown in Figure 5.1 below, a Bank strategic map, the strategic map covers the four perspectives areas of the Balanced Scorecards and each area qualitatively shows what should be done to grow profitability and revenue. Learning and growth is the foundation as it focuses on employee training, succession planning, career development and knowledge leveraging (Anand, 2016:27). Internal business processes focus on the introduction of new products, services and selling systems, encourage customers to migrate to lower cost

channels and improve productivity and efficiency (Anand, 2016:27). The customer area focuses on the customer feedback in the form of indicators such as brand image, reputation, customer satisfaction, innovativeness, quality of service and customer experience (Anand, 2016:27). Lastly, the financial aspect focuses on increasing operating efficiency, increasing assets through acquisition and utilisation of selected corporate customers and increase of non-interest income (Anand, 2016:27). Ultimately, the goal of the bank in the example is to grow profitability and revenue.

Figure 5.1: Bank strategic map



Source: Anand (2016:27)

On another hand, the Balanced Scorecard itself focuses on the quantitative metrics of its four perspectives (Anand, 2016:26). It measures generic financial and nonfinancial indicators (Niven, 2014:2). Each strategic objective listed in Figure 5.1 above can be quantified so that the achievement results are easily comprehended and as for employees, the results from the Balanced Scorecard can easily be translated to rewards, motivation and promotions. Quantifiable strategic objectives

are easy to manage, track in terms of frequency, actuals, targets and related person in charge can be easily visualised (Anand, 2016:29).

5.4 BALANCED SCORECARD ADOPTION

The term and concept of the Balanced Scorecard are now widely, and the world's most popular framework used by several organisations from the private sector, government, non-profit and entrepreneurial enterprises (Niven, 2014:3). Small, medium-sized and large corporation use the Balanced Scorecard as one of their managerial practice and performance management mechanism (Malagueno *et al*., 2018:221). Firms have gradually adopted the Balanced Scorecard with a view to effectively enhance scarce resource allocation and strategy execution (Dobrovic *et al*., 2018:43; Niven, 2014:2). The Balanced Scorecard has attracted a sizable level of attention from both practitioners and scholars as a management concept specifically from developed and stable economies (Albuhisi & Abdallah, 2018:1363). The adoption of the Balanced Scorecard in organisations has infiltrated the organisational wide strategic management system, analysis and measurement of performance, and controlling compatibility with organisational strategic goals (Albuhisi & Abdallah, 2018:1363). Several surveys conducted in large organisations from developed and stable economies show that most of the firms have either implemented the Balanced Scorecard or are experimenting some system in form of a Balanced Scorecard (Oliveira *et al*., 2018:2592).

A survey conducted in 2001 showed that the adoption of the Balanced Scorecard among the fortune 500 companies was 40% and European countries such as Germany, Austria and Switzerland indicated an adoption rate of 25% (Oliveira *et al*., 2018:2592). In 2009, a study conducted on 250 large Portuguese organisations about the knowledge levels that Portuguese organisations have about the Balanced Scorecard indicated that about 50% of the organisations knew about the Balanced Scorecard management tool and about 20% of the organisations had already implemented the tool (Oliveira *et al*., 2018:2592). Furthermore, according to Dobrovic *et al*. (2018:43), the 2017 survey conducted by Bain and company which surveyed about 1200 respondents from businesses operating in advanced economies showed that at least 53% of organisations use the Balanced Scorecard framework as a business tool.

An estimated 60% of the Fortune 1000 companies in the USA have experimented with the scorecard and a high level of adoption was established within the Finnish businesses (Perkins *et al*., 2014:148). In addition, the Harvard Business Review hailed the Balanced Scorecard as the 75th most influential idea of the 20th-century (Niven, 2014:3). The Balanced Scorecard advancement has prompted the improvement of scorecards for specific sectors, leading to the adoption of the Balanced Scorecard in sectors such as non-profit or governmental organisation and public-sector (Perkins *et al*., 2014:149). The public-sector scorecard which has also been applied in several areas including healthcare and voluntary services was designed specifically to incorporate the culture and values of the public and voluntary sectors and take cognisance into account the wider range of stakeholders (Perkins *et al*., 2014:149). The Balanced Scorecard is, therefore, one of the most influential concepts of performance management and measurement (Perkins *et al*., 2014:148). Consequently, literature is continuously confirming the increase in the adoption of the Balanced Scorecard in many organisations because of the benefits it brings to organisations (Oliveira *et al*., 2018:2592).

In this respect, the Balanced Scorecard must align with the mission, vision and strategy of an organisation, enhance internal and external communication and monitor organisational performance against strategic goals (Hamdy, 2018:425; Singh & Arora, 2018:877). The Balanced Scorecard should improve strategic objective implementation process which results in the cultivation of performance-oriented work culture, improve employee engagement, improves strategic operational effectiveness, increased employee's entrepreneurial behaviours and employee active participation in the tactical process of planning, leading to improved organisational success (Singh & Arora, 2018:878). Therefore, the Balanced Scorecard supports managers and employees to comprehend their firms shared vision and strategy because it links the financial and nonfinancial perspectives of the organisation to determine the level of organisation's performance or success (Albuhisi & Abdallah, 2018:1363). The Balanced Scorecard is now the most prominent performance management tool that helps an organisation to effectively implement strategy, control systems and measure performance and demands more accountability from management in terms of management support, giving employees autonomy, rewards, providing time for innovation and organisational boundaries

(Sharma & Gadenne, 2011:167). Fundamentally, the Balanced Scorecard is a performance management framework and a strategic management process (Sharma & Gadenne, 2011:167).

5.5 RELATIONSHIP BETWEEN MISSION, VISION AND STRATEGY

The Balanced Scorecard primary objective is to provide business leaders with a quick but comprehensive outlook of the organisation with an assumption that it's the starting point of improved administrative performance (Perkins *et al*., 2014:149). Although the focus is gradually shifting from measurement to management and from balance to strategy (Perkins *et al*., 2014:152). The Balanced Scorecard requires the involvement of management in the implementation process and ensure alignment to mission, vision and strategy (Perkins *et al*., 2014:150). The Balanced Scorecard was not developed to be an isolated management tool, somewhat it is part of the integrated approach of managing an organisation and a means to evaluating overall organisational performance and success (Niven, 2014:105). It transforms organisational mission, strategy and vision into operational objectives and measures in each of the four perspectives of the Balanced Scorecard (Hamdy, 2018:425; Niven, 2014:105). Below is the detailed illustration of how mission, vision and strategy are related to the Balanced Scorecard.

5.5.1 Mission

According to Gartman, Woods and Morey (2018:38), a mission statement is an organisation's purpose as defined through its goals and values. Thus, a mission statement defines the main purpose of the organisation and shows employees motivation for engaging in the organisation's work (Niven, 2014:96). A mission statement must provide the logic for an organisation's existence apart from a generation of stakeholder's wealth, furthermore describe how it is serving the interests of the organisation's target market and why it's so important to that targeted customers (Niven, 2014:96). In general, people want to know organisations they deal with, why such an organisation exists and its missions in response to their needs and wants (Niven, 2014:96). An effective mission statement must be simple and clear, inspire change, be long-term in nature and easy to understand and communicate, for instance, Google's mission is "To organise the world's information and make it

universally accessible and useful" and Walmart's mission is "We serve people's money, so they can live better" (Niven, 2014:104).

The mission statement is the starting point and the strategic objectives appearing on the Balanced Scorecard must be in consistence with the ambitions of the organisation and guides employees in making decisions based on the mission statement (Niven, 2014:105). All the objectives listed in the strategic map must be evaluated and aligned to the aspirations of the organisation in the mission statement (Niven, 2014:105).

5.5.2 Vision

Once the mission statement is completed, it is important for an organisation to visualise where it wants to go in the future (Niven, 2014:106). Gartman *et al*., (2018:38), defined a vision as an organisational goal, laid out in a time relational format. A vision must provide a concrete image of the future and as such must provide specific details about the imagined future of the organisation (Niven, 2014:108). A vision statement paints a picture of what the organisation proposes to become e.g. in 5, 10 or 15 years (Niven, 2014:106). A vision must be linked to a mission statement and provide all employees in the organisation with a mental framework that illustrate an abstract future that lies before the organisation (Niven, 2014:107). A shared vision encourages employees to create opportunities for resource exchange and combination across departments in the organisation (Simsek *et al*., 2015:467). A vision statement must illuminate the following three key elements for it to be an effective vision; how the organisation wants to be viewed by its stakeholder e.g. customers, employees, suppliers, competitors and regulators, typical competencies and strongly held values (Niven, 2014:107). A vision statement is usually followed by a strategy; thus, it acts as a conduit between the reason for being in existence and the strategy which will help the organisation to achieve its aspirations (Niven, 2014:107). A vision guides the activities of all employees and for it to be effective it must be quantifiable, and time-bound, consistent with the mission, concise, verifiable, feasible and inspirational (Niven, 2014:108).

A quantifiable and time-bound vision statement can hold the ability to understand the gaps between the current state and the future state of the organisation (Niven,

2014:11). Using the statistics envisioned in the vision, an organisation can set its objectives, measures, targets and initiative in the Balanced Scorecard with a view to closing the performance gaps (Niven, 2014:112). The Balanced Scorecard can be used as a mechanism to transform a vision into reality through the delivery of strategy and can be expected to inspire behavioural changes in the organisation (Niven, 2014:112).

5.5.3 Strategy

Fundamentally, the strategy is about making choices such as determining what to do or what not to do especially when faced with numerous options to track (Niven, 2014:115). As postulated by Olson, Slater, Hult and Olson (2018:64), the strategy is more concerned with how organisations compete in the market and is focused on external competitors and intended rate of product market change. While Niven (2014:115), defined strategy as the broad properties such as target customers and geographies, products and service offering, and chosen value proposition, adopted by an organisation in recognition of its operating environment and in search of its mission. From the outset, the Balanced Scorecard has been related to strategy and the supposition is that all organisations that implement the Balanced Scorecard possess a strategy of some sort (Niven, 2014:113). The premise is that the Balanced Scorecard is crafted to translate strategy into action (Niven, 2014:113).

A strategy must be regarded as a dynamic force that consistently seeks opportunities, identifies initiatives that can be capitalised by the organisation and accomplishes such opportunities swiftly and effectively (Niven, 2014:117). Ideally, organisations must continuously seek opportunities to strengthen their agility muscle and challenge assumption, constantly observe both external and internal environment and orientate to the present affairs of the market environment (Niven, 2014:117). The development of the Balanced Scorecard addresses most of these concerns and therefore, the translation of strategic planning to the dynamic evaluation of the present reality improves the value of the Balanced Scorecard as strategic insight and execution mechanism (Niven, 2014:118). The intersection between strategy formulation and execution is at the core of the four perspectives of the Balanced Scorecard: financial, customer, internal business process and learning and growth (Niven, 2014:118).

5.6 BALANCED SCORECARD PERSPECTIVES

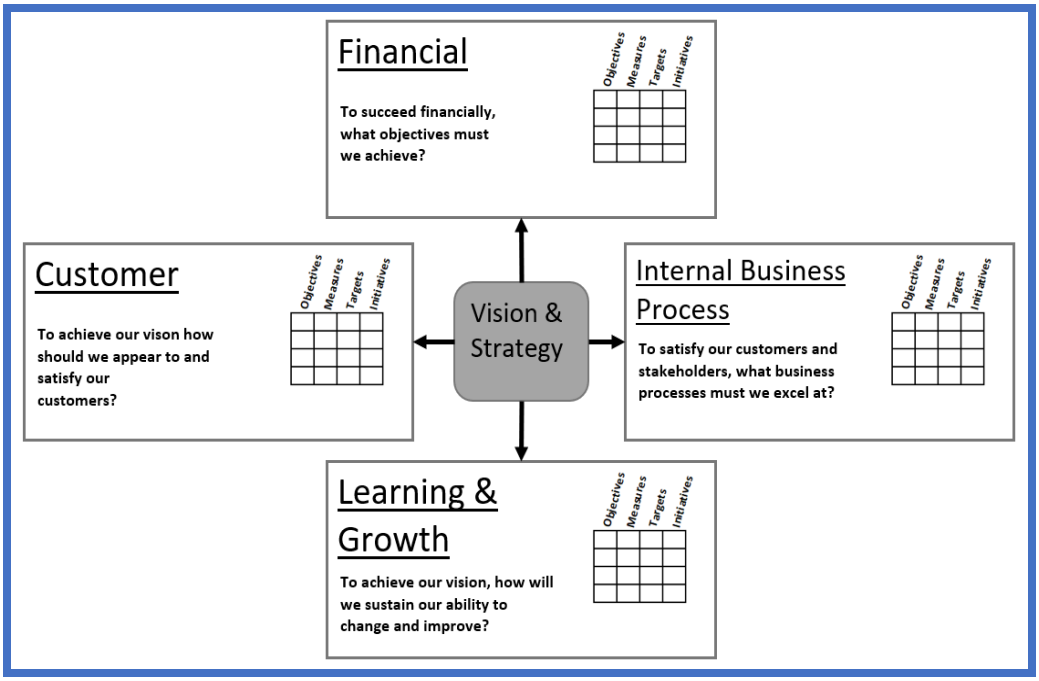
Several organisations express their mission, vision and strategy to their audience publicly while internally they use the Balanced Scorecard as a tool for the implementation of mission, strategy, vision and performance management (Dobrovic *et al*., 2018:42). Organisations use the Balanced Scorecard as a method for translating the firm's mission, vision and strategies into operational objectives and performance measures (Hamdy, 2018:425). In the process, organisations identify success factors that determine what is important to accomplish success and at the same time monitoring if the factors are doing well and producing as per set targets (Dobrovic *et al*., 2018:42). Effective strategies usually comprise of financial aspirations, markets served or to be served, processes to be implemented to deliver the goods and service and the people to guide the strategy to fruition (Niven, 2014:4). Therefore, the contents of strategy logically require organisational leaders to focus on all the elements in strategy since all the parts are interconnected (Niven, 2014:4). In response to this requirement, the Balanced Scorecard is divided into four distinct perspectives of performance that bring it to life; financial, customer, internal business process and learning and growth (Dobrovic *et al*., 2018:42; Hamdy, 2018:425; Niven, 2014:3). The four perspectives of the Balanced Scorecard structure the scaffolding upon which the model is constructed (Niven, 2014:3) and is then used as a vital technique because of its ability to integrate both financial and non-financial variables in measuring organisational performance (Hamdy, 2018:425).

The Balanced Scorecard is a multi-perspective model that depends on specific metrics such as financial, non-financial, internal, external, short and long-term perspectives (Malagueno *et al*., 2018:222). A very important assumption of the Balanced Scorecard is that each performance measure is part of a balanced cause and effect relationship where leading measures such as future financial performance and non-financial drivers, drive lagging measures (Malagueno *et al*., 2018:223; Valmohammadi & Servati, 2011:494). Lag indicators manifest through financial perspectives of performance and leading indicators manifest through non-financial perspectives of performance (Albuhisi & Abdallah, 2018:1363). Leading indicators of performance, that are derived from customer, internal business process and learning and growth perspectives of the Balanced Scorecard provide vital information about

performance and are better predictors of organisation's long-term performance (Albuhisi & Abdallah, 2018:1363). According to Sharma and Gadenne, (2011:169), the Balanced Scorecard is used to explain and update, communicate strategy, align departments, teams and individuals, link objectives to long-term targets and budgets and conduct performance reviews to assess the success of organisations (Sharma & Gadenne, 2011:169).

Therefore, organisations use the Balanced Scorecards as a tool for tracking progress against measures to achieve firm's mission, strategy and vision and at the same time identifying and repairing underperforming perspectives (Malagueno *et al*., 2018:223). The Balanced Scorecard is a flexible framework that can accommodate a variety of organisational success factors in its four perspectives (Dobrovic *et al*., 2018:42). Figure 5.2 below shows the relationship between the vision, strategy and the four perspectives of the Balanced Scorecard; financial, customer, internal business process and learning and growth. Vision and strategy are at the centre of the four perspectives and are translated into operational objectives and performance measures (Hamdy, 2018:425). Each perspective is viewed through the lens of objective, measures, targets and initiative to produce a quantifiable and understandable result for business, teams and individuals in the organisations. Like corporate entrepreneurship organisational antecedents, the success of the Balanced scorecard implementation requires high levels of focus on its antecedents such as top management support, formalisation that encourage organisation's adoption, employee behaviours, organisation's capabilities and departmental cross-section communication (Singh & Arora, 2018:875).

Figure 5.2: Perspectives of the Balanced Scorecard method



Source: Dobrovic *et al*. (2018:42)

Considering the description given in Figure 5.2 above, the Balanced Scorecard was used in this study, to measure the success of organisations. The four perspectives of the Balanced Scorecard were used as performance management system because organisations can monitor daily operations and determine whether they are able to achieve desired objectives (Hamdy, 2018:424). Such business indicators can either be quantitative or qualitative or consist of financial aspects i.e. return on average asset, interest costs, process quality errors and non-financial aspects like service quality, competitive position, human resource management (Hamdy, 2018:425). The four perspectives of the Balanced Scorecard are discussed in detail in the following sub-sections with the hypothesis H_3:

H_3: Corporate entrepreneurship activities are good indicators for the success of an organisation.

5.6.1 Financial perspective

The financial perspective is one of the most important measures of the Balanced Scorecard, specifically for firms that are in business to make profits (Niven, 2014:7).

It measures the financial effect of priorities chosen by the organisation, decisions made, plans executed, and actions taken by managers (Aswani *et al*., 2016:1587). The financial aspect is an indicator of whether organisational strategic formulation, implementation and execution are contributing to the firm's profitability (Aswani *et al*., 2016:1587). The financial perspective is the quickest dip stick that shows whether strategic efforts are fruitful or not in all the four perspectives of the Balanced Scorecard; financial, customer, internal business process and learning and growth (Niven, 2014:7). Economic results for the actions undertaken by an organisation and shareholder verification of profitability from their investments is reflected in financial measures (Hamdy, 2018:425). Generally, financial performance can be measured by several metrics, for instance, economic value added (EVA), it is the most important measure of financial performance because it captures the real economic profit than any other financial performance yardstick, market share, new product sales, return on equity and return on assets (Albuhisi & Abdallah, 2018:1363). In general, the financial perspective is measured on financial measures such as organisation's revenue, productivity and profitability (Oliveira *et al*., 2018:2591). On its own, performance is directly reliant on cycles of growth, sustainability and return (Oliveira *et al*., 2018:2591). Strategic objective development and the financial condition of a firm can, therefore, be directly correlated to an increase in sales and market share (Oliveira *et al*., 2018:2591).

In the financial perspective business leaders or managers are mandated to generate measures that answer the question: to succeed financially, what objectives must the organisation achieve? (Hamdy, 2018:425). The financial perspective addresses the expectation and demands of the shareholders of the organisation (Niven, 2014:8). An organisation can focus all its energy and capabilities on other success factors such as improving customer satisfaction, on-time delivery, dependability, costs, staff skills development or quality, however, ignoring the impact of a financial perspective can result in limited value (Niven, 2014:7). Ideally, the contents of the Balanced Scorecard should be geared up to drive financial results, thereby making the financial perspective the ultimate final consequence of the strategic story (Niven, 2014:7).

According to Hamdy (2018:425), business leaders or managers are required to prioritise and accurately provide financial information whenever it is required. The fundamental objective of an organisation is to achieve financial solvency, survival, security and longevity of an organisation (Oliveira *et al*., 2018:2591). Hence, the financial perspective of the Balanced Scorecard illustrated the financial stability and sustainability of an organisation (Oliveira *et al*., 2018:2591). Financial statements work as a reminder for management to understand high quality and productivity and are important to an organisation only when they are transformed into improved sales, market share, high asset turnover and reduced operating costs (Aswani *et al*., 2016:1587). Therefore, in the financial perspective, organisations can measure employee performance in terms of how organisations resources are utilised, profitability as a result of employee improved productivity, sales growth due to employee's efforts to achieve set objectives and how employees efficiently handle inventory (Aswani *et al*., 2016:1587). The financial perspective is one of the success factors derived from the Balanced Scorecard and the hypothesis $H_{3\text{-}1,}$ is proposed:

$H_{3\text{-}1}$: Corporate entrepreneurship will have a causal effect on the financial growth of an organisation.

5.6.2 Customer perspective

The customer perspective is an important aspect of the Balanced Scorecard that captures the ability of an organisation to provide quality goods and service, effective service delivery and customer satisfaction (Hamdy, 2018:425). It is measured through the pre-set organisation objective i.e. lead time to serve a customer, quality of service or product, performance and costs (Aswani *et al*., 2016:1587). The customer perspective is concerned with customer value add which is achieved through creative, innovation and high-quality service (Aswani *et al*., 2016:1587). An appreciation and reaching out to the continuous dynamic customer behaviours is the heart or focus of the customer perspective (Niven, 2014:118). An organisation must possess a good understanding of what group of customers constitutes their target market, what products and services they will offer them and what value proposition they will provide to the identified target market (Niven, 2014:118). It is at this point when an organisation can articulate appropriate objectives, measures and strategic initiatives to be included in this aspect of the Balanced Scorecard (Niven, 2014:118).

The customer perspective is related to market segmentation and the primary objective is to measure the creation of value for the customer (Oliveira *et al*., 2018:2591). Customer perspective measures the level of customer satisfaction and in the process leads to the implementation of actions that help organisations produce high-quality products, on-time delivery and correctly price the products (Oliveira *et al*., 2018:2591).

In this perspective, an organisation should possess knowledge of its target customers that are correctly segmented with the necessary tools required to measure the end results (Albuhisi & Abdallah, 2018:1363). Included in the objectives, should be yardstick standards such as customer satisfaction, net promoter score, customer profitability, customer retention, customer loyalty and market share (Albuhisi & Abdallah, 2018:1363). Customer perspective identifies the target market and at the same time measures the success of the perspective (Albuhisi & Abdallah, 2018:1363). The Balanced Scorecard generally demands that business leaders interpret the organisation's mission statement on customer satisfaction into explicit measures that matter to the customer's needs and wants (Hamdy, 2018:426). Increased customer satisfaction and retention can be generated from factors such as quality of goods, functionality, price, availability, quality of service and value proposition (Hamdy, 2018:425).

The customer perspective addresses the following questions: who is our target customer, what do they demand from us as an organisation, what is our value proposition in servicing them? (Niven, 2014:5). The customer perspective attracts several challenges organisations face pertaining to how customers perceive the organisation (Niven, 2014:5) as well as helping managers to assess how their organisation is viewed by customers and prioritise customers satisfaction and net promoter score measurement, voice of customer and customer retention analysis as a long-term strategy for success (Hamdy, 2018:426). According to Niven (2014:6), organisations that fail to accurately target their customer or lack focus, will not be able to differentiate themselves from competitors which might be unfavourable to the survival of their organisation.

Technological advancement such as social media e.g. Facebook and twitter has advantaged organisations with easier and quicker channels to view customer

interactions and gather data to use for feedback (Niven, 2014:5). Such kind of information can help organisations to imagine how to achieve their vision, how to appear to and satisfy their customers (Dobrovic *et al*., 2018:42). However, several organisations face the challenge of explicitly articulating their value proposition which is the core of strategic choices made by an organisation (Niven, 2014:5). Quite often, many organisations like Walmart, choose operational excellence strategy, which focuses on low price, no frills or convenience. Apple pursues a product leadership, where it endeavours to offer the best product in the market through continuous innovation and creativity and many retail industry firms pursue a customer intimacy strategy which focuses on providing the best solutions for a customer (Niven, 2014:5). Organisations that focus on customer intimacy are more concerned with customer relationships that are built over time using their rich knowledge of customer needs and wants (Niven, 2014:5).

Customer satisfaction is the key notable consequences of organisational performance i.e. business existence requires customers (Albuhisi & Abdallah, 2018:1363). An organisation that continually creates value build confidence in shareholder so that they continue to invest and reinvest in the business to generate better returns (Oliveira *et al*., 2018:2591). In this respect, customer satisfaction is an important aspect for achieving the financial goals shown in the financial perspective of the Balanced Scorecard (Hamdy, 2018:426). Customer perspective is a success factor derived from the Balanced Scorecard and the hypothesis $H_{3\text{-}2,}$ is proposed:

$H_{3\text{-}2}$: Corporate entrepreneurship will have a causal effect on customer perceptions of an organisation.

5.6.3 Internal business process perspective

The internal business process perspective reflects the importance of identifying and analysing the important processes that are correlated to efficiency and productivity within the short and long-term strategic plans of an organisation (Oliveira *et al*., 2018:2591). According to Hamdy (2018:426), internal business process affords firms with resources for achieving performance expectations from customers. Internal process perspective is focused on value chain activities performed to design, sell, deliver products and services (Niven, 2014:118). The idea behind the internal

business process perspective is that customer-focused measures are vital, nonetheless, they must be interpreted into measures that are targeted at what an organisation must do, to internally meet or exceed customer expectation (Hamdy, 2018:426). The objective of the internal business process perspective is to focus on internal operations results that lead to achieving financial success and customer satisfaction (Hamdy, 2018:426). Organisations are required to identify important internal business processes to address the following question: to satisfy our customers and stakeholders, what business processes must we excel at? (Dobrovic *et al*., 2018:42). Continuous corrections and improvements of internal business processes help organisations to continue adding value to their products thereby improving customer satisfaction and financial status of the business (Niven, 2014:6). Special monitoring and evaluation of important business processes can ensure that the result is always satisfactory to the stakeholders (Hamdy, 2018:426).

The internal business process is centred on accomplishing organisational goals through innovation, customer management, operational improvement, regulation and environment adaptation (Albuhisi & Abdallah, 2018:1363). The internal business process perspective excites creativity, innovation, new product development, process and service improvements to upscale customer value which influences customer satisfaction (Albuhisi & Abdallah, 2018:1363). Operational disciplines such as operational excellence, product leadership and customer intimacy require the efficient operation of precise internal processes to satisfy customers and accomplish a preferred value proposition (Niven, 2014:6). Organisations such as Apple that focus on product leadership tend to incline on processes that lead to innovation and research and development, Walmart that emphases on operational excellence tend to focus on supply chain operations improvements and retail organisations that emphasise on customer intimacy tend to focus on processes that lead to customer knowledge and customer retentions (Niven, 2014:6). Toyota developed a Toyota Service Marketing program called the Kodawari program which focuses on continuous improvement (*Kaizen a Japanese word which mean continuous improvement*) of facilities, internal process and people (TTAF, 2018). In respect of internal process improvement, the Kodawari program aims to improve processes for appointments and maintenance reminders, reception, production, vehicle delivery and post-service follow-up (TTAF, 2018). The Kodawari program is focused on the

daily improvement of production activities in the business aimed at reducing waste, reducing lead times, improving quality of product and service and ultimately improving customer satisfaction (TTAF, 2018).

Internal business process perspective is a gauge that helps organisations to improve their internal performance through identifying, monitoring and evaluating the importance of the value of a customer and shareholder goals (Albuhisi & Abdallah, 2018:1363). Organisations that capitalise on unique differentiators in their value chain can deliver distinct value propositions to their clients (Niven, 2014:118). An Internal business process is an important element of the Balanced Scorecard because it helps an organisation to deliver good quality products, on time and at the right price (Hamdy, 2018:426). The internal business process perspective is a success factor derived from the Balanced Scorecard and the hypothesis $H_{3\text{-}3,}$ is proposed:

$H_{3\text{-}3}$: corporate entrepreneurship will have a causal effect on internal business process.

5.6.4 Learning and growth perspective

The learning and growth perspectives are the root and supplier of enablers, intangible in nature to the other perspectives of the Balanced Scorecard (Niven, 2014:6). The learning and growth perspective is focused on identifying measures that link to long-term growth of organisations (Aswani *et al*., 2016:1587). People are key drivers of any organisation's strategy implementation, the success of any organisation strategy relies on the capacity of its human capital (Aswani *et al*., 2016:1587). In addition to the right people, organisations require system and facilities to support the enhancement of organisational performance (Aswani *et al*., 2016:1587). Therefore, the learning and growth perspective is focused on issues pertaining to new skills, competency acquisition and staff morale (Aswani *et al*., 2016:1587).

Several organisations struggle with the learning and growth perspective because it receives the least investment and is usually delegated to the Human resource department (Niven, 2014:7). The learning and growth perspective is a critical block in

developing aspects that improve organisational performance that leads to organisational success (Niven, 2014:7). The main purpose of the learning and growth perspective is to measure the learning and growth of employees with a view to promoting organisational growth (Oliveira *et al*., 2018:2592). Learning and growth perspective evaluates the ability of employees in respect of their skills, knowledge, talent and training, the quality of information systems, such as network, database and systems and the impact of firm alignment such as culture, leadership and teamwork in enhancing the achievement of organisational objectives (Hamdy, 2018:426). In addition, the perspective tracks how employees learn and grow in their careers to improve organisational performance or success (Hamdy, 2018:426). For example, the Toyota Kodawari program in the people perspective evaluates the certification rate for employees and the skills capabilities using the skills map (TTAF, 2018). Albuhisi and Abdallah (2018:1363), defined learning as a process of acquiring job related skills, knowledge and behaviours. Therefore, organisations that aim to achieve aggressive results in their internal business process and customer perspectives pay more attention to the learning and growth perspectives as well (Niven, 2014:6). The learning and growth perspective is then regarded as the lever for the other three perspectives because it possesses the human capital that has the skills for the development of the organisation (Oliveira *et al*., 2018:2591).

The learning and growth perspective is comprised of three dimensions; people, information and organisational aspects (Albuhisi & Abdallah, 2018:1363; Niven, 2014:6). The human aspect is an important element of strategy, no matter how good the strategy is, without people, a strategy cannot be executed properly (Niven, 2014:6). The people dimension ensures that organisations have the necessary human capital, skills, competence and talent required for effective strategy execution (Niven, 2014:6). Organisations today cannot survive without information regardless of size and nature and strive to ensure that information technology investments are aligned to organisational strategy (Niven, 2014:6). It is vital for organisations to invest in current capabilities to ensure that infrastructure, resources and skills are suited to respond to the demands and fast-changing market environments (Oliveira *et al*., 2018:2592). Numerous organisations of the 21st-century depend on vigorous information systems to process daily data transactions and strategic decision making (Niven, 2014:6). Ultimately, the people and information aspects must gear

organisations for growth and change (Niven, 2014:6). The organisational dimension evaluates important elements of success like culture, teamwork and knowledge sharing (Niven, 2014:7). Consistent monitoring and evaluation of the people, information and organisational aspects have the potential to create growth and performance improvement for organisations (Albuhisi & Abdallah, 2018:1363).

It is imperative that such intangible elements of performance must be transformed into a tangible value that accomplishes the promises outlined in the strategic roadmap (Niven, 2014:7). Organisational success is basically rooted in the organisation's ability to learn, adapt and grow (Oliveira *et al*., 2018:2592). The learning and growth perspective is the foundation for the other perspectives; financial, customer and internal business process because it is the people that build fail-proof processes, please the customers with efficient service, delivery to produce financial results that make the organisations successful (Niven, 2014,7). The learning and growth perspective is an aspect of the Balanced Scorecard that focuses on the organisations identifying the right people, equipping them with the necessary skills and technology and operating in an enabling environment to grow and change (Niven, 2014:119). As a result, effective leadership will emerge from highly skilled and motivated employees who are equipped with accurate and timely information (Hamdy, 2018:426). The result of effective leadership is the production and delivery of quality products and services that enhance the financial performance of organisations (Hamdy, 2018:426).

Against this background, financial metrics unaided are not enough to measure management of organisation and success of the organisational performance, business leaders require several kinds of information about products and services such as quality, market, suppliers, customers, competition, technology and quantity (Sharma & Gadenne, 2011:169). An equilibrium view of both financial and non-financial perspectives of performance is necessary for managers to manage all organisation aspects simultaneously (Sharma & Gadenne, 2011:169). The Balanced Scorecard is crafted to capture an organisation's business strategy and encompass all the drivers of performance in all areas that are vital to organisational strategy (Sharma & Gadenne, 2011:169). The Balanced Scorecard is now considered as a powerful tool used for speedy and effective implementation of strategy and

possesses a multi-dimensional focus that addresses the strategic performance measurement and control systems (Sharma & Gadenne, 2011:169). For this study the Balanced Scorecard has been identified as performance measurement tool to be used together with organisational antecedents because the Balanced Scorecard specifies success factors i.e. the means (measures) by which performance will be measured, level of accomplishment (targets) to be attained in the planning period and any special activities that require to be taken to help achieve the objectives set by the organisation in a given period (Sharma & Gadenne, 2011:169). Learning and growth perspective is derived from the Balanced Scorecard and the hypothesis $H_{3-4,}$ is proposed:

H_{3-4}: corporate entrepreneurship will have a causal effect on the learning and growth of employees in an organisation.

5.7 BALANCED SCORECARD IMPLEMENTATION CHALLENGES

Recent studies have shown that the Balanced Scorecard benchmarking mechanism is being considered as a multi-purpose tool that provides a framework for monitoring current organisational performance and adopting sustainable strategies critical for future organisational performance and success (Singh & Arora, 2018:874). Equipped with result-driven performance management practices, the Balanced Scorecard has succeeded to supersede passive performance measurement reporting systems (Singh & Arora, 2018:874). Postulated by Sharma and Gadenne (2011:167), the adoption of the Balanced Scorecard in organisations has emerged popular in the last decades and its suitability is manifest in its considerable importance, content development and evolution since introduction (Singh & Arora, 2018:874). However, the implementation process of the Balanced Scorecard in organisations has not been an easy road and several scholars have attempted to identify factors that impede the Balanced Scorecard implementation (Singh & Arora, 2018:875). Many researchers have identified several factors that can affect Balanced Scorecard implementation, some of which are lack of; top management support, Balanced Scorecard alignment, management commitment, the strategic objective, communication and employee involvement (Singh & Arora, 2018:875; Anand, 2016:34). Many of the Balanced Scorecard implementation challenges emerge from unimplemented corporate entrepreneurship organisational antecedents.

5.7.1 Senior management support

Senior management support is a crucial dimension (Kuratko *et al*., 2014:39) in successfully launching the Balanced Scorecard in organisations. Successful implementation requires a project sponsor who ideally is the chief executive officer (CEO), who is probably the initiator and organisational strategy promotor (Anand, 2016:34). The sponsor must be a focused leader who is able to align the Balanced Scorecard with organisational strategy and at the same time walk the talk (Anand, 2016:34). Focused leadership will aid continuous reinforcement of implementation and eventually press-fit the Balanced Scorecard into the organisational culture (Anand, 2016:34). The role of senior management is to organise employees, their roles and responsibilities, motivate and create an enabling environment that enhances the implementation process (Bhardwaj & Momaya, 2011:188). Once employees observe the support from management, the probability of implementation success increases (Kuratko *et al*., 2014:39). Senior management support is a key catalyst in accelerating employee involvement, passion and commitment in the implementation process (Bhardwaj & Momaya, 2011:189). In the absence of senior management support, there is a high likelihood that the implementation process of the Balanced Scorecard could be converted into a management information system or performance management system conducted by the human resource department and misaligned with the organisational strategy (Anand, 2016:34). Therefore, the responsibility of successful implementation of the Balanced Scorecard is squarely on the shoulders of senior management (CEO and MD) or sponsors (Singh & Arora, 2018:877).

5.7.2 Balanced Scorecard alignment

The objective of the Balanced Scorecard is to help execute strategy and drive organisational performance, simply developing the Balanced Scorecard and not aligning it across the organisation to prevent sub-optimisation, would not produce expected results (Anand, 2016:93). Organisations must develop coordinated Balanced Scorecard with scorecards, objective and initiative all the way from the top-down to smaller departments (Anand, 2016:93). The corporate level Balanced Scorecard must network all the financial and non-financial strategic objectives and should define overall priority objectives in line with corporate guidelines (Anand,

2016:94). The alignment of the Balanced Scored must be filtered through to all departments, both revenue earner and cost centres e.g. sales, marketing, finance, information technology, human resource and legal (Anand, 2016:95). Although functional and operational objectives might seem different from corporate-level strategic objective, alignment with matching objectives is important (Anand, 2016:95). Organisations require enough resources to support implementation and alignment of strategic objective. Several organisations achieve alignment through cross-functional collaboration (Singh & Arora, 2018:877). Insufficient planning, coordination, cascading and resources can negatively affect the implementation of the Balanced Scorecard.

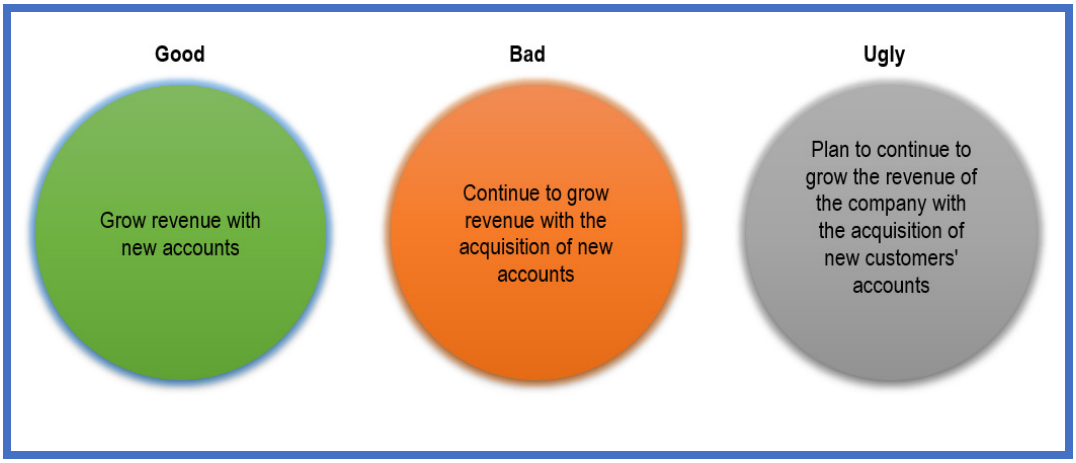
5.7.3 Management commitment

The successful implementation of the Balanced Scored must be driven by people who are fully convinced with the concept of the Balanced Scorecard and committed to seeing the project through. The Balanced Scorecard is basically not a phase but a culture transformation process that is not like an initiative with a start and end (Anand, 2016:34). The responsibility of stimulating and energising commitment lies with top management who have the mandate of providing an appropriate and supportive working environment to achieve organisational goals and enhance performance (Albuhisi & Abdallah, 2018:1362). Top or senior management must demonstrate their commitment through supporting employees, providing resources, improving processes, eliminating red tape and encouraging continuous improvement in the organisation (Albuhisi & Abdallah, 2018:1363). Absence of top management support in creating a conducive environment for employees and supporting with moral, resource, process improvement and elimination of bureaucracy can create challenges for Balanced Scorecard implementation (Albuhisi & Abdallah, 2018:1362). Top management with a mindset of thinking that the Balanced Scorecard was a great initiative at one point and that at a certain point it's not required by the organisation can cause implementation failures (Anand, 2016:34). Very often, objectives prioritised by top management are considered important by employees, if top management stop paying attention to certain firms' objectives the Balanced Scorecard implementation employees would follow suit (Anand, 2016:34).

5.7.4 Strategic objectives

The formulation of the Balanced Scorecard must ensure that the objectives are clear, understandable and manageable (Anand, 2016:35). Clarity of objective is an important aspect of the Balanced Scorecard, employees must easily grasp the objectives and specific areas of strategy that require focus (Anand, 2016:35). Objectives that are too detailed, unreadable, blue sky and vague tend to produce a variety of meaning to employees which eventually creates misunderstanding (Anand, 2016:35). Organisations that are attempting to implement the Balanced Scorecard successfully, must ensure that the objectives are clear and concise, for example, a clear objective would say grow revenue with new account, a bad objective would say continue to grow revenue with the acquisition of new accounts while an ugly objective would say plan to grow the revenue of the company with the acquisition of new customer accounts (Anand, 2016:35). An illustration of good, bad and ugly objectives is shown below in Figure 5.3. Fewer words that are more specific and aligned to the organisational strategy are easier for employees to comprehend and relate to during the implementation phase (Anand, 2016:35).

Figure 5. 3: Good, bad and ugly design challenges



Source: Anand (2016:36)

In addition to the clarity of the objectives, the Balanced Scorecard must contain fewer and manageable objectives in each perspective, the recommendation is between 20 to 25 objectives; thus, five objectives for each perspective (Anand, 2016:36). On one hand, the strategic map might become difficult to read and

interpret if it has many objectives and on the other hand, fewer objectives might be an indication that key strategic components have been omitted in the Balanced Scorecard formulation phase (Anand, 2016:36). Furthermore, incorporating too many measures or incorrect measures in the Balanced Scorecard can impede the implementation process (Anand, 2016:36). The tendency is that having 25 objectives in the Balanced Scorecard might be tempting to include 50 measures because each objective will require a lead and lag measure (Anand, 2016:36). Anand (2016:69), defined a lead measures as an activity that can be done now or in future e.g. sales calls that can improve revenue while a lag measure is computed after the event is over and nothing can be done about it e.g. financial report or statement. Ideally, organisations must start with a default position of one measure and gradually expand as the Balanced Scorecard is being accepted and start showing maturity and capabilities of managing multiple measures (Anand, 2016:77). Consequently, to ensure smooth implementation, the Balanced Scorecard must contain manageable and understandable measures that are correct and precise (Anand, 2016:36).

5.7.5 Communication

According to Longnecker (2016:3), communication is a process whereby information is collated from facts in a matrix and transmitted to the organism or vice versa and can be affected by several things including culture. Employees can only use information if they have control or necessary resources or infrastructure (Longnecker, 2016:3). Management support and commitment can make employees thrive and make use of the information availed to them. Implementation of the Balanced Scorecard requires an efficient way of disseminating deliverables and results to all employees to ensure that everyone is on the same page. Apart from individual communication, interdepartmental or cross-functional communication is important for Balanced Scorecard successful implementation (Singh & Arora, 2018:877). Information sharing between departments is vital because it encourages participation, formalisation and interconnectedness (Singh & Arora, 2018:877). Departments such as information technology, operations, finance and human resources must be fully informed, convinced and motivated to ensure buy-in of the implementation process. Insufficient communication between individual and cross-

functional department can result in the Balanced Scorecard implementation challenges.

5.7.6 Strategy formulation

It is imperative that an organisation is aware and possess a clear vision and strategy before embarking on the Balanced Scorecard implementation process (Anand, 2016:34). A vivid formulated and validated strategy is mandatory before Balanced Scorecard implementation. Fundamentally, an organisation strategy must highlight the achievements of an accepted company vision and is grounded on the internal and external business environment (Anand, 2016:35). The basic function of the Balanced Scorecard is to act as an execution tool for strategy, not the other way around (Anand, 2016:35). Organisations that are contemplating implementing the Balanced Scorecard must be aware of possessing a clear vision and strategy (Anand, 2016:35). Organisations that implement the Balanced Scorecard, without having a clear vision and strategy are prone to a higher risk of implementation failure (Anand, 2016:35).

5.7.7 Employee involvement

Human resource is the pinnacle of success of any organisation, profit or non-profit making organisation (Aswani *et al*., 2016:1582). Organisations achieve their strategic fit through employees that ensure that their organisation is competitive in the market (Aswani *et al*., 2016:1584). Employee involvement is important for improving organisational performance because it encourages employees to contribute to organisational efficiency and effectiveness at all levels (Aswani *et al*., 2016:1584). Therefore, employee involvement is an important element for overcoming Balanced Scorecard implementation challenges. According to Albuhisi and Abdallah (2018:1362), employee involvement is a sense of responsibility that is connected to an employee's participation in work. Employee's participation in work is usually created by management or leaders who provide a conducive environment that is supportive and encourages employees to be autonomous, innovative and creative (Albuhisi & Abdallah, 2018:1362).

Management must involve employees in the implementation of the Balanced Scorecard through the development of teams, allowing employees to make decisions, encouraging employees to be creative and innovative (Albuhisi & Abdallah, 2018:1362). Management can involve employees through formal and informal ways; formal participation happens when management puts in place structures and create expectations for employee involvement while informal participation can happen without management knowledge or support and does not require any form of a structure at all (Albuhisi & Abdallah, 2018:1362). Involved employees can achieve high levels of productivity, staff morale, innovativeness and customer satisfaction (Albuhisi & Abdallah, 2018:1362). According to Aswani *et al*. (2016:1582), involving employees can increase levels of staff motivations and bring out the best to support the implementation of the Balanced Scorecard. Involved employees can embrace commitment, passion, and positive attitude and can familiarise with organisational policies and job requirements in a bid to improve organisational productivity (Aswani *et al*., 2016:1584). On the contrary, failure to involve employees in the implementation phase of the Balanced Scorecard can hinder the implementation process.

5.7.8 Cause and effect relationship of perspectives

Before launching the Balanced Scorecard in an organisation, management or leadership must possess a sound understanding of the relationship between perspectives (Perkins *et al*., 2014:152). When management decides on the 20 to 25 financial and non-financial strategic objectives, it is imperative to visualise the cause and effect relationship between the four perspectives of the Balanced Scorecard (Anand, 2016:37). During implementation management must be in a position to explain to employees the relationship between the four perspectives of the Balanced Scorecard, clarify grey areas and prove that improvements in one perspective can lead to improvement in another perspective, for instance, training employees would improve skills and capabilities which would improve the process of producing a product or service resulting in form of quality service or products and on-time delivery to customers (Perkins *et al*., 2014:152). Ultimately, once customers are satisfied with the quality of service or products, they will continue buying the product or service which would result in the improvement of company revenue or sales.

Whenever employees start to notice interdependence between the four perspectives, management must have the ability to empirically or logically illustrate the relationship between the perspectives (Perkins *et al*., 2014:152). Failure to do so might negatively affect employee motivation and passion to implement the Balanced Scorecard.

5.8 BALANCED SCORECARD STRENGTHS AND WEAKNESSES

The Balanced Scorecard has so far received widespread interest and is the most popular strategic performance management tool and control system that help organisations implement strategy and measure performance (Arnaboldi *et al*., 2015:9; Sharma & Gadenne, 2011:167). The Balanced Scorecard as a performance measurement technique for organisations experiences advantages and disadvantages when being implemented by an organisation (Hamdy, 2018:426). The following are some of the advantages of the Balanced Scorecard:

- The Balanced Scorecard has a broader focus because it includes both financial and non-financial aspects of the business (Arnaboldi *et al*., 2015:9).
- The Balanced Scorecard allows an organisation to create comprehensive approaches for operations to better match all operating and investments to both long and short-term targets (Hamdy, 2018:426).
- The Balanced Scorecard links corporate financial planning and strategic planning (Arnaboldi *et al*., 2015:9). It aligns teams, individuals and the department to avoid working in silos and work together to achieve dramatic performance that leads to the success of organisations (Sharma & Gadenne, 2011:170).
- The Balanced Scorecard provides the organisation a clear prescription of what key performance indicators should be measured and helps to develop a process to achieve strategic focus and avoid the idea of trying to be everything in the market (Hamdy, 2018:426; Sharma & Gadenne, 2011:170).
- The Balanced Scorecard closes the gap between an unclear mission, vision strategy and daily operations of an organisation (Sharma & Gadenne, 2011:170).

- The Balanced Scorecard helps managers move their focus from programs and initiative to the results the programs and initiatives are supposed to achieve (Sharma & Gadenne, 2011:170).

Besides the merits of the Balanced Scored outlined above, the performance measurement tool has also faced considerable criticism from both scholars and practitioners (Hamdy, 2018:426). The Balanced Scorecard has been critiqued because of its lack of so-called cause and effect relationship, lack of clarity and failure to include some stakeholders as perspectives (Sharma & Gadenne, 2011:170). The following are some of the demerits of the Balanced Scorecard:

- The four perspectives of the Balanced Scorecard devalue the complexity of several organisations (Arnaboldi *et al*., 2015:9).
- The causality relationship between the four perspectives of the Balanced Scorecard are unidirectional and simplistic (Hamdy, 2018:427). The four perspectives are not tightly coupled together in practice as they appear in theory (Arnaboldi *et al*., 2015:9). For example, the aspect of learning and growth is causally linked to the aspect of internal business processes which are in turn causally linked to the aspect of the customer which are also causally linked to the aspect of finance (Sharma & Gadenne, 2011:170). In essence, the perspectives can only correlate to each other or act independently (Sharma & Gadenne, 2011:170).
- The Balanced Scorecard ignores the time dimension because varying points in time can produce varying results (Hamdy, 2018:427).
- The Balanced Scorecard lacks validation because it depends on a few measures (Hamdy, 2018:427).
- The Balanced Scorecard fails to integrate between top levels and operational levels and is unable to identify performance measures as a two-way process (Hamdy, 2018:427).
- The Balanced Scorecard is focused on internal perspectives of an organisation and ignores the external environment (Hamdy, 2018:427). The Balanced Scored is not able to address competitor dynamics and cannot predict events in the external environment (Hamdy, 2018:427).

- The Balanced Scorecard is difficult to implement in an organisation (Arnaboldi *et al*., 2015:10).

Regardless of the above criticism of the Balanced Scorecard, in the last two decades, the tool has been adopted by several profit and non-profit making organisations (Sharma & Gadenne, 2011:167). By 2005, a survey conducted by Tennant and Tanoren indicated that over 50% of organisations had adopted the Balanced Scorecard as a performance management technique and control system. Therefore, the adoption of the Balanced Scorecard has spread across industries and organisations, the automotive sector included (Hamdy, 2018:427; Perkins *et al*., 2014:149).

5.9 SUMMARY

Organisation's success factor strategy is a method that is used to organise the information required by business and if applied exceptionally well can enhance performance and success (Marais *et al*., 2017:2). Success factors are things that help organisations produce positive results that galvanised the achievement of organisational goals and success of organisations (Marais *et al*., 2017:2). Organisation's success factors can be in the form of characteristics, conditions, events, activities, actions and strategic areas (Marais *et al*., 2017:2). Organisations derive the following benefits from the organisation's success factors; enhanced quality management, increase revenue, efficient allocation of resources, customer satisfaction and employee satisfaction (Marais *et al*., 2017:2). The level of success of an organisation is determined by the success factors (Dobrovic *et al*., 2018:42). According to Niven (2014:112), "what gets done gets measured". Measuring the degree of success of an organisation is an important aspect of comprehending the level of performance (Dobrovic *et al*., 2018:42).

Organisation's success factors are indicators of how stakeholders perceive an organisation (Sandu, 2015:1035). Success factors are usually related to several financial and non-financial factors such as company innovativeness, quality of products or service, customer relationships, customer satisfaction, marketing and advertising (Sandu, 2015:1035). The Balanced Scorecard is a mechanism that has the ability to recapitulate financial and non-financial success factors of organisations

and helps to understand financial soundness of an organisation and evaluate non-financial aspects which are vital for achieving maximum competitiveness of an organisation (Dobrovic *et al*., 2018:41). It is a strategic mechanism or tool used by organisations to make decisions in all layers of organisational structures (Aswani *et al*., 2016:1583). The Balanced Scorecard is a modern business performance tool that can continually monitor and evaluate the performance of the business process (Dobrovic *et al*., 2018:41). Management of the Balanced Scorecard involves performance measurements which are a wide range of activities that organisations engage in, to improve the performance of individuals and teams (Gorman *et al*., 2017:193).

Performance measurements enhance strategy development and implementation and it germinates from planning and control cycles to an independent system of monitoring and measuring key organisational success factors (Aswani *et al*., 2016:1583). Based on several performance management tools identified in this study, the Balanced Scored was found to be ideal to be used as a measuring mechanism. The Balanced Scorecard is a performance management mechanism that can link financial planning and strategic planning (Arnaboldi *et al*., 2015:9). The Balanced Scorecard focus is wider as it looks at both financial and non-financial aspects of the business and is summarised into four perspectives; customer, financial, internal business process and learning and growth (Oliveira *et al*., 2018:2589).

The financial perspective measures the financial effect of priorities chosen by the organisation, decision made, plans executed, and actions pursued by managers (Aswani *et al*., 2016:1587). The financial aspect is the quickest dip stick that shows weather strategic efforts are producing positive results (Niven, 2014:7) and measures revenue, productivity, and profitability (Oliveira *et al*., 2018:2591). The customer perspective captures the ability of an organisation to provide quality products and service, effective service delivery and customer satisfaction (Hamdy, 2018:425). It measures pre-set organisation's objectives like lead time, quality service, performance and cost of products and it focuses on customer value add, which is derived from internal innovation and creativity (Aswani *et al*., 2016:1587). The internal business process perspective helps to identify and analyse important

processes that are correlated to efficiency and productivity (Oliveira *et al*., 2018:2591). The internal business process is concerned with value chain activities performed to design, sell, and deliver products and services (Niven, 2014:118). Lastly, the learning and growth perspective is the foundation for all the other three perspectives; customer, financial and internal business process (Niven, 2014:6) and the success of any organisation's strategy depends on the capacity of its human capital (Aswani *et al*., 2016:1584). It is concerned with identifying measures that link to the long-term growth of an organisation (Aswani *et al*., 2016:1587).

Although the Balanced Scorecard was developed and conceptualised in 1992 by Robert Kaplan, a Harvard Business School professor and David Norton, a business theorist and consultant (Anand, 2016:25), its deoxyribonucleic acid (DNA) can be traced through the work of practitioners and thinkers such as Abraham Maslow and Peter Drucker (Niven, 2014:1). Hamdy (2018:425), defined the Balanced Scorecard as a strategic mechanism for communicating and evaluating the achievement of a firm's mission, vision and strategy. Thus, the Balanced Scorecard requires the involvement of management in the implementation process and ensure alignment with the organisation's mission, strategy and vision (Perkins *et al*., 2014:150). It is a management technique that is designed to be an integral part of the approach for managing an organisation (Niven, 2014:105).

Recently, several organisations have gradually adopted the Balanced Scorecard with a view to effectively enhance the allocation of scarce resources and strategy execution (Dobrovic *et al*., 2018:43). For instance, an estimate of 60% of the Fortune 1000 companies in the USA have experimented with the Balanced Scorecard and an increased level of adoption was noticed within the Finnish businesses (Perkins *et al*., 2014:149). The adoption of the Balanced Scorecard has also extended to non-profit organisations and government (Perkins *et al*., 2014:149). Despite this considerable adoption and importance of the Balanced Scorecard (Singh & Arora, 2018:874), the implementation process in organisations has not been an easy road or smooth process (Singh & Arora, 2018:874). Organisations require to have the following factors in check to ensure smooth implementation; senior management support, scorecard alignment, management commitment, strategic objectives,

communication, employee involvement and cause and effect relationship (Singh & Arora, 2018:875; Morris *et al*., 2011:51; Kuratko *et al*., 2014:40).

Furthermore, the Balanced Scorecard has its merits and demerits. Some of the advantages of the Balanced Scorecard are that it focuses on both financial and non-financial aspects of the business, helps organisations to develop comprehensive approaches for operations and links financial planning and strategic planning (Arnaboldi *et al*., 2015:9; Sharma & Gadenne, 2011:167; Hamdy, 2018:427). The weaknesses of the Balanced Scorecard are that it devalues the complexity of several organisations, the causal relationship between the four perspectives are unidirectional and simplistic, it ignores time dimensions and lacks validation because it depends on a few measures (Arnaboldi *et al*., 2015:9; Hamdy, 2018:427; Sharma & Gadenne, 2011:170).

The principle goal of Chapter 5 was to clarify the significance of success factors and how they can be measured to appreciate the level of success of an organisation. The Balanced Scorecard is a performance management mechanism that was identified as the most appropriate tool to be used because it focuses on measuring both financial and non-financial aspects of organisational management. The Balanced Scorecard is a performance measurement tool chosen for this study to represent success factors of an organisation i.e. financial, customer, internal business process and learning and growth perspectives. Chapter 6 focuses on the automotive organisations chosen for this study. The chapter introduces the automotive industry in general, and in Sub-Sahara Africa and explains the background of each organisation chosen for the purpose of this study in detail. The organisations chosen for this study were TTAF, SSA, Toyota Kenya, Toyota Malawi, Toyota Zambia and Toyota Zimbabwe from the five countries in Sub-Sahara Africa. A brief life history of the organisations, the type of business they do, their business philosophy, vision and values of the organisations are explained to illustrate the existence of corporate entrepreneurship and success factors.

CHAPTER 6: THE AUTOMOTIVE SECTOR IN SUB-SAHARA AFRICA

6.1 INTRODUCTION

Chapter 5 introduced the success factors of an organisation which was one of the focus areas of this study. A detailed description of performance management tools and the background of the Balanced Scorecard concept was provided. Additionally, explanation of how the Balanced Scorecard is being adopted by organisations, the four perspectives of the Balanced Scorecard (financial, customer, internal business process and learning and growth) and the challenges encountered by organisations leadership during implementation were explained. Furthermore, the strengths and weaknesses of the Balanced Scorecard were outlined to specify its importance. Chapter 6 introduces the automotive industry in Sub-Sahara Africa. A detailed explanation of the global new car market, an overview of the Sub-Sahara Africa region and automotive organisations in the region is presented. Individual overviews of organisations selected for this study is also clarified.

The automotive industry is one of the most complex and sophisticated technologically advanced sectors which involves the formation of new vehicles or automobiles that undergoes multiple process phases such as design process, engineering, pricing, manufacturing, distribution, selling and aftersales support e.g. servicing, parts supply, warranty and technical support (Wedeniwski, 2015:vii). The phases involved in the creation of the motor vehicle consists of several complex processes and technology that must be fully incorporated into a single continuous system (Wedeniwski, 2015:vii). The automotive industry was initially conceptualised by Carl Benz and Gottlieb Daimler who both separately invented the automobile and profoundly transformed how people work, travel and interact with each other (Wedeniwski, 2015:v). In 1876, a Germany engineer, Nicolaus August Otto developed a four-stroke combustion engine which was later patented for a three-wheeled car in 1886 by another Germany engineer Carl Benz (Waldchen, 2014:6). The first four-wheeled car was introduced in 1893 and in 1897 a diesel engine was invented (Waldchen, 2014:6). Although the automotive industry was established more than a century ago, its inventions are still relevant today (Waldchen, 2014:6).

As postulated by Naudé and Badenhorst-Weiss (2012:48), the automotive industry comprises of two major tiers; OEM's and ACM's. OEM's are vehicles manufactures such as Toyota, Nissan, Ford and Kia while ACM's are a network of automotive parts suppliers (Naudé & Badenhorst-Weiss, 2012:48).

Before the invention of the automobile, Europeans travelled an average of 20km per year and now they travel about 20km per day, most of this travel is done by motor vehicles making the automobile an indispensable component of human lives and logistics supply chain (Wedeniwski, 2015:v). The automotive industry has an inescapable impact, economic consequence and cultural status it conveys to society (Nieuwenhuis & Wells, 2015:1). However, at the dawn of the millennium, the automotive industry was viewed as a sunset industry because it was characterised by plant closures, job losses, overcapacity deteriorating profitability and products that did not meet the environmental and social challenges stemming from vehicle ownership and usage (Nieuwenhuis & Wells, 2015:1). Such challenges started raising concerns about the future of the automotive industry (Wedeniwski, 2015:v).

Like any other business, the automotive industry focuses on issues pertaining to social, political and economic such as non-market response (Damert & Baumgartner, 2018:265). The automotive industry has been under extreme pressure from environmental regulators and is continuously being forced to consider climate change as part of its strategy (Damert & Baumgartner, 2018:265). Environmental regulations have subsequently increased together with rising awareness of environmental issues from investors and the public who are demanding transparency on corporate greenhouse gas emissions and plans on how to reduce them (Damert & Baumgartner, 2018:265). Consequently, these calls from the public and investors have shifted the focus of the automotive industry strategy to a more proactive managerial and technological measures, for instance, creation of carbon inventories, investment in green products and cleaner production processes (Damert & Baumgartner, 2018:265). Besides, the regulatory issues, the automotive industry was also impacted by the global economic crisis which occurred around 2008 (Nieuwenhuis & Wells, 2015:19). The initial kick-off of the global economic crisis or recession became apparent that any decline in economic growth had a profound effect on the demand for new vehicles (Nieuwenhuis & Wells, 2015:19). Vehicle

sales fail steeply in established markets while investment was frozen resulting in downsizing, job losses and plant closures (Nieuwenhuis & Wells, 2015:1). The global economic crisis of 2008 was tremendously felt in mature markets especially across the European Union right through to 2014 while emerging markets such as Brazil, India, China and much of Asia experience growth in new car sales shifting the centre of gravity of the automotive industry (Nieuwenhuis & Wells, 2015:19). However, by 2016 the European Union started experiencing new car sales recovery as new car registration increased to 14.6 million almost the same level as the new car sales experienced between 2001 and 2007 (ICCT, 2018:2).

Both environmental compliance pressures and the economic meltdown appeared to call into question the pre-eminent position enjoyed by the automotive industry in providing personal mobility services (Nieuwenhuis & Wells, 2015:1). The automotive industry is currently reinventing itself through embracing technology and regulatory laws which were previously seen as burdensome and punitive, have significantly helped in stimulating technological initiatives as well as exploration and exploitation of new profit avenues (Nieuwenhuis & Wells, 2015:2). The automotive industry is progressively adopting the information technology to manufacture, sell and service automobiles (Wedeniwski, 2015:v). Besides the challenges facing the automotive industry, it is still regarded as an important sector of any economy in the world and consists of more than 5% of the world manufacturing employment (Naudé & Badenhorst-Weiss, 2012:48). Furthermore, it is estimated that one direct automotive manufacturing job exponents to at least five indirect jobs in other tiers of the automotive industry (OICA, 2017).

According to Statista (2017a), the passenger car sales was estimated to reach 78.6 million in 2017 in a global market of about 70 to 80 million cars per year (Nieuwenhuis & Wells, 2015:20). Nieuwenhuis and Wells (2015:20) hypothesised that the automotive industry has space for five to six manufacturers producing 12 to 16 million cars per year and three platforms producing three to six million cars per platform, nonetheless, most efficient producers are expected to absorb less efficient producers. Figure 6.1 below shows the global vehicle production position of top 5 and top 10 manufacturers in selected years in the period between 1998 and 2011. The share of the total market taken by leading top 5 organisations is inclining

towards 100% (Nieuwenhuis & Wells, 2015:20). According to Nieuwenhuis and Wells (2015:20), the share of the total production of both the top 5 and top 10 companies declined between 1998 and 2010 and an increase in share achieved in 2011 was not enough to compensate for the overall market share deficit.

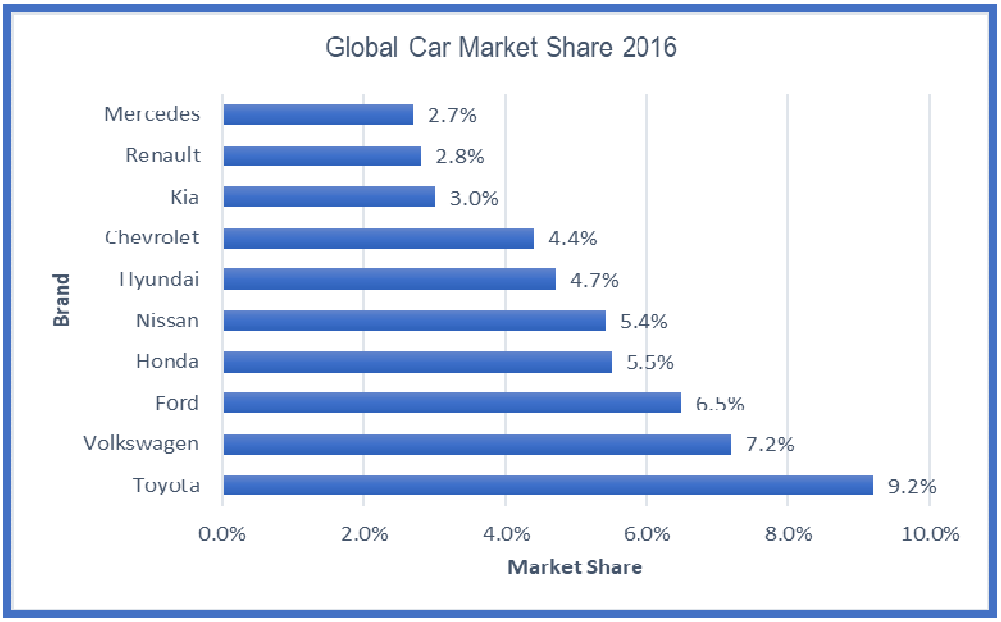
Figure 6.1: All vehicles, production by top 5 and top 10 manufacturers in selected years

	1998 (m)	1998 (%)	2008 (m)	2008 (%)	2010 (m)	2010 (%)	2011 (m)	2011 (%)
Top 5	28.6	54.1	33.2	47.9	34.8	44.7	36.7	46.5
Top 10	40.8	77.0	47.9	68.9	51.4	66.1	53.3	67.6
Total	52.9	100.0	69.5	100.0	77.7	100.0	78.8	100.0

Source: Nieuwenhuis and Wells (2015:20)

In respect of vehicle manufactures, competition is very intense and fierce, efficient manufactures are absorbing inefficient manufactures, for instance, Jaguar Land Rover was taken over by Tata in 2008 while Volvo was taken over by Geely in 2009 (Nieuwenhuis & Wells, 2015:19). Toyota was ranked the world largest leading manufacture based on revenue in 2017 with a market share of 9.2% followed by Volkswagen at 7.2% as shown in Figure 6.2 (Statista, 2017a). Volkswagen market share could have been negatively impacted by the diesel deception scandal of 2015 (Statista, 2017b). Kia Motors a little-known brand overtook Mercedes and Renault to achieve 3% and is showing growth through its increasing vehicles sales and market share (Statista, 2017b). Kia Motors, a new kid on the block is behind Nissan's market share with only 2.4% less (Statista, 2017b).

Figure 6.2: Global car market share 2016



Source: Statista (2017b)

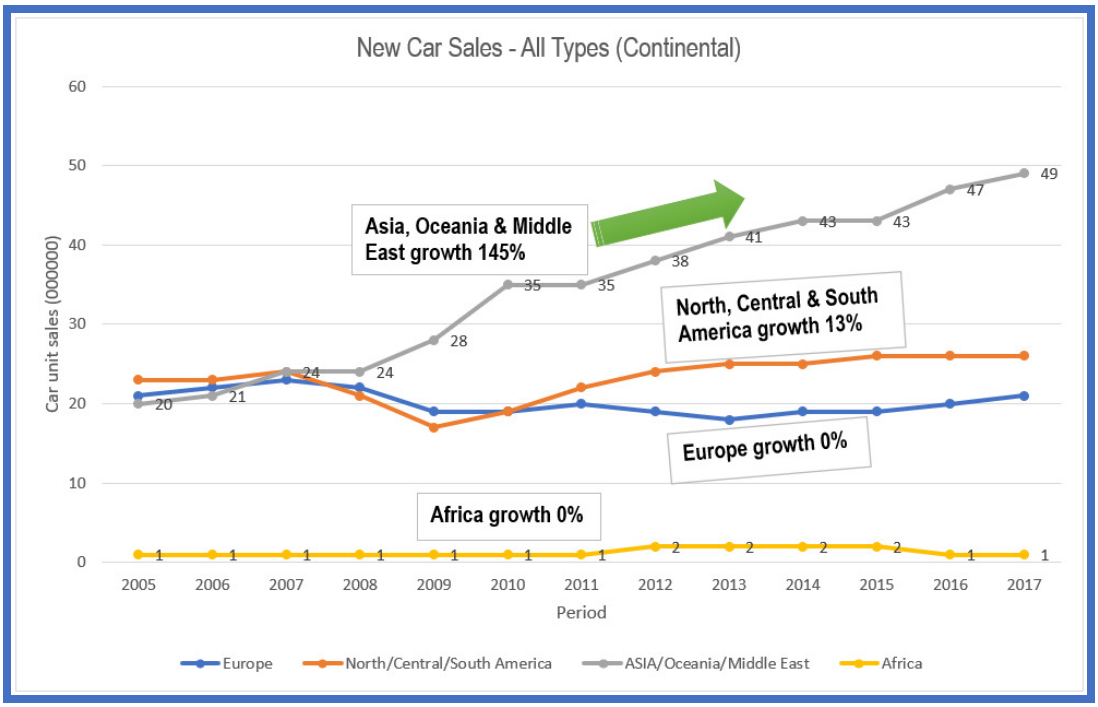
The 3% market share achieved by Kia was unimaginable 20 years ago (Nieuwenhuis & Wells, 2015:95). The South Korean automotive industry reinvented itself through the transformation of management practices and work processes and has become one of the largest export industries in the world in areas of shipbuilding, semiconductors, electronics, steel and petrochemicals (Nieuwenhuis & Wells, 2015:95). Through corporate venturing strategy (Morris *et al*., 2011:86), Kia Motors and Hyundai Motor Company merged in 1988 to form a formidable force in the automotive industry that has significantly increase global vehicle production and sales (Nieuwenhuis & Wells, 2015:95).

6.2 NEW CAR MARKETS GEOGRAPHY

The automotive industry market growth has been stimulated by wider economic changes in supply, demand and economic situation in the country or region (Nieuwenhuis & Wells, 2015:23). The key changes in the markets around the world are shown in Figure 6.3 below. From the bottom of the graph, Africa and Europe new car sales indicate stagnation with 0% growth in the period between 2005 and 2017 (OICA, 2018; Nieuwenhuis & Wells, 2015:23). While North, Central and South America grew by 13% and Asia, Oceania and the Middle East grew by 145% (OICA,

2018). Significant growth was achieved by China which sold almost 30 million new cars in 2017 higher than Europe which sold 20 million cars (OICA, 2018). The growth in China's new car sales is startling, from selling 5 million cars in 2005, China managed to sell 30 million in 2017 (OICA, 2018; Nieuwenhuis & Wells, 2015:23).

Figure 6.3: Continental new car sales for all models



Source: OICA (2018)

Excluding Asia, Oceania and Middle East the trend in the automotive industry is showing that new car sales are stagnating or perhaps entering long term gradual decline in traditional markets such as Europe (Nieuwenhuis & Wells, 2015:23). The decline in new car appetite indicates that stagnation could have started way before the 2008 economic meltdown, a signal for profound changes in the demand for mobility and methods in which demand is satisfied by organisations (Nieuwenhuis & Wells, 2015:23).

6.3 SUB-SAHARA AFRICA

Sub-Sahara Africa has a population of about 950 million people and has the highest population of people living in poverty, underdeveloped infrastructure and is the most vulnerable to climate changes in the world (Chakamera & Alagidede, 2018:945). Opening Sub-Sahara Africa markets to the global markets is one of the remedies to reducing poverty levels, improve industrialisation, gender inequality and minimising regional vulnerability to climate change (Chirambo, 2018:600). The Sub-Saharan vulnerability to climate change can attribute to restricting future generations and economic development of the region (Chirambo, 2018:600). Countries in Sub-Sahara Africa and the rest of Africa have been identified as the most pressing obstacle to economic growth due to corruption and red tape (Chirambo, 2018:600). Countries in the region are characterised by weak environmental regulation and control, closed economies, excessive pollution and political instability (Abid, 2016:85). Government managing styles in Sub-Sahara Africa influences directly or indirectly economic growth especially in areas that concern the rule of law (Abid, 2016:85). Rule of law can help improve the rate of organisational compliance and improve investor confidence in a country (Abid, 2016:85). Therefore, some of the countermeasures to economic growth in Sub-Sahara Africa can be openness, financial development and the quality of political institutions or governance (Abid, 2016:86).

The challenges faced by Sub-Sahara African countries and Africa as a whole also directly or indirectly affect the growth of the automotive industry. Sub-Sahara Africa infrastructure is dilapidated or non-existence, paved roads are covered in potholes and the highest percentage of vehicles on the roads are abandoned cars from the developed countries, generally known as grey vehicles or unofficially imported vehicles (Thomas, 2018:14). With a population of more than 1,2 billion people in Africa, about 45.2 million vehicles are registered, and car ownership remains a privilege of a few elite (Thomas, 2018:14). Global motorisation rate is currently estimated at 182 vehicles per 1000 people while Africa motorisation rate is at 44 vehicles per 1000 people, about 4 times less than the global motorisation rate (Thomas, 2018:14).

South Africa was the only country with vehicle manufacturing plants in Sub-Sahara Africa and in 2018 Volkswagen opened a new manufacturing plant in Rwanda (Thomas, 2018:14). However, new vehicles are expensive, especially for middle-income earners. They, therefore resort to buying used vehicles or grey vehicles from the developed countries (Thomas, 2018:14). Improvement of governance and reduction of corruption, red tape and openness (Abid, 2016:86), can encourage foreign direct investment especially for automotive manufacturing industry which could reduce the cost of new cars and make vehicle affordable to many people in Sub-Sahara African and Africa as a whole (Thomas, 2018:14). Figure 6.4 below shows the trend of vehicle sales from 2005 to 2017 in Sub-Sahara Africa. South Africa and Egypt are the only two countries selling more than 100 000 vehicles per annum, while the other countries sell less than 15000 vehicles per annum (OICA, 2018). New car sales in Sub-Sahara Africa has experienced a mixture of both positive and negative growth. In Figure 6.4 below, the red colour shows negative growth and the white colour shows growth in the growth rate column. Out of 19 countries, 47% of the countries are facing negative growth. The rate of growth of new cars sales correlate with the rate of easy of doing business ranking as shown in Figure 2.1, for example, Kenya was ranked 80 in Figure 2.1 and in Figure 6.4, Kenya shows a growth rate of 98%. Kenya easy of doing business is the best amongst the countries in this study. Zimbabwe, on the other hand, was ranked 159 in Figure 2.1 and relatively Figure 6.4 shows that Zimbabwe has a negative growth of -82% (World Bank Group – Kenya, 2018:4; World Bank Group - Zimbabwe, 2018:4). Thus, considering this assumption, the easier it is to do business in a country, the higher the chances of that country to experiencing economic growth and eventually creating a fertile ground for breeding entrepreneurial activities.

Figure 6. 4: New car sales-all types (Sub-Sahara Africa)

New Car Sales - All Types (Sub-Sahara Africa)														
Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth Rate (2017/2005)
Angola	9000	12000	5500	5500	15000	30000	15000	28000	29000	35700	18000	7300	4230	-53%
Botswana	4200	3600	5200	7100	7000	6000	6200	6600	6900	7400	7500	8100	7600	81%
Burundi	1000	1000	1100	1000	1000	600	500	510	530	400	400	900	130	-87%
Cameroon	3500	4100	4000	3800	2600	2900	2900	3400	4400	4400	4200	4200	3765	8%
Egypt	121437	170614	206060	239833	205521	248917	271900	286300	283000	349100	332100	264100	181001	49%
Gabon	3800	4000	4200	4000	4000	4000	4000	5500	5500	4900	3300	3000	2565	-33%
Ghana	4500	4500	5100	5500	6500	6000	9000	14500	13600	13000	4800	7400	4217	-6%
Kenya	6000	5000	7000	7000	7500	6000	6000	9500	13000	13500	14100	10600	11886	98%
Liberia	400	300	400	500	300	500	400	410	430	400	400	600	132	-67%
Madagascar	2630	3100	3000	2700	2000	1800	2100	2200	2200	2600	2300	1400	1507	-43%
Malawi	1400	1670	1660	1500	1500	2200	2300	1500	1540	1700	1900	1800	1937	38%
Mauritius	4800	5500	6000	6000	5000	6000	4500	9500	10200	10600	10000	11000	12597	162%
Nigeria	23000	38000	12000	12000	51000	37000	45000	50000	52000	53900	20000	23000	6999	-70%
Senegal	5500	6500	7000	7000	6000	6000	5500	6000	6000	6800	5800	6600	6516	18%
South Africa	617406	714315	676108	533387	395222	492907	572241	623921	650745	644504	617749	547406	555716	-10%
Tanzania	3000	3000	3500	3000	3000	3200	4500	6000	6700	5800	5200	4500	5358	79%
Uganda	4000	4500	4000	3500	3500	3500	4000	4500	5000	4900	3100	4000	4337	8%
Zambia	2950	3480	3560	3600	4000	3000	3000	3500	4000	4000	3400	3200	4862	65%
Zimbabwe	12000	11000	5000	5000	4500	3000	4300	4400	5000	5800	2500	2200	2143	-82%

Source: OICA (2018)

Besides the current outlook, Sub-Sahara Africa is experiencing a rise in income and more people are entering middle class where consumers are starting to seek safe, convenient and durable forms of transportation or mobility (Thomas, 2018:15). The migration of Sub-Sahara African population from the lower class to the middle class will have a positive effect on the automotive industry as more people will start to afford to buy cars (Thomas, 2018:15).

6.4 OVERVIEW OF AUTOMOTIVE COMPANIES SELECTED FOR THIS STUDY

This study is focused on six automotive companies selected from five Sub-Sahara African countries. Chapter 2 described the entrepreneurship environments in Kenya, Malawi, South Africa, Zambia and Zimbabwe to illustrate prevailing entrepreneurship environments and easiness of doing business in the countries. Figure 2.1, according to (World Bank Group, 2018:4) easy of doing business ranking showed that Kenya was ranked 80, the best out of the five countries and Zimbabwe was ranked 159 out of 190 countries surveyed, the toughest country to do business amongst the five nations in the study. The ranking helps to simulate the attitude of established

organisations towards corporate entrepreneurship. Hypothetically, a nation's attitude towards entrepreneurship should correlate with the attitudes of established organisations in the country. For example, even though starting a business in Kenya takes much longer time than other countries, the costs of starting a business are much less and affordable, thus encouraging entrepreneurship especially for individuals who do not have finance (In on Africa, 2016:55). Below is the overview and background of the six automotive companies from Sub-Sahara Africa to be surveyed in this study.

6.4.1 Toyota Kenya

Toyota Kenya is a company registered and operating in Kenya a country located in the eastern part of the Africa continent. Toyota Kenya is a subsidiary of the Toyota Tsusho Corporation (TTC) a Toyota Group company (Toyota Kenya, 2018). In 1962, TTC established a representative office in Kenya and subsequently in 1964 appointed Westlands Motors as a distributor for Toyota vehicles in Kenya (Toyota Kenya, 2018). Westlands Motors was subsequently acquired by the Lonrho which later went into a joint venture with TTC in 1999 (Toyota Kenya, 2018). In 2014, Toyota Kenya invited the president of Kenya, His Excellency Uhuru Kenyatta to officially open the Toyota Business Park that houses Toyota Kenya central parts depot, vehicle logistics centre, Training Academy, Toyotsu Auto Mart and Hino trucks and buses (Toyotsu Auto Mark Kenya, 2018).

Toyota Kenya is the sole distributor of new Toyota, Hino, CASE, Yamaha, genuine parts for all the brands and provides aftersales support i.e. warranty support, training support, technical support, maintenance, repairs and dealer support (Toyota Kenya, 2018). Toyota Kenya has branches in Nairobi, Mombasa, Eldoret, Kisumu and Lodwar and has a dealer presence in Nyeri, Nanyuki, Nakuru, Kericho, Meru, Kitale, Kakamega, Naivasha, Malindi and Voi (Toyota Kenya, 2018).

As the official distributor of Toyota, Hino, CASE and Yamaha brands, Toyota Kenya imports new units for distribution to its branches and dealers (Toyota Kenya, 2018). Toyota Kenya is also authorised to import genuine parts for the brands and distribute to its branches and dealers (Toyota Kenya, 2018). Toyota Kenya employees 449

people and more indirectly through its dealer network (Toyota Kenya, 2018; Toyotsu Auto Mark Kenya, 2018).

6.4.1.1 Toyota Kenya history

Toyota Kenya was initiated by the TTC through Westlands Motors in 1964 and later in 1971, Lonrho acquired Westlands Motors (Toyota Kenya, 2018). The purchase of Toyota Kenya by TTC brought in huge capital injection for investment and expansion, growing the organisation from being just a small company to a firm that now has a footprint throughout the country and directly employs 449 people (Toyota Kenya, 2018; Toyotsu Auto Mark Kenya, 2018). Table 6.1 below shows a summary of Toyota Kenya's history.

Table 6. 1: Toyota Kenya history

No.	Event	Time
1.	TTC opened a representative office in Kenya.	1962
2.	TTC appointed Westlands Motors as the distributor for Toyota.	1964
3	Lonrho acquired Westlands Motors.	1971
4	TTC and Lonrho entered into a joint venture.	1999
5	Toyota East Africa Limited was established by TTC and Lonrho.	1999
6	TTC acquired the full shareholding of Toyota East Africa Limited.	2001
7	Toyota East Africa Limited changed its name to Toyota Kenya.	2011
8	9th year of number one market share in Kenya.	2011
9	Toyota Kenya opened a bus assembly in Changamwe, Mombasa.	2013
10	Toyota Kenya opened Toyota Business Park.	2014
11	Historical new car sales record of 3825.	2014
12	Appointed first local Managing Director.	2018

Source: Toyota Kenya (2018)

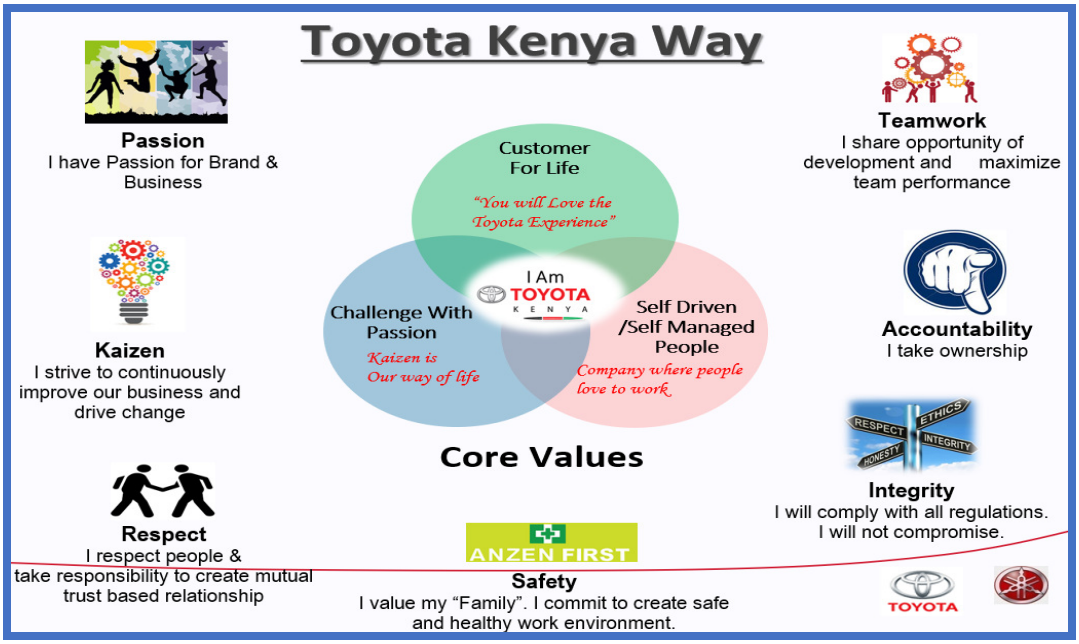
6.4.1.2 Business philosophy of Toyota Kenya

The business philosophy of Toyota Kenya is grounded on the Toyota guiding principles of the Toyota Way and Kaizen (Toyota Global, 2018). The attitude of Toyota Kenya is to continuously look for ways to advance, grow, better lives of people and impact positively on the working environment of its employees to create products and services through the application of *Kaizen* activities (Kuratko *et al*.,

2014:39; Toyota Kenya, 2018). In respect of this philosophy, Toyota Kenya aims to be the most respected organisation by people, society, industry and the government of Kenya and contribute devotedly to the development of Kenya through offering comprehensive automotive solutions (Toyota Kenya, 2018).

The vision of Toyota Kenya is to create an organisation where customers love to visit, and people love to work (Toyota Kenya, 2018). In achieving its vision, Toyota Kenya relies on capitalising its core values of a customer for life, self-managed people and challenge with passion (Toyota Kenya, 2018). Figure 6.5 below, Toyota Kenya Way shows how Toyota Kenya's core values can help to inspire employees in achieving the vision of the organisation. The fundamental reasons for Toyota Kenya's core values are to create an enabling working environment that encourages creativity and innovation (Kuratko *et al*., 2014:39). The values of a customer for life are aimed at enhancing the customer experience to improve customer delight and retentions, self-managed or self-driven people is aimed at creating a working environment where people love to work and challenge with passion is aimed at making *Kaizen* a way of life (Toyota Kenya, 2018). With the core values firmly embodied in the company's culture, Toyota Kenya's objective is to cultivate a culture of teamwork, accountability, integrity, employees and customer safety, respect, *Kaizen* and passion as shown in Figure 6.5 below (Toyota Kenya, 2018).

Figure 6. 5: Toyota Kenya Way



Source: Toyota Kenya (2018)

The Toyota Kenya Way is derived from the Toyota guiding principles of the Toyota Way (Toyota Global, 2018) and is reliant on the development of quality relationships, quality thinking, quality actions and quality of results (Toyota Kenya, 2018).

Toyota Kenya has been in existence for more than 50 years and the organisation has grown from being a small organisation to a larger one that employs 449 employees with a branch and dealer footprint throughout the Republic of Kenya. The growth of the organisation could have been attributed by Toyota Kenya's vision of placing a high value on its employees, process and customers.

6.4.2 Toyota Malawi

Toyota Malawi is an organisation operating and registered in Malawi, a country located in the southern part of the African continent. Toyota Malawi was established by Derek Friend and Jean Friend in 1964 as Mobile Motors. The company was established in partnership with the Lonrho group of companies (Toyota Malawi, 2018). In 1995, Mobile Motors after acquiring full Toyota license to distribute new cars and genuine parts in Malawi changed its name to Toyota Malawi and in 2001

was fully acquired by TTC a Toyota Group Company (Toyota Global, 2018; Toyota Malawi, 2018).

Toyota Malawi is the official distributor of Toyota and Hino trucks and supplies genuine parts and aftersales support such as maintenance, repairs, technical support, warranty and training throughout its branch network in Malawi (Toyota Malawi, 2018). Toyota Malawi is the sole licensed importer of Toyota and Hino trucks and has branches that sell new cars, parts and service in Blantyre, Lilongwe and Mzuzu and parts outlets in Dwangwa and Nchalo (Toyota Malawi, 2018). Toyota Malawi is the market leader in the Malawi automotive industry with a market share of over 40% (Toyota Malawi, 2018). Furthermore, through corporate social responsibility, Toyota Malawi has built partnerships with communities in areas of education, health, safety and environment (Toyota Malawi, 2018).

6.4.2.1 Toyota Malawi history

The company Mobile Motors was a brainchild of Derek Friend and Jean Friend who started it in partnership with Lonrho group of companies in 1964. Mobile Motors started in Blantyre with one branch and now has three branches that sell new cars, parts and service and two branches that sell parts only and employees 179 people (Toyota Malawi, 2018). Huge expansions of Toyota Malawi business started when it was acquired by TTC in 2001 (Toyota Global, 2018). Table 6.2 below shows the summary of Toyota Malawi history.

Table 6. 2: Toyota Malawi history

No.	Event	Time
1.	Derek Friend and Jean Friend visit Japan for a business trip.	1963
2.	Established Mobile Motors as a member of the Lonrho group of companies.	1964
3	Relocate to Masauko Chipembere Highway in Blantyre.	1972
4	Mobile Motors became fully licensed distributor of Toyota vehicles in Malawi.	1995
5	Mobile Motors changed its name to Toyota Malawi.	1995
6	TTC group acquired 100% ownership and control of Toyota Malawi.	2001
7	Opened Mzuzu branch.	2012

Source: Toyota Malawi (2018)

6.4.2.2 Business philosophy of Toyota Malawi

Toyota Malawi's business philosophy is derived from the Toyota guiding principles of the Toyota Way, Just in Time (JIT) and the *Kaizen* Principle (Toyota Global, 2018; Toyota Malawi, 2018). The Toyota Way principles are the basic values and business processes followed by employees of Toyota Malawi and are applied daily at every level of the organisation from operations to top management (Toyota Malawi, 2018). The main objective of Toyota Malawi is to ensure that the Toyota Way becomes the foundation of its corporate culture and uses the Toyota Way to keep pace, remain effective and relevant in the current volatile and turbulent business environment (Toyota Malawi, 2018).

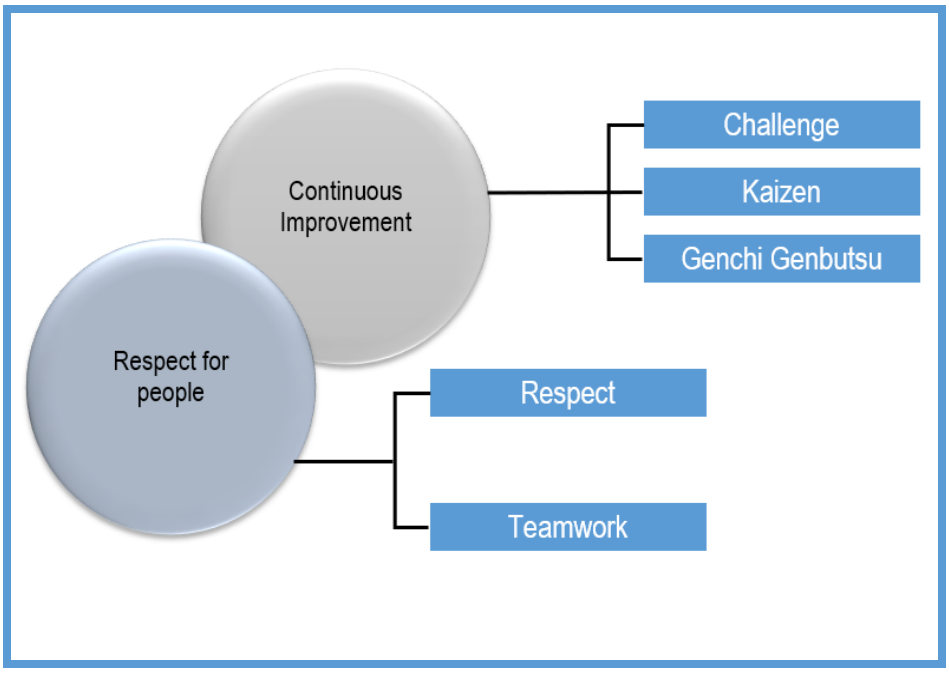
The Toyota Way is built on two pillars of continuous improvement and respect for people (Toyota Malawi, 2018; Toyota Global, 2018). The continuous improvement pillar has three sub pillars: *Kaizen*, challenge and *genchi genbutsu*, and the respect for people pillar has two sub pillars: respect and teamwork.

Toyota Malawi expects its employees to embrace challenge so that they can be able to commit and complete tasks (Toyota Malawi, 2018). The philosophy of challenge in Figure 6.6 below, helps employees to approach every challenge with passion, creativity and courage (Toyota Malawi, 2018). Toyota Malawi encourages *Kaizen* in the organisation as a way of thinking that empowers and encourages all employees to learn how small changes can have a big impact on the success of the organisational, team and individual performance and ultimately creating a favourable working environment for employees (Kuratko *et al*., 2014:39 2018; Toyota Malawi, 2018). *Genchi genbutsu* a Japanese word which literally means going to the source to see for yourself with your own eyes is important for Toyota Malawi for conducting fact-finding and ensuring that the correct information is used for decision making at every level (Toyota Malawi, 2018). All decision made in Toyota Malawi requires proof of on the ground facts and information collected from the source or *genba* a Japanese word that means workplace or work station (Toyota Malawi, 2018).

Toyota Malawi's philosophy is grounded in respect for people regardless of who they are, and their contribution to the organisation (Toyota Malawi, 2018). Furthermore, respect covers cultural backgrounds, ideas and personal beliefs (Toyota Malawi,

2018). Toyota Malawi's vision is to build a diverse and sustainable workforce that is at pace with the changing customer demands and tastes and society (Toyota Malawi, 2018). Toyota Malawi believes that a good mix of challenge, *Kaizen*, *genchi genbutsu*, and respect can create successful teamwork that embraces and understand the goals of the organisation and works together in achieving them (Toyota Malawi, 2018). The Toyota Way philosophy gives every employee an opportunity to contribute, do their best and be accountable for the results achieved by the organisation (Toyota Malawi, 2018). Teamwork helps employees to develop their knowledge, skills, engage in training, successful implementation of succession planning, career path development and knowledge sharing (Anand, 2016:27). The Toyota Way which comprises of the two pillars of continuous improvement and respect for people is shown in Figure 6.6 below.

Figure 6. 6: Toyota Way



Source: Global Toyota (2018); Toyota Malawi (2018)

The Toyota Way principle is based on not being satisfied with the current situation and always working towards improving the organisation with novel ideas and respecting all stakeholders and believing that the success of organisations stems from individual and team effort (Global Toyota, 2018).

The vision of Toyota Malawi is to become a partner of choice in Malawi and lead the way in mobility, empower communities and employees of Toyota Malawi (Toyota Malawi, 2018). Toyota Malawi's objectives are to delight and exceed its customers' expectations through innovation, safety and respect for the environment (Toyota Malawi, 2018).

Toyota Malawi has been in existence for more than 50 years and during its lifetime, it has undergone through changes of names and sustained regeneration (Morris *et al*., 2011:100). Started by Derek and Jean Friend, Toyota Malawi now employs 179 employees and has branches in strategic regions of the Republic of Malawi.

6.4.3 Toyota Tsusho Africa (TTAF)

TTAF is a company registered and is based in South Africa in Johannesburg and Durban. South Africa is a country located in the southern bottom of the African continent. TTAF is a subsidiary of TTC a Toyota Group Company (TTAF, 2018). TTAF was officially established in South Africa in 1999 as a trading and supply chain specialist and is now a multi-business organisation comprising of mobility, life and community, resource and environment capabilities (TTAF, 2018).

Initially, in 1964, TTC opened an office in Johannesburg to support its export business of machinery, equipment and Forklifts from Japan (TTAF, 2018).

In 1994, the Johannesburg office became a branch and as demand for TTC's exports increased into Africa, the branch was officially registered as a company in 1999 (TTAF, 2018). TTAF was started with a 100% shareholding from TTC (TTAF, 2018). South Africa, a geographically well-positioned country to act as a transportation hub for Africa strategically leverages TTAF to ensure optimum service delivery to its customers in Africa (TTAF, 2018). TTAF exports new vehicles manufactured in South Africa, Japan and Indonesia, Machinery, chemicals and equipment's, Toyota genuine parts and offers specialised management, technical and operational support to automotive distributors in Africa (TTAF, 2018).

TTAF is comprised of six key divisions that deliver value to their customers in unique ways and are managed by the corporate division (TTAF, 2018). The corporate

division ensures that the Automotive, Global Trade and Logistics, Machinery and Chemicals, Metals, Wheel and Tyre and New Business divisions work together like a well-oiled machine to create and deliver diverse values that leads to the success of an organisation (TTAF, 2018). The Automotive division is responsible for vehicles, parts, accessories and industrial machinery exported from South Africa to the African continent, Global Trade and Logistics is responsible for logistics, supply and demand management functions for all products that are imported and exported, Machinery and Chemicals is responsible for engineering and installation services of industrial equipment, Metals is responsible for importing steel and recycling of metal, wheel and Tyre is responsible for assembling wheels for assembly plants and the New Business division is responsible for corporate venturing and strategic entrepreneurship (Corbett *et al*., 2013:812; Morris *et al*., 2011:86; TTAF, 2018).

The combination of TTAF division's know-how, experience, capabilities generate synergies and creates new value for its customers through the following offerings (TTAF, 2018):

- Business management and marketing support.
- New car and parts distribution to distributors in Africa.
- Aftersales support to distributors in Africa.
- Global sourcing of products and materials such as steel, machinery, new car raw material and parts.
- Warehousing and storage facilities.
- Clearing and forwarding services.
- Engineering and machinery installations.
- Wheel and tyre assembly for TSAM.
- Scrap metal recycling.

6.4.3.1 Toyota Tsusho Africa history

The history of TTAF is summarised in Table 6.3 below, since its inception as an office in 1964 to date. TTAF can be described as an entrepreneurial organisation because of its continuous growth through strategic entrepreneurship and corporate venturing strategies (Morris *et al*., 2011:86). The organisation has grown from

creating one job in 1964 to create more than 300 direct jobs in South Africa and more than 2000 jobs outside the borders of South Africa (TTAF, 2018).

Table 6. 3: TTAF history

No	Event	Time
1	Established a representative office in Johannesburg to support TTC's machinery, equipment, generators and Toyota Forklift exports to South Africa.	1964
2	Toyota South Africa Motors (TSAM) handed over the responsibility of exporting South African manufactured vehicles into Africa and the representative office was changed to branch.	1994
3	TTAF was established in Johannesburg and Durban South Africa.	1999
4	Parts and accessory export to Africa started, the management team was established to support African distributors with management functions and vehicle logistics centre was established to facilitate central storage facilities for vehicles imported from Japan in route to African countries.	2001
5	Established a representative office in Nairobi, Kenya.	2002
6	Due to an increase in staff numbers, TTAF relocated to a bigger office on 138 West Street, Sandton.	2003
7	Production Support Centre, Wheel & Tyre and Green metal facilities construction begun in Durban.	2004
8	Official opening of Production Support Centre, Wheel & Tyre and Green metal facilities in Durban.	2006
9	• Relocate head office to Production Support Centre in Durban. • Opened a new Vehicle Logistics Centre facility in Southgate Business Park in Durban. • Opening of Toyoda Gosei South Africa (TGSA) airbag plant in Production Support Centre facility. • Merged with Toyota Tsusho South Africa Processing (TTSAP). • Go live of the Global Supply Chain operations.	2007
10	Established a representative office in Luanda, Angola.	2008
11	• Setup a second Production Support Centre facility. • Setup a second vehicle Logistics Centre facility.	2009
12	Established a branch Toyota Tsusho Zambia in Zambia.	2013
13	• Established a representative office in Lagos, Nigeria. • Relocate TTAF office from 138 West Street to Atrium on 5th, 6th Floor, Sandton.	2014
14	• Opening of Advics South Africa office and plant in Production Support Centre facility. • Expansion of TGSA airbag operations.	2015
15	• Merged with Campaignie Francaise de l'Afrique Occidentale (CFAO) a wholly owned subsidiary of TTC. • The Automotive division became a separate legal intensity under the name "Africa Mobility Solutions".	2018

Source: TTAF (2018)

6.4.3.2 Business philosophy of TTAF

The business philosophy of TTAF is deeply entrenched in the Toyota guiding principles of the Toyota Way, Toyota Production System (TPS), JIT, Jidoka (stop work immediately when a problem occurs) and *Kaizen* (Toyota Global, 2018). The business philosophy of TTAF is constructed on a four-level conceptual hierarchical structure with the Toyota Tsusho Group Way as the foundation of the philosophy, long term and annual action plans, vision and fundamental philosophy (TTAF, 2018). All employees are encouraged to adhere to the Toyota Tsusho Group Way through shared values that should be reflected in their actions to achieve both TTAF fundamental philosophy and vision (TTAF, 2018).

The Toyota Tsusho Group Way is founded on the three principles of *genchi genbutsu* and *gennjitsu* (on site, hands on and in touch), team power (teamwork) and *shokon* (a passion for business) as shown in Figure 6.7 below (TTAF, 2018). In addition, the Toyotsu core value emphasises on three specific areas, *genba* focus (operation areas or work station), collective force and innovator spirit (TTAF, 2018). Through embracing the Toyotsu core values, TTAF believes it can be able to reach business fields that contribute to comfortable and healthy societies (Life and Community), sustainable society (Resources and Environment) and future convenient society (Mobility) (TTAF, 2018). With the Toyotsu core values and Toyota Tsusho Group Way implemented, TTAF aims to achieve its vision of “Be the Right ONE” as shown in Figure 6.7 below. TTAF vision is to be the right one for you, us and the future (TTAF, 2018).

Figure 6. 7: TTAF vision

Source: TTAF (2018)

The right one for you is focused on safety, quality and reliability based on the current needs of *genba*, the right one for us is focused on individual capabilities, global networks and diversity to create synergetic strengths and the right one for the future searches for unique insights and capabilities to explore new possibilities for the future and sustainable society (TTAF, 2018).

6.4.3.3 TTAF value system

The value system of TTAF is fixated on people, passion and performance. TTAF strives to create a conducive environment that encourages entrepreneurship similar to the way small businesses are organised (Sahut & Peris-Ortiz, 2014:663). TTAF allows its employees to explore and exploit opportunities comparative to changes in the external environment (Goel & Jones, 2016:94). TTAF endeavours to create a great place where people are inspired to be the best they can be (TTAF, 2018). Once people have autonomy in their jobs, not scared to make mistakes or fail and have available time to be innovative and creative, they become passionate (Corbett *et al*., 2013:813). TTAF believes that passionate employees are committed in heart and mind and they can deliver delight to customers while showing pride in their work, enthusiasm and dedication in everything they do (TTAF, 2018). Once employees have a conducive work environment and are passionate about their work, TTAF aims to enhance its internal business processes to improve performance through an effective and fast-moving organisation that work together as a team and builds relationships to create further value for customers (Hamdy, 2018:426; TTAF, 2018).

Consequently, derived from TTAF's business offering, the objectives are to stay financially strong, satisfy and retain customers, improve internal business processes through lean management, Toyota Best Practices, *Kaizen*, Toyota Way and Toyota Production System and create a work environment that grows the knowledge and capabilities of its employees (Arnaboldi *et al*., 2015:10; TTAF, 2018).

TTAF a registered company in South Africa has been in existence for more than 18 years now and has grown exponentially in areas of mobility, life and community, resource and environment. TTAF now employees 305 employees in Johannesburg and Durban (TTAF, 2018).

6.4.4 Subaru Southern Africa (SSA)

SSA is an automotive organisation registered and operating in South Africa. SSA is wholly owned by TTC a Toyota Group company (Subaru Southern Africa, 2018). The word Subaru is a Japanese name that has two meanings, the first one is the name

for Pleaides, a collection of stars that form the shoulder of Taurus constellation and the other meaning is the term for unite (Subaru Southern Africa, 2018).

SSA was established in South Africa in 1992 and since its establishment it has been the sole distributor of Subaru new cars, genuine parts, vehicle sales and offers aftersales support in form of vehicle maintenance, repairs, warranties, technical support, training, customer handling and dealer support in South Africa (Subaru Southern Africa, 2018). SSA also offers driving experiences by offering training to its customers and the public in advanced driving, off-road driving and high-performance driving (Subaru Southern Africa, 2018).

SSA has a network of 18 dealerships and service centres in Southern Africa with a vehicle population of over 15000 units and employees 73 people in South Africa (Subaru Southern Africa, 2018). The dealer network is represented in six of the nine provinces of South Africa; Free State, Gauteng, Kwa Zulu Natal, Western Cape, Mpumalanga and Limpopo (Subaru Southern Africa, 2018).

6.4.4.1 SSA history

Subaru has a unique history of how it joined the automotive industry. Subaru is an automotive division of the Fiji Heavy Industry (FHI) which was established in 1953 through the merger of five organisations that were previously part of Japan's first private aircraft manufacture Nakajima Aircraft Limited (Subaru Pietermaritzburg, 2018). Subaru technology is well advanced, way ahead of other automotive manufacturing companies and uses FHI engineering of high performance horizontally opposed engines which have been incorporated in Subaru cars since 1965 (Subaru Pietermaritzburg, 2018; TTAF, 2018). Subaru Southern Africa formerly a subsidiary of Barloworld Motor was partially acquired in 2008 and eventually fully acquired by TTC in 2011 (Competition Tribunal South Africa, 2017; Subaru Johannesburg, 2018). The history of Subaru and Subaru Southern Africa is shown in Table 6.4 below.

Table 6. 4: Subaru history

No.	Event	Time
1.	Establishment of Aircraft Research Laboratory in Japan.	1917
2.	Restructured as the Nakajima Aircraft Company that designed the Zero fighters.	1931
3.	Restructured as Fuji Sangyo Company.	1946
4.	Fuji Sangyo Company split into 12 companies.	1950
5.	Four of the 12 companies and one new company merge to form FHI.	1955
6.	The new company changed its name to Subaru.	1955
7.	Launched the Subaru 360 minicar.	1958
8.	First automaker to offer front wheel drive passenger cars.	1965
9	First automaker to produce four-wheel drive passenger cars.	1972
10	Introduced the electronic continuously variable transmission.	1984
11	Subaru Southern Africa established.	1992
12	Won drivers' championship for World Rally Championship.	1995
13	Won drivers' championship for World Rally Championship.	2001
14	Won drivers' championship for World Rally Championship.	2003
15	TTC entered into a joint venture with Barloworld Motor when they acquired 50% of shares in Subaru Southern Africa.	2008
16	TTC acquired 100% shareholding of Subaru South Africa from Barloworld Motor.	2011
17	TTC acquired Subaru Bruma.	2011
18	Subaru Bruma changed its name to Subaru Johannesburg.	2011
19	Subaru Johannesburg relocated to Longmeadow Business Estate.	2014

Source: Competition Tribunal South Africa (2017); Subaru Pietermaritzburg (2018); Subaru (2018); TTAF (2018); Subaru Johannesburg (2018) and Subaru Southern Africa (2018)

6.4.4.2 Business philosophy of SSA

The business philosophy of Subaru Southern Africa is rooted in the Subaru philosophy which aims to create advanced technology on an ongoing process and offer customers with unique products that possess the highest level of quality and customer satisfaction, aiming to continuously promote congruence with people, society and environment and at the same time contribute to prosperity of society and look to the future with a global perspective (Subaru, 2018). SSA is driven by its vision of what mobility is through targeting a niche market and providing customised and high-quality products for the chosen segment (Subaru Southern Africa, 2018). By the use of the tag line "confidence in motion" the Subaru brand is about having

confidence and peace of mind to go anywhere at any time (Subaru Southern Africa, 2018).

Since it's established in South Africa in 1992, SSA has grown through its branches and dealerships to serve its customers. SSA aims to create a balance between people, society and environment while creating advanced vehicle technology on an ongoing process for its customers.

6.4.5 Toyota Zambia

Toyota Zambia is an automotive organisation registered and operating in Zambia, a country located in the southern part of the Africa continent. It is a subsidiary of the CFAO group of companies affiliated to the TTC group (Toyota Zambia, 2017). Toyota Zambia was founded in 1963 as a member of the Lonrho group of companies (Toyota Zambia, 2017). Since its establishment, Toyota Zambia has grown to become a household name of the automotive industry in Zambia and has gained trust from its stakeholders (Toyota Zambia, 2017). In 2001, Toyota Zambia was acquired by TTC a Toyota Group Company and the cash injection from TTC has so far accelerated the growth of Toyota Zambia significantly (Toyota Zambia, 2017).

Toyota Zambia is the official distributor and dealer for Toyota and Hino vehicles in Zambia (Toyota Zambia, 2017). Toyota Zambia imports new cars and genuine parts for consumption in the Zambian market and provides aftersales support such as maintenance, repair, technical support, warranty support and technical training (Toyota Zambia, 2017). Toyota Zambia has a network of 6 branches in Livingstone, Kitwe, Solwezi and Lusaka (Toyota Zambia, 2017).

6.4.5.1 Toyota Zambia history

Toyota Zambia was initially, established as Mobile Motors in 1963 as a member of the Lonrho group of companies (Toyota Zambia, 2017). In 1994, Mobile Motors was licensed to become the distributor of Toyota vehicles in Zambia (Toyota Zambia, 2017). In line with the new milestone, Mobile Motors changed its name to Toyota Zambia in 1994 (Toyota Zambia, 2017). Table 6.5 below shows the summary of Toyota Zambia’s history.

Table 6. 5: Toyota Zambia history

No.	Event	Time
1.	Toyota Zambia was incorporated as Mobile Motors a member of the Lonrho group of companies.	1963
2.	Mobile Motors became a fully licensed distributor of Toyota vehicles and parts in Zambia.	1994
3	Mobile Motors officially changed its name to Toyota Zambia.	1994
4	Lonrho entered into a joint venture with TTC.	1997
5	TTC acquired 100% of Toyota Zambia shareholding.	2001
6	Established a new branch in Livingstone.	2010
7	Established a new world-class branch in Nangwenya Lusaka.	2013
8	Established a new branch in Solwezi. Acquired by CFAO a TTC group company.	2017

Source: Toyota Zambia (2017)

6.4.5.2 Business philosophy of Toyota Zambia

The business philosophy of Toyota Zambia is entrenched in the Toyota guiding principle of the Toyota Way and *Kaizen* (Toyota Global, 2018). Toyota Zambia's vision is to reward their customers with a smile and exceed their expectation by leading the way of becoming a professionally managed organisation that is vibrant, successful, trusted and respected by all stakeholder (Toyota Zambia, 2017). Toyota Zambia's vision is built on a house model shown in Figure 6.8 below. The ultimate goal of Toyota Zambia is to reward its customers with a smile and exceed their expectations (Toyota Zambia, 2017). The house model is constructed on three levels: the values represented by the foundation, supporting process represented by the walls and the vision represented by the roof of the house model (Toyota Zambia, 2017). The foundation of Toyota Zambia's house model is grounded on the following values as shown below and in Figure 6.8:

- **Rectitude** – It is the power of deciding for the right reasons with moral obligations without uncertainty and prioritising the needs of others, be it employees or customers (Aswani *et al*., 2016:1584; Niven, 2014:5; Toyota Zambia, 2017).

- **Valour** – This is the courage to do what is right calmly and methodically for all stakeholders (Toyota Zambia, 2017).
- **Benevolence** – Toyota Zambia philosophy is built on the Toyota Way principle of respect for people (Toyota Global, 2017). Benevolence is a value aimed at respecting others (Toyota Zambia, 2017).
- **Honesty** – The value of honesty encourages all Toyota Zambia employees to be honesty in their thoughts and deeds and maintain open communication with all stakeholders (Toyota Zambia, 2017).
- **Honour** – All employees are encouraged to portray a good image of Toyota through acceptable behaviours, manners and morals (Toyota Zambia, 2017).
- **Loyalty** - The value of loyalty encourages employees to be loyalty to Toyota, customers, family and all stakeholders (Toyota Zambia, 2017).
- **Respect** – The value of respect encourages all Toyota Zambia employees to respect institutions, people, and all things in nature irrespective of origin, race, culture, beliefs, language and constantly seek ways to develop potential in all people fairly and constantly (Toyota Zambia, 2017).
- **Anzen** – Anzen is a Japanese word that means safety and Toyota Zambia aims to create a safe working environment for its employees, customers and a business environment that meets and exceeds the local government and Toyota group requirements (Toyota Zambia, 2017).

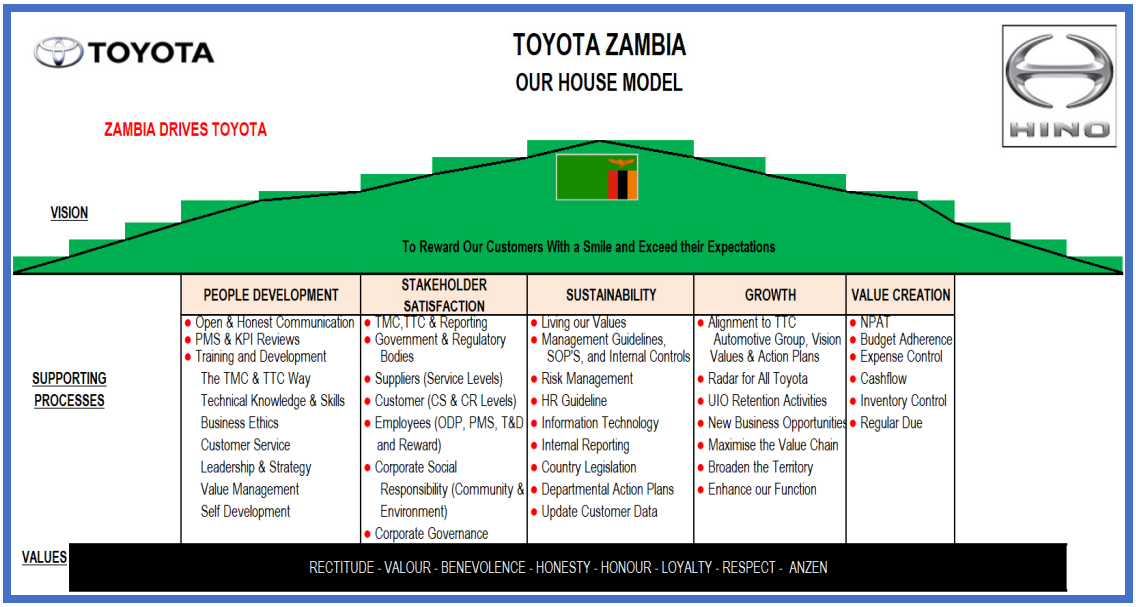
The values of Toyota Zambia are the fundamental variables that develop supporting processes of the organisation. The supporting process of Toyota Zambia is a combination of financial and non-financial perspectives of the business (Anand, 2016:94; Dobrovic *et al*., 2018:41). The supporting processes of Toyota Zambia house model include people development, stakeholder satisfaction, sustainability, growth and value creation (Dobrovic *et al*., 2018:41; Toyota Zambia, 2018). Supporting processes are the success factors identified by Toyota Zambia as the key ingredients to the success of Toyota Zambia (Marais *et al*., 2017:2; Dobrovic *et al*., 2018:41).

People development is driven by variables such as open communication, performance management, training and development (Toyota Zambia, 2017). Stakeholder satisfaction is driven by factors such as customer satisfaction, employee

satisfaction, corporate social responsibility and corporate governance (Toyota Zambia, 2017). Sustainability focuses on reinforcement of values, management of standard operating procedure, risk management and information technology (Toyota Zambia, 2017). Growth is based on identifying a new business opportunity, maximising the value chain and business expansion (Toyota Zambia, 2017).

Toyota Zambia nurtures corporate venturing which involves the creation of new business opportunities within or outside the organisation (Corbett *et al*., 2013:812; Morris *et al*., 2011:86) and strategic entrepreneurship that involves concurrent opportunity-seeking and competitive advantage seeking behaviours such as strategic renewal and sustained regeneration (Morris *et al*., 2011:97). Value creation focuses on the financial aspects of the business such as net profit after tax, budget controls, expense controls and due diligence compliance (Toyota Zambia, 2017; Albuhisi & Abdallah, 2018:1363). Toyota Zambia believes that a good mixture of values and supporting process can reward its customers with a smile and exceed their expectations as shown below in Figure 6.8 (Toyota Zambia, 2017).

Figure 6. 8: Toyota Zambia business model



Source: Toyota Zambia (2017)

Leadership is a key factor in achieving the vision of Toyota Zambia (Anand, 2016:34). Effective leadership can help to reinforce the continuous implementation of values and supporting processes which can create a brand-new culture that can help

Toyota Zambia achieve its vision of rewarding its customers with a smile and exceed their expectations (Anand, 2016:34).

Toyota Zambia has been existing in Zambia for more than 50 years now and is expanding its footprint through establishing branches to support its customers far from Lusaka the capital city of Zambia. Toyota Zambia aims to achieve its vision through the implementation of its organisational values and supporting processes outlined in Figure 6.8 above.

6.4.6 Toyota Zimbabwe

Toyota Zimbabwe is a company registered and is operating in Zimbabwe, a country located in the southern part of the Africa continent. Toyota Zimbabwe is a subsidiary of the CFAO group of companies affiliated to the TTC group (Toyota Zimbabwe, 2018). Toyota Zimbabwe was founded by Mr Derek Friend as Mobile Motors in 1961 and in 1994 after acquiring the rights to distribute Toyota products in Zimbabwe changed its name to Toyota Zimbabwe (Toyota Zimbabwe, 2018). In 2001 Toyota Zimbabwe became a subsidiary of the Toyota Group Company when it was acquired by TTC (Toyota Zimbabwe, 2018:2). Toyota Zimbabwe is the official distributor of Toyota new cars, genuine parts and offers aftersales support in form of vehicle maintenance, warranties, technical support, customer complain handling, technical training and dealer support (Toyota Zimbabwe, 2018). Toyota Zimbabwe is also an authorised sub-distributor of Hino Motors Limited and a dealer of Subaru vehicles in Zimbabwe (Toyota Zimbabwe, 2018). Toyota Zimbabwe owns two branches in Harare and Bulawayo and manages a dealer network of nine in Harare, Masvingo, Mutare, Gweru, Kadoma and Chiredzi (Toyota Zimbabwe, 2018).

6.4.6.1 Toyota Zimbabwe history

Toyota Zimbabwe was initially, established as a small business by Mr Derek Friend to sell fuel and service vehicles in Harare in 1961 (Toyota Zimbabwe, 2018). Since its establishment Toyota Zimbabwe has grown to become one of the biggest and well-respected organisations in Zimbabwe (Herald, 2018). Table 6.6 below summaries the history of Toyota Zimbabwe since its establishment in 1961.

Table 6. 6: Toyota Zimbabwe history

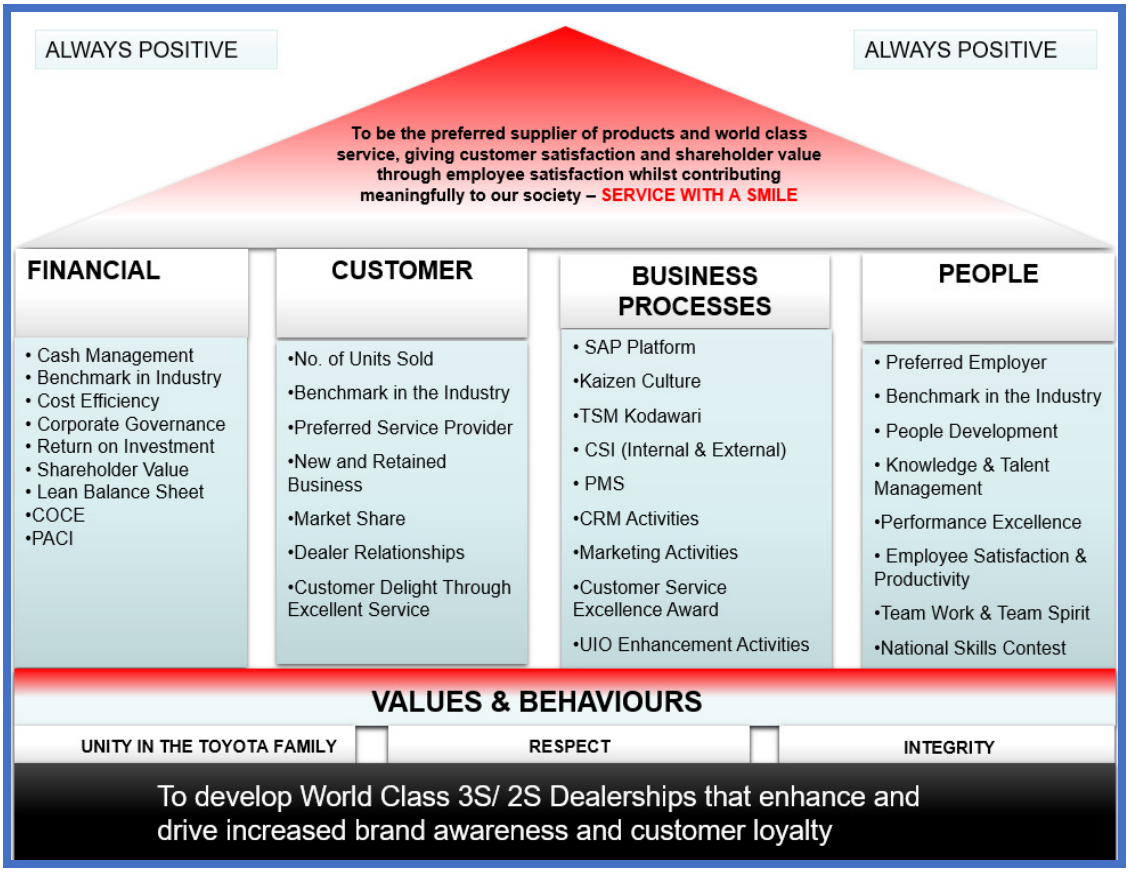
No.	Event	Time
1.	Mobile Motors was established.	1961
2.	Mobile Motors became a member of Lonrho group of companies.	1964
3.	Acquired license to distribute Toyota products in Zimbabwe.	1994
4.	Changed name from Mobile Motors to Toyota Zimbabwe.	1994
5.	TTC acquired 100% shareholding of Toyota Zimbabwe.	2001
6.	Toyota Zimbabwe acquired 100% shareholding in Detroit Motors a dealer from Bulawayo.	2006
7.	Detroit Motors changed its name to Bulawayo Toyota.	2006
8.	Merged Harare Toyota and Msasa branches.	2018
9	Relocated Msasa branch from No. 1 Robert Drive and Harare Toyota Branch from No. 153 Robert Drive to Mutare Road in Msasa to form a single mega branch. Acquired by CFAO a TTC group company.	2018

Source: Toyota Zimbabwe (2018); Herald (2018)

6.4.6.2 Business philosophy of Toyota Zimbabwe

The business philosophy of Toyota Zimbabwe is embodied in the Toyota guiding principles of the Toyota Way, JIT and *Kaizen* (Toyota Global, 2018). Toyota Zimbabwe's principle is to be "Always Positive" with a vision of becoming the preferred supplier of products and world-class services, giving customer satisfaction and shareholder value through employee satisfaction whilst contributing meaningfully to the society (Toyota Zimbabwe, 2018). The principles of Toyota Zimbabwe are built on a house model shown in Figure 6.9 below. Starting from the bottom of the house model, the main objective is to establish world-class dealerships in Zimbabwe that enhance and drive increased brand awareness and customer loyalty (Toyota Zimbabwe, 2018). Toyota Zimbabwe focuses on three key areas that strengthen the base of its house model, unity of the Toyota family, respect and integrity which are expected to cultivate values and behaviours of its employees (Toyota Zimbabwe, 2018). With the values and behaviours aligned, Toyota Zimbabwe expects to achieve success in the perspectives of financial, customer, business process and people (Toyota Zimbabwe, 2018; Oliveira *et al*., 2018:2589; Arnaboldi *et al*., 2015:9).

Figure 6. 9: Toyota Zimbabwe business model



Source: Toyota Zimbabwe (2018)

In a financial perspective, Toyota Zimbabwe focuses on areas of cash management, cost efficiency, corporate governance, return on investment, shareholder value and lean balance sheet (Oliveira *et al.*, 2018:2591). The customer perspective area focuses on benchmarking in the industry, customer delight, dealer relationships, customer satisfaction and retention (Oliveira *et al.*, 2018:2591). The customer perspective is an aspect that measures the value created by Toyota Zimbabwe for the customer (Oliveira *et al.*, 2018:2591). The business processes measure internal processes for Toyota Zimbabwe that are responsible for creating and delivering the final product to the customer such as customer service excellence award program, Kodawari program used to monitor Toyota standards and sustainment and *Kaizen* of internal processes (Niven, 2014:118). While the people perspective focuses on promoting Toyota Zimbabwe as the preferred employer, people development, teamwork and employee satisfaction (Toyota Zimbabwe, 2018). The people aspect

in the house model in Figure 6.9, is the learning and growth perspective, which is the supplier of enablers that are intangible in nature to the financial, customer and business process pillars of the house model (Niven, 2014:6). The roof of the house model in Figure 6.9 aims to make Toyota Zimbabwe the preferred supplier of products and world-class service, providing customer satisfaction and shareholder value through employee satisfaction while contributing meaningfully to the society (Toyota Zimbabwe, 2018).

Toyota Zimbabwe was established more than 50 years ago in Zimbabwe and has survived the harsh political and economic conditions that started in the early 2000s (Toyota Zimbabwe, 2018; Thebe & Ncube, 2015:128). According to the World Bank Group - Zimbabwe (2018:4), doing business report, Zimbabwe was ranked 159 out of 190 countries surveyed ranking Zimbabwe the most difficult country to do business amongst the five countries in the study. Despite the economic and political challenges Toyota Zimbabwe has managed to survive and succeed in areas of people, process, customer and financial (Toyota Zimbabwe, 2018). Toyota Zimbabwe directly employees 181 people and has managed to sustain its dealer network through the supply of parts and new vehicles (Toyota Zimbabwe, 2018; TTAF, 2018).

6.5 SUMMARY

Even though the automotive industry was established more than a century ago, it is still relevant to the requirements and needs of our modern society (Waldchen, 2014:6). The automotive industry is partially responsible for accelerating globalisation through shortening distances and helping in the logistics of people and products. Besides, the advantages of the automotive industry, it also has a noticeable effect on economic consequences and cultural status (Wedeniwski, 2015:v). In 2008, the automotive industry suffered a huge decline in vehicles sales due to the economic meltdown experienced during this period which resulted in job losses and manufacturing plant closures (Nieuwenhuis & Wells, 2015:19). In addition, the automotive industry has recently been facing extreme pressures from environment regulators and pressure groups which have arm-twisted the automotive industry to consider climate changes as parts of its industry strategy (Damert & Baumgartner, 2018:265). On the other side, these pressures have in another way

helped the automotive industry to reinvent itself in areas of technology, social, environmental, regulation as well as exploration and exploitation of new opportunities (Nieuwenhuis & Wells, 2015:2).

Sub-Sahara Africa the focus area of this study was not spared by these challenges and was the most affected by the 2008 economic meltdown. Sub-Sahara Africa has a population of almost 950 million people most of whom live in poverty with poor infrastructure and is the most exposed to climate changes (Chakamera & Alagidede, 2018:945). The major obstacle identified from Sub-Sahara African as the limiting factor for economic growth and development is corruption and red tape (Chirambo, 2018:600). Even so, the current outlook of Sub-Sahara African countries shows an increased income where more people are slowly being elevated to the middle class (Thomas, 2018:15).

This study focused on six automotive companies: Toyota Kenya, Toyota Malawi, Toyota Tsusho Africa, Subaru Southern Africa, Toyota Zambia and Toyota Zimbabwe that are registered and operated in five different countries from Sub-Sahara Africa; Kenya, Malawi, South Africa, Zambia and Zimbabwe. All the companies in this study have been in existence for more than 15 years, where some of which have been in existence for more than half a century e.g. Toyota Kenya, Toyota Zambia and Toyota Zimbabwe. All the organisations in this study show in their visions or business philosophies that they have a clear view of their success factors where the success factors are clearly highlighted in their plans or statements e.g. Toyota Zimbabwe in Figure 6.9 above, clearly shows that its success factors are focused on financial, customer, business processes and people (Arnaboldi *et al*., 2015:9). The common success factors for all the six organisations cover a combination of financial and non-financial perspectives such as the customers, employees, continuously developing their internal processes and finance as the measure of success (Arnaboldi *et al*., 2015:9). However, the drivers of these success factors are not highlighted anywhere in the visions or business philosophies. All the six organisations in this study have a vision, business philosophy and strategy they pursue. Furthermore, based on the history of the organisations in the study, they have experienced some sort of corporate venturing and strategic entrepreneurship in one form or another (Morris *et al*., 2011:86).

The objective of chapter 6 was to highlight the history of the automotive industry, its importance and the challenges it's facing to survive in the contemporary business environment that is highly turbulent and hyper-competitive. The background and current business condition of the automotive industry provided a base to introduce the six-automotive organisation, key focus for this study, their background and business philosophies. The knowledge derived from the six automotive companies was used as the starting point for understanding the study results. At this stage, the literature review was concluded in preparation for the measurement instrument development for this study.

Chapter 7 is fixated on the construction of the measurement instrument and conceptual framework used in this study. The chapter presents an overview of the concepts of SEM, types of models in SEM, five stages used when developing models in SEM, unidimensional measurement instrument, validity and reliability, the research question, objectives, conceptual framework, hypothesis of this study and construction of the measurement instrument.

CHAPTER 7: RESEARCH INSTRUMENT CONSTRUCTION

7.1 INTRODUCTION

The literature review from Chapters 2, 3, 4, 5 and 6 introduced the concepts of entrepreneurship, corporate entrepreneurship, entrepreneurial leadership, organisational success factors and the nature of the automotive industry in Sub-Sahara Africa. Entrepreneurship was introduced to provide a solid grounding of corporate entrepreneurship definitions, the various forms it takes and the models that have been used to explain corporate entrepreneurship.

The focus of the literature review was to explain the condition of the internal environment of an established organisation, the leadership required to manage this internal environment and organisational antecedents as key internal environmental factors that are required to create a conducive environment that can lead to the success of organisations. Unlike external environmental factors which are beyond leadership control, internal environmental factors are more controllable. Furthermore, Chapter 5 explained the literature review on success factors identified by organisations as key performance indicators. Success factors were summarised in line with the four perspectives of the Balanced Scorecard, namely financial, customer, internal business process and learning and growth.

The objectives of the literature review in Chapters 2, 3, 4 and 5 were to introduce antecedents used to understand the relationship between corporate entrepreneurship and the success of organisations. Chapter 6 focused on introducing and explaining the backgrounds of the organisations that were selected to participate in the study.

Chapter 7 explains the construction of the measurement instrument and conceptual framework used in this study. An overview of the concepts of SEM, types of models in SEM, five stages used when developing models in SEM, unidimensional measurement instrument, validity, reliability, the research question, objectives, conceptual framework and hypothesis of this study are explained in more detail. After illuminating all the SEM elements, Chapter 7 provides a detailed review and

explanation of how the measurement instrument for this study was developed and constructed.

7.2 OVERVIEW OF STRUCTURAL EQUATION MODELING (SEM)

In 1918, a biometrician by the name of Wright was accredited with the development of path analysis, a statistical method to analyse genetic theory in biology and since then, the use of SEM has increased in the fields of economics, psychology, sociology and education (Khine *et al*., 2013:3).

The advancement and integration of algorithms in software such as Linear structural relations (LISREL), analysis of a moment structures (AMOS), Mx and Mplus led to an increase in the accessibility of SEM to be applied by researchers who found SEM as an appropriate method for addressing a variety of research questions (Khine *et al*., 2013:3). Therefore, the continuous combination of methodological developments and perfections in several SEM interfaces software e.g. Mplus, a powerful and popular SEM package, has contributed to the diverse use of SEM (Khine *et al*., 2013:3; Cheung, 2015:3).

SEM has maintained its popularity, even though it has undergone refinement and fine-tuning (Khine *et al*., 2013:3). SEM was identified as a technique for this study because it is a flexible method to test proposed models (Cheung, 2015:2). SEM can combine several statistical techniques into a single framework and can specify the proposed model in the form of path diagrams, equations or matrices (Cheung, 2015:3). In addition, because SEM allows hypothesis derived from theory to be tested using the development of models, statistical procedures and computer algorithms for structural equation modelling, SEM has revolutionised the way in which inferences are made from observational data (Cheung, 2015:3).

In this regard, SEM has proven to be the most reliable statistical approach for testing hypotheses about the relationships among latent and observed variables (Khine *et al*., 2013:3).

7.2.1 Definition of SEM

Covariance structure analysis and correlation analysis structure are common names for several related statistical techniques that are associated with SEM (Cheung, 2015:14). In addition, multivariant techniques like regression analysis, correlation analysis, analysis of variance, factor analysis and multivariate analysis of variance are all classified as special models of SEM (Cheung, 2015:14). Thus, SEM can simply be defined as a statistical technique to model the first moment of data that represents the mean structure and the second moment of data that represents the covariance matrix of variables when the data is multivariate normal (Cheung, 2015:14).

According to Ullman and Bentler (2013:661), "SEM is the collection of statistical techniques that allows a set of relationships between one or more independent variable or dependent variables, either continuous or discrete, to be examined". It is a confirmatory process that provides wide-ranging means for validating the measurement model of latent constructs (Awang, 2015:54). The validation process is called confirmatory factor analysis and is used to examine the unidimensionality, validity and reliability of latent constructs (Awang, 2015:54).

SEM is a statistical technique for testing hypotheses about relationships among observed and latent variables (Khine *et al*., 2013:3). Observed variables can be defined as indicator variables or manifest variables and latent variables are described as unobserved variables or factors (Khine *et al*., 2013:4). For instance, latent variables in psychology are factors such as self-confidence and depression. Therefore, independent and dependent variables are used as measured variables or factors in SEM (Ullman & Bentler, 2013:661).

SEM can also do causal modelling, causal analysis, analysis of covariance structures, simultaneous equations modelling, path analysis and confirmatory factor analysis (Ullman & Bentler, 2013:661). Since SEM integrates several statistical techniques into a single framework, it is regarded as a flexible modelling technique that is used to test proposed models (Cheung, 2015:2) and takes a confirmatory or hypothesis testing approach to the analysis of theory relating to some phenomenon

(Khine *et al*., 2013:4). The following are some of the benefits of using SEM as a modelling tool in comparison to other multivariant techniques:

- SEM comprises of SEM, general linear model, meta-analysis and is more appreciated by users because it contains the similarities and differences of techniques under the same SEM framework (Cheung, 2015:6).
- SEM can test construct level hypothesis at the construct level, while other statistical methods can only test constructs level hypothesis at the level of measured variables.
- In SEM, the reliability of measurement can be clearly accounted for within the analysis by estimating and removing the measurement errors, thereby enabling SEM to easily examine complex relationships (Ullman & Bentler, 2013:663). Furthermore, SEM is the only analysis that allows complete and simultaneous testing of relationships in complex and multidimensional phenomena (Ullman & Bentler, 2013:663).
- The SEM technique can incorporate latent and observed variables while other multivariant techniques are only able to use observed measurements (Khine *et al*., 2013:4).
- SEM can model multivariant relationships and estimate direct and indirect effects of variables (Khine *et al*., 2013:4).
- SEM-based meta-analysis possesses research tools that can address research questions in meta-analysis such as univariate, multivariate and three-level meta-analysis that can manage missing values in moderators in the same SEM framework (Cheung, 2015:2; Ullman & Bentler, 2013:661). The confirmatory methodology to data analysis can specify relationships among variables a priori, while other multivariant techniques provide only descriptive results, thereby making hypothesis testing a difficult task to conduct (Khine *et al*., 2013:4).
- SEM methodology can provide clear estimates of error variance parameters while other multivariant techniques are not suitable for either correcting or assessing measurement errors, for instance, regression analysis is not capable of measuring the potential errors in all the independent variables included in the model and can lead to potential incorrect results due to inclusion of errors (Khine *et al*., 2013:4).

The above merits of SEM are the reasons why SEM techniques were preferred for this study. This study focused on developing a measurement instrument that measures or assesses the relationship between the internal environment of an organisation and organisational success factors.

7.2.2 Types of models in SEM

SEM techniques comprise of several models, but the most common models available in the literature are path analytic models, confirmatory factor analysis models, structural regression models and latent change models (Khine *et al*., 2013:4).

Path analytic models form an important aspect of the historical development of SEM and use the same underlying processes of model testing and fitting as other SEM models (Khine *et al*., 2013:5). Path analytic models focus only on observed variables because the model is conceptualised on observed variables (Khine *et al*., 2013:5). Path analytic models use path diagrams that are important to SEM because they afford researchers an opportunity to visualise the hypothesised set of relationships in the model (Ullman & Bentler, 2013:661).

The path analytic model diagrams have the ability to explicitly clarify the ideas about relationships among variables and can be translated into the equations required for the analysis (Ullman & Bentler, 2013:661). Confirmatory factor analysis models are used to explain patterns of interrelationships among several constructs and no specific directional relationships are assumed between the constructs because they are correlated with each other (Khine *et al*., 2013:5). Individual constructs in the confirmatory factor analysis model are measured by a set of observed variables (Khine *et al*., 2013:5).

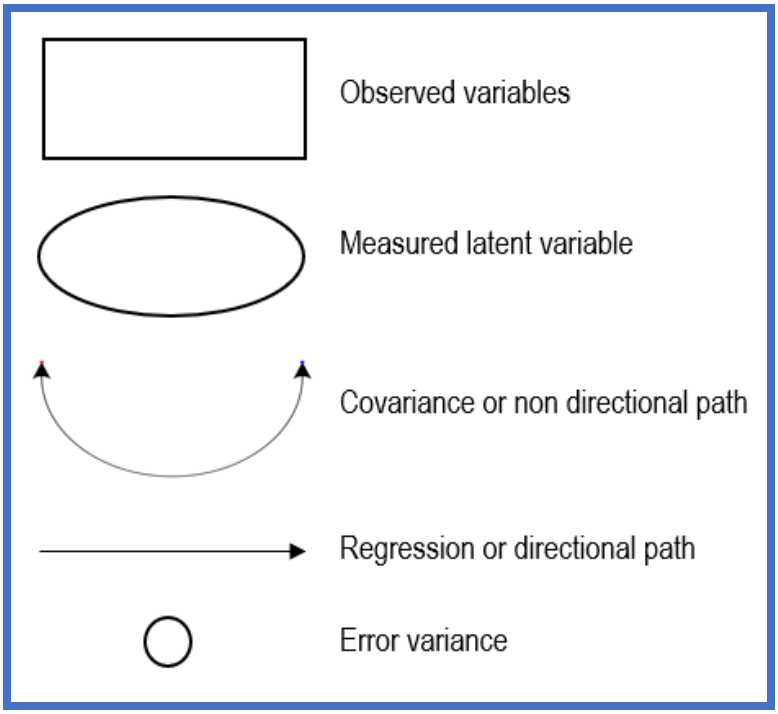
Built on top of the confirmatory factor analysis model is the structural regression model that suggests a specific explanatory relationship of latent regression among constructs and is used to test or disconfirm proposed theories that involve explanatory relationships among several latent variables (Khine *et al*., 2013:5). On the other hand, latent change models are used to measure patterns of growth or decline or both in longitudinal data (Khine *et al*., 2013:5). Latent change models are

helpful for researchers to analyse both intra and inter individual differences in patterns of change (Khine *et al*., 2013:5). Latent change models are used to understand change over a period (Khine *et al*., 2013:5).

Path diagrams have popularised SEM because they have the ability to specify models graphically and can also be used to represent mathematical models in a visual and simple form (Cheung, 2015:15). Graphical SEM path diagrams are suitable devices to represent mathematical models and are developed using several conversions, e.g. measured variables, also known as observed variables, indicators or manifest variables. They are represented by squares or rectangles and factors that are also known as measured latent variables, constructs, or unobserved variables which are represented by circles or oval path diagrams, as shown in Figure 7.1 below (Ullman & Bentler, 2013:661).

Lines in the path diagrams indicate relationships between variables and a lack of lines between variables infers that no direct relationship has been hypothesised between variables (Khine *et al*., 2013:4; Ullman & Bentler, 2013:661). A hypothesised direct relationship between two variables is represented by a line with one arrow and the variable with the arrow pointing to it is a dependent variable, while unanalysed relationships are represented by a line with a two-headed arrow that indicates covariance between the two variables with no implied direction of effect (Ullman & Bentler, 2013:661; Khine *et al*., 2013:4). The error variance is indicated by a small circle as shown in Figure 7.1 below (Ullman & Bentler, 2013:661; Khine *et al*., 2013:4).

Figure 7.1: Path diagram notations



Source: Ullman and Bentler (2013:661); Khine *et al*. (2013:4)

Direct and indirect effects are the two types of effects that are estimated in SEM (Khine *et al*., 2013:7). Direct effects are represented by a single straight arrow that shows the relationship between one latent variable and another (Khine *et al*., 2013:7), while indirect effect represents the relationship between an independent latent variable (exogenous variable) and a dependent variable (endogenous variable) (Khine *et al*., 2013:7). The main function of the arrows used in the path diagrams is to show directionality and they do not infer with causality (Khine *et al*., 2013:7).

7.3 FIVE STAGES OF SEM

The consensus in the SEM literature among theorists and practitioners is that there are five stages involved in the process of modelling or testing SEM models, namely model specification, model identification, model estimation, model evaluation and model modification (Ullman & Bentler, 2013:663; Khine *et al*., 2013:8).

7.3.1 Model specification

Specifying the particular set of hypotheses to be tested in the model is the first step in the modelling process and is done through a diagram (Ullman & Bentler, 2013:663). At this stage, the hypothesised relationships are specified among observed and latent variables that exist or do not exist in the model and researchers can determine relationships that vary, are fixed to a constant as well as the ones that are null (Khine *et al*., 2013:8). More so, relationships that are not specified are considered to be zero (Khine *et al*., 2013:8). Generally, relationships that are not supported may cause misrepresentation of the results (Khine *et al*., 2013:8).

Paths or parameters represent relationships among variables and such relationships can be set to be fixed, free or constrained parameters (Khine *et al*., 2013:8). Fixed parameters usually indicate no relationship between variables and are fixed at zero because they are not estimated from data (Khine *et al*., 2013:9). In such a case, no path is drawn in the SEM diagram (Khine *et al*., 2013:9). Free parameters are considered to be non-zero because they are drawn from observed data (Khine *et al*., 2013:9). Finally, constrained parameters have a specified value, e.g. equal to 1.0 or equal to another parameter in the model that requires it to be projected (Khine *et al*., 2013:9). Specifying the parameters at this stage can help the researcher to determine the parameters to be used to compare the theorised diagram with the sample population variance and covariance matrix in testing the fit of the SEM model and the choice of parameters is determined by the literature (Khine *et al*., 2013:9).

Directional effects, variance and covariance are the three types of parameters that need to be specified (Khine *et al*., 2013:9). Relationships between observed variables and latent variables and path coefficients relationships between latent variables and other latent variables are indicated by directional effects, variances are estimated for independent latent variables and covariances are a non-directional connection among independent latent variables that exist when two factors are correlated (Khine *et al*., 2013:9).

7.3.2 Model identification

The choice of the model and specification of fixed, constrained and free parameters will determine whether a unique value of each free parameter can be obtained from observed data (Khine *et al*., 2013:9). A model is determined as identified when there is a unique numerical figure for each parameter in the model, however, if there is no unique numerical figure, the model is considered as not identified (Ullman & Bentler, 2013:665). The following are the three model identification types (Khine *et al*., 2013:9);

- The model can be considered as 'just identified' if the parameters are determined with just enough information (Khine *et al*., 2013:9).
- The model can be considered as 'over-identified' if the parameters are determined with more than enough information, more data points than parameters to be estimated and more than one way of estimating a parameter (Khine *et al*., 2013:9). Over identified models provide necessary conditions to proceed with the analysis (Ullman & Bentler, 2013:665).
- The model can be considered as 'under-identified' if there are one or more parameters that are not identifiable due to a lack of information or fewer data points to be estimated (Khine *et al*., 2013:9). In such a case the number of parameters might need to be reduced by fixing, constraining or deleting some of the parameters (Ullman & Bentler, 2013:665).

Over identified models can be estimated and help researchers to test the hypothesis about relationships between variables. Therefore, it is important that the difference between the number of elements in the correlation matrix and the number of parameters to be estimated is a positive figure (degree of freedom) as in the formula below where *p* is the number of observed variables (Khine *et al*., 2013:10);

$$[p\,(p+1)]/2$$

Since the phases of model specification and model identification are conducted before data collection it is important to deal with issues relating to sample size and data screening before proceeding to model estimation (Khine *et al*., 2013:10).

7.3.2.1 Sample size

SEM is based on covariances with parameter estimates and chi-square tests of fit that are too sensitive to sample size (Ullman & Bentler, 2013:666). SEM is generally a large sample procedure because it is based on covariances that are less stable when estimated from a small sample size (Ullman & Bentler, 2013:666). Even though there are four requirements desirable to decide the sample size: model misspecification, sample size, a departure from normality and estimation procedure, there is no clear agreement among researchers on how to determine sample size (Khine *et al*., 2013:10). Model misspecification is referred to as the degree to which the hypothesised model suffers from specification errors such as oversight of important variables in the model (Khine *et al*., 2013:10).

Sample size affects the aptitude of the model to be correctly estimated and identification of specification errors (Khine *et al*., 2013:10). In cases where specification error issues are identified it is recommended to collect data from a bigger sample size above what was originally required (Khine *et al*., 2013:10). According to Raykov and Widaman (1995), the minimum sample size should be greater than the elements in the correlation matrix, i.e. ten participants per parameter estimated. Therefore, data that manifest nonnormality characteristics, the ratio of participants to parameter must be increased to 15, to reduce sampling errors on the estimation procedure (Khine *et al*., 2013:10).

The common estimation procedure used in SEM is the Maximum Likelihood Estimation (MLE) which recommends that the minimum sample size to be used must be between 100 to 150 participants (Khine *et al*., 2013:10). The MLE increases its sensitivity to detect differences among the data as the sample size increases (Khine *et al*., 2013:10). Furthermore, Hoelter's critical '**N'** is usually used in most SEM software i.e. AMOS as the standard sample size that would make the obtained fit measured by x^2 significant at the stated level of significance (Khine *et al*., 2013:11).

7.3.2.2 Multicollinearity

Quite often researchers use related measures as indicators of a construct and when these measures are closely related, they increase the biasness of statistical results

(Khine *et al*., 2013:11). Therefore, multicollinearity is when measured variables are too closely related (Khine *et al*., 2013:11). Computing the bivariate correlation for all measured variables can help identify multicollinearity and any pair of variables with a correlation higher than $r = 0.85$ must be considered as a potential problem, thus one or two of the variables should be removed from the analysis (Khine *et al*., 2013:11).

7.3.2.3 Multivariate normality

Multivariate distribution is normally distributed, univariate distribution is the normal and joint distribution of any pair of the variables is bivariate normal (Khine *et al*., 2013:11). Any attempts to disturb these assumptions may affect the accuracy of statistical tests because the commonly used method in SEM assumes that the multivariate distribution is normally distributed (Khine *et al*., 2013:11). Mardia's normalised multivariate kurtosis value is used to examine multivariate normality and is conducted by comparing the Mardia's coefficient for the data understudy to a value computed based on the formula $\boldsymbol{p(p+2)}$ (Khine *et al*., 2013:11). In the formula, p is equal to the observed variables in the model (Khine *et al*., 2013:11). The data can be considered multivariate normal when the value of the Mardia's coefficient is lower than the value obtained from the formula (Khine *et al*., 2013:11).

7.3.2.4 Missing data

Missing data imputation is usually an important aspect of SEM because SEM can amplify missing data issues due to large numbers of measured variables involved (Ullman & Bentler, 2013:667). According to Khine *et al*. (2013:11), missing data is usually a factor that is beyond the researcher's control and depends on the extent and pattern of the missing data. Missing data issues can be resolved if the missing data happen in a non-random pattern and is greater than 10 per cent of the overall data (Khine *et al*., 2013:11).

The missing data can be classified into two categories: Missing At Random (MAR) and Missing Completely At Random (MCAR) (Khine *et al*., 2013:11). On one hand, the missing data in MAR and MCAR categories is not systematic, hence can be ignored (Khine *et al*., 2013:11). SEM uses procedures such as listwise deletion, pairwise deletion and multiple imputations to resolve issues relating to MAR and

MCAR (Khine *et al*., 2013:12). On the other hand, a systematic loss of data, known as Not Missing At Random (NMAR) is the one that creates problems for researchers (Khine *et al*., 2013:11). NMAR occurs when participants did not provide data on the interest construct because they have few interests or chose to skip the items in the questionnaire (Khine *et al*., 2013:12).

7.3.3 Model estimation

The role of model estimation is to determine the value of the unknown parameters and the error linked to the estimated value (Khine *et al*., 2013:12). Once the model is specified, population parameters are estimated with an objective of reducing the difference between the observed and estimated population covariance matrices (Ullman & Bentler, 2013:668). The main objective is to produce $\boldsymbol{\Sigma(\theta)}$ (estimated model-implied covariance matrix) that is similar to '**S'** (estimated sample covariance matrix) of the observed variables with residual matrix and being as small as possible (**S -** $\boldsymbol{\Sigma(\theta)}$) (Khine *et al*., 2013:12). Therefore, when the formula **S -** $\boldsymbol{\Sigma(\theta)} = 0$, $\boldsymbol{x^2}$ it becomes zero and produces a perfect model (Khine *et al*., 2013:12).

SEM uses several estimation methods such as Maximum Likelihood (ML), Generalised Least Square (GLS), Elliptical Distribution Theory (EDT) and Asymptotically Distribution Free (ADF) (Ullman & Bentler, 2013:668). The decision to choose the estimation method to use relies on whether the data are normally distributed or not (Khine *et al*., 2013:12). It is important to consider the sample size, plausibility and independence of assumptions when choosing the correct estimation procedure (Ullman & Bentler, 2013:669). Ideally, the scale of all observed variables must be the same for the estimates to be consistent (Khine *et al*., 2013:12).

According to Ullman and Bentler (2013:668), ML was found to perform well with samples larger than 500, GLS performed better with samples smaller than 500 and EDT performed much better than ML with much smaller samples. In cases where normality assumptions are violated, it is recommended to use ADF methods that do not assume normality, however, they require large samples greater than 500 (Khine *et al*., 2013:13).

7.3.4 Model evaluation

A model evaluation has two general characteristics that are considered, namely the general fit of the model and the significance of a parameter of the model e.g. regression coefficients, variances and covariances of independent indicators (Ullman & Bentler, 2013:671). The general fit of a model is focused on determining how well the data fits the model and helps the researcher to compare the predicted model covariances (specified model) with the sample covariance matrix (obtained data) (Khine *et al*., 2013:14).

Due to a lack of consensus among researchers about what constitutes acceptable values for global fit indices, it is recommended to report several fit indices in the research (Khine *et al*., 2013:14). The fit indices are classified in three categories: absolute fit or model fit which measures how well the specified model produces the data, incremental fit or comparative fit checks if the hypothesised model is assessed on whether it is better than a competing model and parsimonious fit evaluate the inconsistency between the observed and implied covariance matrix while taking into cognisance the complexity of the model (Khine *et al*., 2013:14). The fit indices, therefore, help to assess the fit of the model estimated with large samples (Ullman & Bentler, 2013:671).

Furthermore, the absolute fit or model fit indices are classified into three more categories: Goodness of fit index (GFI), Root Mean Square of Error Approximation (RMSEA) and Discrepancy Chi-square as shown in Table 7.1 with the three categories of model fit and their level of acceptance. Table 7.2 continues to show the full names and index used in SEM (Awang, 2015:57). Table 7.1 below shows that absolute fit is classified into three indices: Chi-square, root mean square of error approximation (RMSEA) and goodness of fit index (GFI), Incremental fit is classified into four indices: Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) and Normal Fit Index (NFI) (Awang, 2015:57). The Parsimonious Fit is classified as Chi-square or Degree of Freedom (Chisq/df) as shown in Table 7.1 and 7.2 (Awang, 2015:57).

Table 7.1: Model fit and level of acceptance

No.	Name of category	Index	Level of acceptancy
1	Absolute Fit	Chi-Square	P- value <0.05 *Not applicable for larger sample size (>200)*
		RMSEA	RMSEA < 0.08
		GFI	GFI > 0.90
2	Incremental Fit	AGFI	AGFI > 0.90
		CFI	CFI > 0.90
		TLI	TLI > 0.90
		NFI	NFI > 0.90
3	Parsimonious Fit	Chisq/df	Chisq/df < 3.0

Source: Awang (2015:57)

The literature referred to in the study usually determines the type of model of the fit index be used and the acceptable cut off values reported by researchers can also fluctuate (Awang, 2015:57). Table 7.2 below shows the names of the category and index full names for the respective index in table 7.1 e.g. Absolute fit, incremental fit and parsimonious fit.

Table 7.2: Model fit literature sources

No.	Name of category	Index	Index full name
1	Absolute Fit	Chi-Square	Discrepancy Chi Square
		RMSEA	Root Mean Square of Error Approximation
		GFI	Goodness of Fit Index
2	Incremental Fit	AGFI	Adjusted Goodness of Fit Index
		CFI	Comparative Fit Index
		TLI	Tucker-Lewis Index
		NFI	Normal Fit Index
3	Parsimonious Fit	Chisq/df	Chi Square/Degree of Freedom

Source: Awang (2015:57)

7.3.5 Model modification

Model modification is important for the purposes of adjusting the hypothesis when the fit of the model does not meet the required specification (Khine *et al*., 2013:16).

Usually, it is difficult to detect the difference between models when the sample sizes are small because of the relationship between sample size and x^2 (Ullman & Bentler, 2013:674). Once the model is adjusted it can be retested and the procedure of resting is called re-specification (Khine *et al*., 2013:16). Model modification helps the researcher to either add or remove parameters to improve the fit of the model and parameters can be changed from fixed to free and vice versa (Khine *et al*., 2013:16). However, to avoid Type I error, caution is important when making such changes and any change made should be backed up with a theory (Khine *et al*., 2013:16).

There are two main objectives of model modification: to improve the fit of the model, mainly for exploratory work and to test the hypothesis in theoretical work (Ullman & Bentler, 2013:674). To help researchers' carryout model modification, there are three basic methods used: chi-square difference, Lagrange multiplier and Wald test (Ullman & Bentler, 2013:674). The three methods are all asymptotically equivalent under the null hypothesis even though they approach model modification differently (Ullman & Bentler, 2013:674). Several SEM software like AMOS computes the modification indices for each parameter (Khine *et al*., 2013:16).

Chi-square test involves nested models i.e. models that are subsets of each other, for example, when the x^2 value for the larger model is subtracted from the x^2 for the smaller nested model and the difference of the x^2 is assessed with the degree of freedom equal to the difference between the degree of freedom in the two compared models (Ullman & Bentler, 2013:674). The Lagrange multiplier test specifies the degree to which additional free parameters improves the model fitness (Khine *et al*., 2013:17).

Like the Chi-square test, Lagrange multiplier test compares nested models and additionally can require estimation of only one model (Ullman & Bentler, 2013:674). Lagrange multiplier test asks which parameters must be included in the model (Ullman & Bentler, 2013:674). Lagrange multiplier test has the ability to check the improvement of the model through the use of one or more of the parameters in the model that are fixed, estimated or parameters that should be added to the model to improve its fit (Ullman & Bentler, 2013:674). Furthermore, the Lagrange multiplier test can also check univariately and multivariate (Ullman & Bentler, 2013:674).

Wald test checks if there are any parameters that are currently being estimated when they could be fixed to zero or probably not necessary for the model (Ullman & Bentler, 2013:674). Wald test checks whether deletion of free parameters can improve the fitness of the model and is analogous to the backward removal of variables in stepwise regression where one seeks a nonsignificant change in R^2 in cases where variables are omitted (Ullman & Bentler, 2013:674; Khine *et al*., 2013:17). Therefore, the Lagrange multiplier test asks for which parameters to be added to the model while Wald test asks for which parameters to be removed from the model (Ullman & Bentler, 2013:674). However, both tests follow the logic of the forward and backward stepwise regression method (Khine *et al*., 2013:17).

To conduct model modification, the researcher must adjust the covariances to make the model fit better, scrutinize the estimates for the regression coefficients and the specified covariances, re-run the model for quality check purposes and if the model is not fit the researcher should refer to modification indices provided by SEM software (Khine *et al*., 2013:17).

Although model modification helps in improving the better fitting of the model, it is important to ensure that model modification is done within the limitations of the relevant theory (Khine *et al*., 2013:17).

Model specification, model identification, model estimation, model evaluation and model modification are the five important stages followed during the modelling process (Khine *et al*., 2013:8).

7.4 MEASUREMENT INSTRUMENT ASSESSMENT

A scientifically sound measurement instrument should pass the following assessments: unidimensionality, validity and reliability for a suggested measurement scale (Awang, 2015:54; Khine *et al*., 2013:101). The testing of model fit and assessing the contributions and statistical significance of the manifest variables' path coefficients can only proceed once the validity and reliability results are satisfactory (Khine *et al*., 2013:101).

7.4.1 Unidimensionality

According to Hagell (2014:256), psychometric theory entails unidimensionality. All measurement instruments that are scientifically sound should meet the conditions of unidimensionality of being valid and genuine, the totality of rating scale items into an interpretable total score rests on the prerequisite that the items represent one shared underlying latent variable (Hagell, 2014:257). The consideration is that useful measurement that only represents one attribute at a time is not precise for latent variables and rating scales (Hagell, 2014:257). If the total scores are not unidimensional, they are regarded as invalid with an ambiguous meaning which is unclear of the of what scores they represent (Hagell, 2014:257). Unidimensionality helps to ensure that the fundamental assumption of valid calculations of total scores is in place according to both classical and modern test theories, score on a scale used to test one variable must not be noticeably influenced by varying levels of one or more of the other variables and ensure that scores represent a common line of inquiry to improve clarity (Hagell, 2014:257).

According to Hair *et al*. (2010:125), "important ingredients for developing a totalled scale is that testing of unidimensionality requires the scale to consist of measurement items loading highly on a single factor, in the scale". To achieve unidimensionality all measuring items must have tolerable factor loadings with no redundant items for the respective latent construct and the specification should be < 0.5 (Awang, 2015:54; Nazim & Ahmad, 2013:4). The lowest factor loading item should be deleted first and deletions must be done one item at a time to avoid errors and it is imperative for the researcher to run the model whenever an item is deleted (Awang, 2015:55). All factors loadings in unidimensionality should be positive or in one direction and the process of testing must continue until unidimensionality is accomplished (Awang, 2015:55). A scientifically sound measurement model requires to be unidimensional, a lack of unidimensionality cannot be compensated by analytic statistics or study design and can have a huge impact on the appreciation and quality of the research outcomes (Hagell, 2014:257).

7.4.2 Validity

According to Hair *et al*. (2010:708), validity is the degree to which a set of measured items reflects the theoretical latent construct the items are meant to measure, and that the basis of model re-specification should be grounded in theory rather than empirical validation. Therefore, validity is the capability of an instrument to measure what it is supposed to measure for a latent construct (Awang, 2015:55). The main objective of confirmatory factor analysis and exploratory factor analysis is to ensure that the measurement instrument is accurate (Khine *et al*., 2013:85; Hair *et al*., 2010:709). The following are the three types of construct validity: convergent validity, face validity and discriminant validity (Awang, 2015:55).

7.4.2.1 Convergent validity

Convergent validity is accomplished when indicators to latent variables correlate with each other to a satisfactory level and convergent validity is indicated when factor loadings of ≥ 0.50 are achieved (Khine *et al*., 2013:101). The degree to which two items that are indicators of a specific construct share a high proportion of variance in common (Hair *et al*., 2010:710). Convergent validity can also be accomplished when all items in the measurement model are statistically significant and can be verified by computing the average variance extracted for each construct (Awang, 2015:55). The specification requirement for average variance extracted should be ≥ 0.5 and using a low factor loading items in the model could jeopardise the model and cause the construct to fail the convergent validity test (Awang, 2015:55).

7.4.2.2 Face validity

Face validity is important for measurement instrument that includes new items for the scale and has been used in several previous studies. It is the level to which the content of each item is consistent with the way the construct is defined and is based on the researcher's assessment (Hair *et al*., 2010:710). Face validity is accomplished when the fitness indices for a construct achieves the required result and show how to fit the items in measuring their respective latent constructs as shown in Table 7.1(Awang, 2015:55).

7.4.2.3 Discriminant validity

Discriminant validity shows the measurement model is free from redundant items which could be identified using the AMOS software through a discrepancy measure called the Modification Index (Awang, 2015:55). Higher values of the Modification Index represent items that are redundant, and the researcher is permitted to delete such items and re-run the model to check for fitness (Awang, 2015:55). Correlations ≥ 0.85 between independent and dependent constructs show poor discriminant validity with critical multicollinearity problems (Mungule & Van Vuuren, 2016:15; Awang, 2015:55). Therefore, according to Hair *et al*. (2010:710) "discriminant validity is the degree to which a construct is truly dissimilar from the other constructs and the presence of cross loading indicates a discriminant validity issue". Measurement models that meet the discriminant validity requirements indicated fitness indices of ≥ 0.90, significant factor loadings of ≥ 0.70 and average variance extracted of ≥ 0.50.

Since SEM is the collection of statistical techniques that allow a set of relationships between one or more independent or dependent variables, either continue or discrete to be evaluated through testing hypothesis about relationships among observed and latent variables, it is the ideal method for this study (Awang, 2015:54; Khine *et al*., 2013:3). This study focused on the development and construction of a measurement instrument for evaluating relationships between organisational antecedents and organisational success factors. The expected outcome was achievable by adopting SEM method to this study because SEM has research tools that can address research question in meta-analysis, incorporate latent and observed variable, model multivariate relations and estimate direct and indirect effects, examine complex relationships and test construct level hypothesis at the construct level (Ullman & Bentler, 2013:663; Khine *et al*., 2013:4). SEM can analyse complex research question and test multivariate models in a single study (Khine *et al*., 2013:18). Therefore, SEM is a flexible and powerful process for evaluating hypothesised relationships and is gaining popularity in several fields (Khine *et al*., 2013:23). SEM is sometimes referred to as covariance structure analysis or simultaneous equation modelling and is viewed as a combination of regression and factor analysis (Khine *et al*., 2013:23).

7.4.3 Reliability

Like validity, it is important to ensure that the observed variables are reliable and contain few errors so that the latent variables can be correctly represented (Khine *et al*., 2013:6). Reliability of a measurement instrument is measured using the Cronbach Alpha coefficients which test the internal consistency of items of the measurement instrument (Khine *et al*., 2013:85; Lotz & van der Merwe, 2013b:203). The internal consistency between items of the measurement instrument and its coefficients varies between 0.0 for no reliability and 1.0 for maximum reliability (Lotz & van der Merwe, 2013b:203). The acceptable reliability must be higher than 0.7 (Khine *et al*., 2013:102; Bryman & Bell, 2007:164).

7.5 RESEARCH QUESTION

The evolution and current development of research in the field of corporate entrepreneurship, theoretical and empirical knowledge about the subject and entrepreneurial behaviour on which it is based on, are still important issues that require further research and data mining (Kuratko, 2017:1). Continuous research by scholars has raised some vital questions and is identifying new theoretical pathways that require exploration and the objective of this study is one of them (Kuratko, 2017:1). Currently, it is not clear that a relationship between organisational antecedents and organisational success factors (financial, customer, internal business process and learning and growth) exists. No empirical work has been done so far to evaluate the relationship between organisational antecedents and success factors of organisations. To evaluate this relationship, it is necessary to develop a tool that can predict such relationships.

SEM techniques were used to develop the measurement instrument that examines the relationships between the independent, mediating and dependent variables and show which antecedents and success factors are significant and more effective in improving the success of organisations.

The following are the questions asked by this study:

- Is there a measurement instrument for measuring relationships between corporate entrepreneurship and the success of the organisation with acceptable scientific attributes?
- Can organisations be able to link their success to their internal environment condition?
- Which organisation antecedents are stronger predictors of organisational success?

Answering the above question can significantly help scholars and business manager to improve entrepreneurial activities within existing organisations.

7.6 RESEARCH OBJECTIVES

The objective of this study was to theoretically and empirically explore organisational antecedents of an internal corporate environment and success factors for both financial and non-financial perspectives. Through the development of a measuring instrument, the study focused on evaluating the relationship between corporate entrepreneurship and the success of an organisation. The study analysed the internal environments of automotive organisations from Sub-Sahara Africa. The assessment of these scientific properties of the new measurement instrument enhanced the corporate entrepreneurship field with a valid and useful empirical instrument for conducting research (Hornsby *et al*., 2013:938).

The following were the primary objectives of this study:

- To develop an instrument that measures the success of automotive companies using organisational antecedents as independent variables, entrepreneurial orientation and corporate entrepreneurship as mediating variables and organisational success factors as dependent variables.
- To expand the CEAI instrument by adding success factors to the measurement instrument.

- To evaluate the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors of automotive companies in Sub-Sahara Africa.
- To propose a framework that helps automotive leaders to keep alive an entrepreneurial spirit in their organisations and at the same time easily visualise indicators of success or failures.
- Based on the study findings, to contribute to the domain of corporate entrepreneurship in the Sub-Sahara region.

7.7 CONCEPTUAL FRAMEWORK

The conceptual frame was developed on two aspects; organisational antecedents (top management support, autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries) developed by Kuratko *et al*. (1990) and success factors of an organisation (financial, customer, internal business process and learning and growth) developed by Kaplan and Norton (1992). The two aspects are commonly used in the day to day running of organisations, but there is no systematic approach to apply these principles so that they can both improve entrepreneurial activities and success of organisations. Numerous researches on corporate entrepreneurship have constantly focused on understanding and linking the internal and external environment of organisations (Ozdemirci, 2011:612). Contrary to previous studies, this study focuses on understanding the relationship between the internal environment of organisations and the key success factors of organisations.

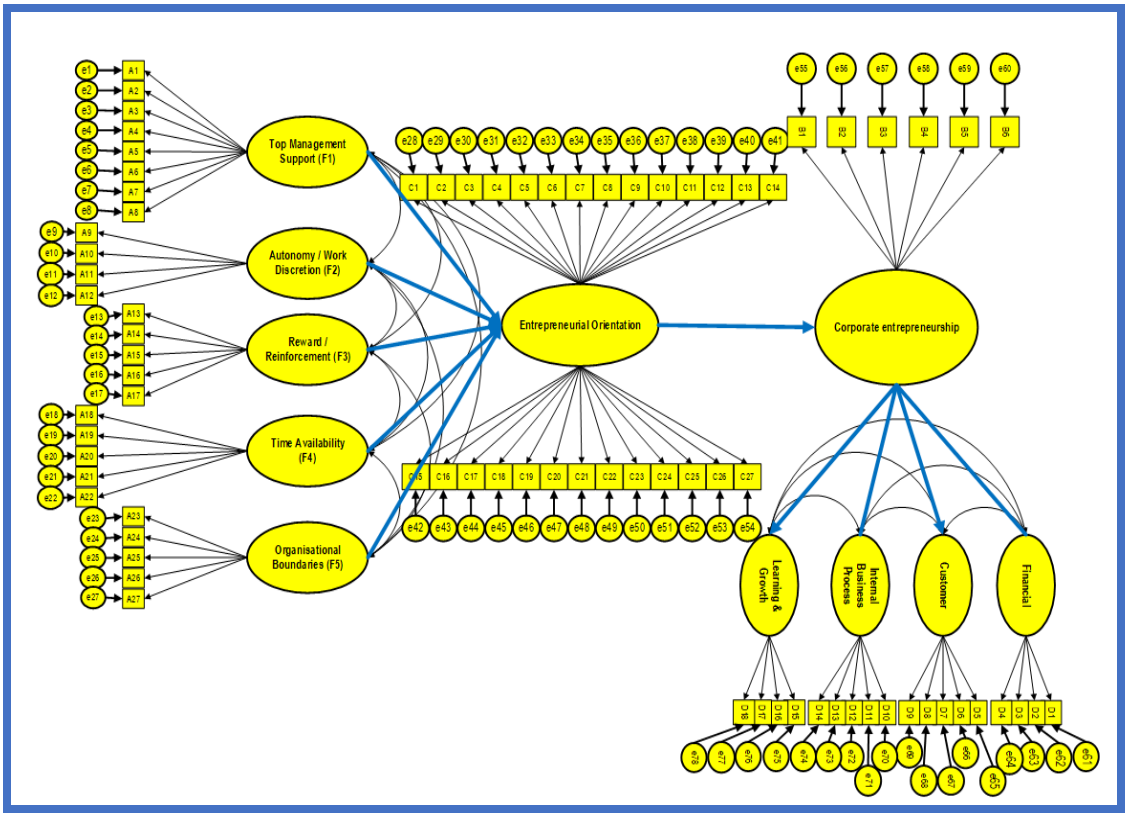
Fundamentally, this study hypothesised that a good mixture of organisational antecedents can create entrepreneurial orientation which then would result in corporate entrepreneurship, and eventually, corporate entrepreneurship would yield positive financial results, customer satisfaction and retention, improved internal business processes and learning and growth for employees' skill development and satisfaction. Figure 7.2 below shows the conceptual model for the study drawn using a path diagram from the AMOS software package (Cheung, 2015:15). Figure 7.2 is an upgrade of the manual conceptual framework illustrated in chapter 1 in Figure 1.2. The hypothesis of the five variables or dimensions: top management support,

autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries (Morris *et al*., 2011:51) have a covariance relationship and they all can create a favourable entrepreneurial environment which can develop an entrepreneurial orientation environment. Entrepreneurial orientation would then create corporate entrepreneurship. The creation of a Corporate entrepreneurship environment is then assumed to result in the success of an organisation emanating from positive financial, customers, internal business process and learning and growth results (Singh & Arora, 2018:875).

Creating a favourable internal environment that enhances entrepreneurial activities through entrepreneurial leadership can help organisations achieve success, however, predicting key performance indicators and measuring them is the subject of this research (Kuratko *et al*., 2014:40). The results of this study are imperative to organisations that are obsessive about improving their internal entrepreneurial activities and are concerned about measuring the effect of nurturing corporate entrepreneurship to produce a success of an organisation (Kuratko *et al*., 2014:40). Figure 7.2 a path diagram below illustrates the logic of the hypothesis of this study.

The fundamental requirements of organisational success are grounded on developing an organisational strategy that supports the creation of a conducive internal environment that encourages leaders to support activities in the organisation, rewards and motivates its employees, provide employees with autonomy to becomes innovative and creative, affords time to employees for creativity and flexibility that favours entrepreneurial activities (Kuratko *et al*., 2014:39). The five characteristics are assumed to develop entrepreneurial orientation which leads to a corporate entrepreneurship environment, mediating variables for this study that would propel the organisation to producing positive financial success, customer satisfaction success, internal business process success and learning and growth success as shown in Figure 7.2 below.

Figure 7.2: Hypothesised model in SEM



7.7.1 Variables

The hypothesised model in Figure 7.2 above had a total of 11 latent variables where each variable possessed several observed variables that were assessed by respondents in the questionnaire. The five latent variables are also known as organisational antecedents on the left of the path diagram were: top management support, autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries (Morris *et al.*, 2011:51). The two latent variables in the middle of the path diagram were entrepreneurial orientation and corporate entrepreneurship and the four latent variables on the right were success factors derived from the Balanced Scorecard concept which summarised success factors of organisations into four perspectives; financial, customer, internal business process and learning and growth (van der Merwe & Malan, 2013:26; Singh & Arora, 2018:874; Kaplan, 2010:4).

The study identified organisational antecedents as independent or exogenous variables brought about by variables outside the system, entrepreneurial orientation and corporate entrepreneurship as mediating variables that can either be predictors or outcome and success factors as dependent or endogenous variables that are caused by variables inside the system (Khine *et al*., 2013:7).

7.7.1.1 Exogenous variables

Exogenous or independent variables for this study were derived from the CEAI instrument that is assumed to be able to predict the likelihood of being able to successfully implement an innovative strategy and identify weak internal areas that require development to enhanced entrepreneurial environments in organisations (Kuratko *et al*., 2014:37). The CEAI measurement instrument comprises of five organisation antecedents used as independent variables in the study: top management support, work discretion or autonomy, rewards or reinforcement, time availability and organisational boundaries (Kuratko *et al*., 2014:40; Morris *et al*., 2011:51) and has been used by several corporate entrepreneurship researchers to measure corporate internal climates (Hornsby *et al*., 2013:937). According to Kuratko *et al*. (2014:37), organisational antecedents are critical variables that are used by business leaders or managers to create and judge conditions of organisational internal climate to enhances the cultivation of entrepreneurial behaviours.

7.7.1.2 Predictors or outcome variables

When organisational antecedents are correctly implemented in an organisation, the assumption is that entrepreneurial culture manifests in the organisation that encourages innovation, creativity and nurtures entrepreneurial behaviours that result in corporate entrepreneurship (Kuratko *et al*., 2014:39). In this study, therefore, entrepreneurial orientation and corporate entrepreneurship were identified as mediating variables, predictors or outcome variables (Khine *et al*., 2013:7). Corporate entrepreneurship acted as a bridge between organisational antecedents and organisation success factors.

7.7.1.3 Endogenous variables

Several organisations, automotive organisations included have sets of success factors they monitor constantly to ensure the success of their organisations. According to Mathews (2011:88), success factors are capabilities and activities that define the continuing success of organisations and a list of such success factors can be exhaustive and difficult to follow. Organisation success factors are more fixated on what leads to organisational success i.e. customer satisfaction, customer retention, positive financial results, innovation through research and design, service quality, growth and development, brand image, standardisation of processes, consistency, staff competencies and many more (Mathews, 2011:88). Success factors are a mixture of financial and non-financial results of an organisation.

For this study, organisation success factors were identified as endogenous or dependent variables and summarised into the four perspectives of the Balanced Scorecard. Postulated by Kaplan (2010:4), the Balanced Scorecard is a modern approach for integrating both financial and non-financial performance measures of an organisation into a single measurement instrument. The Balanced Scorecard four perspectives are financial, customer, internal business process and learning and growth (Dobrovic *et al*., 2018:42). The hypothesis of the study was that corporate entrepreneurship can result in positive financial growth, increased customer satisfaction and customer retention, improved internal business process and improved staff capabilities and skills.

7.7.2 Study hypothesis

The hypothesis of this study was based on the relationship created between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors. The logic was that organisational antecedents create entrepreneurial orientation environment which results in corporate entrepreneurship and corporate entrepreneurship produces financial, customer, internal business process and learning and growth success. The following were the three key hypotheses identified for this study, H_1, H_2 and H_3:

I. Organisational antecedents' hypothesis (H_1): there is a relationship between organisational antecedents and entrepreneurial orientation.

   a) H_{1-1} Management support is positively related to entrepreneurial orientation.
   b) H_{1-2} Work discretion or autonomy is positively related to entrepreneurial orientation.
   c) H_{1-3} Rewards or reinforcement is positively related to entrepreneurial orientation.
   d) H_{1-4} Time availability is positively related to entrepreneurial orientation.
   e) H_{1-5} Organisational boundaries are positively related to entrepreneurial orientation.

II. Entrepreneurial orientation hypothesis (H_2): Entrepreneurial orientation is positively related to corporate entrepreneurship.

III. Corporate entrepreneurship hypothesis (H_3): corporate entrepreneurship activities are good indicators for the success of an organisation.

   a) H_{3-1} corporate entrepreneurship will have a causal effect on the financial growth of an organisation.
   b) H_{3-2} corporate entrepreneurship will have a causal effect on the customer perceptions of an organisation.
   c) H_{3-3} corporate entrepreneurship will have a causal effect on internal business processes.
   d) H_{3-4} corporate entrepreneurship will have a causal effect on the learning and growth of employees in an organisation.

7.8 INSTRUMENT DEVELOPMENT

The theoretical background provided in chapters 2, 3, 4 and 5 clearly showed that corporate entrepreneurship is deeply impacted by the internal climate of organisations. Furthermore, the hypothesis of this study reinforced the line of thought, where the constructs identified for this study together with their variables became the basis of the measurement instrument developed using the structural equation modelling technique. The study measurement instrument was developed in

four parts; the organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and the success factors of the organisation:

Organisational antecedents' questions were derived from several previous scholars who used similar questions in the process of refining the researches on the corporate entrepreneurship topic, e.g. (Adonisi, 2003; Brizek, 2003; Hornsby *et al*., 2013; Kuratko *et al*., 1990; Kuratko *et al*., 2014; Mungule, 2015 and van Wyk and Adonisi, 2012). The questionnaire was largely based on the CEAI Kuratko *et al*. (2014) with some additional new questions developed by Mungule (2015).

Entrepreneurial orientation questions were drawn from numerous scholars who used similar questions in the process of identifying the relationship between entrepreneurial orientation and performance of organisations e.g. Kungeke (2016); Lotz and van der Merwe (2013); Lotz (2009); Covin and Slevin (1989). Entrepreneurial orientation dimension items were compiled mostly based on the study conducted by van der Merwe and Malan (2013), adopted from the work of Lumpkin and Dess (2001:442).

Corporate entrepreneurship questions were drawn from the work of Covin and Miles (1999) and Morris *et al*. (2011). The questions were based on one of the alternative forms of corporate entrepreneurship called strategic entrepreneurship (Morris *et al*., 2011:97).

Success factors questions were derived from various previous scholarly work that researched on organisational success factors, the Balanced Scorecard, organisational performance and new questions were developed by the researcher for this study based on previous work of Matsuno *et al.* (2002); van der Merwe and Oosthuizen (2011); Kumar *et al*. (2015); Valmohammadi and Servati (2011); Aswani *et al*. (2016); Singh and Arora (2018); Dobrovic *et al*. (2018) and Albuhisi and Abdallah (2018).

All the latent variables included in the questionnaire were represented by multiple measures of the same underlying construct and the success factors were based on recognition of previous research practices (Matsuno *et al*., 2002:24). The latent variables were operationalised in the questionnaires to provide a simplified clarity for

the respondents. Before assessing the instruments convergent validity, all the items were tested for content validity to ensure that all the factors of the measurement instrument were represented by a parsimonious set of items that are theoretically different from each other (Hornsby *et al*., 2013:938).

7.8.1 Organisational antecedent measurement scales

The significance of intelligently managing the internal environment of an organisation has slowly gained recognition amongst several organisations such as Google, 3M, Apple and many more organisations to enhance corporate entrepreneurship (Kuratko *et al*., 2014:37). In addition, research has also evolved intending to understand the dimensions that support a conducive internal environment that enables corporate entrepreneurship to thrive (Kuratko *et al*., 2014:37). Research has in the past 40 years identified five dimensions or organisational antecedents that promote innovative internal environments and entrepreneurial behaviours in organisations (Hornsby *et al*., 2013:939; Kuratko *et al*., 2014:37).

Initially, Kuratko *et al*. (1990), identified three organisational antecedents that were considered important for encouraging entrepreneurial behaviours: top management support, organisational structure or boundaries and rewards or reinforcement (Hornsby *et al*., 2013:939). Later, Hornsby, Kuratko and Montagno (1999) included two additional organisational antecedents: work discretion or autonomy and time availability (Hornsby *et al*., 2013:939; Kuratko *et al*., 2014:37). The five dimensions of organisational antecedents lead to the introduction of the measurement instrument prevalently known as the CEAI (Hornsby *et al*., 2013:939). Together or individually, organisational antecedents are important ingredients for creating an internal environment that supports corporate entrepreneurship (Hornsby *et al*., 2013:939).

7.8.1.1 Top management support measurement scale

Since management assumes leadership roles in organisations, it plays important functions in enabling and facilitating corporate entrepreneurship in organisations (Kuratko *et al*., 2014:39). Additionally, according to Kuratko *et al*. (2014:39), the research found that there is a direct positive relationship between top management support and innovative results. Kuratko *et al*. (2014:39) and Hornsby *et al*.

(2013:939), defined top management support as an inclination of top-level management to encourage and promote entrepreneurial behaviours, push and support innovative ideas and provide resources needed to implement entrepreneurial actions.

Top management support measurement scale measured whether management is flexible, adaptive to new ideas proposed by employees, can easily support with resources such as finance for projects and allows employees to experiment on projects. In this study, top management support was represented as a latent variable in SEM and the observed variables were the questions in the questionnaire (Kuratko *et al*., 1990). The following in Table 7.3 below are the latent variable, observed variables description and the author of the questions:

Table 7.3: Top management support measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Top Management Support	My organisation is quick to use improved work processes or procedures that are developed by employees.	Kuratko *et al*. (1990)
2		My organisation encourages the development of new ideas for the improvement of the company.	
3		Upper level management is aware of and very receptive to my ideas and suggestions.	
4		Employees actively working on projects can make decisions without going through elaborate justification and approval procedures.	
5		There are many options within the organisation for individuals to get financial support for their innovative projects and ideas.	
6		Individual risk takers are recognised and encouraged for the willingness to champion new projects, whether eventually successful or not.	
7		My organisation supports many small and experimental projects, realising that some will undoubtedly fail.	
8		Top management encourage innovators to bend rules and rigid procedures to keep promising ideas on track.	

Source: Mungule (2015:168)

7.8.1.2 Autonomy or work discretion measurement scale

Encouraging experimentation and giving employees autonomy over how they perform their duties can encourage innovation and entrepreneurial behaviours in organisations (Kuratko *et al.*, 2014:39). Autonomy or work discretion is top management's commitment to accept failure, offer decision-making latitude, freedom from excessive oversight and to easily delegate authority to employees in the organisation (Hornsby *et al.*, 2013:939; Kuratko *et al.*, 2014:39). Employees become innovative when they do not have to always double-check all decisions with their superiors, get criticised or punished when the projects fail.

The autonomy measurement scale assessed whether employees have the freedom to make their own decisions, employees are not criticised when they fail and that they are left alone to do their work. In this study, autonomy was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Kuratko *et al.*, 1990). The following in Table 7.4 below are the latent variable, observed variables description and the author of the questions:

Table 7.4: Autonomy measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Autonomy/ work discretion	I feel like I am my own boss and do not have to double check all my decisions with someone else.	Kuratko *et al.* (1990)
2		My organisation gives me the opportunity to make use of my abilities.	
3		In my organisation I am not subject to criticism and punishment resulting from mistakes made on the job.	
4		I have much autonomy on my job and am left on my own to do my own work.	

Source: Mungule (2015:169)

7.8.1.3 Rewards or reinforcement measurement scale

Kuratko *et al.* (2014:39), postulated that research found resource availability and rewards to be the fundamental basis for entrepreneurial behaviours. Organisations that use systems and procedures that reward employees based on performance and

encourage employees to pursue challenging work are more successful with entrepreneurial implementation (Hornsby *et al*., 2013:939). Employees incline towards being entrepreneurial when reward systems encourage them to take risks and become innovative (Kuratko *et al*., 2014:39). Entrepreneurial actions thrive in organisations that reward dependent upon work performance and additional compensation for ideas and efforts beyond the standard reward system (Kuratko *et al*., 2014:39).

Rewards scale focused on understanding whether employees feel that they are rewarded depending on their performance, supervisors equate performance and responsibilities and managers can recommend performing employees to their superiors. In this study, the rewards variable was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Kuratko *et al*., 1990). The following in Table 7.5 below are the latent variable, observed variables description and the author of the question:

Table 7.5: Rewards measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Rewards / Reinforcement	The rewards I receive are dependent upon my work performance.	Kuratko *et al*. (1990)
2		My manager / supervisor will increase my job responsibilities if I am performing well in my job.	
3		Individuals running or initiating successful innovative projects receive additional rewards and compensation for their ideas and efforts beyond the standard reward system.	
4		My manager / supervisor would tell his/her boss if my work is excellent or outstanding.	
5		My manager / supervisor helps me get my work done by removing obstacles and roadblocks.	

Source: Mungule (2015:169)

7.8.1.4 Time availability measurement scale

Time availability among employees is a vital resource for developing entrepreneurial ingenuity and can be availed through the provision of unstructured free time (Kuratko *et al*., 2014:39). The unstructured free time enables innovative employees to have free space to become creative and come up with ideas that can drive both short and

long-term goals of an organisation (Kuratko *et al*., 2014:39). Organisations leadership is required to evaluate workloads so that employees also have enough time to pursue innovations (Hornsby *et al*., 2013:939).

Time availability construct was focused on understanding if workloads are evaluated properly, employees are afforded enough time for creativity and the actual jobs are organised in ways that provide employees with enough time to visualise the broader picture of the organisation. In this study, time availability was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Kuratko *et al*., 1990). The following in Table 7.6 below are the latent variable, observed variables description and the author of the questions:

Table 7.6: Time availability measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Time Availability	During the past three months, my workload kept me from spending time on developing new ideas.	Kuratko *et al*. (1990)
2		I have just the right amount of time and workload to do everything well.	
3		I always seem to have plenty of time for innovation and experimentation.	
4		My job is structured in such a way that gives me very little time to think about wider organisation problems.	
5		In this organisation my colleagues and I always find time for long term problem solving.	

Source: Mungule (2015:170)

7.8.1.5 Organisational boundaries measurement scale

Flexible organisational boundaries are vital for promoting entrepreneurial activities in organisations (Kuratko *et al*., 2014:39). Flexible organisational boundaries improve the movement of information between departments, within an organisation and its external environment (Kuratko *et al*., 2014:39). Organisational boundaries that induce, direct and encourage synchronized innovative initiatives are bound to support in improving conducive entrepreneurial environments within an organisation (Kuratko *et al*., 2014:39).

The key focus for organisational boundaries was to understand if organisations have strict standard procedures or many written rules that are followed by employees, or if employees have freedom in their workspace without having to follow the same procedure every time they do their jobs. In this study, organisational boundaries were represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Kuratko *et al*., 1990). Table 7.7 below represents the latent variable, observed variables description and the author of the questions.

Table 7.7: Organisational boundaries measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Organisational Boundaries	In the last three months, I had to follow very little standard operating procedures or practices to do my major tasks.	Kuratko *et al*. (1990)
2		There are many written rules and procedures that exist for doing my major tasks.	
3		My job description clearly specifies the standard of performance on which my job is evaluated.	
4		I clearly know what level of work performance is expected from me in terms of quantity, quality and timeline of output.	
5		I really must follow the same work methods or steps for doing my major tasks.	

Source: Mungule (2015:171)

7.8.2 Entrepreneurial orientation

Entrepreneurial orientation is a process of re-energising and enhancing an organisation's ability to acquire innovative skills and capabilities with the objective of creating new businesses within existing organisations (Kungeke, 2016:i). It comes from the field of entrepreneurship and is strongly regarded as an aspect of corporate entrepreneurship (Covin & Lumpkin, 2011:855; Kungeke, 2016:2). According to Kasim and Altinay (2016:62), organisations that are able to create conducive internal business environments have greater opportunities of providing business with a clear direction that can help the firm to understand the needs and wants of its customers, making it more proactive and competitive, thus staying ahead of the competition. Entrepreneurial orientation is a multidimensional construct and comprises of five dimensions, namely autonomy, risk-taking, innovativeness, proactiveness and

competitive aggressiveness (Covin & Miller, 2014:13; Covin & Lumpkin, 2011:857; Kasim & Altinay, 2016:62). Several academics emphasise that organisations that want to become successful must adopt entrepreneurial orientation (Kasim & Altinay, 2016:62).

The key focus of entrepreneurial orientation was to understand if organisations allow their employees to be autonomous in their work, provide opportunities for innovation and creativity, allow their staff to take risks and support them when they fail, are proactive and strongly take on competition to preserve their position in the market. In this study, entrepreneurial orientation was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Lotz & van der Merwe, 2013). Table 7.8 below represents the latent variable, observed variables description and the authors of the questions:

Table 7.8: Entrepreneurial orientation dimensions measurement scale

No.	Latent variable	Observed variables description	Authored by
1	Entrepreneurial Orientation	I have enough autonomy in my job without continual supervision to do my work.	Lotz and van der Merwe (2013); van der Merwe and Malan (2013); Lotz (2009); Lumpkin and Dess (2001); Covin and Slevin (1989)
2		Our organisation allows me to be creative and try different methods to do my job.	
3		Employees at our organisation can make decisions without going through elaborate justification and approval procedures.	
4		Employees at our organisation are encouraged to manage their own work and have the flexibility to resolve problems.	
5		I seldom must follow the same work methods or steps while performing my major tasks from day to day.	
6		Our organisation regularly introduces new products/services/processes.	
7		Our organisation places a strong emphasis on new and innovative products/services/processes.	
8		Our organisation has increased the	

		number of products/services/processes offered during the past two years.	
9		Our organisation is continually pursuing new opportunities.	
10		Over the past few years, changes in our products/services/processes have been quite dramatic.	
11		In our organisation there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	
12		Our organisation places a strong emphasis on continuous improvement (*kaizen*) in products/services/processes.	
13		Our organisation has a widely held belief that innovation is an absolute necessity for the organisation's future.	
14		Our leaders seek to maximise value from opportunities without constraint to existing models, structures or resources.	
15		When confronted with uncertain decisions, our organisation typically adopts a bold posture to maximise the probability of exploiting opportunities.	
16		In general, our organisation has a strong inclination towards high-risk projects.	
17		Owing to the environment, our organisation believes that bold, wide-ranging acts are necessary to achieve the organisation's objectives.	
18		Employees are often encouraged to take calculated risks concerning new ideas.	
19		The term 'risk-taker' is considered a positive attribute for the employees and management team in our organisation.	
20		Our organisation is very often the first to introduce new services/ learning areas/processes.	
21		Our organisation typically initiates actions that competitors respond to.	

22		Our organisation continuously seeks out new services/learning areas/processes.	
23		Our organisation continuously monitors market trends and identifies future needs of customers.	
24		In dealing with competitors our organisation typically adopts a very competitive "undo-the-competitor" posture.	
25		Our organisation is very aggressive and intensely competitive.	
26		Our organisation effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competitive position.	
27		Our organisation knows when it is in danger of acting overly aggressive (this could lead to erosion of our organisation's reputation or to retaliation by competitors).	

Source: van der Merwe and Malan (2013:36)

7.8.3 Corporate entrepreneurship measurement scale

Corporate entrepreneurship was hypothesised as a build-up of organisational antecedents and entrepreneurial orientation. Entrepreneurial activities in organisations can accumulate if top management support is in existence, employees have autonomy in their job, employees are rewarded in line with performance, employees have available time for creativity and innovation and organisations have fewer restrictions on work boundaries with free flow of information across departments (Srivastava & Agrawal, 2010:164). Srivastava and Agrawal (2010:164) recognised reward and motivation, management support, resource availability, organisational structure and risk-taking as common environmental factors supporting corporate entrepreneurship. Organisational antecedents are a good departure point for introducing entrepreneurial processes in organisations for the purposes of achieving competitive advantage and organisational success (Corbett *et al*., 2013:812). Therefore, corporate entrepreneurship has been identified as the most

worthwhile means for promoting competitive advantage and can be utilised to change market positions, markets and industries through innovations that create value (Covin & Miles, 1999:47).

Morris *et al*. (2011:86) developed two categories of corporate entrepreneurship, namely corporate venturing and strategic entrepreneurship. This study's focus was on corporate entrepreneurship fixated on strategic entrepreneurship and its five forms: strategic renewal, sustained regeneration, domain redefinition, organisation rejuvenation and business model reconstruction (Morris *et al*., 2011:99).

Several pieces of researches have been conducted on corporate entrepreneurship and different scholars have developed questionnaires with questions specific to certain dimensions such as innovation, competitive tactics, venturing activities, proactiveness and self-renewal (Antoncic & Hisrich, 2003, Mungule, 2015; Srivastava & Agrawal, 2010; Zahra, 1991).

The objectives of corporate entrepreneurship measurement scale were to understand if organisational antecedents and entrepreneurial orientation can produce corporate entrepreneurship and if corporate entrepreneurship is able to be manifested through a high rate of new products and services, an increased number of services, the transformation of competition and utilisation of entrepreneurial thinking. In this study, corporate entrepreneurship was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Covin & Miles1999; Morris *et al*., 2011; Srivastava & Agrawal, 2010). Table 7.9 below represents the latent variable, observed variables description and the authors of the questions:

Table 7.9: Corporate entrepreneurship measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Corporate entrepreneurship	Our organisation regularly and continuously introduces new products, services and enters new markets.	Covin and Miles (1999), Morris *et al*. (2011), Srivastava and Agrawal, (2010)
2		Our organisation seeks to sustain or improve its competitive standing by altering its internal processes, structures and capabilities.	
3		Our organisation seeks to redefine its relationship with its markets or industry competitors by fundamentally altering how it competes.	
4		Our organisation proactively creates a new product market arena that others have not recognised or actively sought to exploit.	
5		Our organisation applies entrepreneurial thinking to the design or redesign of its core business model(s) in order to improve operational efficiencies or otherwise differentiate itself from industry competitors in ways valued by the market.	
6		Our organisation applies entrepreneurial thinking to the design or redesign of its core business model(s) in order to improve operational efficiencies. or otherwise differentiate itself from industry competitors in ways valued by the market.	

Source: Mungule (2015:179)

7.8.4 Organisation success factors measurement scales

All businesses, whether profit or non-profit have a desire to be successful. Organisational success is an important result or outcome of any kind of business. Being successful is the key objective of every business leader and can mostly be seen through the existence of organisational solvency and sustainability (Oliveira *et al*., 2018:2592). Arnaboldi *et al*. (2015:1) and Aswani *et al*. (2016:1583) suggested that organisational leaders are faced with the toughest challenge of performance which emanates from components of planning and control systems and extends to independent systems of monitoring and measuring important organisational success factors. Organisational success is the result of strategy development and implementation which can be managed and monitored by performance management

(Aswani *et al*., 2016:1583). Performance management is a wide range of activities that organisations engage in, to improve the performance of individuals or teams, with the final goal of enhancing organisational performance involving strategy, objectives, goals, lead and lag indicator management (Aswani *et al*., 2016:1583; Gorman *et al*, 2017:193). According to Arnaboldi *et al*. (2015:2), continuous changes in customer tastes and demand and unforeseeable changes in the businesses environment such as competition are the key cause for the requirement for survival and success. Organisational leaders who manage to translate strategy and vision into operational objectives and performance measures and visible perspectives have more chances of becoming successful (Hamdy, 2018:425). In this respect, organisations focus on wider metrics such as financial, non-financial, long-term goals and short-term goals (Malagueno *et al*., 2018:222).

Success factors for this study ranged from financial, customer, internal business process and learning and growth perspectives on the assumption that each success factor is a part of a balanced cause and effect relationship where leading measures drive lagging measures (Malagueno *et al*., 2018:223; Valmohammadi & Servati, 2011:494). Paying attention to more than one success factor such as financial success helps organisations explain, update and communicate their strategy, align departments, teams and individuals, link objectives to long-term targets and budgets and conduct performance reviews to assess the success of organisations (Sharma & Gadenne, 2011:169). The success factors identified for this study integrate both financial and non-financial perspectives, financial, customers, internal business processes and learning and growth (Dobrovic *et al*., 2018:42; Hamdy, 2018:425).

7.8.4.1 Financial measurement scale

The financial measurement scale is the most import measure of success, specifically for organisations in the business for profit and assists in measuring the financial effect of priorities chosen by the organisation, decisions made, plans executed, and actions taken by managers (Aswani *et al*., 2016:1587; Niven, 2014:7). The financial measurement scale helps organisations to understand if strategic formulation, implementation and executions are contributing to the company's profitability (Aswani *et al*., 2016:1587). All economic results and shareholder verification of profit from investments are reflected in the financial perspective (Hamdy, 2018:425).

Financial measures can be measured by several metrics such as market share, new product sales, (EVA), return on investment and return on assets (Albuhisi & Abdallah, 2018:1363; Matsuno *et al*., 2002:24).

At the time of conducting the study, it was difficult to collect actual financial data from organisations, thus, the questions in the questionnaire were based on subjective information received from the respondents. According to Matsuno *et al*. (2002:24), previous researchers used subjective measures because it was proven to correlate with objective measures.

The objective of the financial measurement scale was to understand if employees feel that their organisations' market share is growing if the company is generating more sales on new products and that they are generally satisfied with the performance of their organisation. In this study, the financial measure was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Matsuno, 2002; Valmohammadi & Servati, 2011). The following in Table 7.10 below represents the latent variable, observed variables description and the author of the questions:

Table 7.10: Financial measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Financial	Our organisation's revenue and net profit grew in the last year.	Matsuno (2002), Valmohammadi and Servati (2011); Kumar *et al*. (2015); Mungule (2015)
2		Our organisation's percentage of sales generated by new products/services last year grew relative to competitors.	
3		Our organisation's market share grew last year.	
4		I am satisfied with the current financial performance of my organisation.	

Source: Valmohammadi and Servati (2011:501)

7.8.4.2 Customer measurement scale

The customer measurement scale was focused on aspects that reach out to the customers and understand their behaviours that are continuously changing with a view to satisfying them (Niven, 2014:118). The customer measurement scale is an

important portion of success because it grasps the ability of an organisation to provide quality goods and service, effective service delivery and general customer satisfaction (Hamdy, 2018:425). According to Aswani *et al*. (2016:1587), the customer measurement scale is concerned with value to add derived from high-quality products, services, creativity and innovation and is measured using lead time achievements, product or service quality, product performance and the cost of the products.

The study used subjective information to conduct research on the customer measurement scale due to non-availability of quantitative data from the organisations surveyed. Therefore, the questions in the questionnaire were based on subjective information collected from the respondents. Matsuno *et al*. (2002:24) postulated that previous researchers had used subjective measures because it had been proven to correlate with objective measures.

The customer measurement scale aimed to comprehend how employees feel about how their organisation meets lead times for vehicles, parts and service supply, response time for customer complaints handling, prioritise future customer expectation and the comparison of the level of customer satisfaction between their organisation and competitors. In this study, customer measure was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Kumar *et al*., 2015; Valmohammadi & Servati, 2011; van der Merwe & Oosthuizen, 2011). The following in Table 7.11 below are the latent variable, observed variables description and the author of the questions:

Table 7.11: Customer measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Customer	Our organisation can resolve customer complaints within customer acceptable times.	Researcher
2		Our organisation meets customer promised delivery time for vehicles, parts and service.	
3		Our organisation always focuses on meeting customers future expectations.	
4		Our organisation always asks customers what they think about our products and service.	
5		Our organisation satisfies our customers better than our competitors.	

Source: Kumar *et al*. (2015:98); Valmohammadi and Servati (2011:501); van der Merwe and Oosthuizen (2011:560)

7.8.4.3 Internal business process measurement scale

The internal business process measurement scale is interlaced with the customer measurement scale because it's the one responsible for producing and delivering the products and services to the customers. The internal business process is a value chain activity performed to design, sell, deliver products and services (Niven, 2014:118). According to Oliveira *et al*. (2018:2591), the internal business process identifies and analyses the vital processes that are related to productivity and efficiencies. The internal business process helps organisations to improve performances to meet and exceed customer's expectations (Hamdy, 2018:426).

Subjective information was used to survey the internal business process due to a lack of statistical data from companies surveyed in the study. The questions in the questionnaire were constructed on subjective information received from the respondents. Matsuno *et al*. (2002:24) suggested that previous researchers had used subjective measures because it had proved to correlate with objective measures.

The objective of internal business process measurement scale was to understand how employees feel about how their organisation's capacity to introduce new technology, encourage experimentation, flexibility to process changes and acceptance of innovative ideas. In this study, internal business process measure

was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Kumar *et al*., 2015; Valmohammadi & Servati, 2011; van der Merwe & Oosthuizen, 2011). The following in Table 7.12 below are the latent variable, observed variables description and the author of the questions:

Table 7. 12: Internal business process measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Internal Business Process	Our organisation has the capacity to introduce new technology.	Researcher
2		Our organisation encourages experimentation and tolerates failure.	
3		Our organisation offers high quality products and service.	
4		Our organisation is flexible to change standard operating procedures (SOP).	
5		Our organisation encourages employees to be creative and innovative.	

Source: Kumar *et al*. (2015:98); Valmohammadi and Servati (2011:501); van der Merwe and Oosthuizen (2011:560)

7.8.4.4 Learning and growth measurement scale

The learning and growth measurement scale was focused on matters pertaining to new skills, competency acquisition and staff moral because it is the foundation and supplier of enablers that are intangible in nature compared to the other three success factors: financial, customer and internal business process (Aswani *et al*., 2016:1587; Niven, 2014:6). The learning and growth measurement scale identify measures that direct the organisation to long-term growth (Aswani *et al*., 2016:1587). The learning and growth measurement scale have people at the centre, i.e. strategy development, implementation, monitoring and evaluation (Aswani *et al*., 2016:1587). It is, therefore, imperative that the organisation has the right people to operate the right systems and facilities that would enhance organisational performance (Aswani *et al*., 2016:1587). According to Oliveira *et al*. (2018:2592), the learning and growth aspect measures the learning and growth of employees in terms of skills, capabilities, knowledge, training, talent and motivation. It is a process of acquiring job-related skills, knowledge and behaviours (Albuhisi & Abdallah, 2018:1363).

The study used subjective information to conduct research on learning and growth due to non-availability of quantitative data from organisations surveyed in the study. Therefore, the questions in the questionnaire were based on subjective information collected from the respondents. According to Matsuno *et al*. (2002:24), previous researchers used subjective measures because it had proven to correlate with objective measures.

The objective of the learning and growth measurement scale was to understand how employees feel about how their organisation is committed to developing and training employees, involving employees in organisational activities, developing successors for key positions in the organisation and determine whether employees are satisfied with the way their organisation manages people. In this study, learning and growth measure was represented as the latent variable in SEM and the observed variables were represented by the questions in the questionnaire (Valmohammadi & Servati, 2011; Kumar *et al*., 2015). The following in Table 7.13 below are the latent variable, observed variables description and the author of the questions:

Table 7.13: Learning and growth measurement scale

No.	Latent Variable	Observed variables description	Authored by
1	Learning and Growth	Our organisation encourages participation and involvement of all employees.	Researcher
2		Our organisation focuses on training and development of all employees	
3		Our organisation develops successors for key positions in the organisation.	
4		I am satisfied with my organisation (Employee satisfaction).	

Source: Kumar *et al*. (2015:98); Valmohammadi and Servati (2011:501)

7.9 PROPOSED MEASUREMENT INSTRUMENT

The proposed measurement instrument was drawn from several research works conducted by previous scholars from corporate entrepreneurship and the general business management fields (Kuratko *et al*., 1990; Adonisi, 2003; Brizek, 2003; van Wyk & Adonisi, 2012; Hornsby *et al*., 2013; Kuratko *et al*., 2014; Mungule, 2015; Covin & Miles, 1999; Lotz & van der Merwe, 2013; Lotz, 2009; van der Merwe &

Malan, 2013; Lumpkin & Dess, 2001; Covin & Slevin, 1989; Morris *et al*., 2011; Matsuno, Mentzer & Ozsomer, 2002; van der Merwe & Oosthuizen, 2011; Kumar *et al*., 2015; Valmohammadi & Servati, 2011; Aswani *et al*., 2016; Singh & Arora, 2018; Dobrovic *et al*., 2018; Albuhisi & Abdallah, 2018). The questionnaire on organisational antecedents was based on the CEAI developed by (Kuratko *et al*., 1990), entrepreneurial orientation questions were based on the work of van der Merwe and Malan (2013), corporate entrepreneurship questions were based on (Covin & Miles, 1999; Morris *et al*., 2011) and the success factors question were based on (Kumar *et al*., 2015; Valmohammadi & Servati, 2011; van der Merwe & Oosthuizen, 2011) and researcher for this study.

The proposed instrument is in its initial stage of development and may require further development and tune-up into a valid and useful diagnostic instrument for business. The instrument encompassed 78 questions for all the 11 latent variables as shown in Table 7.14 below. Top management support had 8 questions, autonomy or work discretion 4, rewards or reinforcement 5, time availability 5, organisational boundaries 5, entrepreneurial orientation 27, corporate entrepreneurship 6, financial 4, customer satisfaction 5, internal business process 5 and learning and growth 4.

Table 7. 14: Number of questions for each latent variable

No.	Latent variable	Number of questions
1	Top Management Support	8
2	Autonomy/Work Discretion	4
3	Reward/Reinforcement	5
4	Time Availability	5
5	Organisational Boundaries	5
6	Entrepreneurial orientation	27
7	Corporate Entrepreneurship	6
8	Financial	4
9	Customer	5
10	Internal Business Process	5
11	Learning and Growth	4
	Total Questions	78

The proposed measurement instrument was designed to conduct an exhaustive investigation of both inputs and outputs of organisation success. The inputs are the general conditions of the internal environment and the outputs are the results

reflective of the organisation to its employees, customers and the general stakeholders. Regardless of numerous studies on corporate entrepreneurship and development of valid research instruments (Adonisi, 2003; Brizek, 2003; Hornsby *et al*., 2013; Kuratko *et al*., 1990; Kuratko *et al*., 2014; van Wyk & Adonisi, 2012), the suggested instrument contributes to the corporate entrepreneurship field and business as a diagnostic tool for evaluating the elements that influence corporate entrepreneurship and the success of organisations. The details of the contents of the measurement instrument questions are shown in Table 7.15 below. The finalised questionnaire included biographical information such as gender, age, race and structure of organisations investigated in the study e.g. department, years of service and type of employment (permanent or temporary) as shown in Appendix 2, study questionnaire.

Table 7. 15: Variables in proposed measurement instrument

No.	Latent variable	Observed variable description
A1	**Top Management Support**	My organisation is quick to use improved work processes or procedures that are developed by employees.
A2		My organisation encourages the development of new ideas for the improvement of the company.
A3		Upper management is aware of and very receptive to my ideas and suggestions.
A4		Employees actively working on projects can make decisions without going through elaborate justification and approval procedures.
A5		There are many options within the organisation for individuals to get financial support for their innovative projects and ideas.
A6		Individual risk-takers are recognised and encouraged for the willingness to champion new projects, whether eventually successful or not.
A7		My organisation supports many small and experimental projects, realising that some will undoubtedly fail.
A8		Top management encourages innovators to bend rules and rigid procedures in order to keep promising ideas on track.
A9		I feel like I am my own boss and do not have to double-check all my decisions with someone else.
A10		My organisation allows me to make use of my abilities.

A11	**Autonomy/**	In my organisation, I am not subject to criticism and punishment resulting from mistakes made on the job.
A12	**Work Discretion**	I have much autonomy in my job and am left on my own to do my own work.
A13		The rewards I receive are dependent upon my work performance.
A14		My manager/supervisor will increase my job responsibilities if I am performing well in my job.
A15	**Rewards/** **Reinforcement**	Individuals running or initiating successful innovative projects receive additional rewards and compensation for their ideas and efforts beyond the standard rewards system.
A16		My manager/supervisor would tell his/her boss if my work is outstanding.
A17		My manager/supervisor helps me get my work done by removing obstacles and roadblocks.
A18		During the past three months, my workload kept me from spending time on developing new ideas.
A19		I have just the right amount of time and workload to do everything well.
A20	**Time Availability**	I always seem to have plenty of time for innovation and experimentation.
A21		My job is structured in such a way that gives me very little time to think about wider organisation problems.
A22		In this organisation, my colleagues and I always find time for long term problem-solving.
A23		In the last three months, I had to follow very little standard operating procedures or practices to do my major tasks.
A24		There are many written rules and procedures that exist for doing my major tasks.
A25	**Organisational Boundaries**	My job description clearly specifies the standard of performance on which my job is evaluated.
A26		I clearly know what level of work performance is expected from me in terms of quantity, quality and timeline of output.
A27		I really must follow the same work methods or steps for doing my major tasks".
B1		Our organisation regularly and continuously introduces new products, services and enters new markets.
B2		Our organisation seeks to sustain or improve its competitive

		standing by altering its internal processes, structures and capabilities.
B3	**Corporate Entrepreneurship**	Our organisation seeks to redefine its relationship with its markets or industry competitors by fundamentally altering how it competes.
B4		Our organisation proactively creates a new product market arena that others have not recognised or actively sought to exploit.
B5		Our organisation applies entrepreneurial thinking to the design or redesign of its core business model (s) in order to improve operational efficiencies.
B6		Our organisation applies entrepreneurial thinking to the design or redesign of its core business model(s) in order to improve operational efficiencies. or otherwise differentiate itself from industry competitors in ways valued by the market.
C1		I have enough autonomy in my job without continual supervision to do my work.
C2		Our organisation allows me to be creative and try different methods to do my job.
C3		Employees at our organisation are allowed to make decisions without going through elaborate justification and approval procedures.
C4		Employees at our organisation are encouraged to manage their own work and have the flexibility to resolve problems.
C5		I seldom have to follow the same work methods or steps while performing my major tasks from day to day.
C6		Our organisation regularly introduces new products/services/processes.
C7		Our organisation places a strong emphasis on new and innovative products/services/processes.
C8		Our organisation has increased the number of products/services/processes offered during the past two years.
C9		Our organisation is continually pursuing new opportunities.
C10		Over the past few years, changes in our products/services/processes have been quite dramatic.
C11		In our organisation, there is a strong relationship between the number of new ideas generated and the number of new

		ideas successfully implemented.
C12		Our organisation places a strong emphasis on continuous improvement (*kaizen*) in products/services/processes.
C13	**Entrepreneurial Orientation**	Our organisation has a widely held belief that innovation is an absolute necessity for the organisation's future.
C14		Our leaders seek to maximise value from opportunities without constraint to existing models, structures or resources.
C15		When confronted with uncertain decisions, our organisation typically adopts a bold posture in order to maximise the probability of exploiting opportunities.
C16		In general, our organisation has a strong inclination towards high-risk projects.
C17		Owing to the environment, our organisation believes that bold, wide-ranging acts are necessary to achieve the organisation's objectives.
C18		Employees are often encouraged to take calculated risks concerning new ideas.
C19		The term 'risk-taker' is considered a positive attribute for the employees and management team in our organisation.
C20		Our organisation is very often the first to introduce new services/ learning areas/processes.
C21		Our organisation typically initiates actions that competitors respond to.
C22		Our organisation continuously seeks out new services/learning areas/sport codes/processes.
C23		Our organisation continuously monitors market trends and identifies future needs of customers.
C24		In dealing with competitors our organisation typically adopts a very competitive "undo-the-competitor" posture.
C25		Our organisation is very aggressive and intensely competitive.
C26		Our organisation effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competition position.
C27		Our organisation knows when it is in danger of acting overly aggressive (this could lead to erosion of our organisation's reputation or to retaliation by competitors).
D1		Our organisation's revenue and net profit grew in the last

	Financial	year.
D2		Our organisation's percentage of sales generated by new products/services last year grew relative to competitors.
D3		Our organisation's market share grew last year.
D4		I am satisfied with the current financial performance of my organisation.
D5	**Customer**	Our organisation has the ability to resolve customer complaints within customer acceptable times.
D6		Our organisation meets customer promised delivery time for vehicles, parts and service.
D7		Our organisation always focuses on meeting customers future expectations.
D8		Our organisation always asks customers what they think about our products and service.
D9		Our organisation satisfies our customers better than our competitors.
D10	**Internal Business Process**	Our organisation has the capacity to introduce new technology.
D11		Our organisation encourages experimentation and tolerates failure.
D12		Our organisation offers high quality products and service".
D13		"Our organisation is flexible to change standard operating procedures (SOP).
D14		Our organisation encourages employees to be creative and innovative.
D15	**Learning and Growth**	Our organisation encourages the participation and involvement of all employees.
D16		Our organisation focuses on training and development of all employees.
D17		My organisation develops successors for key positions in the organisation.
D18		I am satisfied with my organisation.

7.10 SUMMARY

SEM is a statistical technique to model the first moment of data that represent mean structure and the second moment of data that represents the covariance matrix of variables when the data are multivariate normal (Cheung, 2015:14). It is a statistical technique for testing hypothesis about relationships among observed and latent

variables and it has been popularly utilised in the spheres of sociology, psychology and education (Khine *et al*., 2013:3). Accessibility of SEM has been popularised by the advancement and integration of algorithms in software such as LISREL, AMOS and Mplus (Khine *et al*., 2013:3). SEM can test construct level hypothesis at the construct level, incorporate latent and observed variables and model multivariant relationships of variables (Khine *et al*., 2013:4). SEM comprises of several models, for example, path analysis models, confirmatory factor analysis models, structural regression models and latent change models (Khine *et al*., 2013:4). Additionally, there are five stages involved in the process of modelling or testing SEM i.e. model specification, model identification, model estimation, model evaluation and model modification (Ullman & Bentler, 2013:663).

The SEM technique was used to develop the measurement instrument that examines the relationship between corporate entrepreneurship and the success of automotive organisations in Sub-Sahara Africa in line with the research objectives. Therefore, the measurement instrument was required to pass assessments of unidimensionality, validity and reliability (Awang, 2015:54). The conceptual framework was developed to measure five organisational antecedents' variables, entrepreneurial orientation variable and corporate entrepreneurship variables and four organisational success factors variables. The 11 latent variables used in the conceptual framework in Figure 7.2, lead to the development of the measurement instrument which contained 78 observed variables. The measurement instrument was designed to conduct an extensive investigation of all the 11 latent variables considered in the conceptual framework. The measurement instrument was constructed in four parts; organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success factors. The literature for the components used to develop the measurement instrument was derived from several previous studies and new information developed by the researcher. Therefore, the proposed measurement instrument was developed and designed to conduct an intensive investigation of the relationship between the measured variables.

Chapter 8 focuses on the research methodology for this study. Definition of the term research is clarified together with the general process framework for the research process. Research philosophies and approaches are explained, and a detailed

process of the questionnaire development and distribution are provided. Furthermore, definitions of the population, sample and sampling techniques are explained together with the processes for data collection and analysis.

CHAPTER 8: EMPIRICAL RESEARCH

8.1 INTRODUCTION

The mechanics of SEM techniques were explained in Chapter 7 to provide a clear picture of how the measurement instrument for this study was conceptualised and developed. The measurement instrument was developed using the hypothesised model in Figure 7.2. To address the study objectives and research problem, Chapter 8 follows a structured research methodology approach which explains the term research, research paradigm and the processes used to collect data, the population and sample and data analysis (Gerrish & Lathlean, 2015:16; Taylor, 2018:2).

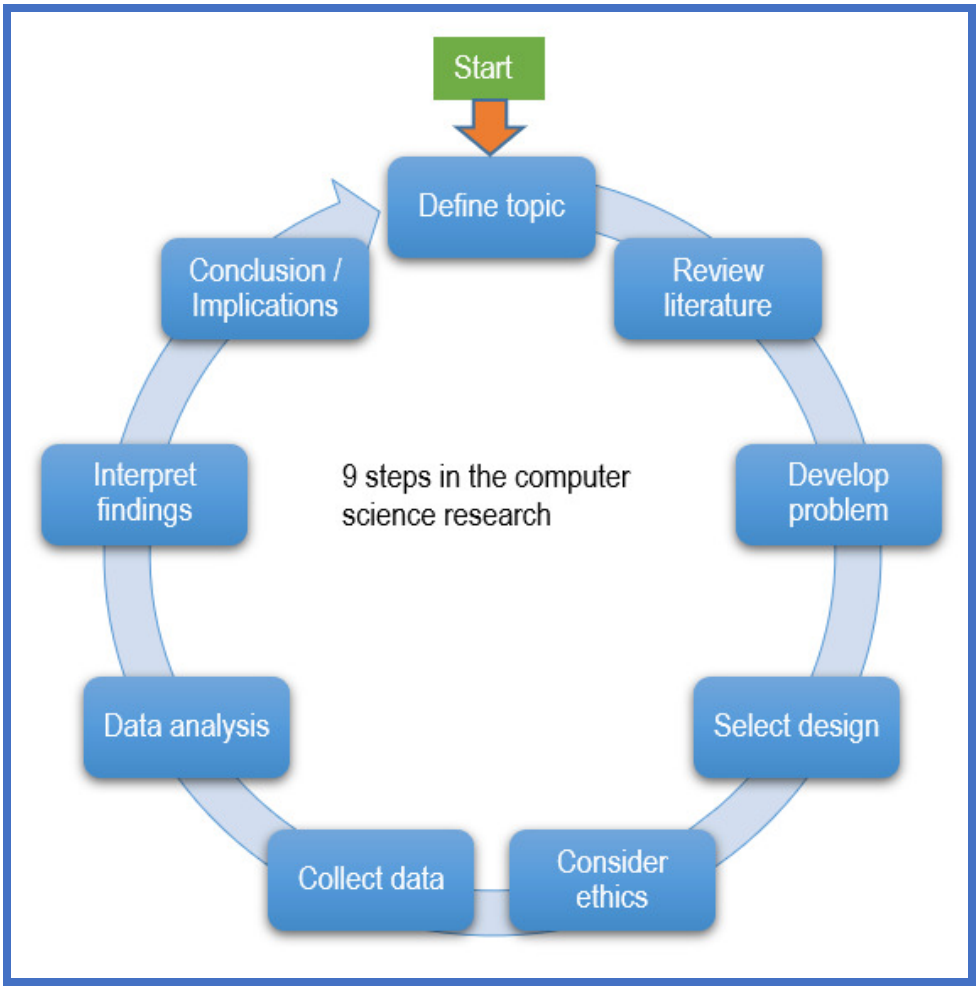
8.2 DEFINITION OF RESEARCH

Research involves the activities of locating, collecting, evaluating, analysing, interpreting and reporting data to the relevant fields of study or business organisations (Clippinger, 2018:v). Research is guided by a systematic process of scientific inquiry used to investigate observed phenomenon (Taylor, 2018:9). The research process involves three important steps: asking the right questions, gathering of data and analysing the data and additionally involves the use of qualitative or quantitative techniques to seek answers to question or solve problems (Clippinger, 2018:2; Taylor, 2018:9). Therefore, research is a methodical process of inquiry used to explain, interpret, describe, predict and control the observed phenomenon and should most likely produce, change or confirm a theory (Taylor, 2018:9).

Research is a logical inquiry into a study of a phenomenon with the objective of acquiring new knowledge (Taylor, 2018:11). Research is highly dependent on literature review or theory, without theory research would consist of only untested ideas and biases (Taylor, 2018:11). Bad theory can hinder the development of science which might as well impact innovation (Taylor, 2018:10). Therefore, the theory is the evidence supplied by the researcher regarding the technique, procedures, underlying assumptions and the reasons for the choices made to conduct the study (Taylor, 2018:11). In addition, according to Saunders and Lewis (2012:107), the theory is an explanation of the relationship between two or more

variables or concepts. Consequently, the aim of conducting research is to create new knowledge and deepen levels of understanding of a subject issue (Taylor, 2018:18). The most important indicator of any scientific theory is the account of how the theory works and its ability to predict the outcome (Gerrish & Lathlean, 2015:162). Similar to Figure 1.4, the research process below in Figure 8.1 consists of stages that may overlap or occur in different order depending on the landscape of the research (Taylor, 2018:18). The research process in Figure 8.1 starts with defining the topic, literature review, problem statement, research design, ethical concerns, data collection, data analysis, interpretation of findings and conclusions or implications of the investigation (Taylor, 2018:18).

Figure 8.1: General process framework for the information system research process



Source: Taylor (2018:18)

The topic of this study focused on evaluating the relationship between corporate entrepreneurship and the success of the automotive companies from selected Sub-Sahara African countries. The topic was defined and explained in Chapter 1 and further supported by literature review in Chapters 2, 3, 4, 5 and 6 (Saunders & Lewis, 2012:15). Chapter 7 focused on the construction of the measurement instrument. The study topic gave rise to the research problem which in turn formed the basis of the research question and eventually led to the research hypothesis (Taylor, 2018:40).

8.3 PROBLEM STATEMENT CLARIFICATION

According to Taylor (2018:32), a research problem must be researchable, marshal enough support from previous research, support future studies and should be a compelling problem. The research problem must be able to relate to the analysis of data collected and to be collected in a scientific style (Taylor, 2018:33). Therefore, the research problem is important for every research because it guides the subsequent results of the study (Taylor, 2018:33). As a consequence of challenges faced by the automotive sector as described in Chapter 1, the problem statement was focused on developing a measurement instrument which would be used to evaluate the relationship between corporate entrepreneurship and the success of automotive companies in Sub-Sahara Africa. The problem statement had the interest of the researcher, it was researchable, significant and feasible (Taylor, 2018:33).

A research problem can only be systematically and scientifically resolved when it is condensed in the form of a hypothesis, a testable suggestion stating that there is a significant difference or relationship between two or more variables (Taylor, 2018:40; Saunders & Lewis, 2012:25). It is a proposed predication, educated guess about a problem, expectations about the surveyed population expressed in empirical testing or explanation for a phenomenon (Taylor, 2018:40). The hypothesis is responsible for creating margins within which a problem could be reviewed and attain the characteristics of a good hypothesis of having a target population, names of the variable to be tested, identification of the relationship between the variable, being testable with a limited scope (Taylor, 2018:40). This study developed three main hypotheses as explained in Chapter 7.7.2: H_1, organisational antecedents are positively related to entrepreneurial orientation, H_2, entrepreneurial orientation is

positively related to corporate entrepreneurship and H_3, corporate entrepreneurship activities are good indicators for the success of an organisation. Therefore, for this study, suggestions to reject null hypothesis show the extent to which the concepts that comprise the propositions within the hypothesis share a co-relationship (Taylor, 2018:40).

8.4 RESEARCH PARADIGM

A research paradigm is a structured approach designed to guide the researcher when designing research (Saunders & Lewis, 2012:102). It is a general blueprint that explains the components that would be used to organise the entire research project (Taylor, 2018:48). The paradigm according to Saunders and Lewis (2012:103), comprised of the following stages: philosophies, approaches, strategies, choices, time horizons, data collection and data analysis.

8.4.1 Research philosophy

The development of scientific knowledge relies on several philosophical assumptions that must be acknowledged before conducting research (Taylor, 2018:7). Researchers consciously or subconsciously acknowledge certain philosophical assumptions during the research process (Taylor, 2018:7). According to Saunders and Lewis (2012:104), “research philosophy is the overall term that relates to the development of knowledge and the nature of the knowledge in relation to the research”. The research philosophy adopted in this study contains important assumptions about the way in which the researchers view the world around them and such assumptions underpin the research strategy and the data collection techniques (Saunders & Lewis, 2012:104). The views are articulated as suppositions held about the basic nature of reality (ontology), how learning occurs (epistemology), a function of values (axiology) and the technique chosen in the process (methodology) of obtaining true reality (Taylor, 2018:7).

This study adopted the views of epistemology, the theory of knowledge (Taylor, 2018:7; Walliman, 2011:17). It is the relationship between the researcher and reality and deals with how things are known by people and what is considered as acceptable knowledge (Walliman, 2011:17). In line with epistemology, the knowledge

acquired in this study was based on the positivism approach (Walliman, 2011:17). According to Saunders and Lewis (2012:104), positivism is a research philosophy like those used in the physical and natural sciences and highly structured techniques are used to support replication, resulting in law-like generalisations. It is a realist ontology example about science theory that assumes that there is an objective reality, which consists of real-world objects apart from the person endeavouring to know the truth (Taylor, 2018:8). In this respect, to discover the truth, empirical evidence which takes the form of numerical data is used to justify or falsify the hypothesis (Taylor, 2018:8). Thus, a quantitative method was preferred to be a principle technique for this investigation because it uses measurable data to quantify predetermined variables and reveals patterns (Taylor, 2018:8).

8.4.2 Research approaches

This study adopted a deductive research approach rather than an inductive approach because the theory was used to direct design and drive interpretation (Gerrish & Lathlean, 2015:163). In an inductive approach, the theory may provide the lens through which the phenomena are justified by the methodological approach chosen (Gerrish & Lathlean, 2015:163). The deductive research approach is a technique that uses logical reasoning which involves rationalism (Taylor, 2018:5). The study uncovers the truth through intellectual and deductive reasoning instead of intuitive or authoritative sources (Taylor, 2018:5). Deductive reasoning emerges from the general concepts to specific facts or cases generated from primary data gathered by the researcher (Clippinger, 2018:59). Rationalism suggests that reason is the best way of uncovering knowledge. It is recurrently expressed in the form of a syllogism and is a formal logical structure used to draw conclusions from a set of premises (Taylor, 2018:5). The three logical syllogisms of deduction are (Clippinger, 2018:59):

- A major premise is a large assumption or primary facts (Clippinger, 2018:59).
- A Minor premise is a small assumption or secondary facts (Clippinger, 2018:59).
- A conclusion is a logically inescapable inference based on the premise (Clippinger, 2018:59).

Consequently, the major premise is larger than the minor premise. The minor premise is also larger than the conclusion, the detail is mostly inferred from a more general premise and it is a prerequisite to test the accuracy of the premise (Clippinger, 2018:59).

A deduction can, therefore, be defined as a research approach which involves the testing of theoretical proposing by using a research strategy particularly designed for its testing (Saunders & Lewis, 2012:108). A deductive research approach can explain causal relationships between variables, for example, the objective of this study is to understand the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and the success of organisations (Saunders & Lewis, 2012:108).

The inductive research approach was not considered for this study because the approach involves the development of theory as a result of analysing data already collected (Saunders & Lewis, 2012:109). The inductive research approach involves reasoning from specific examples, facts or cases to generalisation based on the specifics already researched (Clippinger, 2018:58). The following, according to Saunders and Lewis (2012:108), are the five chronological stages in the deductive research approach:

- The definition of research questions from existing theory (Saunders & Lewis, 2012:108).
- Operationalisation of the research questions by specifying the way in which the questions may be answered (Saunders & Lewis, 2012:108).
- Seeking answers to the questions defined in the first stage of the deductive research approach (Saunders & Lewis, 2012:108).
- Analysing the results of the inquiry to determine whether it supports the theory used or suggest the need for its alteration (Saunders & Lewis, 2012:108).
- Confirming the initial general theory or altering it in view of the findings. Suppose, the theory is altered in stage five, the five chronological stages must be repeated to test the new theory (Saunders & Lewis, 2012:108).

8.4.2.1 Quantitative approach

Considering the five sequential stages in the deductive research approach, a quantitative research approached was adopted for this study to suffice stage three of the five chronological stages (Saunders & Lewis, 2012:108). Quantitative research methods are generally underpinned by positivism and empirical paradigms, while qualitative methods are guided by constructivism and interpretivism paradigms (Taylor, 2018:7). Quantitative techniques measure quantities or amounts through numerical terms such as percentages or numbers (Gerrish & Lathlean, 2015:163; Krishnaswami & Satyaprasad, 2010:6; Saunders & Lewis, 2012:85). Simply quantitative is generally represented by a set of numbers while qualitative data is represented by ideas, words or thoughts (Clippinger, 2018:2).

The quantitative method can be used to respond to questions about relationships between measured variables or correlations with a view of explaining independent and dependent variables (Krishnaswami & Satyaprasad, 2010:6). Quantitative research can test hypothesis and involves evaluating or comparing interventions especially new ones (Gerrish & Lathlean, 2015:9). While qualitative methods seek to understand how interventions and relationships are experienced. Quantitative techniques are inferential methods that require the collection of data containing uniform characteristics and set standard variables conducted through surveys (Krishnaswami & Satyaprasad, 2010:7). The quantitative methods involve the use of statistical tools that were used in this study such as arithmetic mean, standard deviation, exploratory factor analysis, confirmatory factor analysis and SEM analysis (Krishnaswami & Satyaprasad, 2010:7).

Quantitative techniques use statistics processing of data which enhances logical analysis and synthesis (Clippinger, 2018:62). Statistics is a subdivision of mathematics that deals with the analysis, interpretation, and presentation of numerical data, for example, simple computations used to describe data sets or complex calculations used to analyse relationships between or among sets of data or predict behaviours and events (Clippinger, 2018:62). Thus, this study involved evaluation of relationships between four aspects, organisation antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success

factors which required power calculations that involve the use of statistical techniques or methods (Gerrish & Lathlean, 2015:25).

Quantitative and qualitative research techniques emerge from different scientific traditions, forms of knowledge and have different characteristics (Gerrish & Lathlean, 2015:159). The quantitative method comes from the biomedical sciences which assumes a positivism research approach while qualitative method comes from social sciences which assumes that the world is stable, predictable and phenomena can be measured empirically (Gerrish & Lathlean, 2015:159). Furthermore, qualitative methods take an interpretivist perspective which has a huge emphasis on meaning and the understanding of human actions and behaviour (Gerrish & Lathlean, 2015:159). However, both methods are suitable for business research, the choice of the methods depends on the research question (Gerrish & Lathlean, 2015:159). When using quantitative research techniques, research questions and hypotheses are used and should be directly answerable, specific and testable, for instance, the research question can ask “what is the relationship between corporate entrepreneurship and success?” (Taylor, 2018:20). While qualitative research techniques use broad questions that are not specific and cannot be directly answered for instance, “how do you describe your organisation?” (Taylor, 2018:20).

Table 8.1 shows the characteristics of quantitative and qualitative research methods. Quantitative research methods are based on hard science, are objective, deductive, test theories, use instruments as data collection tools and investigate cause and effect relationships while qualitative methods are more on the soft science, subjective, value-free, holistic, inductive, speculative with a shared meaning (Gerrish & Lathlean, 2015:160).

Table 8.1: Characteristics of quantitative and qualitative research

No.	Quantitative research	Qualitative research
1	Hard science	Soft science
2	Objective	Subjective
3	Political	Value free
4	Reductionist	Holistic
5	Logico-deductive	Dialectic, inductive and speculative
6	Cause and effect relationship	Meaning
7	Test theory	Develops, advances and reinterprets theory
8	Control	Shared interpretation
9	Instruments as a data collection tool	Listening and talking, observation as a way of gathering data
10	Basic unit of analysis: numbers	Basic unit of analysis: words
11	Statistical analysis	Interpretation
12	Generalisation	Uniqueness/transferability

Source: Gerrish and Lathlean (2015:160)

This study research method was decided based on the characteristics in Table 8.1 above. The study adopted a quantitative research method which required the development of a measurement instrument to be used to measure relationships between variables (Gerrish & Lathlean, 2015:160).

8.4.3 Research strategies

The research strategies comprise experiments, surveys, case studies, action research, ground theory, ethnography and archival research (Saunders & Lewis, 2012:103). The research strategy for this study was guided by the research questions, objectives and the time required to conduct this study (Saunders & Lewis, 2012:114). The period for conducting this research was very limited and hence based on the research approach, a survey strategy was suggested and found appropriate (Saunders & Lewis, 2012:114). Survey strategies are regularly used in business and management research because people find them easy to comprehend and place a good deal of faith in the results which come from surveys (Saunders & Lewis, 2012:116). For instance, a survey of a local business might be more valid than census data because it is more current and specific (Clippinger, 2018:4). Surveys are also good instruments for asking questions that address research

questions that are useful for exploratory and descriptive research (Saunders & Lewis, 2012:116).

Surveys help in the collection of data from many people, within a shorter period and in a cost-effective way (Saunders & Lewis, 2012:116). The challenge with surveys is that the data collected would unlikely to be detailed and the number of questions recommended is few and brief to encourage a huge response rate (Saunders & Lewis, 2012:116). Nevertheless, the reliability of a questionnaire improves with the increase in the number of questions (Clippinger, 2018:7). Surveys are based on sampling that make it possible to generate findings that are representative of the total population at a lower cost than collecting data from the whole population e.g. an organisation's customer satisfaction index can be inferred that characteristics of a sample of those customers represent the characteristics of the entire customer population (Clippinger, 2018:4; Saunders & Lewis, 2012:116). The quantitative methods can use both experimental and observational methods in form of surveys that use questionnaires to collect data (Gerrish & Lathlean, 2015:22).

8.4.3.1 Data collection

Data is a set of individual values associated with variables (Levine *et al*., 2014:35). According to Levine *et al.* (2014:35), data can be defined as the values associated with the trait or property that help to distinguish the manifestation of something. Data is a special word used in place of bits of information and is used by researchers as a raw material for deriving conclusions about issues (Walliman, 2011:63). Although data are facts and can be considered as truth, data may be true for a particular time as observed by a researcher but might be quite different at another given time (Walliman, 2011:63). Data relate to knowledge as a whole and are part of the hierarchy of information starting from the abstract to concrete (Walliman, 2011:66).

This hierarchy of information makes it possible to break down research problems expressed in the theoretical language to a more practical constituent that can be measured in one way or another (Walliman, 2011:17). According to Walliman (2011:66), the hierarchy of information includes theory, concepts, indicators, variables and values as shown in Table 8.2. Research problems are frequently stated at a theoretical level, concepts are building blocks of the theory, indicators are

phenomena which point to the existence of concepts, variables are components of the indicators which can be measured, and values are actual units of measurement of the variables (Walliman, 2011:66).

Table 8.2: Hierarchy of information

No.	Information	Description
1	Theory	Abstract statements that make claims about the world and how it works. Research problems are usually stated at a theoretical level.
2	Concepts	Building blocks of the theory which are usually abstract and cannot be directly measured.
3	Indicators	Phenomena which point to the existence of concepts.
4	Variables	Components of the indicators which can be measured.
5	Values	Actual units of measurements of the variables. These are data in their most concrete form.

Source: Walliman (2011:66)

Information for this investigation was gathered using two data collection techniques, primary and secondary data sources. Primary data is the data collected by the researcher for his own analysis and secondary data is the data collected by someone else and is used for analysis by a different researcher (Levine *et al*., 2014:52). Secondary data is already written sources that interpret primary data (Walliman, 2011:69). Secondary data was used to conduct the literature study and the information was sourced from published entrepreneurial books, journals, databases, Business Source Complete, Emerald, JSTOR, Wiley Online and Google Scholar (Saunders & Lewis, 2012:40). The primary data is data that has been observed, experienced and recorded close to the event and was collected using a questionnaire that was distributed to the six organisations selected to participate in this study (Saunders & Lewis, 2012:40; Walliman, 2011:69).

8.4.3.2 Data collection techniques

Primary data was collected using a well-crafted questionnaire developed to nest responses that would address both the research questions and research objectives. The data collected was also expected to support the testing of the propositions of this study. Questionnaires are widely used by researchers, institutions and organisations to collect data and usually referred to as a method or technique of data

collection in which each potential respondent is asked to answer the same set of questions in the same order (Saunders & Lewis, 2012:141). Before a questionnaire is distributed to organisations, institutions or government organisations, it is important to seek permission from higher authorities in the organisations to conduct the research.

8.4.3.3 Permission to conduct the study

The study was focused on investigating automotive organisations in the Sub-Sahara Africa region. The selected sample to be investigated was collected from the Sub-Sahara Africa region from the following automotive organisation; Toyota Malawi, Toyota Kenya, Toyota Tsusho Africa, Subaru Southern Africa, Toyota Zambia and Toyota Zimbabwe. At the beginning of 2017, before the study commenced, the researcher travelled to several Sub-Sahara African countries to explain the idea and intentions of the study and more specific to request permission to write about the organisation and conduct data collection for analysis and testing of the hypothesis of the study. The initial intention was to conduct a study on at least 11 organisations, but some of the organisations declined due to their internal reasons and language concerns e.g. Portuguese and French speaking countries. In this matter, in 2019, at the information accumulation phase of the study, follow up messages were sent to all Managing Directors for organisations selected to participate in the study to request for composed affirmation to officially provided written proof that the researcher was allowed to gather information from the organisations. Each Managing Director from the selected automotive organisations sent a written and signed confirmation letter on the organisation's letterhead as proof of authorisation as shown in Appendix 1.

Upon receiving written confirmation from all the organisations involved in the survey, the SCS was contacted to support with the development of an online questionnaire which was emailed to all employees involved in the information collection process. Printed questionnaires were also made available to staff who did not have access to email.

8.4.3.4 Questionnaire

The questionnaire or the measurement instrument was developed on four study aspects: organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success factors. According to Saunders and Lewis (2012:116), a questionnaire is a written document with a set standardised question. The standard questions in the questionnaires help to compare responses across different locations or time frames, ideal for this study which covered countries from the Sub-Sahara Africa region (Saunders & Lewis, 2012:116). Questionnaires can be completed by respondents in several ways such as interviews, face to face, telephonic, post, hand delivery or online (Taylor, 2018:25; Saunders & Lewis, 2012:141). In a web, post, hand delivery questionnaire, the respondent reads the questions and records his or her own answers, while in a telephonic and face to face survey, the interviewer is the one who records each respondent's answers (Saunders & Lewis, 2012:141). Consequently, questionnaires are a good method of collecting data about the same things from several respondents because the data collected is usually used for descriptive research, that is analysed statistically (Saunders & Lewis, 2012:141).

The questionnaire must be developed in such a way that it is easy to read, complete and its accuracy entices respondents to complete the questionnaire rather than discourage them (Clippinger, 2018:25). The following are some of the tips of how to complete an effective questionnaire that can help to achieve the objectives:

- Provide in the questionnaire enough space to record information neatly and clearly (Clippinger, 2018:25).
- Use the blank spaces in the questionnaire profitably (Clippinger, 2018:25).
- Place spaces or boxes for responses near the items to be answered (Clippinger, 2018:25).
- Choose open or closed questions format wisely (Clippinger, 2018:25).
- The arrangement of questions must be logical, and the use of branching techniques is recommended, if necessary, to help respondents avoid unnecessary questions (Clippinger, 2018:26).

Before designing the questionnaire, important factors were considered such as ensuring that the sample was representative, designing and piloting the measurement instrument, the time to conduct the survey and soliciting for a good response rate (Saunders & Lewis, 2012:116).

8.4.3.5 Questionnaire design

Questionnaires are considered useful when they collect the data that is required to address the research questions and meet the research objective, collect data from many respondents and the questions asked in the questionnaire are not misinterpreted by the respondents (Saunders & Lewis, 2012:142). A questionnaire must be able to tell the respondent what the questionnaire is about and why the respondents should answer the questions (Saunders & Lewis, 2012:145).

Ideally, questionnaires must contain a reasonable number of questions which would encourage the respondents to complete it, however, it is also important for the questionnaire to have all the necessary questions that are able to collect the data required to answer the research questions and meet the research objectives (Saunders & Lewis, 2012:145). Table 8.3 below shows the key points to remember when designing the questionnaire. On one hand, the layout of the questionnaire must present a clear title with a brief explanation of why the topic is important and what respondents must do (Saunders & Lewis, 2012:146). The questionnaire typeface font, font size, line spacing and formatting must be consistent and easy to read (Saunders & Lewis, 2012:146). On the other hand, the questions at the beginning must be easy and straight forward and related to the topic, while more complex questions should be in the middle (Saunders & Lewis, 2012:146). Questions must be grouped into sections that will be obvious to the respondents and ask personal or sensitive questions at the end of the questionnaire (Saunders & Lewis, 2012:146).

Table 8. 3: Points to remember when designing a questionnaire

No.	Layout	Question order
1	The title must be clear and larger font size.	At the start, ask more straightforward questions.
2	The introduction must be brief and explain why the topic is important and what the respondents must do.	At the start, ask questions that are related clearly to the stated topic of the questionnaire.
3	Questions must not appear squashed on the page or computer screen.	Ask more complex questions in the middle of the questionnaire.
4	The typeface (font) should be easy to read.	Group questions into sections that will be obvious to the respondents.
5	Questions typeface (font), font size, spacing and formatting must be consistent throughout.	Use filter questions to stop the respondents from answering questions that are not relevant.
6	When printed, it should be on good quality paper.	Ensure the wording of the questions is consistent throughout the questionnaire.
7	Include details of how to return the completed questionnaire at the end.	At the end of the questionnaire, asked personal or sensitive questions.

Source: Saunders and Lewis (2012:146)

The questionnaire must meet the requirements of content validity and construct validity (Saunders & Lewis, 2012:142). Content validity is when the data is able to answer the research questions and meet all the objectives and construct validity is when the questions collect data about what is intended to be measured rather than something differently (Saunders & Lewis, 2012:142).

The study adopted questions from two main sources, questions from other researchers' questionnaires from previous research and new questions designed by the researcher for this study (Saunders & Lewis, 2012:142). The questionnaire was developed using the concept of a 5-point Likert scale (Taylor, 2018:65). The use of quantitative data collection methods helped to make use of rating scales such as Likert scales that simplifies and quantifies respondents' behaviours and attitudes (Taylor, 2018:52). According to Taylor (2018:65), the Likert scale is a special response format used for a research questionnaire to capture responses from respondents at ordinal level of measurement and the results can be analysed using nonparametric test or chi- square tests of association or correlation coefficients. The

Likert scale contained five ordinal values; (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree and (5) strongly agree (Taylor, 2018:66). However, it is argued that the intervals between the ordered Likert items are not equal and thus do not meet the two criteria for application of parametric statistical methods but rather nonparametric statistics which might produce invalid results (Taylor, 2018:66).

8.4.3.6 Questionnaire layout

The questionnaire layout was designed with the recommendations provided in Table 8.3 in mind. The font size, line spacing and formatting of the questionnaire were developed according to the NWU requirements. The questionnaire started with a cover page that explained what corporate entrepreneurship is, the reason of the research, the benefits of the study and clarified some ethical implications for the respondents (Saunders & Lewis, 2012:148). The cover letter was followed by general instruction on how to use the Likert scale in the questionnaire (Taylor, 2018:66). Respondents were requested to select the number which best described their opinion about a specific question or statement. The questionnaire was divided into five sections as below (Saunders & Lewis, 2012:146):

- Section A, organisational antecedents with 27 questions,
- Section B corporate entrepreneurship with 6 questions,
- Section C entrepreneurial orientation with 27 questions,
- Section D organisational success factors with 18 questions,
- Section E biographical information i.e. age, sex, race, employment level and academic qualifications and the structure of the business such as years of service, employment type, department and name of the organisation with 8 questions.

In total the whole questionnaire had 86 questions (78 questions from Section A, B, C and D, 8 questions from Section E) as shown in Appendix 2 (Lotz & van der Merwe, 2013b; van der Merwe & Malan, 2013). The questionnaire seemed longer than usual, however, fewer questions could have compromised the intended objectives and results of the study (Saunders & Lewis, 2012:145).

8.4.3.7 Levels of the measurement instrument

The questionnaire was developed using the four levels of the measurement, namely: nominal, ordinal, interval and ratio (Walliman, 2011:73). The levels of the measurement were used to measure the five aspects of the measurement instrument: organisational antecedents, corporate entrepreneurship, entrepreneurial orientation, organisational success factors and biographical information.

Nominal level is a very fundamental method which divides the data into separate categories that can then be compared with each other and uses numbers to identify and categorise the objects (Walliman, 2011:75). Nominal levels are used to record sample groups such as commercial, industrial, education, religion, including classifications that allow only two categories e.g. sex, marital status (single, married, divorced, separated or widow) (Walliman, 2011:75). A nominal level is when one value is different from another (Walliman, 2011:76).

Nominal levels can be analysed using graphs e.g. bar graphs to compare the sizes of categories and statistical properties to compare the percentage relationship of one subgroup to the other (Walliman, 2011:75). In the questionnaire, the nominal level measured sex and gender.

The ordinal level organises data into order with regard to a particular property that they all share, where a relative position of an item on a characteristic is indicated, not the degree of the difference between positions e.g. income, firm size, firm age and strength (Walliman, 2011:75). Employees in an organisation can be measured using ordinal levels such as skilled, semi-skilled and unskilled, while runners in a race can be measured in the order they finish the race (Walliman, 2011:75).

Ordinal level is when one value is bigger, better or more of anything than the other (Walliman, 2011:76). According to Walliman (2011:75), ordinal levels increases the range of statistical methods that can be applied to the data collected. In the questionnaire, the ordinal level measured the age, level of employment and level of education.

Interval level items are ordered such that numerical equal distances on a scale represent equal distance on the instrument being measured or data must be measured precisely on a regular scale without there being a meaningful zero (Walliman, 2011:75). Nevertheless, the zero point has been established arbitrarily (Walliman, 2011:76). For example, some scales in social science that measure attitudes are usually measured on a scale that can range from one to 10, one meaning unfavourable and 10 meaning favourable (Walliman, 2011:76). The interval level is when one value is so many units more or less than another (Walliman, 2011:77). The interval level provides a more sophisticated statistical analysis to be conducted on the collected data (Walliman, 2011:75). In the questionnaire, the interval level measured organisational antecedents, corporate entrepreneurship, entrepreneurial orientation and organisational success factors.

Ratio level is the point where the value is truly equal to nought (Walliman, 2011:76). Several concepts in mathematics and physics are conceptualised both operationally and theoretically at a ratio level of quantification such as mass, time, velocity and distance (Walliman, 2011:76).

Ratios are true ratios and can express values in terms of multiples of fractional chunks (Walliman, 2011:75). A ratio level is identified when one value is many times bigger, brighter, taller or heavier than another (Walliman, 2011:77). Ratios can be used in a wide range of statistical techniques (Walliman, 2011:76). The ratios were used in the analysis part of the study. Table 8.4 below shows the sections of the questionnaire and where the levels of the measurement were applied.

Table 8. 4: Levels of the measurement

No.	Questionnaire Sections	Level of measurement
1	Section A	Interval level
2	Section B	Interval level
3	Section C	Interval level
4	Section D	Interval level
5	Section E	Nominal and ordinal level

8.4.3.8 Pre-testing of the measurement instrument

It is imperative to pre-test the questionnaire before distributing it out to all the respondents (Saunders & Lewis, 2012:148). The main reasons for piloting the questionnaire are to check if the questionnaire itself will work, the questions are clear, that the respondents will have no problems in answering the questions, top management for the organisation you are collecting data from are comfortable with the questions in the questionnaire, the flow of questions is logical and the responses would be recorded correctly (Saunders & Lewis, 2012:148). Pre-testing helps to confirm that the respondents would understand the meaning and requirements of the questions and follow the instructions on the questionnaire (Saunders & Lewis, 2012:142).

The questionnaire was initially, sent to the researcher's supervisor for checking and corrections. After initial approval from the supervisor, the questionnaire was sent to eight randomly selected senior managers and 20 general staff from the selected automotive organisations considered for the study. The overall comments received from the 28 selected sample and action taken by the researcher is shown in Table 8.5 below. The respondents commented about the number of questions, terms used to question the respondents, applicability of certain questions to their business and non-availability of certain staff who work in production.

Table 8. 5: Questionnaire pre-test overall comments

No.	Comments from respondents	Action taken
1.	Too many questions in the questionnaire.	A decision was taken to maintain the same number of questions because reducing the number of questions would comprise the objectives of the study. Pre-emails were sent to the target population to alert them that the questionnaire will be longer than expected. The initial expected time to complete the questionnaire was 15 minutes.
2	Some of the terms in the questions might be too complicated for the respondents e.g. organisational antecedents, corporate entrepreneurship, entrepreneurial orientation and Kaizen.	The terms in the questionnaire were explained in the questionnaire and some of the terms were changed to align with the jargon used by the organisations e.g. continuous improvement was changed to Kaizen.
3	Some questions might not apply to some employees e.g. general staff are not involved in decision making.	The study objective was to capture the opinion of each individual employee. Generally, general staff also make decisions at their level, they follow procedures and require autonomy in their job.
4	Many production staff have no email addresses.	The researcher provided a printed copy of questionnaire to staff without email addresses and captured the data manually.
5	Generally, all the questions are in order. No questions were found to be offensive or infringed the rights of employees.	No action taken.

The main challenge with the questionnaire was that it was too long with an estimated completion time of 15 minutes, but a decision had to be taken to ask all the questions required to achieve the objectives of the study (Saunders & Lewis, 2012:145). The objective of a long questionnaire was to ask enough questions that would collect all the data required to answer the research question and at the same time meet the objective of the study (Saunders & Lewis, 2012:145). The pre-test exercise helped to correct mistakes in the questionnaire before sending it out to all respondents (Saunders & Lewis, 2012:149). At this stage, the questionnaire passed the pre-test because it met most of the key points identified in Table 8.3 (Saunders & Lewis, 2012:146). At this stage, the questionnaire was now ready to be distributed to all respondents from the selected organisations.

8.4.3.9 Distribution of the measurement instrument

The method of data collection for this study was conducted through a questionnaire which was referred to as a data collection technique in which each potential respondent was asked to answer the same set of questions in the same order (Saunders & Lewis, 2012:141). A questionnaire can be used to collect data through various ways such as web, post, hand delivery, telephone and face to face (Saunders & Lewis, 2012:141). However, the response rate from questionnaires varies considerably (Saunders & Lewis, 2012:149). According to Saunders and Lewis (2012:149), previous studies show that the average response rate collected from individuals was 52.7%, while that for questionnaires to organisations was much lower at 35.7%. Though, questionnaires using web-based and telephone distribution were much higher than paper-based questionnaires distribution (Saunders & Lewis, 2012:149).

In this respect, a web-based questionnaire was chosen for this study. As soon as permission to conduct the survey was granted by the organisations to be surveyed and the questionnaire pre-test completed, the SCS was requested to develop a web-based questionnaire which would be distributed using an email with a hyperlink to the actual questionnaire (Saunders & Lewis, 2012:149). A collection of updated email addresses was done for all the targeted respondents from the six organisations in the Sub-Sahara region (Saunders & Lewis, 2012:149). Netiquette, the general guidelines for using the internet was followed as below (Saunders & Lewis, 2012:146):

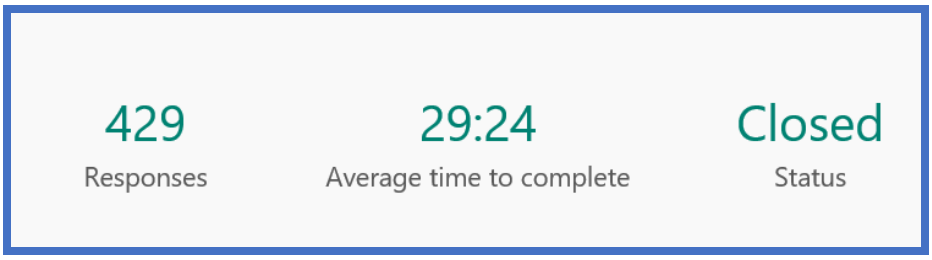
- Emails were sent to relevant user groups only.
- No junk or spam emails were sent.
- Duplicated email addresses were checked and deleted to avoid sending more than one copy to one person.
- No attachments were emailed to avoid virus suspicions.

An email was sent to all respondents advising them that an email with a hyperlink to the questionnaire would be sent to them in a short while (Saunders & Lewis, 2012:150). Shortly, the email was later sent to all the targeted respondents with a cover letter and a hyperlink to the questionnaire (Saunders & Lewis, 2012:150). After

two weeks of sending the questionnaire, another email was sent to all the staff from the surveyed organisations, specifically to thank employees who had responded and encouraged the ones who had not completed yet, to do so (Saunders & Lewis, 2012:150). Four weeks after the initial email, an email was sent again to thank everyone who participated in the survey and to advise the respondents that the survey was officially closed (Saunders & Lewis, 2012:150).

As for the printed questionnaire, the researcher appointed key staff from the surveyed organisations to support with data collection for hard copy questionnaires. The appointed persons were requested to print the paper-based questionnaires and hand deliver to staff without email addresses (Saunders & Lewis, 2012:146). Upon receiving the completed questions, the appointed persons were requested to enter the information in the format provided. Below in Figure 8.2 is the actual results of the survey. The total number of respondents was 429 with an average completion time of 29 minutes 24 seconds per questionnaire. The actual completion time was about two times longer than the estimated completion time of 15 minutes indicated on the electronic questionnaire. The current status of the survey is now on the closed status and no completed questionnaire would be received and included in the analysis.

Figure 8. 2: Survey results



8.4.4 Time horizons

This study was conducted with limited time and resources available, thus a cross sectional research design was recommended (Saunders & Lewis, 2012:123). According to Saunders and Lewis (2012:122), in a cross-sectional research design, data is collected from participants at only a single period commonly referred to as a snapshot. In a cross-sectional design, the data is collected from multiple groups or types of people such as male and female from different levels in the organisation,

people from different ages, social economic classes and educational achievements (Saunders & Lewis, 2012:124). The reason why longitudinal research design was not considered for this study is that it required a longer period of time to track changes and the cost of conducting the study could have been out of reach since the study span across Sub-Sahara Africa (Saunders & Lewis, 2012:124).

8.4.5 Missing data and data cleaning

Missing data is frequently a factor that is beyond the researcher's control and depends on the extent and pattern of the missing data (Khine *et al*., 2013:11). The data received from the respondents through questionnaires had some errors and a few inconsistencies. Therefore, data cleaning was conducted to remove errors to improve data quality and integrity. Missing data imputation is typically a significant feature of SEM (Ullman & Bentler, 2013:667). SEM has the ability to amplify missing data issues due to large numbers of measured variables involved (Ullman & Bentler, 2013:667).

8.5 THE POPULATION AND SAMPLE

The study population usually comprises of the subjects which are regular people because they are the ones who voluntarily participate and allow the researcher to collect the data from them (Taylor, 2018:94). Thus, the subjects or participants are the ones targeted by the researchers for data collection or observation (Levine *et al*., 2014:53; Taylor, 2018:94). The summation of all the subjects in a study makes up the study population. The population is a collective term to describe the total quantity of cases and consists of certain types of people or organisations (Walliman, 2011:94). Populations include the entire group of people, events or items of interest to the researcher and hence consisting of the total collection of elements about which the researcher wishes to make inferences (Clippinger, 2018:8).

According to Taylor (2018:94), the study population is a complete set of individuals, units, elements, observations, objects, events and procedures, for instance, automotive organisations in Sub-Sahara Africa. While target population is a subcategory of individual units, observations, elements, events, procedures and group of elements with specific demographical characteristics required to be studied

e.g. automotive organisation that have been in existence for more than 15 years (Taylor, 2018:94). The target population is the entire population of interest and it is the population to whom the results are applied (Gerrish & Lathlean, 2015:173). The objective of the target population is to generalise the data collected from a sample of a population from which it was drawn (Gerrish & Lathlean, 2015:173). Though, a target population comprises of too many units to practically study the whole population is impossible, it is at this stage where a decision should be made of what and who should be included in the sample so that the sample would include almost all of the parameters of the target population (Taylor, 2018:94).

Consequently, a sample is a further subgroup or portion of the target population in a study and it is a slice that is representative of all observations, elements, units from which data is collected for analysis (Levine *et al*., 2014:53). Sampling is, therefore, a process of choosing a subset of elements or units to be surveyed (Clippinger, 2018:9). Deciding to survey the entire population is usually not practical due to costs, time and resources involved (Clippinger, 2018:9). However, the larger the sample the more representative it is to the entire population (Clippinger, 2018:9; Walliman, 2011:95). When conducting a study, it is imperative to identify all elements of the entire population before drawing out a sample (Clippinger, 2018:8). The list used to identify all elements in a population is called a population or sampling frame (Clippinger, 2018:8). It is a detailed list of all units e.g. people or organisations and relates to the study population rather than the target population (Gerrish & Lathlean, 2015:174). A study population that has similar characteristics to a target population is generally considered to be robust because it can be used to generalise the wider population (Gerrish & Lathlean, 2015:174).

Ideally, the sample must reflect the population as precisely as possible and allow correct inferences about the population to be made using the findings of the study (Taylor, 2018:95). In the quantitative research approach, generalisation using extrapolation through broad inferences from specific study findings is a quality standard (Taylor, 2018:95). Thus, important demographic characteristics of the study population need to be encompassed, for example, age, gender or education qualifications (Taylor, 2018:95). It is important to carefully define the study sample so

that it is representative of the target population through detailing subjects or participants based on key demographic characteristics (Taylor, 2018:95).

In this respect, the target population for this study was drawn from automotive organisations from Sub-Sahara Africa and the sampling frame focused on automotive organisations that have been in existence for 15 years or more (Krishnaswami & Statyaprasad, 2010:51; Taylor, 2018:94; Walliman, 2011:94). As shown in Figure 1.3, the sample was comprised of employees from Toyota Tsusho Africa, Subaru Southern Africa, Toyota Malawi, Toyota Kenya, Toyota Zambia and Toyota Zimbabwe. To select the sample, a stratified random technique was used to ensure that the sample obtained was representative of the population from which it was drawn (Taylor, 2018:96). A stratified sampling technique was found to be more efficient method than either simple random sampling or systematic sampling because the representation of the items across the entire population is certain or ensured (Levine *et al*., 2014:56). The research was a cross sectional type of research which surveyed all employees from the selected organisation of all ages, race and levels of employment (Saunders & Lewis, 2012:123). The estimated sample population was 1434 employees from all selected organisations and thus the more the data collected the more convincing the results for the study would be (Clippinger, 2018:9; Walliman, 2011:95). The sample was selected because it was less time consuming than selecting the entire population, less costly, less cumbersome and more practical than analysing the whole population (Levine *et al*., 2014:53).

8.5.1 Characteristics of a valid sample

It is imperative for a researcher to ensure that the identified sample to be used in a study is always valid. According to Clippinger (2018:9), a valid sample must precisely represent its population characteristics and sample validity relies on three factors: accuracy, precision and size.

Accurate samples neither overrepresents nor underrepresents certain population characteristics, have no system variance and are free of bias (Clippinger, 2018:9). Precise samples have few sampling errors that are caused by fluctuations or variations in statistical mean that can vary from its corresponding population value

because of random fluctuations in the sampling process (Clippinger, 2018:10). The fluctuations or variations are called sampling error (Clippinger, 2018:10). Therefore, research inferences can be justified only if the sample is precise and accurate however, sample size can also influence sample accuracy and precision (Clippinger, 2018:10). Accordingly, increasing the sample size can improve the accuracy and precision of inferences based on the sample (Clippinger, 2018:10). According to Clippinger (2018:11), the rule of thumb for sample size is that sample sizes larger than 30 and smaller than 500 is suitable for a research, when many variables are used in the study, the sample size must be preferably 10 times larger than the variables being measured and for simple experimental research with strict experimental controls, successful researches are possible with samples between 10 and 20.

8.5.2 Sampling designs

Sampling design is a selection process of participants based on the theoretical requirements of the study (Taylor, 2018:96). Quantitative and qualitative research approaches use different techniques and procedures in sampling designs (Taylor, 2018:96). Qualitative research sampling designs are purposeful, deliberate and occur throughout the research process while quantitative research designs sampling techniques applied in this study are purely based on assumptions about the population and can be conducted randomly using the two categories of the sampling designs probability techniques or nonprobability techniques (Taylor, 2018:96; Clippinger, 2018:11). The randomised technique applied in probability sampling allows the unit of the population to have a nonzero likelihood or chance of being selected while in nonprobability sampling, the units do not have a predetermined chance of being selected (Taylor, 2018:96; Clippinger, 2018:11). Probability sampling is mostly characterised by a random selection of units from the population and the technique ensures that all elements of the target population have a known chance of being selected (Gerrish & Lathlean, 2015:176). For instance, applying a randomised technique to an organisation with 1000 employees and draw a sample of 100, all the names of the employees would be put in a basket and a blindfolded person would draw the 100 giving everyone a chance to be selected with an equal chance of 1 in 10 (Clippinger, 2018:12). Table 8.6 below shows the categories,

methods, strengths and weaknesses of probability and nonprobability sampling techniques. Nonprobability sampling techniques can produce larger participants, cost less and are flexible, but the technique is likely to be biased, has reliability issues and its findings are difficult to generalise (Taylor, 2018:96). While in probability sampling technique it is possible to compute statistical significance, calculate sampling error and is less likely to be biased. However, the probability sampling technique is costly, time consuming and requires larger data (Taylor, 2018:96).

Table 8. 6: Types of sampling techniques

No.	Types	Methods	Strengths	Weaknesses
1	Nonprobability	Convenience	1. Yields larger participants. 2. Flexible 3. Cost less	1. Reliability issues. 2. Findings not generalisable. 3. Likely to be bias
		Quota		
		Snowball		
		Judgemental		
2	Probability	Systematic	1. Less likely to be bias. 2. It is possible to calculate sampling error. 3. It is possible to compute statistical significance.	1. List of all units must be available. 2. Costly and time consuming. 3. There is no benefit with smaller number.
		Cluster		
		Simple random		
		Stratified		
		Multistage		

Source: Taylor (2018:96)

Probability sampling techniques sometimes referred to as complex sampling designs were developed to compensate for the inefficiencies of the simple random sampling method which uses a series of random numbers used to select the numbers of units of the population from the sampling frame i.e. systematic, stratified random, cluster and area sampling are repeatedly used in business research (Clippinger, 2018:12; (Saunders & Lewis, 2012:135). The study preferred to use a probability stratified method to select its sample rather than the systematic, cluster, simple random or the multistage sampling techniques. In systematic sampling technique, every *n*th element in the population is drawn from a list generated from a sampling frame

starting with a randomly selected element (Clippinger, 2018:12; Gerrish & Lathlean, 2015:178). Elements from the sample are selected from the sampling frame at regular internal (Saunders & Lewis, 2012:136). The systematic method can be used when study population units are similar to one another on important variables (Taylor, 2018:99). The cluster sampling method is ideal to use when the target population is already divided into groups (Clippinger, 2018:14). The cluster method is most suitable when the population consists of units or groups rather than individuals (Taylor, 2018:99).

The stratified method was found to be most suitable for this study because of its ability to divide the sampling frame into strata that are relevant to the research questions (Saunders & Lewis, 2012:135). It is a modified version of the random sampling technique (Saunders & Lewis, 2012:136). The stratified random technique is used when the research population is heterogeneous and contains several different groups, some of which are related to the topic of the study (Krishnaswami & Statyaprasad, 2010:61; Taylor, 2018:99). The Sub-Sahara Africa region which comprises of several different countries which are heterogeneous applies to the stratified sampling requirements. Utilising a sampling list from Table 2.5, Sub-Sahara Africa countries, all the countries had a 1 in 10.9 chance of equally being selected (Clippinger, 2018:12). The population was divided into homogenous groups and from each stratum which comprised some common characteristics a random sample was drawn (Krishnaswami & Statyaprasad, 2010:60; Levine *et al*., 2014:56). The sampling frame focused on automotive distributors or dealers that have been in existence for 15 years or more (Levine *et al*., 2014:56; Clippinger, 2018:12; Walliman, 2011:94; Krishnaswami & Statyaprasad, 2010:51). The study sample comprised of employees from all levels of the organisations from the selected automotive organisations in Table 1.1.

8.6 DATA PROCESSING AND ANALYSIS TOOLS

Data were analysed using a statistical software programme developed by the International Business Machines (IBM) for data analysis, reporting, big data analysis, data mining and decision making called the SPSS package and AMOS (IBM, 2017; Saunders & Lewis, 2012:36). The SPSS package was used to analyse descriptive data and the AMOS was used to conduct SEM analysis (IBM, 2017; IBM, 2019).

AMOS helps to easily use SEM to test hypotheses on complex variable relationships and acquire insights on data (IBM, 2019; Khine *et al*., 2013:4). AMOS is a SEM software that helps researchers to support their theories by extending multivariate analysis methods such as regression, correlation and analysis of variance (IBM, 2019; Khine *et al*., 2013:4). Using AMOS researchers can construct attitudinal and behavioural models that reflect complex relationships more accurately than standard multivariate statistical tools (IBM, 2019).

As explained in Chapter 7, SEM is a method used to model the first moment of data that represent the mean structures and the second moment of data that represents the covariance matrix of variables when the data is multivariate normal (Chaung, 2015:14). According to Chaung (2015:6), SEM is highly favoured by users because it comprises of general linear models and meta-analysis. SEM contains a variety of techniques under the same framework (Chaung, 2015:6). SEM is an ideal technique for measuring correlations that seek to measure relationships between two concepts (Ullman & Bentler, 2013:661; Walliman, 2011:10).

Descriptive statistics were used to help summarise and present the data (Levine *et al*., 2014:36). Exploratory factor analysis and confirmatory factor analysis were also conducted to check if the data achieved the required reliability, content and construct validity before conducting SEM. Furthermore, comparison of the biographical variable effect on constructs was conducted to measure the effect size which is a measure of practical significance which is totally independent of sample size and measures correlation and regression coefficient (Ellis & Steyn, 2003:51). The effect size was used as a backup for standard reporting of statistical significance (Ruscio & Mullen, 2012:202). The effect size measured the gender effect size and employment status. Additionally, nonparametric correlations were measured to determines the strength and direction of the monotonic relationship between two variables rather than the strength and direction of a linear relationship and the variables measured could either be ordinal, ratio or interval (Laerd Statistics, 2018). The measurement was conducted between the constructs and biographical information such as age, level of employment, qualifications and number of years served in the organisation. Coefficient of correlations was used to measure correlations between constructs to identify small, important and large correlation coefficients before conducting SEM

analysis. SEM analysis was conducted to establish the relationship between the measured variables in line with the study objective and hypothesis. An in-depth evaluation of the data was done to check if the data truly confirmed the hypotheses of the study.

8.7 SUMMARY

Chapter 8 was focused on explaining the research methodology used to conduct the study. The term research was defined as a methodical process of inquiry used to explain, interpret, describe, predict and control the observed phenomenon (Taylor, 2018:9). The relationship between theory and the empirical study was clarified and some benefits or reasons for conducting research were provided. The research process framework was illustrated to show the step required to be followed when conducting research. The research paradigm a general blueprint that explains the components that would be used to organise the entire research project was explained (Taylor, 2018:48). The research paradigm explained the research philosophies, approaches and strategies. The deductive research approach was preferred for this study because it arises from the general concepts to specific facts or cases generated from primary data gathered by the researcher. It is basically described as a top-down approach because it uses theory to direct design and drive interpretation. In this regard, the study adopted a quantitative research approach which is largely underpinned by positivism and empirical paradigms (Taylor, 2018:7). Additionally, a comparison between a quantitative and qualitative research approach was described to clarify the reasons for choosing the quantitative method over the qualitative research approach.

Data were collected using a questionnaire that was distributed to respondents from selected surveyed organisations in Sub-Sahara Africa. Before data collection was conducted, permission to conduct the survey was requested from the organisations' top management (Managing Directors). The questionnaire was developed based on the process followed in Chapter 7 and was distributed to the respondents using email and printed hard copies for employees without access to email. The sample was drawn from Toyota Kenya, Toyota Malawi, TTAF, Subaru Southern Africa, Toyota Zambia and Toyota Zimbabwe. The total sample of the study was estimated at 1434 employees. A stratified method was found to be most suitable for this study

because of its ability to divide the sampling frame into strata that are relevant to the research questions (Saunders & Lewis, 2012:135). Data were processed using the SPSS, AMOS statistical package. Construct validity and reliability was tested using exploratory factor analysis and confirmatory factor analysis. Furthermore, descriptive analysis and SEM analysis were conducted to finally develop and proposed a framework for this study.

Chapter 9 concentrates on analysing the study results or findings related to the research objectives and the hypothesis of the study. The data collected in this study was used to explain the biographical characteristics, exploratory factor analysis, confirmatory analysis, descriptive statistics, comparison of biographical effects on constructs, correlations between constructs and conduct SEM analysis. The data analysis conducted using SEM was expected to result in the developed of a framework that would be proposed for this study.

CHAPTER 9: DISCUSSION AND RESULTS

9.1 INTRODUCTION

The research methodology adopted for this study was explained in Chapter 8 where the definitions of the term research and the problem statement were provided. A detailed explanation of the research paradigm, research approaches and research strategies used was presented. Additionally, an in-depth explanation of how the questionnaire was designed, its layout and the distribution process were also provided. Furthermore, the population, sample size, data collection and data analysis techniques were explained in the readiness of the analysis and presentation of the results in Chapter 9. Chapter 9 presents the study results or findings that were anchored on the research objectives and hypothesised framework. The chapter unbundles the data collected in the study by explaining the biographical characteristics, exploratory factor analysis, confirmatory analysis, descriptive statistics, comparison of biographical effects on constructs, correlations between constructs and the SEM analysis.

The results of this study were presented in the easiest understandable way as possible and comprised of both results that supported the hypothesis and the ones which did not support the hypothesis of the research objectives. The results were shared with the NWU and were published in this thesis in line with the NWU requirements and guidelines.

9.2 BIOGRAPHICAL INFORMATION

The study was conducted in five countries from selected six Sub-Sahara African automotive organisations namely; TTAF, Toyota Kenya, Toyota Malawi, Subaru Southern Africa, Toyota Zambia and Toyota Zimbabwe with a total estimated population sample of 1434 as shown in Table 9.1 below. After the data had been collected, the total respondents were 429 giving a response rate of 30%. From the total respondents, five respondents did not indicate the names of their organisation. Table 9.1 below shows the name of the country, company, number of respondents, number of employees and response rate of the survey. Toyota Zimbabwe produced the highest response rate of 49% followed by Subaru Southern Africa at 48% and

Toyota Zambia produced the lowest response rate of 19%. In general, the total average response rate for the study was 30% slightly lower than the average response rate identified in previous studies of 35.7% (Saunders & Lewis, 2012:149). However, Toyota Zimbabwe, Subaru Southern Africa, Toyota Malawi and TTAF had response rates above 30%.

Table 9.1: Number of respondents

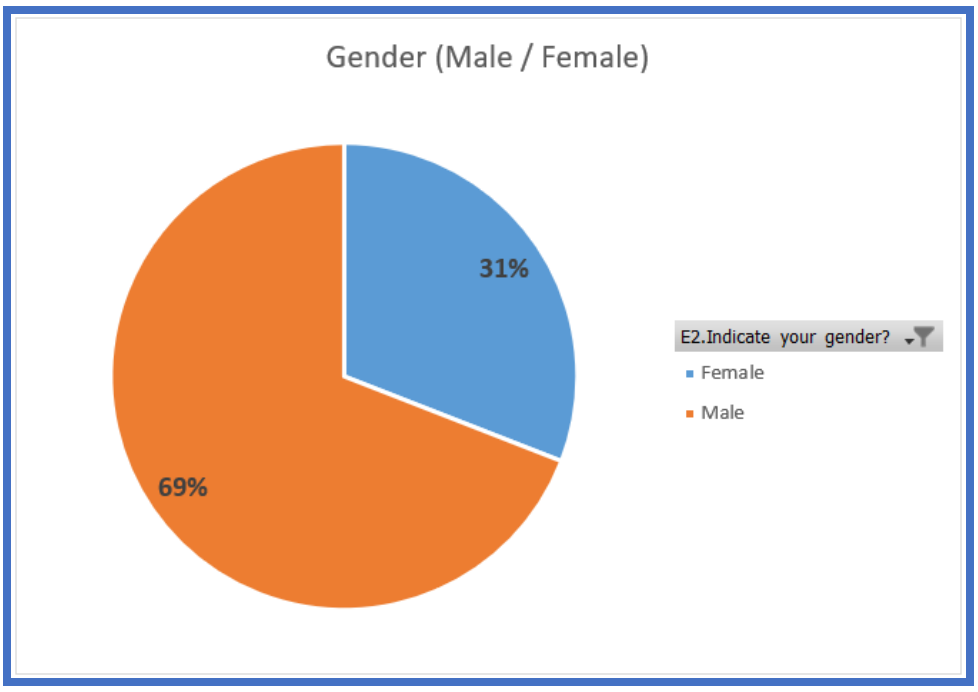
No.	Country	Company	No. of Respondents	No. of Employees	Response Rate
1	Kenya	Toyota Kenya	89	449	20%
2	Malawi	Toyota Malawi	62	179	35%
3	South Africa	Toyota Tsusho Africa	103	305	34%
4	South Africa	Subaru Southern Africa	35	73	48%
5	Zambia	Toyota Zambia	46	247	19%
6	Zimbabwe	Toyota Zimbabwe	89	181	49%
7	N/A	Missing data	5	0	0%
	Total		**429**	**1434**	**30%**

NB 5 respondents missing data*

9.2.1 Female and male respondents

The study comprised of more male respondents than female respondents. From the total amount of respondents, only two respondents in the survey did not indicate their gender. Accordingly, 31% of the respondents were female while 69% were men as shown in Figure 9.1 below.

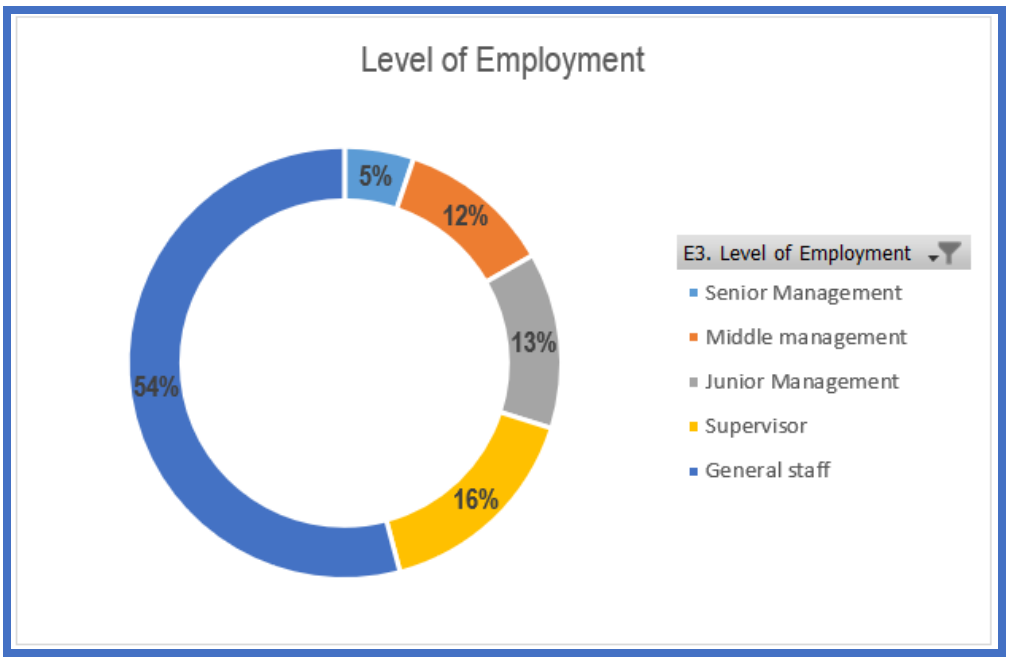
Figure 9.1: Gender



9.2.2 Level of employment

Only four respondents had missing data on the level of employment. General staff had a 54% response rate while the senior management response rate was 5%. The survey received favourable response rates from supervisors at 16%, middle managers at 12% and junior managers at 13% as shown in Figure 9.2 below.

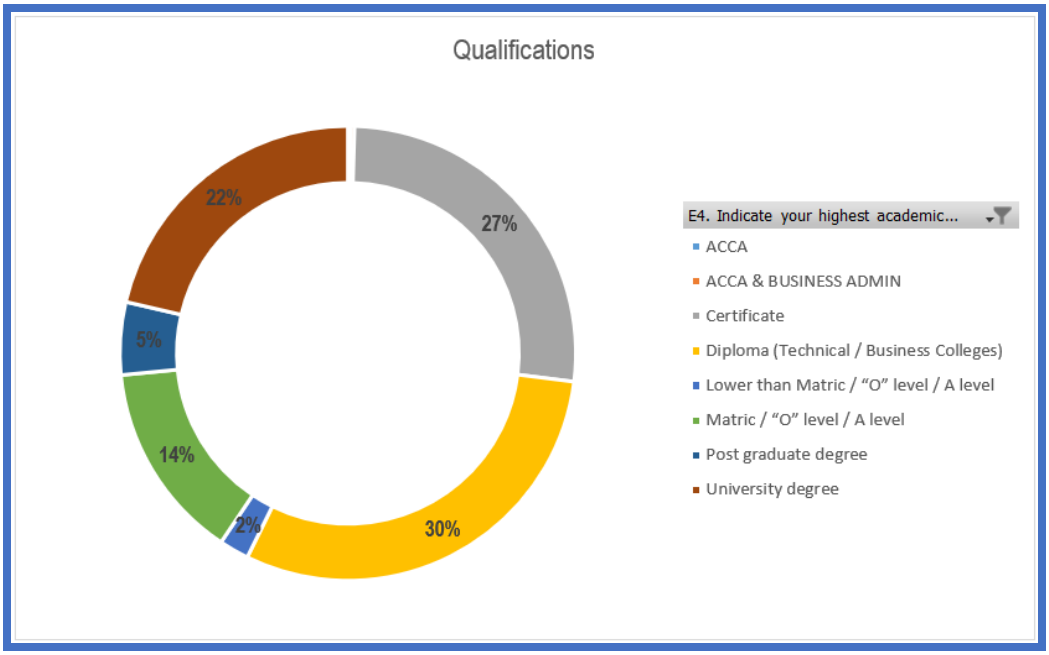
Figure 9.2: Level of employment



9.2.3 Qualifications

In respect of qualifications, 14% of the respondents possessed a grade 12% or matric qualification, 30% college diplomas, 27% college certificates, 22% university degrees and 5% postgraduate qualification. Only three respondents did not indicate their level of qualifications. Moreover, from the total respondents, only 2% possessed qualifications lower than matric or grade 12 as shown in Figure 9.3 below. Two respondents possessed the Association of Chartered Certified Accountants (ACCA) and business administration certification recorded as other qualifications.

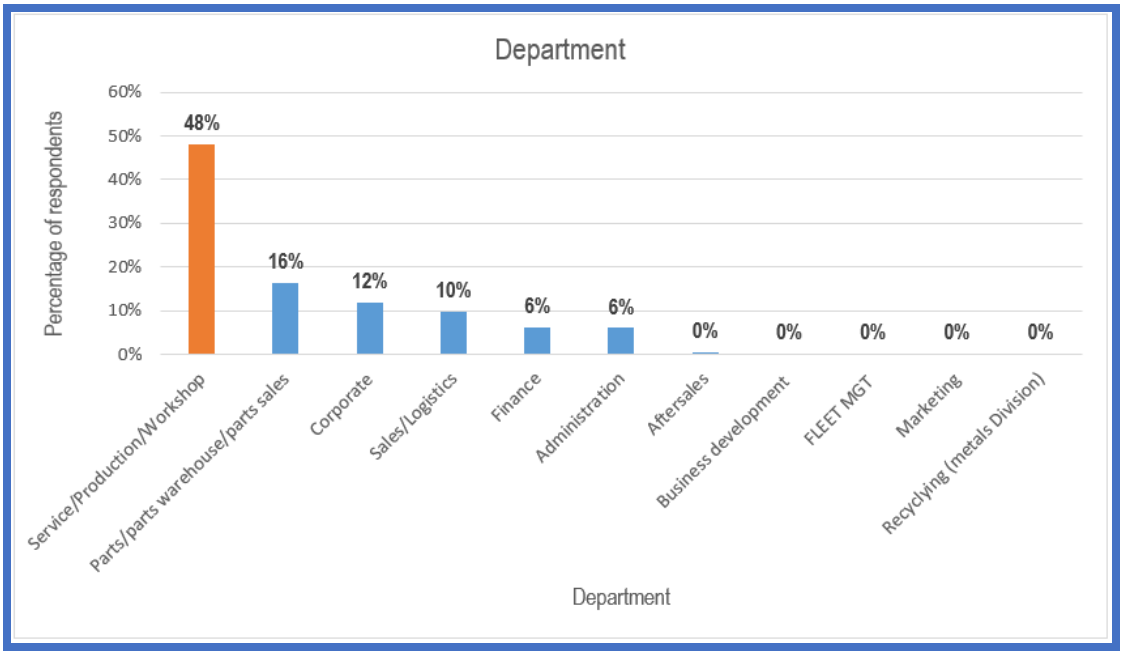
Figure 9.3: Qualifications



9.2.4 Department

Most of the respondents in the survey came from the service, production or workshop departments which produced a response rate of 48% followed by parts, parts warehouse or parts sales department at 16%, corporate department at 12%, sales and logistics department at 10%, finance department at 6% and administration department at 6%. Only one respondent had missing information on the department as shown below in Figure 9.4. The responses were in line with the ratio of employees in the organisations. All the organisations surveyed had more than 50% of their employees working in the service, production or workshops department. Aftersales, business development, marketing and recycling departments were included by the respondents in the survey as other categories. The total number of the other category was 6 which did not have a significant impact on the results of the survey as shown in Figure 9.4 below.

Figure 9.4: Department



9.3 VALIDITY AND RELIABILITY

According to Hair *et al.* (2010:693), it is imperative before conducting significant relationship tests in SEM to obtain satisfactory level of validity and reliability. Before analysing the proposed overall structure of the hypothesis, each latent variable was tested for validity and reliability using exploratory factor analysis and confirmatory factor analysis. Reliability tests for all the latent variables were all above the recommended threshold of 0.7 and were explained on individual latent variables in exploratory factor analysis and confirmatory analysis (Bryman & Bell, 2007:164; Lotz & van der Merwe, 2013b:203). On the other hand, validity tests were conducted using the Kaizer-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's test of sphericity which determines the appropriateness of data for factor analysis (Lotz & van der Merwe, 2013b:200). Therefore, to completely comprehend the nature of factors in the data, it was viewed as important to first conduct exploratory factor analysis (Khine *et al.*, 2013:158).

9.4 EXPLORATORY FACTOR ANALYSIS

According to Khine *et al.* (2013:158), exploratory factor analysis is when the researcher has a minimal direct impact on the correspondence between the factors

and indicators and it is defined as a standard statistical method for evaluating a measurement model. Exploratory factor analysis in statistics is usually used to produce information about the nature of factors determined by the researcher instead of testing the hypothesis (Khine *et al*., 2013:158). It is further used to collect information about the inter-relationships among set variables (Khine *et al*., 2013:153). Thus, it does not require a priori hypothesis about how the indicators are linked to the underlying factors (Khine *et al*., 2013:158). It is concerned with whether the covariance or correlations between a set of observable variables can be explained in terms of smaller numbers of unobserved constructs e.g. latent variables or common factors (Khine *et al*., 2013:153). In addition, exploratory factor analysis is usually not regarded as part of the SEM family (Khine *et al*., 2013:158).

The key focus areas for this study on exploratory factor analysis were KMO and Bartlett's test, communalities tests, total variance explanation, the pattern matrix and reliability tests. The KMO and Bartlett's test is the initial step used to perform a factor analysis because it can evaluate the data for factor analysis with a satisfactory sampling adequacy greater than 0.5 for a satisfactory analysis to proceed, although values greater than 0.6 are preferred (Khine *et al*., 2013:153). At this level of analysis, the correlation matrix for the coefficient of 0.3 and above are inspected in order to calculate the measure of adequacy or KMO and Bartlett's test of sphericity (Khine *et al*., 2013:154). The p-values are also measured in KMO and Bartlett's test. The recommended p-value that is considered statistically significant must be less than 0.05 (Khine *et al*., 2013:13). P-values of less than 0.001 show that the patterns of correlations are compact in the sense that factor analysis should produce reliable factors (Lotz & van der Merwe, 2013b:199).

Additionally, the communalities test must also produce values greater than 0.3 to conduct a satisfactory test (Khine *et al*., 2013:153). The total variance explained focused on the cumulative percentages of the explained variance for the process and outcome variables of the model (Khine *et al*., 2013:71). The cumulative percentage value of the explained variance that is greater than 0.5 is considered satisfactory or acceptable because more than 0.5 of the information can explain the factors represented (Gerrish & Lathlean, 2015:418; Khine *et al*., 2013:71). The pattern matrix is a regression equation where the standardised observed variable is

expressed as a function of the factors and the loadings are regression coefficient (IBM Support, 2019). Therefore, the function of the pattern matrix is to hold the loadings (IBM Support, 2019). The reliability of the measurement instrument was measured using the Cronbach Alpha coefficients (Lotz & van der Merwe, 2013b:198). Reliability is evaluated by testing the internal consistency of items of the measurement instrument by calculating the Cronbach Alpha coefficients (Lotz & van der Merwe, 2013b:203). Cronbach Alpha coefficient measures the internal consistency between the items of the measuring instrument and its coefficients which ranges between 0 for no reliability and 1.0 for maximum reliability (Lotz & van der Merwe, 2013b:203).

9.4.1 KMO and Bartlett's test and pattern matrix for organisational antecedents

The exploratory factor analysis for organisational antecedents' scale showed satisfactory sampling adequacy of KMO of 0.933 which indicated that the data was enough for the researcher to conduct factor analysis as shown in Table 9.2. The KMO result of 0.933 confirmed that Bartlett's test was also statistically significant, and that factor analysis was applicable because correlations amongst the items were very high close to 1.0 (Khine *et al*., 2013:157). The p-value for the KMO and Bartlett's was statistically significant at p=0.000 less than 0.001 (Khine *et al*., 2013:13).

Table 9.2: KMO and Bartlett's test for organisational antecedents

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.933**
Bartlett's Test of Sphericity	Approx. Chi-Square	6336.289
	df	351
	Sig.	0.000

The communalities test for all the 27 items in organisational antecedents produced satisfactory values that were ranging between 0.808 and 0.424 greater than 0.3 as shown in Appendix 3 for organisational antecedents (Khine *et al*., 2013:153). Item A2, "my organisation encourages the development of new ideas for the improvement

of the company produced the highest value of 0.808" and item "A22, in this organisation my colleagues and I always find time for long term problem solving produced the lowest value of 0.424". The item that produced the lowest factor of 0.424 was above the minimum values of 0.3 recommended to proceed with the analysis (Khine *et al*., 2013:153).

The total variance explained a cumulative percentage of 62.512%, more than half of the information collected from the five factors in organisational antecedents as shown in Table 9.3 below (Khine *et al*., 2013:71). The cumulative percentage of the eigenvalues above 1.0 was at 62.512% and was considered satisfactory to explain the five factors represented in organisational antecedents.

Table 9.3: Total variance explained for organisational antecedents

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.905	40.388	40.388	10.905	40.388	40.388	8.746
2	2.171	8.040	48.429	2.171	8.040	48.429	5.175
3	1.557	5.768	54.197	1.557	5.768	54.197	5.015
4	1.183	4.381	58.577	1.183	4.381	58.577	4.767
5	1.062	3.934	62.512	1.062	3.934	**62.512**	4.532

The pattern matrix for organisational antecedents did not load 100%, therefore required confirmatory factor analysis for further analysis to be conducted. The pattern matrix for organisational antecedents was expected to load the observed variables according to how they were categorised in the measurement instrument and order the loadings from the highest to the lowest. An oblimini or promax rotation was used where factors can correlate so that the loadings and correlations are distinct (IBM Support, 2019). Organisational antecedents had five latent variables where items A1 to A8 belonged to top management support factor, A9 to A12 belonged to autonomy or work discretion factor, A13 to A17 belonged to rewards or reinforcement factor, A18 to A22 belonged to time availability factor and A23 to A27 belonged to organisational boundaries factor. Table 9.4 below shows that the factor loadings for organisational antecedents' factors were spread out between item A1 and A17. Furthermore, the factor loadings produced values less than 0.3, even

worse some of the values produced negative values as shown in Table 9.4 below. Item A18 to A27 also produced overlaps in factor loading, thus the recommendation to conduct confirmatory factor analysis to confirm construct validity as shown in Table 9.4 below

Table 9.4: Organisational antecedents pattern matrix

Pattern Matrix[a]					
Observed variables	Component				
	1	2	3	4	5
A1. My organization is quick to use improved work processes or procedures that are developed by employees.		-0.802			
A2. My organization encourages the development of new ideas for the improvement of the company.		-0.899			
A3. Upper management is aware of and very receptive to my ideas and suggestions.		-0.745			
A4. Employees actively working on projects are allowed to make decisions without going through elaborate justification and approval procedures.		-0.396		0.326	-0.470
A5. There are many options within the organization for individuals to get financial support for their innovative projects and ideas.		-0.388			-0.563
A6. Individual risk takers are recognized and encouraged for the willingness to champion new projects, whether eventually successful or not.	0.331	-0.328			-0.368
A7. My organization supports many small and experimental projects, realising that some will undoubtedly fail.					-0.547
A8. Top management encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	0.272				-0.562
A9. I feel like I am my own boss and do not have to double check all my decisions with someone else.	0.524				-0.389
A10. My organization gives me the opportunity to make use of my abilities.	0.569	-0.255			
A11. In my organization I am not subject to criticism and punishment resulting from mistakes made on the job.	0.610				-0.349
A12. I have much autonomy on my job and am left on my own to do my own work.	0.701				
A13. The rewards I receive are dependent upon my work performance.	0.717				
A14. My manager / 4 will increase my job responsibilities if I am performing well in my job.	0.647				
A15. Individuals running or initiating successful innovative projects receive additional rewards and compensation for their ideas and efforts beyond the standard reward system.	0.634				
A16. My manager / 4 would tell his/her boss if my work is outstanding.	0.716				
A17. My manager / 4 helps me get my work done by removing obstacles and roadblocks.	0.720				
A18. During the past three months, my workload kept me from spending time on developing new ideas.				0.742	
A19. I have just the right amount of time and workload to do everything well.			0.585		-0.399
A20. I always seem to have plenty of time for innovation and experimentation.			0.470		-0.441
A21. My job is structured in such a way that gives me very little time to think about wider organization problems.				0.811	
A22. In this organization my colleagues and I always find time for long term problem solving.	0.262		0.308		
A23. In the last three months, I had to follow very little standard operating procedures or practices to do my major tasks.				0.593	
A24. There are many written rules and procedures that exist for doing my major tasks.			0.296	0.474	0.273
A25. My job description clearly specifies the standard of performance on which my job is evaluated.			0.755		
A26. I clearly know what level of work performance is expected from me in terms of quantity, quality and timeline of output.			0.691		
A27. I really have to follow the same work methods or steps for doing my major tasks.			0.438	0.309	

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 25 iterations.

9.4.2 KMO and Bartlett's test for entrepreneurial orientation

The exploratory factor analysis for entrepreneurial orientation scale showed satisfactory sampling adequacy of KMO of 0.948 which indicated that the data was enough to conduct factor analysis as shown in Table 9.5 below. The KMO result of 0.948 confirmed that Bartlett's test was also statistically significant, and that factor analysis was applicable because correlations amongst the items were very high (Khine *et al*., 2013:157). The p-value for the KMO and Bartlett's was statistically significant at p=0.000 less than 0.001 (Khine *et al*., 2013:13).

Table 9.5: KMO and Bartlett's test for entrepreneurial orientation

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.948**
Bartlett's Test of Sphericity	Approx. Chi-Square	7877.919
	df	351
	Sig.	0.000

Amongst all the 27 items in entrepreneurial orientation, the communalities test found only 24 items with satisfactory values that were ranging between 0.618 and 0.383 greater than 0.3 as shown in Appendix 3 for entrepreneurial orientation (Khine *et al*., 2013:153). The three items that produced values lower than 0.3 were C12, "our organisation places a strong emphasis on continuous improvement (Kaizen) in product, service and process at 0.287", C1, "I have enough autonomy in my job without continual supervision to do my job at 0.252" and C5, "I seldom have to follow the same work methods or steps while performing my major tasks from day to day at 0.149". Item C25, "our organisation is very aggressive and intensely competitive produced the highest value of 0.618" in entrepreneurial orientation (Khine *et al*., 2013:153).

The total variance explained a cumulative percentage of the eigenvalue above 1.0 at 47.375%, slightly less than 50% of the information collected for entrepreneurial orientation as shown in Table 9.6 below (Khine *et al*., 2013:71) thus the result was considered satisfactory to explain the factor represented in entrepreneurial orientation.

Table 9.6: Total variance explained for entrepreneurial orientation

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.791	47.375	47.375	12.791	47.375	**47.375**

The pattern matrix for entrepreneurial orientation latent variable was loaded as expected by the literature, therefore was considered enough evidence of construct validity. The pattern matrix for entrepreneurial orientation loaded the observed variables according to how they were categorised in the measurement instrument. Entrepreneurial orientation had one latent variable, where items C1 to C27 belonged to the entrepreneurial orientation latent variable. Table 9.7 below shows that the factor loadings for entrepreneurial orientation were loaded perfectly where item C25, our organisation is very aggressive and intensely competitive loaded the highest at 0.786 and C5, I seldom follow the same work methods while performing my major tasks from day to day loaded the lowest at 0.387. All the factor loadings produced values higher than 0.3 as shown in Table 9.7 below.

Table 9.7: Entrepreneurial orientation pattern matrix

Pattern Matrix[a]	
Observed variables	Component
C1. I have enough autonomy in my job without continual supervision to do my work.	0.502
C2. Our organisation allows me to be creative and try different methods to do my job.	0.619
C3. Employees at our organization are allowed to make decisions without going through elaborate justification and approval procedures.	0.631
C4. Employees at our organization are encouraged to manage their own work and have flexibility to resolve problems.	0.650
C5. I seldom have to follow the same work methods or steps while performing my major tasks from day to day.	0.387
C6. Our organization regularly introduces new products/services/processes.	0.709
C7. Our organization places a strong emphasis on new and innovative products/services/processes.	0.755
C8. Our organization has increased the number of products/services/processes offered during the past two years.	0.774
C9. Our organization is continually pursuing new opportunities.	0.750
C10. Over the past few years, changes in our products/services/processes have been quite dramatic.	0.701
C11. In our organization there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	0.709
C12. Our organization places a strong emphasis on continuous improvement (kaizen) in products/services/processes.	0.535
C13. Our organization has a widely held belief that innovation is an absolute necessity for the organization's future.	0.686
C14. Our leaders seek to maximize value from opportunities without constraint to existing models, structures or resources.	0.760
C15. When confronted with uncertain decisions, our organization typically adopts a bold posture in order to maximize the probability of exploiting opportunities.	0.754
C16. In general, our organization has a strong inclination towards high-risk projects.	0.667
C17. Owing to the environment, our organization believes that bold, wide-ranging acts are necessary to achieve the organization's objectives.	0.629
C18. Employees are often encouraged to take calculated risks concerning new ideas.	0.655
C19. The term 'risk-taker' is considered a positive attribute for the employees and management team in our organization.	0.647
C20. Our organization is very often the first to introduce new services/ learning areas/ sport codes/processes.	0.733
C21. Our organization typically initiates actions that competitors respond to.	0.696
C22. Our organization continuously seeks out new services/learning areas/sport codes/processes.	0.773
C23. Our organization continuously monitors market trends and identifies future needs of customers	0.746
C24. In dealing with competitors our organization typically adopts a very competitive "undo-the-competitor" posture.	0.731
C25. Our organization is very aggressive and intensely competitive.	0.786
C26. Our organization effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competition position.	0.755
C27. Our organization knows when it is in danger of acting overly aggressive (this could lead to erosion of our organization's reputation or to retaliation by competitors).	0.684

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The reliability for entrepreneurial orientations' 27 items were higher than 0.7 (Bryman & Bell, 2007:164; Khine *et al*., 2013:102; Lotz & van der Merwe, 2013b:203). The reliability of entrepreneurial orientation was at 0.953 as shown in Table 9.8 below (Gerrish & Lathlean, 2015:418).

Table 9.8: Cronbach Alpha for entrepreneurial orientation

Reliability Statistics for Entrepreneurial Orientation				
No.	Latent Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
1	Entrepreneurial Orientation	0.953	0.954	27

Subsequently, the results produced in entrepreneurial orientation confirmed construct validity and the reliability was sufficient for structural equation modeling.

9.4.3 KMO and Bartlett's test for corporate entrepreneurship

The exploratory factor analysis for corporate entrepreneurship scale showed satisfactory sampling adequacy of KMO of 0.884 which indicated that the data was enough to conduct factor analysis as shown in Table 9.9 below. The KMO result of 0.884 confirmed that Bartlett's test was also statistically significant, and that factor analysis was applicable because correlations amongst the items were very high (Khine *et al*., 2013:157). The p-value for the KMO and Bartlett's was statistically significant at p=0.000 less than 0.001 (Khine *et al*., 2013:13).

Table 9.9: KMO and Bartlett's test for corporate entrepreneurship

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.884**
Bartlett's Test of Sphericity	Approx. Chi-Square	1991.782
	df	15
	Sig.	0.000

The communalities test for all the 6 items in the corporate entrepreneurship factor produced satisfactory values that were ranging between 0.787 and 0.664 greater than 0.3 as shown in Appendix 3 for corporate entrepreneurship (Khine *et al*., 2013:153). Item B3, "our organisation seeks to redefine its relationship with its market or industry competitors by fundamentally altering how it competes, produced the highest value of 0.787" and item "B1, our organisation regularly and continuously introduces new products, services and enters new markets produced the lowest value of 0.664" (Khine *et al*., 2013:153).

The total variance explained in this factor was 73.886%, which was more than half of the information collected in the corporate entrepreneurship factor as shown in Table 9.10 below (Khine *et al*., 2013:71). The result for the total variance explained for corporate entrepreneurship was satisfactory to proceed with the analysis.

Table 9.10: Total variance explained for corporate entrepreneurship

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.433	73.886	73.886	4.433	73.886	**73.886**

The pattern matrix for corporate entrepreneurship latent variable loaded according to the literature, therefore, it was considered as evidence of construct validity to conduct structural equation modeling. The pattern matrix for corporate entrepreneurship loaded the observed variables according to how they were categorised in the measurement instrument. Corporate entrepreneurship had one latent variable, where items B1 to B6 belonged to the corporate entrepreneurship latent variable. Table 9.11 shows that the factor loadings for corporate entrepreneurship were loaded perfectly where item B3, our organisation seeks to redefine its relationship with its market or industry competitors by fundamentally altering how it competes loaded the highest at 0.887 and B1, our organisation regularly and continuously introduces new products, services and enters new markets loaded the lowest at 0.815. All the factor loadings produced values higher than 0.3 as shown in Table 9.11 below.

Table 9.11: Corporate entrepreneurship pattern matrix

Pattern Matrix[a]	
Observed variable	Component
B1. Our organisation regularly and continuously introduces new products, services and enters new markets.	0.815
B2. Our organisation seeks to sustain or improve its competitive standing by altering its internal processes, structures and capabilities.	0.850
B3. Our organization seeks to redefine its relationship with its markets or industry competitors by fundamentally altering how it competes.	0.887
B4. Our organisation proactively creates a new product market arena that others have not recognised or actively sought to exploit.	0.867
B5. Our organisation applies entrepreneurial thinking to the design or redesign of its core business model (s) in order to improve operational efficiencies.	0.868
B6. Our organization applies entrepreneurial thinking to the design or redesign of its core business model(s) in order to improve operational efficiencies. or otherwise differentiate itself from i...	0.869

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The reliability for corporate entrepreneurship six items was higher than 0.7 (Bryman & Bell, 2007:164; Khine *et al*., 2013:102; Lotz & van der Merwe, 2013b:203). The

reliability for corporate entrepreneurship was at 0.928 as shown in Table 9.12 below (Gerrish & Lathlean, 2015:418).

Table 9.12: Cronbach Alpha for corporate entrepreneurship

Reliability Statistics for Corporate entrepreneurship				
No.	Latent Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
1	Corporate Entrepreneurship	0.928	0.929	6

Therefore, the results produced in the corporate entrepreneurship factor confirmed that construct validity and reliability was fit for structural equation modeling to be conducted.

9.4.4 KMO and Bartlett's test and pattern matrix for success factors

The exploratory factor analysis for the success factors scale showed satisfactory sampling adequacy of KMO of 0.939 which indicated that the data was enough for the researcher to conduct factor analysis as shown in Table 9.13. The KMO result of 0.939 confirmed that Bartlett's test was also statistically significant, and that factor analysis was applicable because correlations amongst the items were very high (Khine *et al*., 2013:157). The p-value for the KMO and Bartlett's was statistically significant at p=0.000 less than 0.001 (Khine *et al*., 2013:13).

Table 9.13: KMO and Bartlett's test for success factors

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.939**
Bartlett's Test of Sphericity	Approx. Chi-Square	5268.622
	df	153
	Sig.	0.000

The communalities test for all the 18 items for success factors produced satisfactory values that were ranging between 0.830 and 0.545, greater than 0.3 as shown in Appendix 3 for success factors (Khine *et al*., 2013:153). Item "D2, our organisation's percentage of sales generated by new products or services last year grew relative to competitors produced the highest value of 0.830" and item "D13, our organisation is

flexible to change standard operating procedures produced the lowest value of 0.545" (Khine *et al*., 2013:153).

The total variance explained a cumulative percentage of the eigenvalues for the four success factors at 71.528%, which was more than half of the information collected from the four factors in success factors as shown in Table 9.14 below (Khine *et al*., 2013:71). The cumulative percentage value of 71.528% was considered satisfactory to explain the four factors represented in success factors.

Table 9.14: Total variance explained for success factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	9.281	51.559	51.559	9.281	51.559	51.559	6.917
2	1.721	9.562	61.121	1.721	9.562	61.121	6.686
3	0.964	5.356	66.477	0.964	5.356	66.477	2.743
4	0.909	5.051	71.528	0.909	5.051	**71.528**	6.465

Similar to organisational antecedents, the pattern matrix for success factors did not load 100% as expected from the literature, therefore the success factors required further analysis using the confirmatory factor analysis. The pattern matrix for success factors was expected to load the observed variables according to how they were categorised in the measurement instrument and order the loadings from the highest to the lowest. Organisational success factors had four latent variables where items D1 to D4 belonged to the financial factor, D5 to D9 belonged to the customer factor, D10 to D14 belonged to the internal business process factor and D15 to D18 belonged to the learning and growth factor. Table 9.15 below shows that the factor loadings for financial loaded perfect and they were all above 0.3, customer and internal business process loaded with overlaps and the factor learning and growth loaded perfectly with all values above 0.3 as shown in Table 9.15. Hence, the customer and internal business process factors did not load perfectly and was therefore necessary to conduct confirmatory factor analysis for the organisational success factors. At this level, the organisational success factor latent variable did not confirm construct validity.

Table 9.15: Organisational success factors pattern matrix

Pattern Matrix[a]				
Observed variables	Component			
	1	2	3	4
D1. Our organisation's revenue and net profit grew in the last year				0.928
D2. Our organisation's percentage of sales generated by new products/services last year grew relative to competitors.				0.882
D3. Our organization's market share grew last year.				0.820
D4. I am satisfied with the current financial performance of my organization.				0.735
D5. Our organization has the ability to resolve customer complaints within customer acceptable times.	0.738			
D6. Our organization meets customer promised delivery time for vehicles, parts and service.	0.703		-0.255	
D7. Our organization always focuses on meeting customers future expectations.	0.767			
D8. Our organization always asks customers what they think about our products and service.	0.619		0.334	
D9. Our organization satisfies our customers better than our competitors.	0.785			
D10. Our organization has the capacity to introduce new technology.	0.282		0.592	
D11. Our organization encourages experimentation and tolerates failure.	0.312	0.567		
D12. Our organization offers high quality products and service.			0.619	
D13. Our organization is flexible to change standard operating procedures (SOP).		0.573	0.261	
D14. Our organization encourages employees to be creative and innovative.		0.676	0.318	
D15. Our organization encourages participation and involvement of all employees.		0.765		
D16. Our organization focuses on training and development of all employees.		0.867		
D17. My organization develops successors for key positions in the organization.		0.793		
D18. I am satisfied with my organization (Employee satisfaction).		0.741		

Extraction Method: Principal Component Analysis.

a. Rotation converged in 14 iterations.

Therefore, grounded on the pattern matrix results produced in Table 9.15 above, it was recommended to conduct confirmatory factor analysis on success factors. Exploratory factor analysis helped to identify the factors with strong relations and to determine the factors that needed to be included in the model (Khine *et al.*, 2013:152).

9.5 CONFIRMATORY FACTOR ANALYSIS

Confirmatory factor analysis is just one form of factor analysis and has been widely used in test development processes conducted by social science researchers in the last decade (Khine *et al.*, 2013:152). Confirmatory factor analysis measures causality relations among determining factors for a particular study (Khine *et al.*, 2013:152). Therefore, confirmatory factor analysis is used to determine whether the construct structured by the researcher is consistent, suitable and divulges causality relationships (Khine *et al.*, 2013:152). The investigation was utilised to ascertain

whether the hypothesised model provided a good fit to the data by indicating if a relationship existed between the observed variables and the latent variables using the minimum sample discrepancy divided by degrees of freedom (CMIN/DF), CFI, RMSEA and p-values (Hancock & Mueller, 2010; Blunch, 2008; Mueller, 1996).

The recommended value of CMIN/DF is estimated at 4.463, however, interpretation of the size of the CMIN/DF value depends on the researcher's viewpoint where ratios as high as 5.0 are found to represent a good model fit (Awang, 2015:57; Mueller, 1996). CFI values greater than 0.9 are indicative of a good overall fit (Awang, 2015:57; Mueller, 1996). The RMSEA values of between 0.08 and 0.09, reported at an average confidence level of 90% are considered to represent a good model fit, while RMSEA values of 0.10 should not be accepted (Awang, 2015:57; Khine *et al*., 2013:15; Blunch, 2008). Furthermore, it is recommended that the square multiple correlations for each equation to be reported because items with square multiple correlations less than 0.2 are considered not acceptable (Hooper, Coughlan & Mullen, 2008:56). Ideally, items with values less than 0.2 must be considered for deletion because values less than 0.2 indicate that the item is measuring something else (Hooper *et al*., 2008:56). Also, to be noted is that it is not necessarily important to report on all the indices produced by the software because the information can burden the readers or reviewers (Hooper *et al*., 2008:56). The confirmatory factor analysis was conducted on the organisational antecedents and organisational success factors models as recommended by results from the exploratory factor analysis.

9.5.1 Assessment of organisational antecedents' model

Confirmatory factor analysis for organisational antecedents produced a CMIN/DF value of 5.199, CFI of 0.788 and RMSEA of 0.099. The CMIN/DF and RMSEA values were considered acceptable to represent a good model fit, while CFI value was less than 0.9 at 0.788, was not indicative of an overall good model fit (Awang, 2015:57; Mueller, 1996). However, since the two indices, CMIN/DF and RMSEA were acceptable, an acceptable construct validity existed with all items loaded statistically significantly. The full results of the organisational antecedents' model fit are shown below in Table 9.16.

Table 9.16: Organisational antecedents' model fit summary

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	91	1632.456	314	.000	5.199
Saturated model	405	.000	0		
Independence model	27	6591.540	378	.000	17.438
Model	**NFI Delta1**	**RFI rho1**	**IFI Delta2**	**TLI rho2**	**CFI**
Default model	.752	.702	.790	.745	.788
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Model	**RMSEA**	**LO 90**	**HI 90**		**PCLOSE**
Default model	.099	.094	.104		.000
Independence model	.196	.192	.200		.000

All the p-values for the organisational antecedents' items loaded statistically significant on the factors at p=0000 represented by three stars p<0.001 in Table 9.17 below.

Table 9.117: Organisational antecedents regression weights

	Latent Variable	Estimate	S.E.	C.R.	P
A8.	Top management support	3.230	.051	63.003	***
A7.	Top management support	3.289	.045	72.667	***
A6.	Top management support	3.012	.047	64.236	***
A5.	Top management support	3.315	.048	69.024	***
A4.	Top management support	3.358	.046	72.557	***
A3.	Top management support	3.559	.045	79.972	***
A2.	Top management support	3.854	.044	87.688	***
A1.	Top management support	3.592	.049	73.747	***
A9.	Autonomy / Work Discretion	3.323	.050	65.976	***
A10.	Autonomy / Work Discretion	3.688	.040	92.631	***
A11.	Autonomy / Work Discretion	3.452	.049	70.108	***
A12.	Autonomy / Work Discretion	3.621	.041	88.618	***
A17.	Rewards / Reinforcement	3.650	.041	88.942	***
A16.	Rewards / Reinforcement	3.579	.044	82.254	***
A15.	Rewards / Reinforcement	3.499	.044	78.744	***
A14.	Rewards / Reinforcement	3.596	.041	87.751	***
A13.	Rewards / Reinforcement	3.543	.047	76.095	***
A18.	Time availability	3.568	.042	84.583	***
A19.	Time availability	3.492	.043	80.540	***
A20.	Time availability	3.276	.048	68.247	***
A21.	Time availability	3.396	.043	78.146	***
A22.	Time availability	3.404	.045	75.835	***
A27.	Organisational boundaries	3.620	.042	86.479	***
A26.	Organisational boundaries	3.782	.042	89.535	***
A25.	Organisational boundaries	3.657	.045	80.966	***
A24.	Organisational boundaries	3.656	.041	89.714	***
A23.	Organisational boundaries	3.329	.049	68.131	***

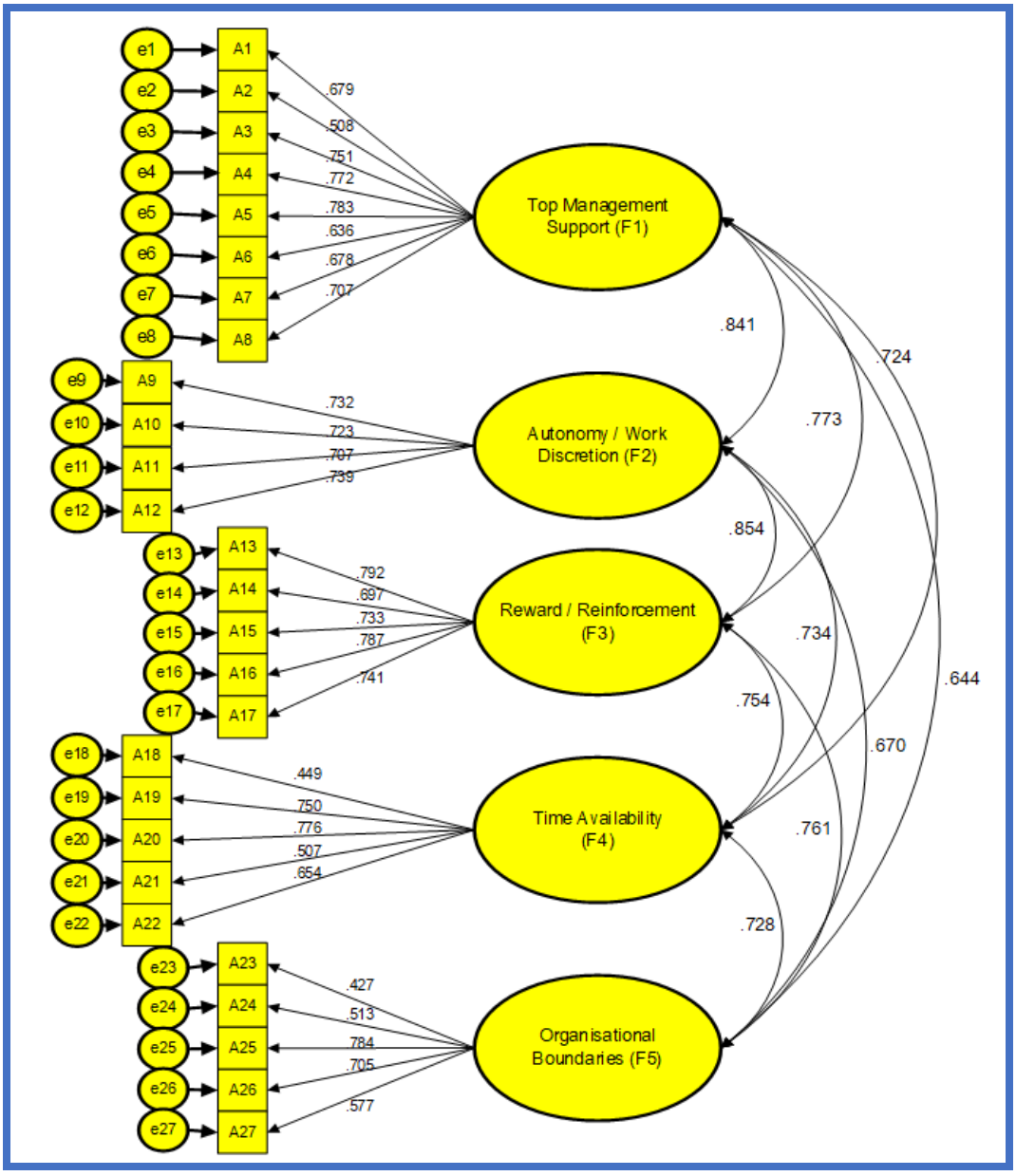
*** (p<value 0.001)

The hypothesised model for organisational antecedents had five latent variables; Top management support, autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries and 27 observed variables. The correlation values for all the five latent variables were statistically significant. The values ranged between 0.854 and 0.644 as shown in Figure 9.5 below. Autonomy or

work discretion and rewards or reinforcement correlations produced the highest values of 0.854, while top management support and organisational boundaries correlations produced the lowest value of 0.644. However, all the correlation values were within the recommended specification to proceed with structural equation modelling.

All the factor loadings were also greater than 0.3 with the lowest value report in item A23, “in the last three months, I had to follow very little standard operating procedure or practices to do my job at 0.427” and the highest loading reported from item A13, “the rewards I receive are dependent upon my work performance at 0.792” (Khine *et al.*, 2013:153).

Figure 9.5: Model of Organisational antecedents' hypothesis



The reliability for organisation antecedents' values were all acceptably higher than 0.7 (Bryman & Bell, 2007:164; Khine *et al*., 2013:102; Lotz & van der Merwe, 2013b:203). Therefore, the reliability of the five subscales of organisational antecedents were all acceptable with values ranging from 0.878 to 0.719. Top management support had the highest reliability of 0.878, while organisational boundaries had the lowest value of 0.719 as shown in Table 9.18 below (Gerrish & Lathlean, 2015:418).

Table 9.18: Cronbach Alpha for organisational antecedents

Reliability Statistics for Organisation Antecedents				
No.	Latent Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
1	Top Management Support	0.878	0.879	8
2	Autonomy / Work discretion	0.811	0.815	4
3	Reward / Reinforcement	0.863	0.864	5
4	Time Availability	0.764	0.762	5
5	Organisational Boundaries	0.719	0.724	5

Therefore, based on the above analysis the organisational antecedents hypothesised model was considered acceptable to represent a good model fit. The CMIN/DF value of 5.199, RMSEA 0.99, p-values 0.001 and factor loadings greater than 0.3 were found acceptable except for CFI which reported 0.788 less than 0.9. Therefore, we can conclude validity as well as reliability on the organisational antecedents' latent variables and proceed to conduct structural equation modelling.

9.5.2 Assessment of organisational success factors model

The confirmatory factor analysis for organisational success factors produced a CMIN/DF value of 4.365, CFI of 0.917 and RMSEA of 0.089. All the three reported indices for the confirmatory factor analysis were considered acceptable to represent the model fit. CMIN/DF value of 4.365 was within the acceptable estimate of 4.463, CFI value of 0.917 was greater than 0.9 and RMSEA value of 0.089 was less than 0.10 (Awang, 2015:57; Blunch, 2008; Khine *et al*., 2013:15; Mueller, 1996). The results were an indication that an acceptable construct validity existed, and all items loaded were statistically significant as shown below in Table 9.19.

Table 9.19: Organisational success factors model fit summary

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	60	563.055	129	.000	4.365
Saturated model	189	.000	0		
Independence model	18	5413.852	171	.000	31.660
Model	**NFI Delta1**	**RFI rho1**	**IFI Delta2**	**TLI rho2**	**CFI**
Default model	.896	.862	.918	.890	.917
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Model	**RMSEA**	**LO 90**	**HI 90**		**PCLOSE**
Default model	.089	.081	.096		.000
Independence model	.268	.262	.274		.000

The p-values for organisational success factors loaded statistically significantly on the factors at P=0.000 represented by three stars as shown below in Table 9.20. P-values for financial, customer, internal business process and learning and growth were all within the acceptable specification of p<0.001.

Table 9.20: Organisational success factors regression weights

	Latent Variable	Estimate	S.E.	C.R.	P
D4.	Financial	1.000			
D3.	Financial	1.134	.058	19.451	***
D2.	Financial	1.101	.056	19.593	***
D1.	Financial	.978	.056	17.336	***
D9.	Customer	1.000			
D8.	Customer	.935	.053	17.809	***
D7.	Customer	1.054	.052	20.166	***
D6.	Customer	1.105	.066	16.791	***
D5.	Customer	.978	.054	18.178	***
D14.	Internal business process	1.000			
D13.	Internal business process	.885	.056	15.911	***
D12.	Internal business process	.596	.045	13.186	***
D11.	Internal business process	.974	.062	15.700	***
D10.	Internal business process	.673	.051	13.144	***
D18.	Learning and growth	1.000			
D17.	Learning and growth	.932	.074	12.536	***
D16.	Learning and growth	1.119	.062	17.932	***
D15.	Learning and growth	1.057	.056	18.817	***

*** (p<value 0.001)

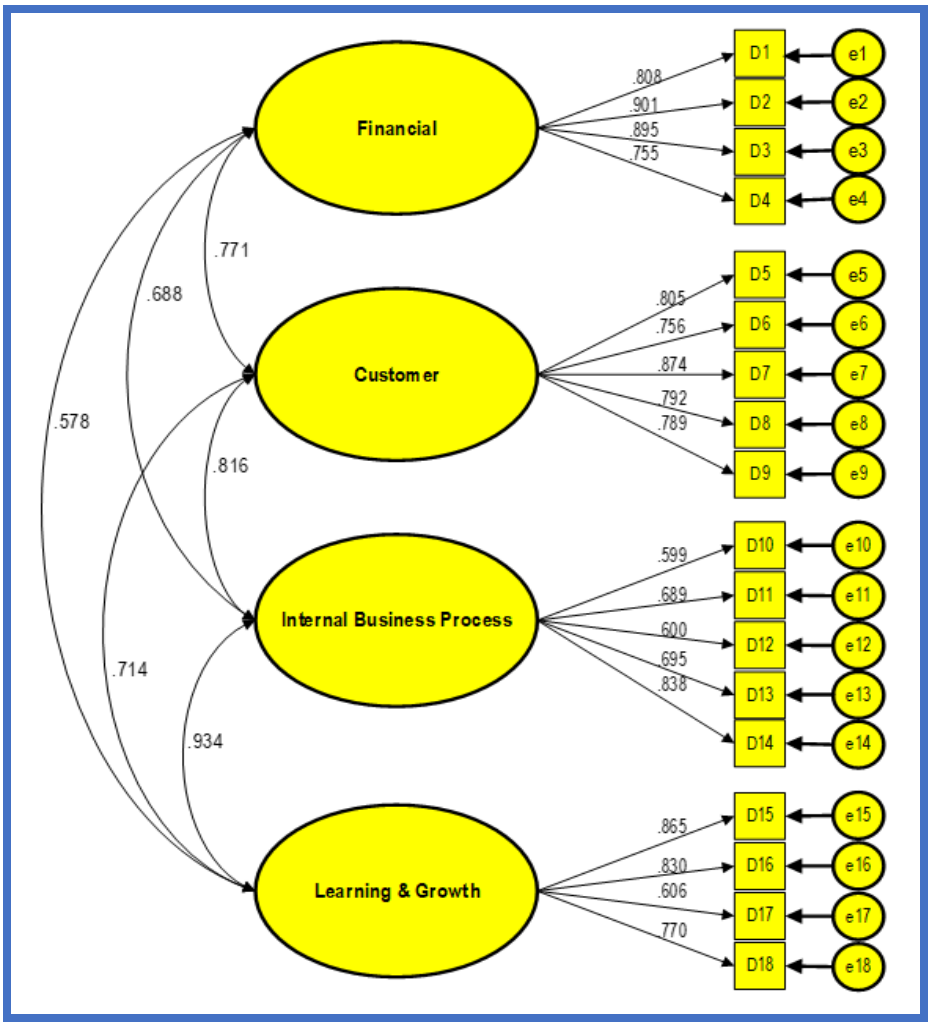
The hypothesised model for organisational success factors had four latent variables; financial, customer, internal business process and learning and growth with 18 observed variables.

The correlation values for all the four latent variables were statistically significant. The values ranged between 0.934 and 0.578 as shown in Figure 9.6 below. Internal business process and learning and growth correlations produced the highest value of 0.934, while financial and learning and growth correlations produced the lowest value of 0.578. However, all the correlation values were all within the recommended specification to proceed with structural equation modelling.

All the factor loadings were also greater than 0.3 with the lowest value report in item D10, “our organisation has the capacity to introduce new technology at 0.599” and the highest loading reported from item D2, “our organisation’s percentage of sales

generated by new products or services last year grew relative to competitors at 0.901" (Khine *et al*., 2013:153).

Figure 9.6: Organisational success factors hypothesised model



The organisational success factors hypothesised model was considered to represent a good model fit based on the results from the confirmatory factor analysis. The CMIN/DF value of 4.365, RMSEA 0.089, CFI 0.917, p-values <0.001 and factor loadings greater than 0.3 were all considered acceptable. Henceforward, validity was confirmed on the organisational success factor latent variables and a recommendation to proceed to conduct structural equation modelling was proposed.

The reliability test for success factors values were all pleasingly higher than 0.7 (Bryman & Bell, 2007:164; Khine *et al*., 2013:102; Lotz & van der Merwe,

2013b:203). The reliability of the four subscales of success factors was acceptable ranging from 0.904 to 0.817. Financial produced the highest reliability value of 0.904, while internal business process produced the lowest value of 0.817 as shown in Table 9.21 below (Gerrish & Lathlean, 2015:418).

Table 9.21: Cronbach Alpha for success factors

Reliability Statistics for Success Factors				
No.	Latent Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
1	Financial	0.904	0.905	4
2	Customer	0.896	0.899	5
3	Internal Business Process	0.817	0.819	5
4	Learning and Growth	0.852	0.858	4

All the four main aspects considered for the model of this study; organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success factors produced satisfactory results of the KMO and Bartlett's test, communalities test and reliability test.

Considering the results conducted using confirmatory factor analysis for the hypothesised models: organisational antecedents and organisational success factors, as well as reliability we can conclude that the required specification to proceed to conduct structural equation modelling was reached.

9.6 DESCRIPTIVE STATISTICS

This study used 11 latent variables in the hypothesis and the latent variables were assessed using the mean and standard deviation in the descriptive statistics. According to Levine *et al.* (2014:136), mean is a typical or central value that serves as a balance point in a set of data. When the mean is higher than the mid-point it is an indication that the results are more favourable to the viewpoint and if the mean is lower than the mid-point it is an indication that the results were less favourable to the viewpoint (Levine *et al*., 2014:136). A mean value higher than 3.0 in this study was considered as a favourable response, whereas a mean value lower than 3.0 was considered as an unfavourable response.

While standard deviation is the measure of variation and is used to measure the average scatter around the mean (Levine *et al*., 2014:142). Standard deviation determines how larger values fluctuate around the mean and how smaller values fluctuate below the mean (Levine *et al*., 2014:142). In this study, smaller values of standard deviation showed that responses had similar views and larger values show that responses had varied views e.g. standard deviation values less than 1.0 showed that responses had similar views and values greater than 1.0 showed that responses had varied views (Levine *et al*., 2014:142). The total sample size for the survey was 429 greater than the recommended minimum of 200 respondents required to conduct SEM analysis for this study i.e. the sample size is recommended to be greater than the elements in the correlation matrix with preferable ten respondents per parameter estimated (Khine *et al*., 2013:10). Sample size influences the model to be estimated correctly and specification error to be identified, thus as the model complexity increases, the sample size is recommended to be adjusted in line with the requirement (Khine *et al*., 2013:10). Samples that are below 200 or the recommended levels are considered poor and can cause issues of specification error (Khine *et al*., 2013:10).

Table 9.22 below shows a summary of the average mean and a standard deviation of all the latent variables used in the hypothesis. The top management latent variable received an average of 428 responses with a mean value of 3.4 and a standard deviation of 0.97. The top management mean value of 3.4 showed that responses were favourable and a standard deviation value of 0.97 showed that the responses had a similar view about the variable. The autonomy or work discretion latent variable received an average of 427 responses with a mean value of 3.52 and a standard deviation value of 0.932. The autonomy or work discretion latent variable produced a mean value of 3.52 which indicated that responses were more favourable and a standard deviation value of 0.932 showed that the responses had similar views about the variable. Rewards or reinforcement latent variable received an average of 426 responses with a mean value of 3.58 and a standard deviation value of 0.894. The rewards or reinforcement latent variable produced a mean value of 3.58 which indicated that the responses were more favourable and a standard deviation value of 0.894 which strongly indicated that the responses views were similar. The time availability latent variable received an average of 426 responses

and produced a mean value of 3.43 and a standard deviation of 0.916. The Time availability latent variable mean value of 3.43 showed that the responses were more favourable and a standard deviation value of 0.916 indicated that the responses' views were similar. The organisational boundaries latent variable received 424 responses and produced a mean value of 3.61 and a standard deviation value of 0.903. The organisational boundaries latent variable mean value of 3.61 strongly showed a more favourable response than top management, autonomy or work discretion, rewards or reinforcement and time availability latent variables in organisational antecedents. The organisational boundaries latent variable standard deviation value of 0.903 also showed that the responses views were similar. All organisation antecedent latent variables showed a more favourable mean response, greater than 3.0 and a standard deviation value of less than 1.0.

The entrepreneurial orientation latent variable received 426 responses and produced a mean value of 3.61 and a standard deviation of 0.841. The entrepreneurial orientation latent variable mean value of 3.61 indicated a favourable response and standard deviation value of 0.841 showed that the views of the responses were similar. The entrepreneurial orientation latent variable showed a strong mean response and a common view about the variable.

The corporate entrepreneurship latent variable received 425 responses and produced a mean value of 3.78 and a standard deviation value of 0.904. The corporate entrepreneurship latent variable mean value of 3.78 indicated that responses were more favourable and a standard deviation of 0.904 also showed that the response had similar views about the variable. The strength of the corporate entrepreneurship mean values indicate that favourable organisational internal environments can create entrepreneurial orientation which can result in corporate entrepreneurship.

The financial latent variable received 427 responses and produced a mean value of 3.86 and a standard deviation of 0.881. The financial latent variable mean value of 3.86 showed that the responses were favourable and a standard deviation value of 0.881 showed that the responses views were similar. The customer latent variable received 426 responses and produced a mean value of 3.94 and a standard deviation of 0.844. The customer latent variable mean value of 3.94 indicated that

responses were favourable and a standard deviation of 0.844 showed that the responses had similar views. The internal business process received 425 responses and produced a mean value of 3.89 and a standard deviation of 0.847. The internal business process latent variable mean value of 3.89 showed that responses were favourable and a standard deviation of 0.847 indicated that the views of the responses were similar. The learning and growth latent variable received 425 responses with a mean value of 3.76 and a standard deviation of 1.003. The learning and growth latent variable mean value of 3.76 showed that responses were favourable and a standard deviation value of 1.003 showed that the responses had varied views about the variable. The questions or observed variables "D16, our organisation focuses on training and development of all employees and D18, I'm satisfied with my organisation had standard deviation values of 1.002 and 1.142 respectively". The two questions indicated that employees had varied views about training and employee satisfaction. All the success factors variables had mean values that were favourable and most of them with a standard deviation value that showed similar views except for the learning and growth latent variable that had a value greater than 1.0.

In a nutshell, all the mean values of the 11 latent variables produced mean values greater than 3.0 and most of the standard deviation values were below 1.0. Learning and growth latent variable was the only variable with a standard deviation value greater than 1.0 as shown below in Table 9.22.

Table 9.22: Summary of average mean and standard deviation

Variable	Average Number of Respondents	Minimum	Maximum	Mean	Std. Deviation
Top management support	428	1	5	3.4	0.97
Autonomy / Work Discretion	427	1	5	3.52	0.932
Rewards / Reinforcement	426	1	5	3.58	0.894
Time Availability	426	1	5	3.43	0.916
Organisational Boundaries	424	1	5	3.61	0.903
Entrepreneurial Orientation	426	1	5	3.61	0.841
Corporate Entrepreneurship	425	1	5	3.78	0.904
Financial	427	1	5	3.86	0.881
Customer	426	1	5	3.94	0.844
Internal Business Process	425	1	5	3.89	0.847
Learning and Growth	425	1	5	3.76	1.003

On the surface, considering the results in Table 9.22 above, the outcome favours the initial hypothesis which stated that when the internal environment of an organisation is conducive it facilitated the existence of entrepreneurial orientation which in turn creates a corporate entrepreneurial environment, which ultimately results in the success of organisations. However, a deeper analysis is required to be conducted by measuring the effect size and correlations between construct before conducting SEM analysis. In addition to analysing the mean result, it is important to analyse the differences in mean and the relationships in two-way frequency tables and multiple regression.

9.7 COMPARISON OF BIOGRAPHICAL VARIABLES EFFECT ON CONSTRUCTS

The comparison of biographical variables effect on construct was conducted by measuring the effect size. The reason for conducting the effect size test was because generally, statistical significance tests have a propensity to yield small p-values as the size of the data set increase (Ellis & Steyn, 2003:51). Effect size is a measure of practical significance and is totally independent of sample size and measures correlation and regression coefficient (Ellis & Steyn, 2003:51). Statistical significance is the measure of the probability that the observed difference between two constructs is by coincidence and such a measurement cannot predict effect size because it's not independent of the sample size (Ellis & Steyn, 2003:51). The use of the effect size measure serves as a useful backing to the standard reporting of statistical significance (Ruscio & Mullen, 2012:202). Effect size measure helps the readers or reviewers to easily comprehend the practical significance of the results presented by the researcher (Ruscio & Mullen, 2012:202).

There are several effect size tests, however, the common effect size tests are the ones for measuring the differences in mean and for the relationships in two-way frequency tables and multiple regression (Ellis & Steyn, 2003:51). The general guideline for effect size is; 0.2 represents small effect, 0.5 medium effects and 0.8 large effect, where small effect size has a real effect, medium effect size has an average effect and large effect size has a clear large effect noticeable through naked eyes (Cohen, 1988; Ellis & Steyn, 2003:53; Ruscio & Mullen, 2012:211; Tomczak[1] & Tomczack[2], 2014:22).

The effect size and correlation coefficient measurements were conducted on the biographical Section of the questionnaire measuring two types of variables; the constructs that were assessed without order or ranking and constructs that were measured with no order or ranking. Therefore, the correlation coefficient measures were conducted to assess the effect size and correlation levels of the data to determine whether SEM analysis could be conducted.

9.7.1 Gender effect size

Table 9.23 below shows the mean values and effect size values of the gender data captured by the questionnaire. The mean test measured the difference between the mean for female and male respondents. As shown in Table 9.23 below, there was no significant mean difference between females and males for any of the constructs. The average mean value for the females was 3.61 and for the males 3.69. Furthermore, the effect size ranged from 0.01 to 0.22 slightly greater than the small effect guideline of 0.2 (Tomczak[1] & Tomczack[2], 2014:22). Nevertheless, the effect size for gender was considered a small effect.

Table 9.23: Gender effect size

E2.Indicate your gender		N	Mean	Std. Deviation	p-value	Effect sizes
A_Manage_Support	1	295	3.4157	0.70518	0.596	0.05
	2	132	3.3751	0.74038		
A_Autonomy	1	295	3.5641	0.70235	0.110	0.16
	2	132	3.4293	0.84367		
A_Rewards	1	295	3.6320	0.68522	0.028	0.22
	2	131	3.4556	0.79069		
A_Time	1	295	3.4458	0.64502	0.545	0.06
	2	131	3.4027	0.69163		
A_Boundaries	1	295	3.6372	0.59022	0.203	0.13
	2	131	3.5481	0.69474		
B_Corp_Entrepreneur	1	295	3.8129	0.76212	0.277	0.11
	2	130	3.7210	0.81869		
C_Entrepreneurial_Orient	1	295	3.6366	0.56308	0.263	0.12
	2	131	3.5677	0.59491		
D_Financial	1	295	3.8381	0.79845	0.365	0.09
	2	130	3.9096	0.72471		
D_Customer	1	295	3.9444	0.72104	0.903	0.01
	2	130	3.9354	0.69507		
D_Int_Business_Process	1	295	3.9324	0.63412	0.082	0.18
	2	130	3.8123	0.66204		
D_Learning	1	294	3.8087	0.78906	0.094	0.17
	2	130	3.6506	0.93352		

9.7.2 Employment status

The average mean value for permanently employed staff was at 3.67 higher than the mean value for non-permanent employed staff which was at 3.49. The result showed that permanently employed staff agreed more with the constructs than non-permanent staff. The employment status effect size ranged between 0.07 and 0.58. The result varied between small effect size and medium effect size as shown in Table 9.24 below. Top management support, Autonomy or work discretion, time availability, organisational boundaries, Corporate entrepreneurship, entrepreneurial orientation, internal business process and learning and growth produced a small effect size of around 0.2, while rewards or reinforcement, financial and customer produced a medium effect size of around 0.5 (Tomczak[1] & Tomczack[2], 2014:22). Although rewards or reinforcement, financial and customer had a medium effect size, permanently employed staff had a higher mean than non-permanent staff which indicated that permanently staff agreed more with the constructs. It was, therefore concluded that the effect size of employment status varied between small effect size and medium effect size (Cohen, 1988; Tomczak[1] & Tomczack[2], 2014:22).

Table 9. 24: Employment status effect size

E6. Are you permanently employed by the organization?		N	Mean	Std. Deviation	p-value	Effect sizes
A_Manage_Support	Yes	401	3.4047	0.71900	0.770	0.07
	No	17	3.4559	0.69589		
A_Autonomy	Yes	401	3.5345	0.75101	0.282	0.22
	No	17	3.3676	0.60025		
A_Rewards	Yes	400	3.5908	0.72055	0.127	0.36
	No	17	3.3294	0.65552		
A_Time	Yes	400	3.4350	0.65986	0.678	0.10
	No	17	3.3647	0.67170		
A_Boundaries	Yes	400	3.6174	0.61941	0.185	0.34
	No	17	3.4000	0.63640		
B_Corp_Entrepreneur	Yes	400	3.7897	0.78799	0.178	0.30
	No	16	3.5521	0.65749		
C_Entrepreneurial_Orient	Yes	401	3.6123	0.57592	0.651	0.12
	No	16	3.5440	0.58102		
D_Financial	Yes	400	3.8625	0.78466	0.046	0.36
	No	16	3.5781	0.50595		
D_Customer	Yes	400	3.9490	0.71107	0.028	0.58
	No	16	3.5375	0.66821		
D_Int_Business_Process	Yes	400	3.9021	0.64605	0.147	0.35
	No	16	3.6750	0.58367		
D_Learning	Yes	399	3.7721	0.84055	0.295	0.21
	No	16	3.5938	0.63819		

9.7.3 Biographical nonparametric correlations

The nonparametric correlation or experiential rank-order correlation coefficient signified by the symbol (r_S) measured the strength and direction of the association between two ranked variables measured on at least on one ordinal scale (Laerd Statistics, 2018). The nonparametric correlation determines the strength and direction of the monotonic relationship between two variables rather than the strength and direction of a linear relationship and the variables measured can either be ordinal, ratio or interval (Laerd Statistics, 2018). Therefore, in a monotonic relationship, as one variable increases, the other variable will also increase or as one variable increases, the other variable can decrease (Laerd Statistics, 2018). The correlation coefficient can take values from positive 1 to negative 1, where positive 1 denotes a perfect association of ranks, 0 denotes no association between ranks and negative 1 denotes a perfect negative association of rank (Laerd Statistics, 2018).

Table 9.25 below measured the association of ranks between the constructs and biographical information; age, level of employment, qualifications and number of years served in the organisation. The critical analysis points of the association of rank, where the ranks between the constructs and biographical information which produced a negative correlation coefficient with stars (*) were highlighted in red in Table 9.25 below. The intersection between question E1 (indicate your age) and time availability produced a correlation coefficient of -0.222**, organisational boundaries a correlation coefficient of -0.117*, corporate entrepreneurship a correlation coefficient of -0.107* and internal business process a correlation coefficient of -0.101*. The results indicated that as the age of the respondents increased, the less the respondents agreed with time availability, organisational boundaries, corporate entrepreneurship and internal business process (Laerd Statistics, 2018). The intersection between question E3 (indicate your level of employment) and time availability produced a correlation coefficient of 0.105* which indicated that as the level of employment became higher e.g. senior management, the less the respondents agreed with time availability. The intersection between question E5 (“how many years have you been employed by the organisation”?) and top management support produced a correlation coefficient of -0.123*, rewards or reinforcement produced a correlation coefficient of -0.105*, time availability produced

a correlation coefficient of -0.180**, organisational boundaries produced a correlation coefficient of -0.132** and corporate entrepreneurship produced a correlation coefficient of -0.124*. These results indicated that the longer the respondents worked at an organisation, the less they agreed with the constructs of top management support, rewards or reinforcement, time availability, organisational boundaries and corporate entrepreneurship. Question E4 (indicate your highest academic qualification), all the constructs indicated evidence of no correlation as shown in Table 9.25 below.

Table 9.25: Monotonic relationship

		E1. Indicate your age age	E3. Indicate your level of Employment	E4. Indicate your highest academic qualification	E5. How many years have you been employed by the organization?
A_Manage_Support	Correlation Coefficient	-0.073	-0.013	0.053	-.123
	Sig. (2-tailed)	0.132	0.786	0.278	0.011
	N	427	425	424	424
A_Autonomy	Correlation Coefficient	-0.056	-0.034	0.050	-0.086
	Sig. (2-tailed)	0.250	0.487	0.303	0.077
	N	427	425	424	424
A_Rewards	Correlation Coefficient	-0.026	-0.043	0.090	-.105*
	Sig. (2-tailed)	0.591	0.374	0.065	0.031
	N	426	424	423	423
A_Time	Correlation Coefficient	-.222**	.105*	-0.036	-.180**
	Sig. (2-tailed)	0.000	0.031	0.458	0.000
	N	426	424	423	423
A_Boundaries	Correlation Coefficient	-.117*	0.053	0.033	-.132**
	Sig. (2-tailed)	0.016	0.276	0.497	0.007
	N	426	424	423	423
B_Corp_Entrepreneur	Correlation Coefficient	-.107*	0.020	0.067	-.124*
	Sig. (2-tailed)	0.028	0.684	0.167	0.011
	N	425	423	422	423
C_Entrepreneurial_Orient	Correlation Coefficient	-0.068	-0.023	0.065	-.099*
	Sig. (2-tailed)	0.160	0.643	0.179	0.042
	N	426	424	423	423
D_Financial	Correlation Coefficient	-0.075	-0.009	0.049	-0.090
	Sig. (2-tailed)	0.123	0.850	0.316	0.063
	N	425	423	422	422
D_Customer	Correlation Coefficient	-0.095	0.058	0.026	-0.068
	Sig. (2-tailed)	0.051	0.233	0.592	0.166
	N	425	423	422	422
D_Int_Business_Process	Correlation Coefficient	-.101*	0.007	0.053	-0.026
	Sig. (2-tailed)	0.037	0.881	0.273	0.588
	N	425	423	422	422
D_Learning	Correlation Coefficient	-0.070	0.001	0.024	-0.071
	Sig. (2-tailed)	0.150	0.990	0.618	0.149
	N	424	422	421	421

**. Correlation is significant at the 0.01 level (2-tailed).

9.8 CORRELATION BETWEEN CONSTRUCTS

The nonparametric test also measured correlations between the constructs i.e. correlation between top management support and autonomy. A correlation coefficient value of 0.1 indicated a small correlation coefficient, the correlation

coefficient of 0.3 started to become important and the correlation coefficient of 0.5 became important, large enough to have an effect in practice. Table 9.26 shows the correlation between the constructs. All the correlation coefficient values highlighted in yellow, the intersection of constructs was larger, most of them greater than 0.50.

Table 9. 26: Correlation between constructs

		A_Manage_Support	A_Autonomy	A_Rewards	A_Time	A_Boundaries	B_Corp_Entrepreneur	C_Entrepreneurial_Orient	D_Finance	D_Customer	D_Int_Business_Process	D_Learning
A_Manage_Support	Correlation Coefficient	1.000	.672**	.659**	.547**	.515**	.569**	.644**	.437**	.495**	.504**	.550**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	429	429	428	428	428	427	428	427	427	427	426
A_Autonomy	Correlation Coefficient	.672**	1.000	.662**	.550**	.514**	.496**	.627**	.403**	.478**	.526**	.530**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	429	429	428	428	428	427	428	427	427	427	426
A_Rewards	Correlation Coefficient	.659**	.662**	1.000	.576**	.598**	.559**	.634**	.437**	.496**	.561**	.622**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	428	428	428	428	428	426	427	426	426	426	425
A_Time	Correlation Coefficient	.547**	.550**	.576**	1.000	.646**	.509**	.550**	.412**	.453**	.455**	.432**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	428	428	428	428	428	426	427	426	426	426	425
A_Boundaries	Correlation Coefficient	.515**	.514**	.598**	.646**	1.000	.564**	.580**	.393**	.443**	.457**	.480**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
	N	428	428	428	428	428	426	427	426	426	426	425
B_Corp_Entrepreneur	Correlation Coefficient	.569**	.496**	.559**	.509**	.564**	1.000	.723**	.580**	.601**	.601**	.601**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
	N	427	427	426	426	426	427	427	426	426	426	425
C_Entrepreneurial_Orient	Correlation Coefficient	.644**	.627**	.634**	.550**	.580**	.723**	1.000	.560**	.608**	.599**	.576**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000
	N	428	428	427	427	427	427	428	427	427	427	426
D_Financial	Correlation Coefficient	.437**	.403**	.437**	.412**	.393**	.580**	.560**	1.000	.711**	.605**	.519**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000
	N	427	427	426	426	426	426	427	427	427	427	426
D_Customer	Correlation Coefficient	.495**	.478**	.496**	.453**	.443**	.601**	.608**	.711**	1.000	.716**	.633**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
	N	427	427	426	426	426	426	427	427	427	427	426
D_Int_Business_Process	Correlation Coefficient	.504**	.526**	.561**	.455**	.457**	.601**	.599**	.605**	.716**	1.000	.688**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	N	427	427	426	426	426	426	427	427	427	427	426
D_Learning	Correlation Coefficient	.550**	.530**	.622**	.432**	.480**	.601**	.576**	.519**	.633**	.688**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	N	426	426	425	425	425	425	426	426	426	426	426

**. Correlation is significant at the 0.01 level (2-tailed).

Consequently, constructed on the correlations between constructs observation on correlations coefficient in Table 9.26 above, the next logical test to conduct was structural equation modelling analysis.

9.9 STRUCTURAL EQUATION MODEL (SEM) ANALYSIS

Confirmatory factor analysis was used to validate and examine the unidimensionality, validity and reliability of latent constructs (Awang, 2015:54). Patterns of interrelationships among several constructs were explained using confirmatory factor analysis and individual constructs in the confirmatory factor analysis model were measured by a set of observed variables (Khine *et al*., 2013:5). Therefore, the main objective of the confirmatory factor analysis was to confirm that

the measurement instrument was accurate (Hair *et al*., 2010:709). SEM is a statistical technique to model the first moment of data that represent mean structure and the second moment of data that represent the covariance matrix of variables when the data are multivariate normal (Cheung, 2015:14). It is a collection of statistical techniques that allow a set of relationships between one or more independent variable or dependent variables, either continuous or discrete to be examined and a confirmatory process that provides a wide-ranging means for validating the measurement model of latent constructs (Awang, 2015:54; Ullman & Bentler, 2013:661). In this study, SEM was utilised to test the hypothesis about relationships among observed and latent variables (Khine *et al*., 2013:3).

Several tests were conducted using SEM after reliability and construct validity was confirmed using exploratory factor analysis and confirmatory factor analysis respectively. Nevertheless, two models produced the closet results to the hypothesis and were presented. SEM concentrated on measuring the strength of relationships between factors using the p-values. All p-values that were less than 0.05 were considered to provide evidence of mediation between the factors (Khine *et al*., 2013:17; Lotz & van der Merwe, 2013b:199). The CMIN/DF, CFI and RMSEA were also used to cross-check whether the models provided a good fit to the data (Blunch, 2008; Hancook & Mueller, 2010).

9.9.1 Model without entrepreneurial orientation variable

The first simplified SEM diagram contained 10 latent variables; top management support, autonomy or work discretion, rewards or reinforcement, time availability, organisational boundaries, corporate entrepreneurship and organisational success factors (financial, customer, internal business process and learning and growth). Entrepreneurial orientation latent variable was not included in this model. The model tested if the effect of the independent variables on the dependent variable (success factor) was mediated by corporate entrepreneurship. The objective was to test the strength of the relationship between the factors.

The regression line from top management support to corporate entrepreneurship had a p-value of 0.000 which indicated a strong relationship as shown in Figure 9.7 below where one star (*) represented $p<0.05$. The relationship from top management

support factor to corporate entrepreneurship factor indicated a strong mediation effect. The regression line from the autonomy factor to corporate entrepreneurship factor had a p-value of 0.430 which was greater than 0.05 and thus reflected a weak relationship between the two factors, as shown in Appendix 4 for SEM model 1, which illustrates the factors, p-values and comments about the state of the relationships between the factors (Khine *et al*., 2013:17). The relationship of the regression line from the autonomy factor to corporate entrepreneurship factor showed that there was no mediation effect. The regression line from rewards or work discretion factor to corporate entrepreneurship factor had a p-value of 0.100 which was greater than 0.05. The relationship of the regression line from autonomy or work discretion factor to corporate entrepreneurship factor showed that mediation did not exist. The regression line from time availability factor to corporate entrepreneurship factor had a p-value of 0.785 which was greater than 0.05, consequently, mediation between the two factors did not exist. The regression line from organisational boundaries factor to corporate entrepreneurship had a p-value of less than 0.001 which indicated a strong relationship between the two factors because it was less than 0.05. The relationship from organisational boundaries factor to corporate entrepreneurship factor showed a strong mediation effect between the factors.

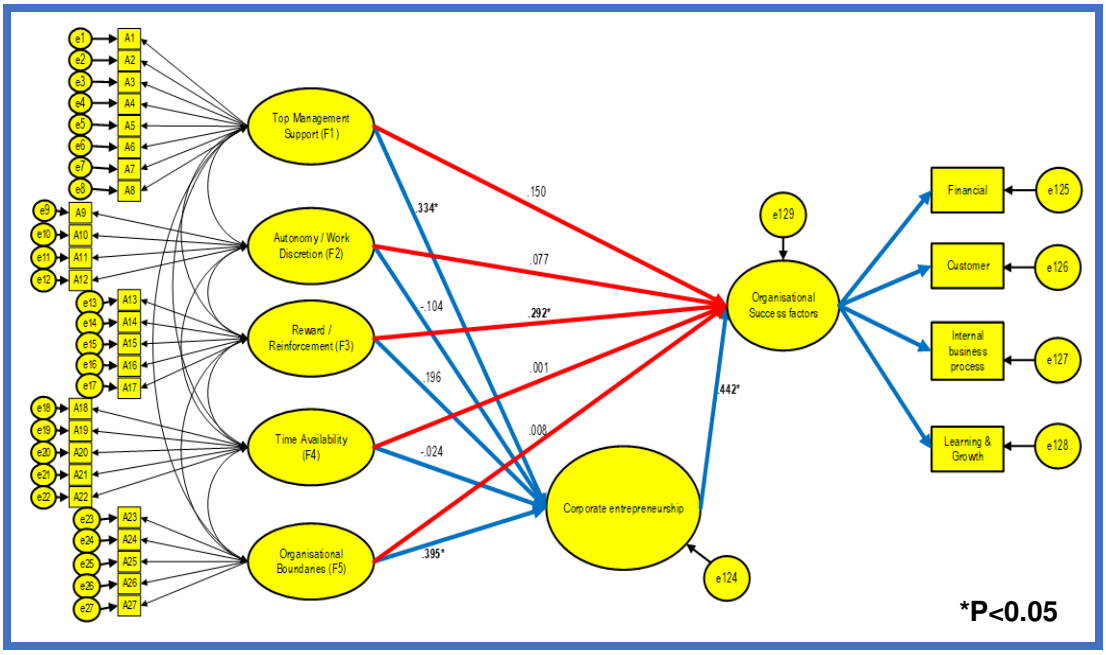
The regression line from the corporate entrepreneurship factor to success factor had a p-value of 0.00 less than 0.05. The relationship from the corporate entrepreneurship factor to success factors reflected a strong relationship between the two factors an indication of the mediation effect.

The regression line from top management support factor to success factor had a p-value of 0.86 which was greater than 0.05. This outcome indicated that there was no direct relationship from top management support to success factors and that the mediation through corporate entrepreneurship was complete. The regression line from the autonomy or work discretion factor to success factors had a p-value of 0.518 which was greater than 0.05. The autonomy or work discretion factor to success factors had no unique direct effect on success factors and did not have a mediation effect. The regression line from rewards or reinforcement had a p-value of 0.007 which was less than 0.05. The relationship from rewards or reinforcement factor to success factors showed a strong direct relationship. Since the relationship

between rewards or reinforcement factor to corporate entrepreneurship factor showed no mediation effect, the relationship from rewards or reinforcement factor to success factors indicated a direct effect. The regression line from time availability factor to success factors had a p-value of 0.989 which was greater than 0.05. There was no unique effect between time availability and success factors. Since mediation did not exist between time availability and corporate entrepreneurship, there was also no unique effect between time availability factor and success factors. The regression line from organisational boundaries to success factors had a p-value of 0.919 greater than 0.05 which also reflected no direct effect. However, the results indicated that there was no direct relationship from organisational boundaries to success factors and that mediation effect through corporate entrepreneurship was complete.

Therefore, the relationships from top management support, organisational boundaries to corporate entrepreneurship and corporate entrepreneurship to success factors indicated a mediation effect. The relationships from autonomy or work discretion, rewards or reinforcement, time availability to corporate entrepreneurship had no mediation effect, while, rewards or reinforcement had a unique direct effect on success factors as shown in Figure 9.7 below. The relationships with the mediation effect were indicated by p-values less than 0.05.

Figure 9.7: SEM mediation model 1



9.9.2 Assessment of SEM model 1 indices

SEM model 1 indices produced a CMIN/DF value of 4.511, CFI value of 0.806 and RMSEA value of 0.091. The CMIN/DF and the RMSEA values were considered acceptable to represent a good model fit, but CFI value was below acceptable specifications. CMIN/DF value of 4.511 was within the acceptable estimate of smaller than 5.0, RMSEA value of 0.091 was less than 0.10 with a confidence interval between 0.87 and 0.95, while CFI value of 0.806 was below 0.9 (Awang, 2015:57; Blunch, 2008; Khine *et al*., 2013:15; Mueller, 1996).

9.9.3 Modified mediation model with two latent mediator variables

The second simplified SEM diagram had all the 11 latent variables considered in the study; top management support, autonomy or work discretion, rewards or reinforcement, time availability, organisational boundaries, entrepreneurial orientation, corporate entrepreneurship and organisational success factors (financial, customer, internal business process and learning and growth). Figure 9.8 tested the effect of independent variables on the dependent variables (success factors) which was mediated by entrepreneurial orientation and corporate entrepreneurship. The

objective of further modifying SEM model 1, was to improve the mediation of the independent variables on dependent variables.

The regression line from top management support to entrepreneurial orientation had a p-value of 0.01 less than 0.05 which indicated a strong relationship between the two factors, hence evidence of mediation effect from top management support factor to entrepreneurial orientation factor as shown in Appendix 4 for SEM model 2, which outlines the factors, p-values and comments about the state of the relationships between factors. The regression line from autonomy or work discretion factor to entrepreneurial orientation factor had a p-value of 0.219 which was greater than 0.05. The relationship from autonomy or work discretion factor to entrepreneurial orientation factor indicated that there was a weak relationship between the two factors, hence no mediation effect was evident. The regression line from rewards or reinforcement factor to entrepreneurial orientation factor had a p-value of 0.049 which was less than 0.05. The result showed that mediation between the two factors existed, unlike in SEM model 1, which showed no mediation effect between rewards or reinforcement factor and the mediating factor corporate entrepreneurship. The regression line from time availability factor to entrepreneurial orientation factor had a p-value of 0.513 which was greater than 0.05. The relationship from the time availability factor to entrepreneurial orientation factor showed that there was no mediation between the factors. The regression line from organisational boundaries factor to entrepreneurial orientation factor had a p-value of 0.000 which was less than 0.05. The result showed that a strong relationship or mediation effect existed from organisational boundaries factor to the entrepreneurial orientation factor.

The regression line from entrepreneurial orientation factor to corporate entrepreneurship factor had a p-value of 0.000 which was less than 0.05. The relationship from entrepreneurial orientation factor to corporate entrepreneurship factor was strong indicating evidence of mediation effect. The regression line from corporate entrepreneurship factor to success factors had a p-value of 0.000 which was less than 0.05. The relationship from corporate entrepreneurship factor to success factors reflected evidence of mediation effect.

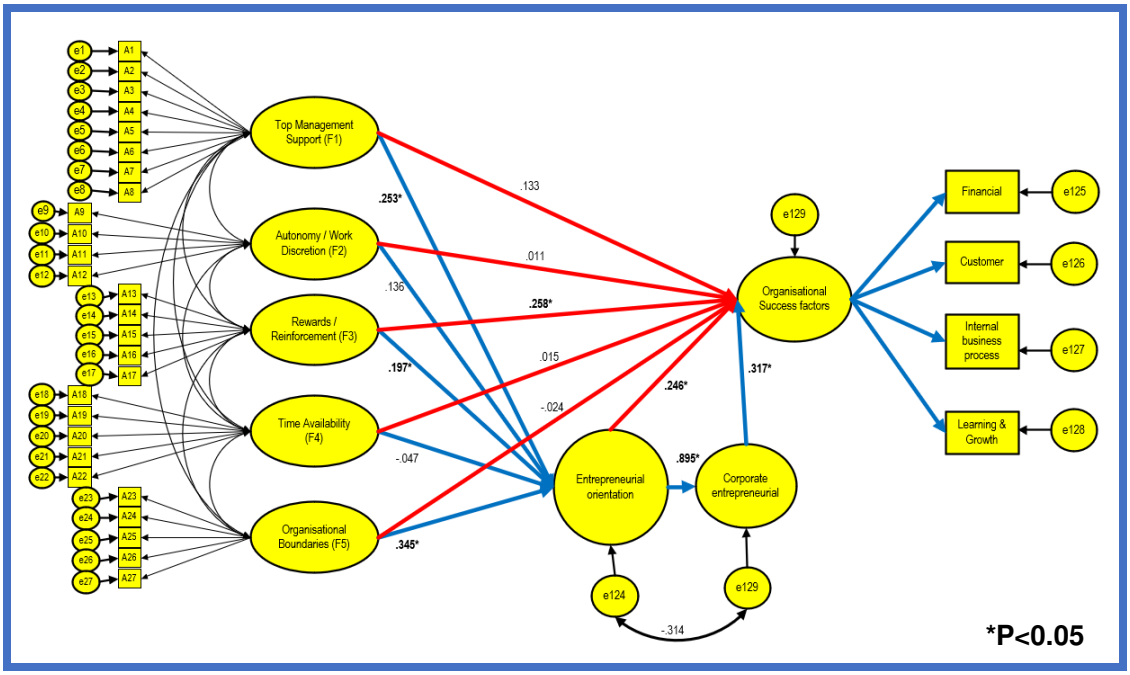
The regression line from entrepreneurial orientation factor to success factors had a p-value of 0.000 which was less than 0.05. The strength of the relationship between

the two factors was strong showing that mediation effect existed. Though, the relationship from entrepreneurial orientation factor to success factors showed a partial mediation effect of 53.58%. Partial mediation effect of entrepreneurial orientation factor and success factors supported the validity of including corporate entrepreneurship factor as a mediating factor in the SEM model 2.

The regression line from top management support factor to success factors had a p-value of 0.111 which was greater than 0.05. The relationship from top management support factor to success factors did not designate mediation, however, the result indicated that, there was no direct relationship from top management support factor to success factors and that the mediation through entrepreneurial orientation was complete. The regression line from autonomy or work discretion factor to success factors had a p-value of 0.924 which was greater than 0.05. The autonomy or work discretion factor had no unique direct effect on the success factors and thus did not have a mediation effect. Furthermore, the relationship from autonomy or work discretion factor to entrepreneurial orientation factor also had no mediation effect. The regression line from rewards or reinforcement factor to success factors had a p-value of 0.015 which was less than 0.05. The relationship from rewards or reinforcement factor to success factors indicated a relationship. The relationship from rewards or reinforcement factor to success factors indicated a mediation effect even though it was a partial relationship of 29%. Unlike in the SEM model 1, where the relationship from rewards or reinforcement factor to success factors was completely direct. The regression line from time availability factor to success factors had a p-value of 0.845 which was greater than 0.05. There was no unique relationship from the time availability factor to success factors. Since mediation did not exist between the two factors, there was no unique effect between time availability and success factors. The regression line from organisational boundaries factor to success factors had a p-value of 0.759 which was greater than 0.05. The relationship from organisational boundaries to success factors showed no mediation effect. The result indicated that there was no direct relationship from organisational boundaries factor to success factor and that the mediation through entrepreneurial orientation was complete.

Consequently, the relationship from top management support, rewards or reinforcement and organisational boundaries to entrepreneurial orientation showed a mediation effect. The relationship from autonomy or work discretion and time availability to entrepreneurial orientation showed no mediation effect. The relationship from entrepreneurial orientation to corporate entrepreneurship indicated mediation effect. The relationship from corporate entrepreneurship to success factors indicated mediation effects while the relationship from entrepreneurial orientation to success factors indicated a partial mediation effect of 53.58%. The relationship from top management support and organisational boundaries to success factors indicated a complete mediation effect while the relationship from autonomy or work discretion and time availability to success factors indicated no unique effect. Lastly, the relationship from rewards or reinforcement to success factors indicated a partial mediation effect of 29% as shown in Figure 9.8 below. The relationships with the mediation effect were indicated by p-values less than 0.05.

Figure 9.8: Simplified SEM model 2



9.9.4 Assessment of SEM Model 2 Indices

SEM model 2 indices produced a CMIN/DF value of 4.370, CFI value of 0.815 and RMSEA value of 0.089. The CMIN/DF and RMSEA values were regarded

acceptable to represent a good model fit, however, the CFI value was below acceptable specification, though slightly better than the CFI indices produced in SEM model 1. CMIN/DF value of 4.370 was within an acceptable estimate of 4.463, RMSEA value of 0.089 was less than 0.10 with a confidence interval of about 90%. The CFI value of 0.815 was less than 0.9 (Awang, 2015:57; Khine *et al*., 2013:15; Blunch, 2008, Mueller, 1996).

On one hand, SEM model 1, indicated two mediation effects in the relationship from organisational antecedents to corporate entrepreneurship factor. The relationship was evident from top management support factor and organisational boundaries factor to corporate entrepreneurship factor as shown in Table 9.27 below. The autonomy or work discretion, rewards or reinforcement and time availability factors had a weak relationship with corporate entrepreneurship, hence showed no mediation effect. The relationship from Corporate entrepreneurship to success factors showed a mediation effect. The relationship from organisational antecedents to success factors indicated that top management factor and organisational boundaries factor confirmed complete mediation effect and autonomy, or work discretion factor and time availability factor had no unique effect at all. Only the relationship from rewards or reinforcement to success factors showed a direct effect as shown in Table 9.27 below.

Table 9.27: SEM model 1 summary results

SEM Model 1			
Factors			Relationship
B_Corp_Entrepreneur	<---	Management_Support	Mediation
B_Corp_Entrepreneur	<---	Autonomy	No mediation
B_Corp_Entrepreneur	<---	Reward	No mediation
B_Corp_Entrepreneur	<---	Time_availability	No mediation
B_Corp_Entrepreneur	<---	Organisational boundaries	Mediation
Success	<---	B_Corp_Entrepreneur	Mediation
Success	<---	Management_Support	Complete mediation
Success	<---	Autonomy	No effect
Success	<---	Reward	Direct effect
Success	<---	Time_availability	No effect
Success	<---	Organisational boundaries	Complete mediation

On the other hand, SEM model 2, indicated three mediation effects in the relationship from organisational antecedents to entrepreneurial orientation factor as shown in Table 9.28 below. The relationship was apparent from top management support factor, rewards or reinforcement factor and organisational boundaries factor to entrepreneurial orientation factor. The inclusion of entrepreneurial orientation as a mediating variable changed the status of rewards or reinforcement factor from no mediation effect to mediation effect. The relationship from autonomy or work discretion factor and time availability continued to be weak with no mediation effect. The relationship between the two mediating variables, entrepreneurial orientation and corporate entrepreneurship to the success factors was strong indicating mediation effect, however, the relationship from entrepreneurial orientation to success factors produced a partial mediation effect of 53.58% favouring the inclusion of corporate entrepreneurship factor in SEM model 2. The relationship from organisation antecedents to success factors showed complete mediation in top management support factor and organisational boundaries factor similar to results in SEM model 1, no unique effect in autonomy or work discretion factor and the time availability factor were produced. The relationship from rewards or reinforcement

factor to success factor changed from direct effect in SEM model 1 to partial mediation at 29% in SEM model 2 as shown in Table 9.28 below.

Table 9.28: SEM model 2 summary results

SEM Model 2			
Factors			**Relationship**
C_Entrepreneurial_Orient	<---	Management_Support	Mediation
C_Entrepreneurial_Orient	<---	Autonomy	No mediation
C_Entrepreneurial_Orient	<---	Reward	Mediation
C_Entrepreneurial_Orient	<---	Time_availability	No mediation
C_Entrepreneurial_Orient	<---	Organisational boundaries	Mediation
B_Corp_Entrepreneur	<---	C_Entrepreneurial_Orient	Mediation
Success	<---	B_Corp_Entrepreneur	Mediation
Success	<---	C_Entrepreneurial_Orient	Partial mediation 53.58%
Success	<---	Management_Support	Complete mediation
Success	<---	Autonomy	No unique effect
Success	<---	Reward	Partial mediation 29%
Success	<---	Time_availability	No unique effect
Success	<---	Organisational boundaries	Complete mediation

Therefore, founded on the improvement observed in SEM model 2, the model was adopted in the conclusions and recommendations for this study analysis.

9.10 SUMMARY

Chapter 9 provided the details of how the collected data for the six surveyed organisations; TTAF, Subaru Southern Africa, Toyota Kenya, Toyota Malawi, Toyota Zambia and Toyota Zimbabwe from five countries in Sub-Sahara Africa were analysed. The data analysis aimed to report on the objectives and hypothesis of the study. The biographical characteristics, exploratory factor analysis, confirmatory factor analysis, descriptive statistics, comparison of biographical effects on the construct, the correlation between constructs and SEM analysis were all individually analysed and explained in detail.

All the latent variables produced acceptable levels of KMO, reliability and total variance explained, except for organisation antecedents and organisational success factors that had a pattern matrix which did not load 100% were recommended for further analysis in confirmatory factor analysis to confirm construct validity. Confirmatory factor analysis of organisational antecedents and organisational success factors results confirmed construct validity to allow for SEM analysis to be conducted. Two models (SEM 1 and SEM 2) were analysed in SEM, however, SEM model 2 produced results that were close to the hypothesis. Therefore, SEM model 2 was adopted for this study and was used to develop a proposed framework.

Chapter 10 concentrates on dissecting the findings of this study in more detail on the premise of the research objectives and hypothesis. Research findings are concluded, and recommendations presented in line with the results produced in Chapter 9 and the literature review. Each hypothesis formulated at the beginning of this study is explained in line with the results whether favourable or not. A proposed framework to work as a guideline for automotive leaders is provided based on the findings and future recommendations. In addition, study contributions, limitations and future research suggestion are outlined and proposed.

CHAPTER 10: CONCLUSION AND RECOMMENDATIONS

10.1 INTRODUCTION

An exhaustive analysis of the information gathered in Chapter 8 was conducted in Chapter 9 concerning the research objectives, research questions and hypothesis of this study. The analysis started with the investigation of biographical information of the respondents, exploratory factor analysis, confirmatory factor analysis, descriptive statistics, comparison of biographical effects on constructs, correlations between constructs and was concluded with the SEM analysis which produced the models which were utilised to evaluate the hypotheses of this investigation. The SEM analysis provided the grounds for either accepting or rejecting the hypothesis of this study.

The objective of Chapter 10 was to summarise the findings of this study by analysing the results presented in Chapter 9. The conclusions were based on the literature review and the outcomes of the data analysis conducted in Chapter 9. Evaluation of the study's primary and secondary objectives was conducted and outlined to show successful and unsuccessful objectives. The study hypotheses have been summarised into a simple understandable fashion that clearly indicates the accepted or rejected hypotheses. Hypothesis conclusions and the proposed study framework were presented and explained in detail. A summary of recommendations for action plans to be implemented by the organisations was also provided. Study contributions to the field of corporate entrepreneurship were explained and the limitations of the study were also outlined. Furthermore, future research suggestions are outlined and proposed.

10.2 ASSESSMENT OF PRIMARY AND SECONDARY OBJECTIVES

Evident from the amount of research information conducted by researchers about corporate entrepreneurship, corporate entrepreneurship studies can be considered as work in progress. According to Kuratko (2017:2), theoretical and empirical knowledge about the subject has evolved over the last four decades. Corporate entrepreneurship research started on a sluggish note, but most recently it has gradually gained momentum and attention from both academics and business

people (Kuratko, 2017:2). Many studies on corporate entrepreneurship investigated about the corporate environment, predictability of sustainable corporate entrepreneurship, relationship between corporate entrepreneurship and performance, strategic entrepreneurship and corporate venturing (Covin & Miles, 1999; Kuratko, *et al*., 2014; Kuratko *et al*., 1990; Morris *et al*., 2011; Mungule, 2015). Additionally, several scholars focused on conceptualisation of theoretical models e.g. a model of sustained corporate entrepreneurship (Kuratko *et al*., 2004), internally generated innovations in existing organisations (Ireland *et al*., 2009) and an interactive model of corporate entrepreneurship (Hornsby *et al*., 1993).

Therefore, this study's primary objectives focused on identifying success factors of automotive organisations, a gap that has not been really investigated in the field, specifically within the Sub-Sahara African space. Furthermore, the study went on to develop a measurement instrument for measuring the success of organisations. The study commenced by asking the following questions which needed answers through conducting the study investigation:

- Is there a measurement instrument for measuring relationships between corporate entrepreneurship and success factors of an organisation with acceptable scientific attributes?
    - *A scientific measurement instrument which passed exploratory factor analysis, confirmatory factor analysis and structural equation modeling test was developed for this study to measure the relationship between corporate entrepreneurship and success factors*.
- Can organisations be able to link their success to their internal environment conditions?
    - *The scientific measurement instrument developed for this study clearly showed the elements that are instrumental in creating a successful organisation*.
- Which organisation antecedents are stronger predictors of organisational success?
    - *The framework or model developed in this study suggested top management support, rewards or reinforcement and organisational boundaries as strong predictors of organisational success.*

After the research question, five study primary objectives were developed to understand the relationships between corporate entrepreneurship and success of organisations and develop a measurement instrument for measuring the success of organisations that is valid and useful with scientific attributes.

The following were the primary objectives of this study:

- To develop an instrument that measures the success of automotive companies using organisational antecedents as independent variables, entrepreneurial orientation and corporate entrepreneurship as mediating variables and organisational success factors as dependent variables.
- To expand the CEAI instrument by adding success factors to the measurement instrument.
- To evaluate the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors of automotive companies in Sub-Sahara Africa.
- To propose a framework that helps automotive leaders to keep alive an entrepreneurial spirit in their organisations and at the same time easily visualise indicators of success or failures.
- Based on the study findings, to contribute to the domain of corporate entrepreneurship in the Sub-Sahara Africa region.

The above five primary objectives of the study were evaluated against the outcome of the findings in Chapter 9 and the results were summarised as shown in Table 10.1 below. Table 10.1 shows the initial objectives, outcomes and objectives status. All the five primary objectives of the study were achieved. A measurement instrument was developed using SEM, success factors were added to the CEAI measurement instrument, the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors was evaluated, a new framework was proposed, and a Sub-Sahara Africa study was completed successfully as shown in Table 10.1.

Table 10.1: Assessment of primary objectives

Primary objectives			
No.	**Initial primary objective**	**Outcome**	**Objective status**
1	To develop an instrument that measures the success of automotive companies using organisational antecedents as independent variables, entrepreneurial orientation and corporate entrepreneurship as a mediating variables and organisational success factors as dependent variables.	The measurement instrument was developed using data collected from the automotive industry in Sub-Sahara Africa. SEM was used to develop the measurement instrument for measuring success factors.	Achieved
2	To expand the CEAI instrument by adding success factors to the measurement instrument.	Success factors were successfully added to the measurement instrument to extend the coverage of the CEAI measurement instrument.	Achieved
3	To evaluate the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors of automotive companies in Sub-Sahara Africa.	Based on the data collected, the relationship between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors was evaluated and strong relationships or weak relationships between the latent variables were determined through SEM.	Achieved
4	To propose a framework that helps automotive leaders to keep alive an entrepreneurial spirit in their organisations and at the same time easily visualise indicators of success or failures.	A new framework was developed and proposed for easily visualising indicators of success or failures. All the rejected hypotheses were removed from the proposed framework.	Achieved
5	Based on the study findings, to contribute to the domain of corporate entrepreneurship in the Sub-Sahara Africa region.	Since the study spanned across Sub-Sahara Africa, it contributed to the knowledge and would encourage other academics to study real African situations that can provide real practical solutions for African organisations and institutions.	Achieved

The study also developed secondary objectives which were aimed at supporting the achievement of the primary objectives listed in Table 10.1 above. The following were the secondary objectives developed before conducting the study:

- To explain the background and relationship between entrepreneurship and corporate entrepreneurship.
- To explain the importance of corporate entrepreneurship in organisations.
- To explain the two forms of corporate entrepreneurship and conceptual models.
- To explain the importance of entrepreneurial leadership to internal environments of organisations.
- To provide an overview of the automotive industry in Sub-Sahara Africa.
- To explain the relationship between corporate entrepreneurship and success factors.

The above six secondary objectives of the study were evaluated against the outcomes of all the chapters covered in the study and the results were summarised as shown in Table 10.2 below. Table 10.2 shows the initial objectives, outcomes and objectives status. All the six secondary objectives of the study were achieved. The relationship between entrepreneurship and corporate entrepreneurship was clarified in Chapters 2 and 3, the importance of corporate entrepreneurship was explained in Chapter 3, the two forms of corporate entrepreneurship were illustrated in Chapter 3, the importance of entrepreneurial leadership to internal business environments was explained in detail in Chapter 4, the overview of the automotive industry was explained in Chapter 5 and the relationship between corporate entrepreneurship and success of organisation was analysed and tested in detail in Chapters 9 and 10 using exploratory factor analysis, confirmatory factor analysis and SEM analysis as shown in Table 10.2 below.

Table 10.2: Assessment of secondary objectives

Secondary objectives			
No.	**Initial secondary objective**	**Outcome**	**Objective status**
1	To explain the background and relationship between entrepreneurship and corporate entrepreneurship.	The relationship between entrepreneurship and corporate entrepreneurship was explained in Chapters 2 and 3.	Achieved
2	To explain the importance of corporate entrepreneurship in organisations.	The importance of corporate entrepreneurship was explained in Chapter 3.	Achieved
3	To explain the two forms of corporate entrepreneurship and conceptual models.	The two forms of corporate entrepreneurship were illustrated in Chapter 3.	Achieved
4	To explain the importance of entrepreneurial leadership to internal environments of organisations.	The importance of entrepreneurial leadership to internal environments of organisations was explained in detail Chapter 4.	Achieved
5	To provide an overview of the automotive industry in Sub-Sahara Africa.	The overview of the automotive industry in Sub-Sahara Africa was explained in Chapter 5.	Achieved
6	To explain the relationship between corporate entrepreneurship and success factors.	The relationship between corporate entrepreneurship and success factors was analysed and tested in Chapters 9 and 10 using SEM.	Achieved

10.3 STATISTICAL CONCLUSIONS

The statistical conclusions drew its deductions from the findings resulting from the analysis conducted in Chapter 9 which was based on the quantitative approach analysed using SPSS AMOS software program used to fit structural equation models. The conclusions were focused on data analysis and hypothesis.

10.3.1 Data analysis

The data was analysed by assessing the biographical information of the respondents, exploratory factor analysis, confirmatory factor analysis, descriptive statistics, comparison of biographical effects on constructs, correlations between constructs and SEM analysis.

Biographical information in the questionnaire collected information related to age, gender, level of employment, academic qualification, years of employment, employment status, department and organisation they belonged to. A total of 429 respondents participated in the survey or study which resulted in a 30% response rate.

- Most of the responses came from the age group between 30 and 39 years. The response rate of the age group less than 29 years was 22%, 30 to 39 years was 42%, 40 to 49 years was 27%, 50 to 59 years was 8% and above 60 years was 1%. The age balance looked even with 22% of the new generation (<29 years) and 69% between 30 and 49 years (middle age generation with skill and experience). The age balance was a good reflection of a good mixture of low skill, medium skill and high skill.
- Most of the respondents from the survey were male with a response rate of 69% and 31% from female respondents. The results showed that automotive organisations still have a tendency of employing more male employees than female.
- General staff had a higher response rate of 54%, supervisors 16%, Junior management 13%, middle management 12% and senior management 5%. The results produced a well-balanced hierarchical structure that has more general staff at the bottom of the pyramid and fewer staff as the level of employment gets higher.
- Most of the respondents had technical diploma qualifications. Respondents with diplomas had a response rate of 30%, 27% college certificates, 22% university degree, 14% matric, 5% postgraduates and 2% lower than matric qualification or grade 12. The results showed that 57% of the respondents had diplomas and certificates from technical colleges indicating that the respondents were involved in trade jobs i.e. manufacturing or engineering. Furthermore, the number of respondents with qualification less than matric was 2% indicating that more people are acquiring a higher level of education and organisations are also preferring people with tertiary education.
- Most of the respondents were from the service or production or workshops department. The service or production or workshop department had a response rate of 48%, 16% parts or parts warehouse or parts sales

department, 12% corporate department, 10% sales and logistics department, 6% finance department and 6% administration department. Service or workshop or production department employed the largest number of employees, followed by parts or parts warehouse or parts sales department and the other departments employed fewer staff to conduct administrative, sales, finance and corporate functions. The survey results also produced a good balance of response rate concerning the number of employees in a department. The pattern of the response rate was a true reflection of the structure and distribution of employees in the organisations.

- Toyota Zimbabwe produced the highest response rate of 49%, followed by Subaru Southern Africa at 48%, 35% from Toyota Malawi, 34% from TTAF, 20% from Toyota Kenya and 19% from Toyota Zambia. The average response rate of the six-organisation involved in the study was 30%.

The internal consistency of the items measuring the factors in the measurement instrument was calculated using the Cronbach Alpha coefficients (Bryman & Bell, 2007:164; Lotz & van der Merwe, 2013b:203). The reliability results for organisational antecedents were; top management support $\alpha = 0.878$, autonomy or work discretion $\alpha = 0.811$, rewards or reinforcement $\alpha = 0.863$, time availability $\alpha = 0.764$ and organisational boundaries $\alpha = 0.719$. The reliability result for entrepreneurial orientation was $\alpha = 0.953$ and corporate entrepreneurship was $\alpha = 0.928$. The reliability results for organisational success factors were; financial $\alpha = 0.904$, customer $\alpha = 0.896$, internal business process $\alpha = 0.817$ and learning and growth $\alpha = 0.852$. All the reliability results for the measurement instrument were greater than $\alpha =$ 0.7 confirming a reliable result (Khine *et al*., 2013:102).

Validity is the capability of an instrument to measure what it is supposed to measure for a latent construct (Awang, 2015:55). Validity test was conducted using exploratory factor analysis and confirmatory factor analysis (Lotz & van der Merwe, 2013b:200). The entrepreneurial orientation and corporate entrepreneurship latent variables passed the KMO, communalities tests, total variance explained and pattern matrix tests which confirmed construct validity. The organisational antecedents and success factors latent variables passed the KMO, communalities tests, total variance explained tests and failed the pattern matrix test which did not load all the factor

loadings 100%. The results of the organisational antecedents and success factors latent variables did not confirm construct validity, thus required further tests using confirmatory factor analysis. Organisational antecedents and success factors latent variables were then subjected to confirmatory factor analysis which measured the confirmatory factor analysis indices to assess good model fit, p-values if they were less than 0.05, correlations among latent variables and factor loadings if they were greater than 0.3. Organisational antecedents and success factor latent variables passed the confirmatory tested which confirmed construct validity and a recommendation to proceed to conduct SEM analysis.

Descriptive statistics were conducted to confirm mean and standard deviations values. Mean measured the balance point in the set data (Levine *et al*., 2014:136). While standard deviation measured the average scatter around the mean (Levine *et al*., 2014:142). The mean results values for all the latent variables were; top management support 3.4, autonomy or work discretion 3.53, rewards or reinforcement 3.58, time availability 3.43, organisational boundaries 3.61, entrepreneurial orientation 3.61, corporate entrepreneurship 3.78, financial 3.86, customer 3.94, internal business process 3.89 and learning and growth 3.76. All the mean values were greater than 3.0 a result which indicated that most of the respondents agreed with all the constructs in the measurement instrument. The standard deviations result for all the latent variables were; top management support 0.97, autonomy or work discretion 0.932, rewards or reinforcement 0.894, time availability 0.916, organisational boundaries 0.903, entrepreneurial orientation 0.841, corporate entrepreneurship 0.904, financial 0.881, customer 0.844, internal business process 0.847 and learning and growth 1.003. Learning and growth was the only latent variable with a result slightly greater than 1.0, however, the result was still acceptable. All the other latent variables standard deviation results were less than 1.0 indicating that most of the respondents agreed with the views of the constructs.

The comparison of the effects of the biographical variables on constructs was performed by measuring the effect size to measure practical significance which is independent of the sample size (Ellis & Steyn, 2003:51). The gender effect size measured the mean values and the effect size. The mean values between the female and male-produced no significant difference. The female mean value was

3.61 and 3.69 for male respondents. The result indicated that the views of the female and male for all the 11 constructs were almost similar. The effect size for the latent variables were; top management support 0.05, autonomy or work discretion 0.16, rewards or reinforcement 0.22, time availability 0.06, organisational boundaries 0.13, corporate entrepreneurship 0.11, entrepreneurial orientation 0.12, financial 0.09, customer 0.01, internal business process 0.18, learning and growth 0.17. The gender effect size was concluded to be a small effect. While the average mean result for employment status was higher for permanently employed staff at 3.67 than the average mean for non-permanently employed staff which was at 3.49. The result indicated that permanently employed staff agreed more with the constructs than non-permanent staff. The effect size results for employment status were; top management support 0.07, autonomy or work discretion 0.22, rewards or reinforcement 0.36, time availability 0.10, organisational boundaries 0.34, corporate entrepreneurship 0.30, entrepreneurial orientation 0.12, financial 0.36, customer 0.58, internal business process 0.35 and learning and growth 0.21. Although the employment status effect size varied ranging from 0.07 to 0.58, it was concluded that the effect size was between small to medium effect (Tomczak[1] & Tomczack[2], 2014:22).

The biographical nonparametric correlations measured the association of ranks between the constructs and biographical information i.e. age, level of employment, qualifications and number of years served in the organisation. It was observed that the older the respondents were, the less they agreed with the constructs of time availability, organisational boundaries, corporate entrepreneurship and internal business process. The higher-level staff e.g. senior management also agreed less with the construct of time availability and the longer the respondents served in an organisation, the less they agreed with the constructs of top management support, rewards or reinforcement, time availability, organisational boundaries and corporate entrepreneurship.

Correlation between constructs measured correlations for all the 11 latent variables. It was observed that all the correlation coefficients for the constructs were above 0.5 which required SEM analysis to be conducted.

SEM analysis was conducted on two models, model 1 excluded the latent variable entrepreneurial orientation and model 2 included all the 11 latent variables considered in the study hypothesis. Model 2 results were considered over model 1 because the model included all the variables and more variables produced a mediation effect than in model 1. In model 2, top management support, autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries were independent variables, entrepreneurial orientation and corporate entrepreneurship were mediating variables and organisational success factors were dependent variables.

The relationship from top management support to entrepreneurial orientation produced a mediation effect, autonomy or work discretion to entrepreneurial orientation produced no mediation effect, rewards or reinforcement to entrepreneurial orientation produced a mediation effect, time availability to entrepreneurial orientation produced no mediation effect and organisational boundaries to entrepreneurial produced a mediation effect. The relationship from entrepreneurial orientation to corporate entrepreneurship produced a mediation effect and corporate entrepreneurship to success also produced a mediation effect.

The relationship from entrepreneurial orientation to success produced a partial mediation effect of 53.58%. The relationship from top management support to success produced a complete mediation, autonomy or work discretion to success produced no unique effect, rewards or reinforcement to success produced a partial mediation effect of 29%, time availability to success produced no unique effect and organisational boundaries to success produced a complete mediation effect. The detailed results are shown in Appendix 4 for SEM model 2.

Therefore, three independent variables produced a mediation effect to entrepreneurial orientation; top management support, rewards or reinforcement and organisational boundaries. All the mediating variables produced a mediating effect on success factors; entrepreneurial orientation and corporate entrepreneurship. Entrepreneurial orientation and rewards or reinforcement to success produced a partial mediation effect. The results from the SEM analysis were used to prove the study hypothesis and propose a framework or model to use for evaluating the relationship between corporate entrepreneurship and organisational success.

10.4 HYPOTHESIS CONCLUSIONS

Everyday life requires people to make suggestions and provide reasons for certain occurrences by making rational guesses (Walliman, 2011:34). Thus, it is imperative to formulate a prediction before conducting an experiment to determine the variables that will be tested and how they will be measured and controlled (Walliman, 2011:11). Before testing a theory, it is important to express the theory in the form of a statement called hypothesis which can be falsifiable (Walliman, 2011:19). The process of falsifying the hypothesis can lead to a devastating result of a total rejection of the theory which might require a fresh start of the investigation or modification (Walliman, 2011:19). The process of hypothesis starts to form problem identification, hypothesis development, plotting implication by deduction, testing the hypothesis both theoretically and practically and rejecting the hypothesis or modifying the hypothesis depending on the result (Walliman, 2011:19). This study followed the same process described by Walliman (2011:19).

The hypothesis of this study was formulated based on the problem statement which wanted to evaluate the relationship between corporate entrepreneurship and the success of organisations. The guess was based on the relationship created between organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and success factors. The logic was that organisational antecedents created entrepreneurial orientation environments which result in corporate entrepreneurship and corporate entrepreneurship produced financial, customer, internal business process and learning and growth organisational success. The following were the three key hypotheses identified for this study, H_1, H_2 and H_3 which shows the rejected and accepted hypothesis.

I. Organisational antecedents' hypothesis (H_1): there is a relationship between organisational antecedents and entrepreneurial orientation. A relationship was accepted between top management support, rewards or reinforcement and organisational boundaries. The relationship between autonomy or work discretion, time availability and entrepreneurial orientation were rejected.

    a) $H_{1\text{-}1}$ Top management support is positively related to entrepreneurial orientation. The relationship from top management support to

entrepreneurial orientation produced a mediation effect. The result of hypothesis H_{1-1} was accepted.

b) H_{1-2} Work discretion or autonomy is positively related to entrepreneurial orientation. The relationship from autonomy or work discretion to entrepreneurial orientation produced no mediation effect. The result for hypothesis H_{1-2} was rejected

c) H_{1-3} Rewards or reinforcement is positively related to entrepreneurial orientation. The relationship from rewards or reinforcement to entrepreneurial orientation produced a mediation effect. The result for hypothesis H_{1-3} was accepted.

d) H_{1-4} Time availability is positively related to entrepreneurial orientation. The relationship from time availability to entrepreneurial orientation produced no mediation effect. The result for hypothesis H_{1-4} was rejected.

e) H_{1-5} Organisational boundaries are positively related to entrepreneurial orientation. The relationship from organisational antecedents to entrepreneurial orientation produced a mediation effect. The result for hypothesis H_{1-5} was accepted.

II. Entrepreneurial orientation hypothesis (H_2): Entrepreneurial orientation is positively related to corporate entrepreneurship. The relationship from entrepreneurial orientation to corporate entrepreneurship produced a mediation effect. The result for hypothesis H_2 was accepted.

III. Corporate entrepreneurship hypothesis (H_3): corporate entrepreneurship activities are good indicators for the success of an organisation. A relationship was accepted between corporate entrepreneurship and all the success factors considered in this study.

a) H_{3-1} corporate entrepreneurship will have a causal effect on the financial growth of an organisation. The relationship from corporate entrepreneurship to the financial factor produced a mediation effect. The result for hypothesis H_{3-1} was accepted.

b) H_{3-2} corporate entrepreneurship will have a causal effect on the customer perceptions of an organisation. The relationship from corporate

entrepreneurship to customer factor produced a mediation effect. The result for hypothesis H_{3-2} was accepted.

c) H_{3-3} corporate entrepreneurship will have a causal effect on internal business process. The relationship from corporate entrepreneurship to internal business process factor produced a mediation effect. The result for hypothesis H_{3-3} was accepted.

d) H_{3-4} corporate entrepreneurship will have a causal effect on the learning and growth of employees in an organisation. The relationship from corporate entrepreneurship to learning and growth factor produced a mediation effect. The result for hypothesis H_{3-4} was accepted.

The SEM analysis for model 2 produced additional results that were not included in the initial hypothesis. The analysis results of SEM showed that there was evidence of a partial relationship of 53.58% from entrepreneurial orientation to success factors and a partial relationship of 29% from rewards or reinforcement to success factors. The two new results were included in the proposed framework developed to evaluate the relationship between corporate entrepreneurship and the success of organisations. The results of the hypothesis testing conducted in SEM were summarised in Table 10.3 below. The summary table shows that hypothesis H_{1-2} and H_{1-4} were rejected and all the rest of the hypothesises were accepted. However, two new results for the relationships between entrepreneurial orientation and rewards or reinforcement to success factors which emerged from the SEM analysis were also included in the proposed framework.

Table 10. 3: Hypothesis confirmation table

Study Hypothesis Confirmation Table		Accepted/Rejected
H_1: There is a relationship between organisational antecedents and entrepreneurial orientation		
H_{1-1}	Top management support is positively related to entrepreneurial orientation.	**Accepted**
H_{1-2}	Work discretion or autonomy is positively related to entrepreneurial orientation.	Rejected
H_{1-3}	Rewards or reinforcement is positively related to entrepreneurial orientation.	**Accepted**
H_{1-4}	Time availability is positively related to entrepreneurial orientation.	Rejected
H_{1-5}	Organisational boundaries are positively related to entrepreneurial orientation.	**Accepted**
H_2	**Entrepreneurial orientation is positively related to corporate entrepreneurship.**	**Accepted**
H_3: Corporate entrepreneurship activities are good indicators for the success factors.		
H_{3-1}	Corporate entrepreneurship will have a causal effect on the financial growth of an organisation.	**Accepted**
H_{3-2}	Corporate entrepreneurship will have a causal effect on the customer perceptions of an organisation.	**Accepted**
H_{3-3}	Corporate entrepreneurship will have a causal effect on internal business process.	**Accepted**
H_{3-4}	Corporate entrepreneurship will have a causal effect on the learning and growth of employees in an organisation.	**Accepted**
New	Entrepreneurial orientation is partially related to success factors	**Partially accepted**
New	Rewards or reinforcement is partially related to success factors	**Partially accepted**

Nonetheless, the rejected variables are still important factors to be management by business managers or leaders. Autonomy or work discretion latent variable which was rejected is generally defined as the level at which employees perceive organisations' tolerance to failure, decision-making latitude, the delegation of authority and responsibility to lower employees (Kuratko *et al*., 2014:39). Employees draw satisfaction through having total control of the success of projects with which they are involved in (Bhardwaj & Momaya, 2011:190). Employees who have the freedom to experiment and control over their work are the ones that easily identify entrepreneurial opportunities (Kuratko *et al*., 2014:39). Time availability latent variable theoretically can also be associated with autonomy. As employees are assigned to work on certain projects, they require time to think freely and experiment to pursue innovation (Hornsby *et al*., 2013:939). Time availability assesses workloads and ensures that employees or teams have enough time required for innovation and development of new products and services (Hornsby *et al*., 2013:939). Therefore, time availability is the degree to which employee's perception of workload schedule ensure extra time for employees to pursue creativity and innovation (Kuratko *et al*., 2014:39). Although time availability and autonomy or work discretion were rejected in the SEM analysis, they are still important factors to be considered by top management or entrepreneurial leaders.

10.4 PROPOSED STUDY FRAMEWORK

The proposed study framework developed after conducting SEM analysis had nine variables; three independent variables, two mediating variables and four dependent variables. The independent variables were organisational antecedent factors; top management support, rewards or reinforcement and organisational boundaries (Kuratko *et al*., 2014:37). The mediating variables were two; entrepreneurial orientation and corporate entrepreneurship. The dependent variables were four, success factors derived from the Balanced Scorecard performance management mechanism (Kaplan, 2010:4; Singh & Arora, 2018:874); financial, customer, internal business process and learning and growth.

Top management support is a fundamental management requirement that plays a vital role in creating internal environments that can produce corporate entrepreneurship (Kuratko *et al*., 2014:39). It is the function of top management to facilitate entrepreneurial actions in organisations (Bhardwaj & Momaya, 2011:188). The SEM analysis showed that the relationship from top management support latent variable to entrepreneurial orientation latent variable had a mediation effect. The outcome demonstrated that both theoretical and empirical proof supported the significance of top management support in creating entrepreneurial environments. Top management support sets the path of how to grow the business, how to build a loyal clientele, how to outperform rivals, how each function of the business e.g. finance, production, marketing, sales, distribution, human resource must operate and how performance should be furthered (Hough *et al*., 2011:5). The conclusion was drawn that top management support is positively related to entrepreneurial orientation as shown in Figure 10.1.

According to Kuratko *et al*. (2014:39), rewards or reinforcement is the degree to which employees perceive how the organisation uses methods that rewards based on entrepreneurial activities and success. The SEM analysis showed that the relationship from rewards or reinforcement to entrepreneurial orientation had a mediation effect. Furthermore, rewards and reinforcement also produced a partial relationship of 29% to the success factors. The result showed that both theory and empirical evidence supported the importance of rewards and reinforcement in creating entrepreneurial behaviours in organisations. Suggested by Bhardwaj and

Momaya (2011:190), rewards systems are a vital success factor for stimulating entrepreneurial behaviours. The conclusion was drawn that rewards or reinforcement is positively related to entrepreneurial orientation and additionally partially related to success factors as shown in Figure 10.1 below.

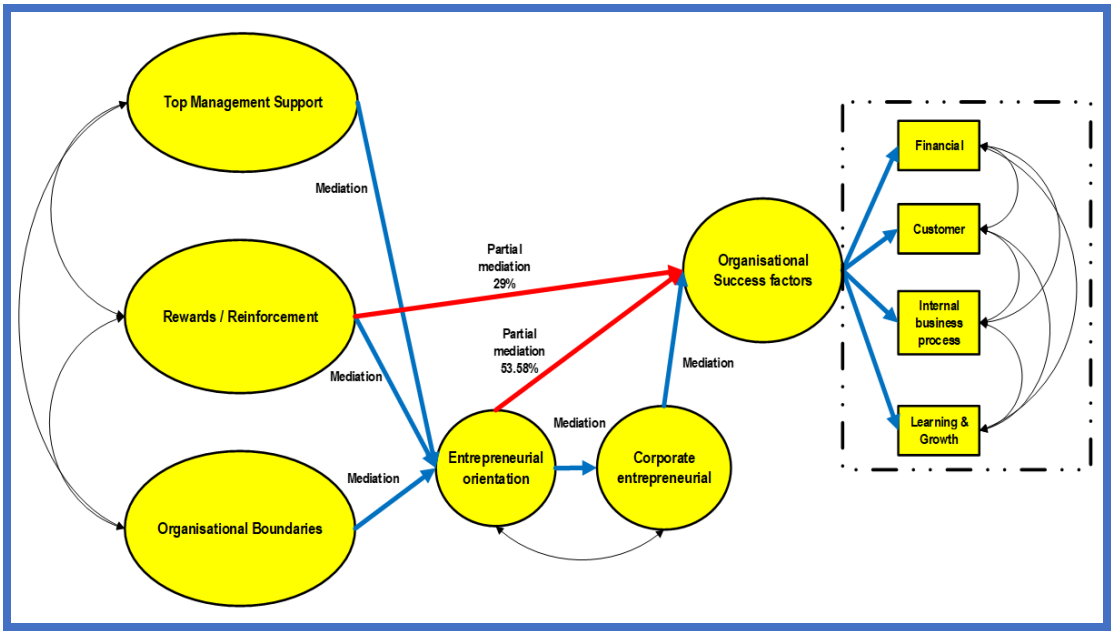
Organisational boundaries can be defined as the degree to which employees perceives their flexible organisational boundaries that are useful in encouraging entrepreneurial actions because they enhance the flow of information between the external environment and internal environments of the organisation (Kuratko *et al*., 2014:39). The SEM analysis showed that the relationship from organisational boundaries to entrepreneurial orientation produced a mediation effect. The result showed that both theory and empirical evidence support the importance of organisational boundaries in inspiring coordinated innovative behaviours across the organisations can produce productive outcomes that enhance the organisation's a competitive edge. Organisational boundaries help to ensure productive use of innovative resources in an organisation (Kuratko *et al*., 2014:39). The conclusion was drawn that organisational boundaries are positively related to entrepreneurial orientation as shown in Figure 10.1 below.

According to Kasim and Altinay (2016:62), entrepreneurial orientation is viewed as principles that influence business approaches and creates exploitative behaviours towards business opportunities to gain and sustain competitive advantage and longevity. Entrepreneurial orientation has been generally referred to as the engine that drives specific behaviours of corporate entrepreneurship such as risk-taking, innovativeness, proactiveness, autonomy and competitive aggressiveness (Corbett *et al*., 2013:813). The SEM analysis showed that the relationship from entrepreneurial orientation to corporate entrepreneurship produced a mediation effect. The result showed that both theory and empirical evidence supported the importance of entrepreneurial orientation in enhancing corporate entrepreneurship behaviours. Additionally, entrepreneurial orientation also produced a partial relationship of 53.58% to success factors. Empirical evidence proved that entrepreneurial orientation is part of corporate entrepreneurship (Mungule & Van Vuuren, 2016:3). The conclusion was drawn that entrepreneurial orientation is positively related to corporate entrepreneurship as shown in Figure 10.1 below.

Corporate entrepreneurship an umbrella topical domain of multidimensional concepts that incorporates all aspects of entrepreneurship inside the established organisations like entrepreneurial orientation, strategic entrepreneurship, corporate venturing and intrapreneurship (Mungule & Van Vuuren, 2016:3). It is a process whereby an individual or group of individuals, in association with an existing organisation create a new organisation or instigate renewal or innovation within that organisation (Sharma & Chrisman 1999:5). Organisations that want to be successful must develop and nurture competitive advantage through innovations of products, service, processes and new business acquisition or development (Kuratko, 2017:3). All these behaviours are embodied in the concept of corporate entrepreneurship (Kuratko, 2017:3). The SEM analysis showed that the relationship from corporate entrepreneurship to success factors (financial, customer, internal business process and learning and growth) produced a mediation effect. The result showed that both theory and empirical evidence support the importance of corporate entrepreneurship in enhancing the success of an organisation through both financial and non-financial success factors as shown in Figure 10.1 below.

The proposed study framework or model in Figure 10.1 below, suggests that a well-balanced combination of top management support, rewards or reinforcement and organisational boundaries can create entrepreneurial orientation which will, in turn, produce corporate entrepreneurship. Corporate entrepreneurship supported by entrepreneurial orientation and rewards or reinforcement can be responsible for producing the success of organisations, the objective of this study.

Figure 10.1: Proposed framework



10.5 SUMMARY OF RECOMMENDATIONS

The focus of the study was concentrated on the internal environment of the selected automotive organisations. The findings from the study were positive, not too far away from the initial hypothesis proposed at the beginning of the study.

The outcome of the study was aimed at developing a measurement instrument that would help automotive leaders or practitioners to identify key variables that can lead their organisations to success and at the same time measure or visualise success in the simplest and understandable manner. Although the proposed measurement instrument is still at its initial stage, it will require further validation and refinement in future research or studies.

The recommendations for the study outcomes were based on the proposed framework in Figure 10.1. It is thus imperative for organisational leaders to embrace entrepreneurship because entrepreneurship is the driving force of organisational vision and mission and hugely impact organisational systems, processes, procedures and culture (Karmarkar *et al*., 2014:159). Therefore, according to Simsek *et al*. (2015:464), entrepreneurial organisations that are engrossed on stimulating wealth and growth through new product development, innovation, innovative

business models and focused competitive strategies require leadership that is supportive, flexible, rewards fairly, innovative, competitive aggressive, proactive and risk-taking.

The following are some of the recommendations derived from the empirical study conduct in the six organisations selected for the study from the Sub-Sahara Africa region. The recommendations were organised according to the results in Figure 10.1, fixated on organisational antecedents, entrepreneurial orientation, corporate entrepreneurship and organisational success factors.

10.5.1 Recommendations for organisational antecedents

Organisational leadership must first create a conducive internal working environment for its employees that enhances the success of the organisations (Kuratko *et al*., 2014:39). Generally, work environments are governed by set conditions under which employees must operate as they try to accomplish firm tasks and personal goals (Morris *et al*., 2011:247). Positive work environments are generally assumed to yield positive results. The following were the recommendation for top management support, rewards or reinforcement and organisational boundaries:

10.5.1.1 Actions for top management support

Top management support is a key ingredient for an entrepreneurial organisation that is focused on becoming successful. The function of top management support is to organise staff, roles and functions in a fashion that enhances entrepreneurial actions (Bhardwaj & Momaya, 2011:188). Top management support is important for keeping the momentum going and it is a good approach for motivating staff. Organisational managers or leaders are recommended to implement the following actions:

- Implement a top-down management style that is focused on creating the organisational vision, mission and strategy to paint a longer- and a medium-term picture of the organisation. Top management must be seen to lead the organisation through visualisation of the ultimate firm's goals and dreams. Top management should be able to pull all employees together and get buy-in of the organisations' long-term goals.

- Implement a bottom-up management style that taps into collective expertise and creativity of the entire organisation. The bottom-up approach helps top management to easily receive ideas and suggestions from floor level staff. This approach is important because all staff eventually become part of the organisation because they feel that the organisation values their contribution. Top management must be quick to use improved work processes developed by employees.
- Cultivate entrepreneurial behaviours in the organisation by encouraging the development of new ideas for the improvement of the organisation. Top management must be viewed to be receptive to new ideas and suggestions from employees. Individual risk-takers should be encouraged and recognised for the willingness to champion new projects. Experimentation of projects should be incorporated into the organisational DNA.
- Reduce decision making layers for employees working on projects. Top management must facilitate a process that enables employees working on a project to make decisions without going through elaborate justification and approval procedures.
- Top management must provide several options within or outside the organisation for individuals to get support for financial support for their innovative ideas and projects.
- Introduce flexibility of organisational policies and procedure. Each new idea should be treated as an individual idea or tailored to a specific context with the flexibility to avoid suffocation of new ideas from employees.

The activities and action plans for top management are explained in detail in Table 10.4 below. The activities areas considered as recommendations by management were top-down management approach, bottom-up management approach, entrepreneurial culture, decision-making process, financial support and flexible company policies and procedures.

Table 10.4: Top management support action plan

No.	Activity	Action plan	Ideal state
1	Top-down Management Approach.	①Scan company's external business environment and customer needs. ②Understand current organisation's internal environment. ③Involve all employees to brainstorm and the development of the organisations' direction e.g. mission, vision and strategy. ④Cultivate and create a common organisational culture accepted by all employees. ⑤Develop company's mission, vision and strategy with all employees and stakeholders. ⑥Share company's strategy with all employees and ensure buy-in from all levels within the organisation. ⑦Periodically share real-time company's KPI results with all employees.	To have a vision, mission and strategy that is clearly understood and accepted by all employees.
2	Bottom-up Management Approach.	①Introduce cross-functional teams. ②Reduce bureaucratic layers between management and staff by introducing flat or matrix structures. ③Encourage employees to make changes that improve work processes. ④Set up think tanks to support the conceptualisation of ideas from employees. ⑤Implement employees' ideas and recognise the sources of ideas from employees through incentive or bonus schemes.	Employee involvement and participation in all company activities.

3	Entrepreneurial culture.	①Contract entrepreneurial experts to help develop an entrepreneurial culture in the organisation using the variables suggested in Figure 10.1. ②Positively receive new ideas and suggestions from the employee. ③Encourage employees to take risks. ④Encourage employees to experiment with projects.	An organisation is driven by creativity and innovation.
4	Decision-making process.	①Categorise decisions into levels and prioritise the speed of making decisions by the level of importance. ②Automate all daily operational decisions to reduce work stoppage, customer complaints and employee frustration. ③Involve decision-makers in new projects development to speed up decision-making process.	Simple and faster decision-making process.
5	Financial support.	①Provide internal budget for innovation to each division. ②Provide alternative external sources to support new projects and ideas.	Alternative financial support.
6	Flexible company policies and procedures.	①Constantly review company policies and procedure. ②Introduce flexible company policies that encourage innovation and creativity. ③Apply tailored specific context policies and procedures for each new concept, idea or project. ④Benchmark company policies and procedure with entrepreneurial organisations in the industry.	Flexible organisational policies and procedures to support innovative thinking.

10.5.1.2 Actions for rewards or reinforcement

Rewards or reinforcement is an important factor required for entrepreneurial activities to enhance corporate entrepreneurial behaviours. According to Bhardwaj & Momaya (2011:190), a rewards system is an important success factor for stimulating entrepreneurial behaviours. Organisational managers or leaders were recommended to implement the following actions:

- Develop a rewards system that is clear and fair to all employee in line with industry practices and must fit the company's budget. Ensure that employees are rewarded according to their work performance.
- The rewards system must be linked to projects or innovations where successful projects are rewarded fairly to motivate entrepreneurial actions.

The activities and action plans for rewards or reinforcement are explained in detail in Table 10.5 below. The activities areas considered as recommendations by management were rewards systems and project incentives.

Table 10.5: Rewards or reinforcement action plan

No.	Activity	Action plan	Ideal state
1	Rewards system	①Understand current needs of employees. ②Compare employees' rewards program with industry best practices. ③Set up a reward program that aligns with staff performance and company results. ④Introduce employees' appraisal or performance evaluation program that is fair for all employees. ⑤Introduce a rewards program that is linked to career development and training plan.	Rewards system that motivates and is fair for all employees.
	Project incentives	①Develop KPIs to measure the success of new projects. ②Reward employees when a project is successful.	Monetised successful entrepreneurial ideas suggested by employees.

10.5.1.3 Actions for organisational boundaries

According to Hornsby *et al*. (2013:939), organisational boundaries are results anticipated from organisational work and development mechanisms for assessing, selecting and utilising innovations. Organisational boundaries encourage the flow of information between the external environment and internal environments of the organisation (Kuratko *et al*., 2014:39). Organisational managers or leaders are recommended to implement the following actions:

- Ensure smooth and transparent communication between departments e.g. introduce cross-functional meetings and create matrix organisational structures.
- Management should expose employees to both internal and external forces that affect their organisations. A good understanding of what is happening both inside and outside the organisation or trends can help employees become more creative.
- Introduce flexibility in the standard operating procedures and minimise the number of rules and regulation in work procedures. Employees are much more flexible, creative and innovative when working with minimum rules and procedures.
- Clearly specify job descriptions with the standards of performance on which the job is evaluated.

The activities and action plans for organisational boundaries are explained in detail in Table 10.6 below. The activities areas considered as recommendations by management were cross-functional meetings, industry trends, standard operating procedures and job description.

Table 10.6: Organisational boundaries action plan

No.	Activity	Action plan	Ideal state
1	Cross-functional meetings	①Explain to all heads of departments the importance of cross-functional meetings and projects. ②Explain to all staff the importance of cross-functional meetings and projects. ③Introduce cross-functional meetings and matrix organisational structure.	An organisation that has all units working together as a single system.
2	Industry trends	①Contract industry experts to explain the current industry forces affecting the business to employees. ②Brainstorm to understand the current forces affecting the internal operation and develop SWOT analysis. ③Develop new strategy based on the outcome of the analysis for the internal and external business environments.	Remain relevant in the industry.
3	Standard Operating Procedures	①Audit current standard operating procedures. ②Improve and change operating procedures that are not in line with current business processes keeping in mind of quality, cost, time and flexibility. ③Continuously improve standard operating procedures.	Operating in line with current business needs and requirement.
4	Job description	①Audit current job descriptions. ②Realign job description with current roles and responsibility. ③Explain job description to all employees and request signed job descriptions to confirm compliance. ④Continuously update job descriptions in line with changes in job roles and functions.	The clear understanding of job roles and responsibilities.

10.5.2 Recommendations for entrepreneurial orientation

Entrepreneurial orientation is recognised as the engine for growth and success of any organisation. It is characterised as a multidimensional construct in which risk-taking, autonomy, innovativeness, proactiveness and competitive aggressiveness are treated as independent behavioural dimensions that explain entrepreneurial orientation (Covin & Miller, 2014:13). Entrepreneurial orientation usually manifests in organisations where strategic leaders generate an impetus to innovate, act aggressively and take risks (Kungeke, 2016:41). Organisational managers or leaders were recommended to implement the following actions:

- Ensure that employees have autonomy in their jobs to encourage innovation, promote entrepreneurial actions, increase competitiveness and decision making. Employees must be allowed to be creative and try different ways of doing their jobs. Employees must be allowed to manage their work and have the flexibility to conduct problem-solving.
- Promote risk-taking behaviours through the commitment of resources to ventures with uncertain outcomes and venturing into unknown areas. Employees must be encouraged to take calculated risks concerning new ideas and risk-taking should be considered as a positive attribute.
- Promote innovativeness to help continuously search for new ways of innovation, competitiveness and success. Management must encourage employees to continuously pursue new opportunities and place a strong emphasis on continuous improvement.
- Promote proactiveness a forward-looking view characterised by anticipating customers' future needs and wants. Proactiveness helps organisations to capitalise on opportunities before they are noticed by the competitors.
- Management must put in place strategies that directly challenge its competitors aggressively to achieve the intended market share and position in the market space.

The activities and action plans for entrepreneurial orientation are explained in detail in Table 10.7 below. The activities areas considered as recommendations by

management were autonomy, risk-taking, innovativeness, proactiveness and competitive aggressiveness.

Table 10. 7: Entrepreneurial orientation action plan

No.	Activity	Action plan	Ideal state
1	Autonomy	①Understand the job description of each employee in the organisation. ②Clearly explain what each employee has to do and the level of decisions they are allowed to make based on responsibilities and roles. ③Develop clear escalation processes for faster decision making. ④Use algorithms to control operations decision making. Set up a system that supports staff to make daily operations decisions. ⑤Continuously improve standard operating procedures in line with customer needs. ⑥Encourage employees to continuously improve service processes. ⑦Promote experimentation of projects and ideas in the organisation.	Employee ownership and responsibility for roles and responsibilities.
2	Risk-taking	①Understand the types of risks facing the organisations and the industry. ②Categorise the types of risks and develop a guideline to evaluate risk attempts. ③Identify potential risk-takers in the organisation and support them with training on risk-taking. ④Create a culture that encourages risk-taking and experimentation. ⑤Evaluate risks taken based on the type of risk attempt not just failure or success.	Bold moves that disrupt the industry.

3	Innovativeness	①Set up a cross-functional think tank team responsible for innovation. ②Empower the think tank team to conceptualise and propose new ideas. ③Encourage employees to explore new service processes and products.	Stay relevant and provide updated products and services to customers.
4	Proactiveness	①Constantly scan the business environment. ②Identify market trends to predict changes in the market environment. ③Implement anticipated changes in the market to stay ahead of the competition.	Continuously be the first to introduce innovative products in the industry.
5	Competitive aggressiveness	①Understand the current strength and weaknesses of the organisation internal and external factors. ②Improve weak areas. ③Reinforce the current strengths. ④Use current strengths to counter competition in the market.	The largest market share in the industry.

10.5.3 Recommendations for corporate entrepreneurship

Corporate entrepreneurship the umbrella term used to describe all entrepreneurial activities that occur inside the existing organisations is focused on achieving success for any organisations (Morris *et al.*, 2011:56; Mungule & Van Vuuren, 2016:3). Organisational managers or leaders were recommended to implement the following actions:

- Promote strategic renewal through the transformation of the organisation's key ideas.
- Continuously introduce new products, services and processes in the market using the sustained regeneration.

- Continuously create new businesses or new products arena using the domain redefinition strategy.
- Continuously sustain or improve organisational competitive advantage by altering internal processes, capabilities and structures using the organisational rejuvenation.
- Apply entrepreneurial thinking by redesigning the organisational core business model to improve operational efficiencies using the business model reconstruction strategy.

The activities and action plans for corporate entrepreneurship are explained in detail in Table 10.8 below. The activities areas considered as recommendations by management were strategic renewal, sustained regeneration, domain redefinition, organisational rejuvenation and business model reconstruction.

Table 10. 8: Corporate entrepreneurship action plan

No.	Activity	Action plan	Ideal state
1	Strategic renewal	①Continuous review of important organisation's ideas or projects. ②Renew and update current organisation's important ideas. ③Encourage employees to create new wealth through innovation and creativity.	Continuously add value innovation to the organisation.
2	Sustained regeneration	①Continuous market scanning. ②Continuous introduction of new products and service in the market.	Sustained competitive advantage.
3	Domain redefinition	①Conduct market study. ②Analyse market trends. ③Develop completely new products arena using think tanks. ④Redefine the industry to isolate the organisation from the competition.	Completely new industry.

4	Organisational rejuvenation	①Continuously monitor internal processes. ②Continuously evaluate the organisational structure. ③Continuously evaluate organisational capabilities and resources.	Use internal processes, structure and capabilities as competitive advantage.
5	Business model reconstruction	①Continuously evaluate the current business model and improve where necessary. ②Develop new business models in line with market requirements. ③Develop new business models to satisfy future customer needs.	Sustained competitive advantage.

10.5.4 Recommendations for organisational success factors

According to Marais *et al*. (2017:2), Organisational success factors are factors that require close attention from management or business leaders, for organisations to achieve the desired success and are also popularly known as key success factors, critical success factor, limiting factors, key result areas, strategic variables and strategic success factors. It is important for organisational leaders to manage both financial and non-financial success factors. The success factors were characterised by four dimensions: financial, customer, internal business process and learning and growth. Organisational managers or leaders are recommended to implement the following actions:

10.5.4.1 Actions for financial

- Management must be able to track their revenue progress year on year. There must also be a clear revenue comparison between competitors. Continuous tracking and comparisons of current financial results versus budget versus historical results can help to redefine strategy. Financial information should be broken down into understandable information for employees to easily understand the current performance of the organisation.

This information can help to motivate employees to keep on improving the performance of their organisation compared to competitors.

- Management should be able to clearly measure the percentage of sales generated by new products and services relative to competitors.
- Management must clearly measure market share. Historical information to show market share and comparison between competitors should be readily available to all employees.

The activities and action plans for financial are explained in detail in Table 10.9 below. The activities areas considered as recommendations by management were revenue results, new products and service revenue and market share.

Table 10. 9: Financial action plan

No.	Activity	Action plan	Ideal state
1	Revenue results	①Develop a reporting structure for financial results. ②Identify ways of sharing financial results with competitors in exchange with competitor information. ③Share financial information with employees showing the performance of the organisation compared to previous years, budget and competitor results.	Provide financial information to employees.
2	New products and service revenue	①Separate sales of new products and services from current products and services. ②Develop a report that shows revenue generated from only new products and services. ③Compare revenue percentage of new products and service relative to the competition. ④Measure additional revenue from new products and services.	A clear indication of the performance of new products and services.
3	Market share	①Develop a reporting format for market share. ②Collaborate with competitors and share	A clear picture of market share position in the

		market share information. ③Develop action plans to improve market share.	industry.

10.5.4.2 Actions for customer

- Conduct regular surveys to understand the current and future levels of customer satisfaction. Continuously collecting the voice of the customers can help the organisation to continuously shape itself in line with the customer's needs and wants. Contact customers to measure customer satisfaction levels and assess the lead time for customer complaints resolution. Timely resolving customers complaints can help satisfy and retain customers.
- Management should ensure that the organisation meets customer promised delivery through measuring on-time delivery. Promised delivery times can be identified through report analysis and voice of customer analysis.
- Conduct mystery shopper case studies to collect actual customer experience when they visit the organisation.

The activities and action plans for the customer are explained in detail in Table 10.10 below. The activities areas considered as recommendations by management were customer satisfaction survey, promised delivery time and mystery shopper.

Table 10.10: Customer action plan

No.	Activity	Action plan	Ideal state
1	Customer satisfaction Survey	①Set up a call centre. ②Contact all customers that have been invoice within 72 hours by your organisation to grasp their satisfaction levels. ③Register all customer complaints and set up processes to timeously resolve complaints. ④Collect voice of the customer and timeously respond to all customers. ⑤Benchmark customer survey results with	Provide quality and superior service.

		competitors. ⑥Share customer survey positive or negative voice of customers results with all employees.	
2	Promised delivery time	①Understand the current promised delivery time through the voice of the customer. ②Develop an automated report that measures promised delivery time for all products and services. ③Develop processes that enhance the promised delivery time. ④Set KPI's for promised delivery times. ⑤Confirm the voice of the customers regarding promised delivery times after implementation.	Meet customer promised delivery time.
3	Mystery shopper	①Contract service provider to conduct mystery shopper case study in the organisation. ②Conduct mystery shopping and document case studies. ③Explain the organisation's needs for the case study to all employees once the results are available. ④Identify weak and strong areas in the case study. ⑤Develop countermeasures based on the results from mystery shopper case studies results. ⑥Train employees on how to improve customer experience based on mystery shopper case studies results.	Provide the best customer experience.

10.5.4.3 Actions for internal business process

- Management should ensure that the organisation has the capacity to support and introduce new technology. Technology should enhance the customer's

experience from the point of customer awareness of the product to delivery of the product. Seamless technology that can easily integrate all departments e.g. new vehicle sales, service and parts are imperative in improving customer experience when purchasing the product or service.

- Management should ensure that standard operating procedure is flexible to encourage innovation and creativity. This can be done by conducting motion studies to identify value add and non-value adding processes.
- Introduce a process that encourages communication between customer relations management and internal business process. This can help employee easily receive the voice of customer or customer complaints and immediately use the information to re-engineer internal business processes.

The activities and action plans for the internal business process are explained in detail in Table 10.11 below. The activities areas considered as recommendations by management are technology, standard operating procedure and cross-functional.

Table 10 11: Internal business process action plan

No.	Activity	Action plan	Ideal state
1	Technology	①Conduct current company technology audit. ②Collect employees and customer voice regarding the company's current technology. ③Evaluate current company technology in line with industry benchmark. ④Identify preferred industry technology from market leaders. ⑤Integrate preferred technology with social media.	Best customer purchasing experience.
2	Standard Operating Procedure	①Audit current standard operating procedures. ②Conduct motion studies to identify value add and non-value adding process. ③Improve and change operating procedures that are not in line with current business processes.	Efficient internal business processes.

		④Continuously improve standard operating procedures.	
3	Cross-functional	①Identify a cross-functional team between operations and customer relationship management. ②Set up processes to resolve customer queries or complaints. ③Set up processes to create preventive measures when queries or complaints are resolved.	Prevent reoccurrence of similar customer complaints.

10.5.4.4 Actions for learning and growth

- Management should ensure that all employees are skilled and capable to do their work through training and development in line the 4th Industrial Revolution. This can be achieved by setting up a separate training department that focuses on improving the skills of all employees.
- Identify highly skilled and experienced employees to act as mentors for freshmen or new employees in the organisation. Introduce on the job training to be conducted by mentors appointed by the organisation.
- Management should be able to identify talent and develop a successor for each position. A career path development plan should be in place for each employee.
- In order to understand the level of satisfaction of employees, management must introduce an employee satisfaction survey. This platform will help employees express their views. In turn, management will be required to use the feedback to improve employees working conditions.

The activities and action plans for learning and development are explained in detail in Table 10.12 below. The activities areas considered as recommendations by management were training and development, on the job training, succession planning and employee satisfaction.

Table 10.12: Learning and growth action plan

No.	Activity	Action plan	Ideal state
1	Training and development	①Incorporate training and development into company strategy mindful of the 4th Industrial Revolution. ②Understand current organisations training needs and develop a skills matrix to visualise employees training gaps. ③Set up a training structure according to current and future organisation's needs. ④Invest in training and development. ⑤Develop a clear training calendar for all employees. ⑥Create certification level to motivate employees. ⑦Link promotions and rewards to training results.	Highly skilled employees.
2	On the Job Training	①Identify highly skilled employees. ②Appoint highly skilled employees as mentors to train freshmen or new employees. ③Develop an on the job training program. ④Set up evaluation method for assessing on the job training.	Seamless induction for all new and learning employees.
3	Succession plan	①Identify talented employees. ②Develop a clear career path development plan for employees. ③Identify coaches to support monitoring of employees.	Clear career path development for all employees.

		④Develop a coaching program for employees on the succession planning program. ⑤Annually conduct assessments to measure achievement levels of employee's career development plan.	
	Employee satisfaction	①Develop an employee satisfaction survey that is anonymous. ②Conduct biannual or annual surveys to capture the voice of employees and assess the general level of satisfaction index. ③Review and develop action plans to resolve employee concerns. ④Implement action plans and to ensure all staff are aware of the results after implementation. ⑤Benchmark employee satisfaction level across the industry.	Low employee turnover rate.

10.6 STUDY CONTRIBUTION TO CORPORATE ENTREPRENEURSHIP

According to Kuratko (2017:2), corporate entrepreneurship has become a key strategy for all types of organisations and is proving to be a valid and effective area of research that has tangible benefits for emerging scholars. Its theoretical and empirical knowledge has evolved over the last forty-five years, initially, taking off on a slow start and now its importance has matured with time (Kuratko, 2017:2). This study focused on evaluating the relationship between corporate entrepreneurship and the success of an organisation through developing a measuring instrument using SEM.

The following were some of the contributions of this study to the field of entrepreneurship and corporate entrepreneurship literature:

- The study achieved all the intended objectives of the study as illustrated in Tables 10.1 and 10.2 above.
- The study contributed to the limited empirical research that is existing in understanding the relationship between corporate entrepreneurship and the success of organisations.
- The study used the CEAI measurement instrument and extended it by introducing entrepreneurial orientation, corporate entrepreneurship and success factors i.e. financial, customer, internal business process and learning and growth factors. The new constructs introduced in form of success factors may require further fine-tuning in future studies to validate the construct validity of the proposed measurement instrument. However, the new constructs identified contributed to the field of corporate entrepreneurship by opening new research avenues.
- The study used complicated statistical methods to measure corporate entrepreneurship e.g. SEM for model construction, exploratory factor analysis and confirmatory factor analysis to confirm construct validity.
- The study developed a proposed framework to be used for business and academic purposes.
- The study provided organisations with practical guidelines on how to use resources for establishing effective corporate entrepreneurship strategies and direction on how to develop an entrepreneurial climate.
- The proposed measurement instrument opened new avenues for further research in the field of corporate entrepreneurship because of the inclusion of the four perspectives of the Balanced Scorecard as success factors i.e. financial, customer, internal business process and learning growth. The study ignited novel inquiry due to additional variables.
- The study used data collected from Kenya, Malawi, South Africa, Zambia and Zimbabwe where no similar research has been conducted before. The research contributed to knowledge enhancement for the Sub-Sahara Africa region.
- Scholars and practitioners now have empirically tested variables to use when working with corporate entrepreneurship internal business environments.

10.7 STUDY LIMITATIONS

The investigation identified a few constraints which could be likewise utilised as the initial step for future research on corporate entrepreneurship. The following are some of the constraints identified in the investigation:

- The study was carried out in five unique countries in Sub-Sahara Africa. The spread of the locations had a huge financial impact which was not budgeted for. Some of the activities couldn't be accomplished in time and the quality of work produced could have been compromised in the process.
- Some countries such as Mozambique, Angola and the Democratic Republic of Congo were not included in the study because of language differences.
- Automotive information available for Sub-Sahara Africa is very limited.
- The research was limited to a few selected automotive organisations, which could compromise the generalisation of the results because of differences in internal organisational cultures and values of the investigated organisations.
- Measurements in the questionnaire were based on perceptions due to lack of data e.g. financial or customer information.
- The study was conducted in Kenya, Malawi, South Africa, Zambia and Zimbabwe, countries that were experiencing different levels of political, economic, technological and social challenges. The outcome could have been impacted by external factors which were not considered in the investigation.
- The investigation was rivetted on internal environmental factors of the organisation which influence corporate entrepreneurship and did not consider the external environment (Heinonen & Toivonen, 2008:258).
- Success factors used in the study were derived from the Balanced Scorecard. Several success factors such as the geographical location of the organisation, the economic state of the country, political stability of the country, the economic state of the organisations' clients were not considered in the study. Insufficient consensus on the underlying factors of the dimensions of success could impact the generalisation of results derived from the study. Additional research is required to clarify the underlying factors of organisational success. Positively, this study ignited more inquiry due to additional variables added to the measurement instrument.

- Organisational based factors such as strategy, vision and communication were not explored in detail and related to organisational success factors.
- Individual countries' cultural factors were not explored in detail and not considered in the measurement instrument.

10.8 FUTURE RESEARCH SUGGESTIONS

The study proposed a new framework that evaluated the relationship between corporate entrepreneurship and the success of organisations. The framework requires to be rigorously validated through future research to prove the model fitness.

The study conducted was a cross-sectional study. To further strengthen the proposed framework a longitudinal study with an extended geographical demarcation is suggested to further fine-tune the proposed framework.

The development of the proposed framework included the CEAI measurement instrument with five organisational antecedents: top management support, autonomy or work discretion, rewards or reinforcement, time availability and organisational boundaries. However, in the new proposed frame autonomy or work discretion and time availability did not indicate a relationship with entrepreneurial orientation, corporate entrepreneurship and success factors. Future research requires to retest the construct validity of the CEAI measurement instrument's relationship with corporate entrepreneurship.

Sub-Sahara Africa is the untapped region for corporate entrepreneurship studies. The recommendation is that more resources be channelled towards the region to increase the number of research projects to further improve knowledge for corporate entrepreneurship in the region.

10.9 SUMMARY

Chapter 10 focused on dissecting the findings of the analysis of the results. An assessment of the achievement of the primary and secondary objectives was conducted. All the initial set objectives of the study were achieved. The statistical conclusions analysed the data analysis on the biographical information, construct

validity, reliability, descriptive statistics, biographical nonparametric correlations, correlations between constructs and SEM analysis. The statistical conclusions led to the hypothesis analysis. The results of the hypothesis showed the following:

- Relationship from top management to entrepreneurial orientation was accepted.
- Relationship from autonomy or work discretion to entrepreneurial orientation was rejected.
- Relationship from rewards or reinforcement to entrepreneurial orientation was accepted.
- Relationship from time availability to entrepreneurial orientation was rejected.
- Relationship from organisational boundaries to entrepreneurial orientation was accepted.
- Relationship from entrepreneurial orientation to corporate entrepreneurship was accepted.
- Relationship from corporate entrepreneurship to success factors was accepted.

In addition to the hypothesis results, new results were produced by the framework. The following were the two new relationships produced by the SEM model 2:

- Partial relationship of 53.58% from entrepreneurial orientation to success factors was produced.
- Partial relationship of 29% from rewards or reinforcement to success factors was produced.

The summary of the accepted hypothesis and the new relationship produced by SEM model 2 developed the proposed study framework. Based on the proposed study framework, study recommendations were provided for top management support, rewards or reinforcement, organisational boundaries, entrepreneurial orientation, corporate entrepreneurship and organisational success factors. The study recommendations were the basis of the development of the study contributions, limitations and future research suggestions.

In a nutshell, organisations are recommended to ensure that they create a conducive internal organisational environment using top management support, rewards or reinforcement and organisational boundaries. The three variables once implemented successfully can create entrepreneurial orientation which is characterised by innovativeness, autonomy, risk-taking, proactiveness and competitive aggressiveness. Entrepreneurial orientation creates corporate entrepreneurship a multidimensional concept that incorporates all aspects of entrepreneurship inside established organisations. The presence of corporate entrepreneurship with the help of partial direct relationship from rewards or reinforcement and entrepreneurial orientation to success factors can produce organisational success.

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APPENDIX 1 – SURVEY CONFIRMATION LETTERS

cfao
SOUTH AFRICA

To: The North West University,
Potchefstroom Campus- Higher Degree Administration,
Private Bag X6001,
Potchefstroom 2520,
North West Province,
South Africa.

Date: 15 March 2019

Dear Sir / Madam,

Re: Authorization to collect data for PHD studies (Corporate Entrepreneurship)

Please be advised that CFAO Holdings South Africa has granted permission to Peter Kungeke to collect data from our organisation for the purposes of his PHD thesis.

We have granted this permission on the basis that the information collected will be used for his studies only and confidentiality procedures will be followed accordingly.

All the best with your studies.

Yours Faithfully,

Erika Harley
Vice Divisional General Manager
Corporate

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Longmeadow Business Park, Edenvale, 1609

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Phone +27 11 608 0116
www.subaru.co.za

22 March 2019

To: The North West University,
Potchefstroom Campus – Higher Degree Administration,
Private Bag X6001,
Potchefstroom 2520,
North West Province,
South Africa

Dear Sir / Madam,

Re: Authorisation to collect data for PHD studies (Corporate Entrepreneurship)

Please be advised that Subaru Southern Africa has granted permission to Peter Kungeke to collect data from our organisation for the purposes of his PHD thesis.

We have granted this permission on the basis that the information collected will be used for his studies only and confidentiality procedures will be followed accordingly.

We wish him well in his studies.

Yours Faithfully,

Morné Viviers
General Manager (Retail)
Subaru Southern Africa

Toyota Malawi Limited
Masauko Chipembere Highway
P. 0. Box 430
Blantyre - Malawi

TOYOTA

15th March 2019

The North West University,
Potchefstroom Campus- Higher Degree Administration,
Private Bag X6001,
Potchefstroom 2520,
North West Province,
South Africa

Dear Sir / Madam,

Re: Authorisation to collect data for PHD studies (Corporate Entrepreneurship)

Please be advised that Toyota Malawi Limited has granted permission to Peter Kungeke to collect data from our organisation for the purposes of his PHD thesis.

We have granted this permission on the basis that the information collected will be used for his studies only and confidentiality procedures will be followed accordingly.

We wish Peter good luck with his studies.

Yours faithfully,

Kennedy Kabaghe
Managing Director

Head Office
Masauko Chipembere Highway
P. 0. Box 430, Blantyre
Tel : 01 841 933 / 01 841 726
: 01 844 424/01 843 068
: 0999 971 033 1034 / 035

Makata Office
Off Industrial Area
P. 0. Box 430, Blantyre
Tel:01 880 499

HINO

Your partner for Life

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LUSAKA TOYOTA
Vehicle Sales, Parts, Service
Plot No. 8522
Cairo Road, North End, Lusaka
P. 0. Box 33438, Lusaka ·Zambia
Tel: +260·211·229109·13
Fax: +260·211·222136/223846
E-mail: contactus@toyotazambia.co.zm
Websi1e.www.toyotazambia.com

NANGWENYA TOYOTA
Vehicle Sales, Parts, Service
Plot No. 25
Nangwenya Rd
Mass Media Area, Lusaka
P.O Box 34599, Lusaka ·Zambia
Tel: +260·211·378051 ·50
Fax:+260·211·378050
E-mail: contactus@toyolazambia.co.zm

COPPERBELT TOYOTA
Vehicle Sales, Parts, Service
Plot No. 1325
Chingola Road, Kitwe
P. 0. Box 22595
Kitwe • Zambia
Tel: +260·212·217571
Fax: +260·212·217595
E-mail: contactus@toyotazambia.co.zm

LIVINGSTONE TOYOTA
Parts, Service
Plot No. 699
Industrial Road, Livingstone
P. 0. Box 60864
Livingstone • Zambia
Tel: +260·213·322409
Fax: +260·213·322407
E-mail: contactus@toyotazambia.co.zm

SOLWEZI TOYOTA
Parts, Service
Plot No.17117
Kansanshi Mine Road
Mushitala Township
P. 0. Box 110200, Solwezi ·Zambia
Tel: +260·211·229109·13 /228228·9
Fax: +260·211·222136/223846
E-mail: contactus@toyotazambia.co.zm

The North West University,
Potchefstroom Campus- Higher Degree Administration,
Private Bag X6001,
Potchefstroom 2520, •
North West Province,
South Africa.

17th April 2019

Dear Sir / Madam,

Re: Authorisation to collect data for PHD studies (Corporate Entrepreneurship)

Please be advised that Toyota Zambia has granted permission to Peter Kungeke to collect data from our organisation for the purposes of his PHD thesis.

We have granted this permission on the basis that the information collected will be used for his studies only and confidentiality proc dures will be followed accordingly.

We wish him well in his studies.

Yours Faithfully,

Dino Bianchi,
Managing Director- Toyota Zambia.

TOYOTA ZIMBABWE (Pvt) Ltd

Head Office
67 Mutare Road, Msasa
Hg 4 7 , Highland s, Harare
T: 263 8677 000 019
F:263 8677 067 067

Bulawayo Branch
1Oth & 11th Ave / J M N Nkomo St
P.O. Box 32, Bulawayo
T: +263-9-69881/4, 68327. 69964
F: + 263-9-69963

To: The North West University,

Potchefstroom Campus- Higher Degree Administration,

Private Bag X6001,

Potchefstroom 2520,

North West Province,

South Africa.

20 March 2019

Dear Sir / Madam,

AUTHORISATION TO COLLECT DATA FOR PHD STUDIES (CORPORATE ENTREPRENEURSHIP)

Please be advised that Toyota Zimbabwe has granted permission to Peter Kungeke to collect data from our organisation for the purposes of his PHD thesis.

We have granted this permission on the basis that the information collected will be used for his studies only and confidentiality procedures will be followed accordingly.

We wish him well in his studies.

Yours faithfully,

FOR: TOYOTA ZIMBABWE (PVT) LTO

Sebastien Benning

MANAGING DIRECTOR

TOYOTA KENYA LIMITED

Uhuru Highway
P.O. Box 3391 - 00506
Nairobi, Kenya
Tel: 254-020-6967000 / 651444
Fax:254-020-651458 1651403
GSM: 0719 029 000 / 0734 333 271
Website: www.toyotakenya.com
Customer **Relations: enquiries@toyotakenya.com / 0724 256594**

TOYOTA

To: The North West University,

Potchefstroom Campus- Higher Degree Administration,

Private Bag X6001,

Potchefstroom 2520,

North West Province,

South Africa.

Date: 28 May 2019

Dear Sir / Madam,

Re: Authorization to collect data for PHD studies (Corporate Entrepreneurship)

Please be advised that Toyota Kenya has granted permission to Peter Kungeke to collect data from our organisation for the purposes of his PHD thesis.

We have granted this permission on the basis that the information collected will be used for his studies only and confidentiality procedures will be followed accordingly.

We wish him well in his studies.

Yours Faithfully,

Arvinder Reel,

Managing Director.

Toyota Kenya.

APPENDIX 2 – STUDY QUESTIONNAIRE

CORPORATE ENTREPRENEURSHIP

CONFIDENTIAL

Researcher: Peter Kungeke
0722709495

Note: All responses are confidential and neither the individual nor the organisation would be identified in any report or release.

Corporate entrepreneurship

Dear Respondent,

An entrepreneurial firm is the one that engages in product market innovation, undertakes somewhat risky ventures, and is the first to come up with proactive innovations beating competitors to the punch, while non-entrepreneurial firms innovate very little, are highly risk averse and imitates the moves of competitors instead of leading the way. Therefore, entrepreneurship that is practiced by existing organisations is known as corporate entrepreneurship. It is a process whereby an individual or group of individuals, in association with an existing organisation create new organisations or instigate renewal or innovation within that organisation.

Corporate entrepreneurship has gradually become one of the most extensively researched topics in literature and empirical results show that it may have influence on organisational success. The growing interest is not just about macro-economic benefits as a result of entrepreneurial activities, but improved performance in established organisations. The general agreement in literature is that performance is a multidimensional concept and that multiple success measures must be used instead of just a single dimension i.e. financial and non-financial success measures. Organisations adopt entrepreneurial attitudes in the hope that similar behaviours will help create high levels of success. Shockingly enough there is little theoretical and empirical evidence to support a strong relationship between corporate entrepreneurship and success of organisations, hence the reason for this research.

The survey will be conducted in several automotive organisations from the Sub-Sahara African region. This survey will focus on measuring organisational antecedents, corporate entrepreneurship and the four perspectives of the Balanced Scorecard. Once the results of the survey are published, managers and staff will be able to easily visualize the elements that can improve corporate entrepreneurship.

Thank you very much for participating in the survey, your feedback is highly appreciated.

Yours sincerely,

Peter Kungeke.

Please complete every question / statement to ensure the validity and reliability of the study.

GENERAL INSTRUCTIONS

Virtually all questions should be answered by *ticking (X) or highlighting* the relevant block.

Use the following key to indicate your preference:

SCALE	TERM USED
1	Strongly disagree
2	Disagree
3	Neither agree nor disagree (Neutral)
4	Agree
5	Strongly agree

Please select the number which best describes your opinion about a specific question or statement. In the example beneath, the respondent agreed to the statement listed.

I believe that Small, micro and medium sized enterprises in South Africa can be successful	1	2	3	X 4	5

SECTION A: ORGANISATIONAL ANTECEDENTS

The following statements concern your attitude towards variables that help to improve organisational internal environments that can enhance corporate entrepreneurship.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree	*2 = Disagree*	*3 = Neutral*	*4 = Agree*	*5 = Strongly agree*

	Statement	Scale				
A1	My organisation is quick to use improved work processes or procedures that are developed by employees.	**1**	**2**	**3**	**4**	**5**
A2	My organisation encourages the development of new ideas for the improvement of the company.	**1**	**2**	**3**	**4**	**5**
A3	Upper management is aware of and very receptive to my ideas and suggestions.	**1**	**2**	**3**	**4**	**5**
A4	Employees actively working on projects are allowed to make decisions without going through elaborate justification and approval procedures.	**1**	**2**	**3**	**4**	**5**
A5	There are many options within the organisation for individuals to get financial support for their innovative projects and ideas.	**1**	**2**	**3**	**4**	**5**
A6	Individual risk takers are recognised and encouraged for the willingness to champion new projects, whether eventually successful or not.	**1**	**2**	**3**	**4**	**5**
A7	My organisation supports many small and experimental projects, realising that some will undoubtedly fail.	**1**	**2**	**3**	**4**	**5**
A8	Top management encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	**1**	**2**	**3**	**4**	**5**
A9	I feel like I am my own boss and do not have to double check all my decisions with someone else.	**1**	**2**	**3**	**4**	**5**
A10	My organisation gives me the opportunity to make use of my abilities.	**1**	**2**	**3**	**4**	**5**
A11	In my organisation I am not subject to criticism and punishment resulting from mistakes made on the job.	**1**	**2**	**3**	**4**	**5**
A12	I have much autonomy on my job and am left on my own to do my own work.	**1**	**2**	**3**	**4**	**5**
A13	The rewards I receive are dependent upon my work performance.	**1**	**2**	**3**	**4**	**5**
A14	My manager / supervisor will increase my job responsibilities if I am performing well in my job.	**1**	**2**	**3**	**4**	**5**
A15	Individuals running or initiating successful innovative projects receive additional rewards and compensation for their ideas and efforts beyond the standard reward system.	**1**	**2**	**3**	**4**	**5**
A16	My manager / supervisor would tell his/her boss if my work is outstanding.	**1**	**2**	**3**	**4**	**5**
A17	My manager / supervisor helps me get my work done by removing obstacles and roadblocks.	**1**	**2**	**3**	**4**	**5**
A18	During the past three months, my workload kept me from spending time on developing new ideas.	**1**	**2**	**3**	**4**	**5**
A19	I have just the right amount of time and workload to do everything well.	**1**	**2**	**3**	**4**	**5**
A20	I always seem to have plenty of time for innovation and experimentation.	**1**	**2**	**3**	**4**	**5**

A21	My job is structured in such a way that gives me very little time to think about wider organisation problems.	**1**	**2**	**3**	**4**	**5**
A22	In this organisation my colleagues and I always find time for long term problem solving.	**1**	**2**	**3**	**4**	**5**
A23	In the last three months, I had to follow very little standard operating procedures or practices to do my major tasks.	**1**	**2**	**3**	**4**	**5**
A24	There are many written rules and procedures that exist for doing my major tasks.	**1**	**2**	**3**	**4**	**5**
A25	My job description clearly specifies the standard of performance on which my job is evaluated.	**1**	**2**	**3**	**4**	**5**
A26	I clearly know what level of work performance is expected from me in terms of quantity, quality and timeline of output.	**1**	**2**	**3**	**4**	**5**
A27	I really have to follow the same work methods or steps for doing my major tasks.	**1**	**2**	**3**	**4**	**5**

SECTION B: CORPORATE ENTREPRENEURSHIP

The following statements concern variables that show the existence of corporate entrepreneurship in an organisation.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

1 = Strongly disagree	***2 = Disagree***	***3 = Neutral***	***4 = Agree***	***5 = Strongly agree***

	Statement	**Scale**				
B1	Our organisation regularly and continuously introduces new products, services and enters new markets.	**1**	**2**	**3**	**4**	**5**
B2	Our organisation seeks to sustain or improve its competitive standing by altering its internal processes, structures and capabilities.	**1**	**2**	**3**	**4**	**5**
B3	Our organisation seeks to redefine its relationship with its markets or industry competitors by fundamentally altering how it competes.	**1**	**2**	**3**	**4**	**5**
B4	Our organisation proactively creates a new product market arena that others have not recognised or actively sought to exploit.	**1**	**2**	**3**	**4**	**5**
B5	Our organisation applies entrepreneurial thinking to the	**1**	**2**	**3**	**4**	**5**

	design or redesign of its core business model (s) in order to improve operational efficiencies.					
B6	Our organisation applies entrepreneurial thinking to the design or redesign of its core business model(s) in order to improve operational efficiencies. or otherwise differentiate itself from industry competitors in ways valued by the market.	**1**	**2**	**3**	**4**	**5**

SECTION C: ENTREPRENEURIAL ORIENTATION

The following statements concern your attitude towards the entrepreneurial orientation of the organisation.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5-point scale next to the statement.

1 = Strongly disagree	***2 = Disagree***	***3 = Neutral***	***4 = Agree***	***5 = Strongly agree***

	Statement	**Scale**				
C1	I have enough autonomy in my job without continual supervision to do my work.	**1**	**2**	**3**	**4**	**5**
C2	Our organisation allows me to be creative and try different methods to do my job.	**1**	**2**	**3**	**4**	**5**
C3	Employees at our organisation are allowed to make decisions without going through elaborate justification and approval procedures.	**1**	**2**	**3**	**4**	**5**
C4	Employees at our organisation are encouraged to manage their own work and have flexibility to resolve problems.	**1**	**2**	**3**	**4**	**5**
C5	I seldom have to follow the same work methods or steps while performing my major tasks from day to day.	**1**	**2**	**3**	**4**	**5**
C6	Our organisation regularly introduces new products/services/processes.	**1**	**2**	**3**	**4**	**5**
C7	Our organisation places a strong emphasis on new and innovative products/services/processes.	**1**	**2**	**3**	**4**	**5**
C8	Our organisation has increased the number of products/services/processes offered during the past two years.	**1**	**2**	**3**	**4**	**5**
C9	Our organisation is continually pursuing new opportunities.	**1**	**2**	**3**	**4**	**5**

C10	Over the past few years, changes in our products/services/processes have been quite dramatic.	**1**	**2**	**3**	**4**	**5**
C11	In our organisation there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	**1**	**2**	**3**	**4**	**5**
C12	Our organisation places a strong emphasis on continuous improvement (kaizen) in products/services/processes.	**1**	**2**	**3**	**4**	**5**
C13	Our organisation has a widely held belief that innovation is an absolute necessity for the organisation's future.	**1**	**2**	**3**	**4**	**5**
C14	Our leaders seek to maximise value from opportunities without constraint to existing models, structures or resources.	**1**	**2**	**3**	**4**	**5**
C15	When confronted with uncertain decisions, our organisation typically adopts a bold posture in order to maximise the probability of exploiting opportunities.	**1**	**2**	**3**	**4**	**5**
C16	In general, our organisation has a strong inclination towards high-risk projects.	**1**	**2**	**3**	**4**	**5**
C17	Owing to the environment, our organisation believes that bold, wide-ranging acts are necessary to achieve the organisation's objectives.	**1**	**2**	**3**	**4**	**5**
C18	Employees are often encouraged to take calculated risks concerning new ideas.	**1**	**2**	**3**	**4**	**5**
C19	The term 'risk-taker' is considered a positive attribute for the employees and management team in our organisation.	**1**	**2**	**3**	**4**	**5**
C20	Our organisation is very often the first to introduce new services/ learning areas/ sport codes/processes.	**1**	**2**	**3**	**4**	**5**
C21	Our organisation typically initiates actions that competitors respond to.	**1**	**2**	**3**	**4**	**5**
C22	Our organisation continuously seeks out new services/learning areas/sport codes/processes.	**1**	**2**	**3**	**4**	**5**
C23	Our organisation continuously monitors market trends and identifies future needs of customers.	**1**	**2**	**3**	**4**	**5**
C24	In dealing with competitors our organisation typically adopts a very competitive "undo-the-competitor" posture.	**1**	**2**	**3**	**4**	**5**
C25	Our organisation is very aggressive and intensely competitive.	**1**	**2**	**3**	**4**	**5**
C26	Our organisation effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competition position.	**1**	**2**	**3**	**4**	**5**
C27	Our organisation knows when it is in danger of acting overly aggressive (this could lead to erosion of our organisation's reputation or to retaliation by competitors).	**1**	**2**	**3**	**4**	**5**

SECTION D: ORGANISATIONAL SUCCESS FACTORS

The following statements concern your attitude towards the success of an organisation.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5-point scale next to the statement.

1 = Strongly disagree	*2 = Disagree*	*3 = Neutral*	*4 = Agree*	*5 = Strongly agree*

	Statement	Scale				
D1	Our organisation's revenue and net profit grew in the last year.	**1**	**2**	**3**	**4**	**5**
D2	Our organisation's percentage of sales generated by new products/services last year grew relative to competitors.	**1**	**2**	**3**	**4**	**5**
D3	Our organisation's market share grew last year.	**1**	**2**	**3**	**4**	**5**
D4	I am satisfied with the current financial performance of my organisation.	**1**	**2**	**3**	**4**	**5**
D5	Our organisation has the ability to resolve customer complaints within customer acceptable times.	**1**	**2**	**3**	**4**	**5**
D6	Our organisation meets customer promised delivery time for vehicles, parts and service.	**1**	**2**	**3**	**4**	**5**
D7	Our organisation always focuses on meeting customers future expectations.	**1**	**2**	**3**	**4**	**5**
D8	Our organisation always asks customers what they think about our products and service.	**1**	**2**	**3**	**4**	**5**
D9	Our organisation satisfies our customers better than our competitors.	**1**	**2**	**3**	**4**	**5**
D10	Our organisation has the capacity to introduce new technology.	**1**	**2**	**3**	**4**	**5**
D11	Our organisation encourages experimentation and tolerates failure.	**1**	**2**	**3**	**4**	**5**
D12	Our organisation offers high quality products and service.	**1**	**2**	**3**	**4**	**5**
D13	Our organisation is flexible to change standard operating procedures (SOP).	**1**	**2**	**3**	**4**	**5**
D14	Our organisation encourages employees to be creative and innovative.	**1**	**2**	**3**	**4**	**5**

D15	Our organisation encourages participation and involvement of all employees.	**1**	**2**	**3**	**4**	**5**
D16	Our organisation focuses on training and development of all employees.	**1**	**2**	**3**	**4**	**5**
D17	My organisation develops successors for key positions in the organisation.	**1**	**2**	**3**	**4**	**5**
D18	I am satisfied with my organisation (Employee satisfaction).	**1**	**2**	**3**	**4**	**5**

SECTION E: DEMOGRAPHIC INFORMATION

Mark the applicable block with a cross (X). Complete the applicable information.

E1	**Indicate your age group**	≤ 29	30 - 39	40 - 49	50 - 59	60+

E2	**Indicate your gender?**	Male	Female

E3	**Level of Employment**	Senior Management	Middle management	Junior Management	Supervisor	General staff

E4	**Indicate your highest academic qualification.**	
	Lower than Matric / "O" level / A level	1
	Matric / "O" level / A level	2
	Certificate	3
	Diploma (Technical / Business Colleges)	4
	University degree	5
	Post graduate degree	6
	Other (Kindly indicate):	7

E5	**How many years have you been employed by the organisation?**			
	<1	1-5	6-10	10 or More

E6	Are you permanently employed by the organisation?	
	Yes	No

E7	Indicate your department.	
	Corporate	1
	Service/Production/Workshop	2
	Parts	3
	Finance	4
	Sales/Logistics	5
	Administration	6
	Other (Kindly indicate):	7

E8	Indicate the name of your organisation / company	
	Toyota Tsusho Africa (CFAO / AMS)	1
	Toyota Kenya	2
	Toyota Malawi	3
	Toyota Zambia	4
	Toyota Zimbabwe	5
	Subaru Southern Africa	6
	Other (Kindly indicate):	7

THANK YOU FOR YOUR TIME

APPENDIX 3 – COMMUNALITIES TESTS

Organisational antecedents		
Communalities		
Organisational antecedents items	Initial	Extraction
A2. My organization encourages the development of new ideas for the improvement of the company.	1.000	0.808
A3. Upper management is aware of and very receptive to my ideas and suggestions.	1.000	0.761
A1. My organization is quick to use improved work processes or procedures that are developed by employees.	1.000	0.758
A25. My job description clearly specifies the standard of performance on which my job is evaluated.	1.000	0.724
A26. I clearly know what level of work performance is expected from me in terms of quantity, quality and timeline of output.	1.000	0.702
A8. Top management encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	1.000	0.694
A4. Employees actively working on projects are allowed to make decisions without going through elaborate justification and approval procedures.	1.000	0.692
A5. There are many options within the organization for individuals to get financial support for their innovative projects and ideas.	1.000	0.686
A20. I always seem to have plenty of time for innovation and experimentation.	1.000	0.680
A21. My job is structured in such a way that gives me very little time to think about wider organization problems.	1.000	0.663
A16. My manager / 4 would tell his/her boss if my work is outstanding.	1.000	0.662
A13. The rewards I receive are dependent upon my work performance.	1.000	0.660
A17. My manager / 4 helps me get my work done by removing obstacles and roadblocks.	1.000	0.638
A19. I have just the right amount of time and workload to do everything well.	1.000	0.634
A18. During the past three months, my workload kept me from spending time on developing new ideas.	1.000	0.616
A11. In my organization I am not subject to criticism and punishment resulting from mistakes made on the job.	1.000	0.602
A23. In the last three months, I had to follow very little standard operating procedures or practices to do my major tasks.	1.000	0.593
A9. I feel like I am my own boss and do not have to double check all my decisions with someone else.	1.000	0.591
A12. I have much autonomy on my job and am left on my own to do my own work.	1.000	0.578
A10. My organization gives me the opportunity to make use of my abilities.	1.000	0.575
A15. Individuals running or initiating successful innovative projects receive additional rewards and compensation for their ideas and efforts beyond the standard reward system.	1.000	0.574
A7. My organization supports many small and experimental projects, realising that some will undoubtedly fail.	1.000	0.570
A14. My manager / 4 will increase my job responsibilities if I am performing well in my job.	1.000	0.566
A6. Individual risk takers are recognized and encouraged for the willingness to champion new projects, whether eventually successful or not.	1.000	0.507
A24. There are many written rules and procedures that exist for doing my major tasks.	1.000	0.474
A27. I really have to follow the same work methods or steps for doing my major tasks.	1.000	0.444
A22. In this organization my colleagues and I always find time for long term problem solving.	1.000	0.424

Entrepreneurial Orientation		
Communalities		
Entrepreneurial Orientation items	Initial	Extraction
C25. Our organization is very aggressive and intensely competitive.	1.000	0.618
C8. Our organization has increased the number of products/services/processes offered during the past two years.	1.000	0.599
C22. Our organization continuously seeks out new services/learning areas/sport codes/processes.	1.000	0.598
C14. Our leaders seek to maximize value from opportunities without constraint to existing models, structures or resources.	1.000	0.578
C26. Our organization effectively assumes an aggressive posture to combat industry trends that may threaten our survival or competition position.	1.000	0.569
C7. Our organization places a strong emphasis on new and innovative products/services/processes.	1.000	0.569
C15. When confronted with uncertain decisions, our organization typically adopts a bold posture in order to maximize the probability of exploiting opportunities.	1.000	0.569
C9. Our organization is continually pursuing new opportunities.	1.000	0.563
C23. Our organization continuously monitors market trends and identifies future needs of customers	1.000	0.557
C20. Our organization is very often the first to introduce new services/ learning areas/ sport codes/processes.	1.000	0.537
C24. In dealing with competitors our organization typically adopts a very competitive "undo-the-competitor" posture.	1.000	0.534
C11. In our organization there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	1.000	0.503
C6. Our organization regularly introduces new products/services/processes.	1.000	0.503
C10. Over the past few years, changes in our products/services/processes have been quite dramatic.	1.000	0.491
C21. Our organization typically initiates actions that competitors respond to.	1.000	0.485
C13. Our organization has a widely held belief that innovation is an absolute necessity for the organization's future.	1.000	0.471
C27. Our organization knows when it is in danger of acting overly aggressive (this could lead to erosion of our organization's reputation or to retaliation by competitors).	1.000	0.467
C16. In general, our organization has a strong inclination towards high-risk projects.	1.000	0.445
C18. Employees are often encouraged to take calculated risks concerning new ideas.	1.000	0.429
C4. Employees at our organization are encouraged to manage their own work and have flexibility to resolve problems.	1.000	0.422
C19. The term 'risk-taker' is considered a positive attribute for the employees and management team in our organization.	1.000	0.419
C3. Employees at our organization are allowed to make decisions without going through elaborate justification and approval procedures.	1.000	0.398
C17. Owing to the environment, our organization believes that bold, wide-ranging acts are necessary to achieve the organization's objectives.	1.000	0.396
C2. Our organisation allows me to be creative and try different methods to do my job.	1.000	0.383
C12. Our organization places a strong emphasis on continuous improvement (kaizen) in products/services/processes.	1.000	0.287
C1. I have enough autonomy in my job without continual supervision to do my work.	1.000	0.252
C5. I seldom have to follow the same work methods or steps while performing my major tasks from day to day.	1.000	0.149

Corporate entrepreneurship		
Communalities		
Corporate entrepreneurship items	Initial	Extraction
B3. Our organization seeks to redefine its relationship with its markets or industry competitors by fundamentally altering how it competes.	1.000	0.787
B6. Our organization applies entrepreneurial thinking to the design or redesign of its core business model(s) in order to improve operational efficiencies. or otherwise differentiate itself from i...	1.000	0.755
B5. Our organisation applies entrepreneurial thinking to the design or redesign of its core business model (s) in order to improve operational efficiencies.	1.000	0.753
B4. Our organisation proactively creates a new product market arena that others have not recognised or actively sought to exploit.	1.000	0.751
B2. Our organisation seeks to sustain or improve its competitive standing by altering its internal processes, structures and capabilities.	1.000	0.723
B1. Our organisation regularly and continuously introduces new products, services and enters new markets.	1.000	0.664

Success factors		
Communalities		
Success factors items	Initial	Extraction
D2. Our organisation's percentage of sales generated by new products/services last year grew relative to competitors.	1.000	0.830
D3. Our organization's market share grew last year.	1.000	0.813
D7. Our organization always focuses on meeting customers future expectations.	1.000	0.794
D1. Our organisation's revenue and net profit grew in the last year	1.000	0.794
D15. Our organization encourages participation and involvement of all employees.	1.000	0.771
D16. Our organization focuses on training and development of all employees.	1.000	0.768
D14. Our organization encourages employees to be creative and innovative.	1.000	0.750
D6. Our organization meets customer promised delivery time for vehicles, parts and service.	1.000	0.749
D9. Our organization satisfies our customers better than our competitors.	1.000	0.744
D5. Our organization has the ability to resolve customer complaints within customer acceptable times.	1.000	0.737
D8. Our organization always asks customers what they think about our products and service.	1.000	0.723
D4. I am satisfied with the current financial performance of my organization.	1.000	0.698
D18. I am satisfied with my organization (Employee satisfaction).	1.000	0.686
D12. Our organization offers high quality products and service.	1.000	0.657
D10. Our organization has the capacity to introduce new technology.	1.000	0.656
D17. My organization develops successors for key positions in the organization.	1.000	0.592
D11. Our organization encourages experimentation and tolerates failure.	1.000	0.568
D13. Our organization is flexible to change standard operating procedures (SOP).	1.000	0.545

APPENDIX 4 – SEM MODELS

SEM Model 1							
Factors			Estimate	S.E.	C.R.	P-value	Relationship
B_Corp_Entrepreneur	<---	Management_Support	0.346	0.098	3.51	***	Mediation
B_Corp_Entrepreneur	<---	Autonomy	-0.106	0.134	-0.79	0.43	No mediation
B_Corp_Entrepreneur	<---	Reward	0.242	0.147	1.645	0.1	No mediation
B_Corp_Entrepreneur	<---	Time_availability	-0.047	0.173	-0.273	0.785	No mediation
B_Corp_Entrepreneur	<---	Organisational boundaries	0.617	0.144	4.295	***	Mediation
Success	<---	B_Corp_Entrepreneur	0.304	0.038	7.911	***	Mediation
Success	<---	Management_Support	0.112	0.065	1.719	0.086	Complete mediation
Success	<---	Autonomy	0.056	0.087	0.647	0.518	No effect
Success	<---	Reward	0.261	0.097	2.685	0.007	Direct effect
Success	<---	Time_availability	0.002	0.111	0.014	0.989	No effect
Success	<---	Organisational boundaries	0.009	0.093	0.102	0.919	Complete mediation
A8	<---	Management_Support	1				
A7	<---	Management_Support	0.849	0.063	13.413	***	
A6	<---	Management_Support	0.815	0.066	12.439	***	
A5	<---	Management_Support	1.03	0.067	15.285	***	
A4	<---	Management_Support	0.981	0.065	15.123	***	
A3	<---	Management_Support	0.919	0.062	14.733	***	
A2	<---	Management_Support	0.61	0.061	9.947	***	
A1	<---	Management_Support	0.905	0.068	13.291	***	
A9	<---	Autonomy	1				
A10	<---	Autonomy	0.779	0.055	14.287	***	
A11	<---	Autonomy	0.94	0.067	13.931	***	
A12	<---	Autonomy	0.812	0.056	14.52	***	
A17	<---	Reward	1				
A16	<---	Reward	1.12	0.069	16.155	***	
A15	<---	Reward	1.07	0.071	15.028	***	
A14	<---	Reward	0.931	0.066	14.113	***	
A13	<---	Reward	1.207	0.074	16.263	***	
A18	<---	Time_availability	1				
A19	<---	Time_availability	1.706	0.198	8.611	***	
A20	<---	Time_availability	1.965	0.225	8.721	***	
A21	<---	Time_availability	1.167	0.161	7.235	***	
A22	<---	Time_availability	1.559	0.19	8.206	***	
A27	<---	Organisational boundaries	1				
A26	<---	Organisational boundaries	1.191	0.114	10.408	***	
A25	<---	Organisational boundaries	1.444	0.129	11.183	***	
A24	<---	Organisational boundaries	0.901	0.102	8.791	***	
A23	<---	Organisational boundaries	0.892	0.118	7.564	***	
D_Finance	<---	Success	1				
D_Customer	<---	Success	1.048	0.063	16.602	***	
D_Int_Business_Process	<---	Success	0.987	0.057	17.264	***	
D_Learning	<---	Success	1.216	0.074	16.388	***	

SEM Model 2							
Factors			Estimate	S.E.	C.R.	P-value	Relationship
C_Entrepreneurial_Orient	<---	Management_Support	0.193	0.061	3.194	0.001	Mediation
C_Entrepreneurial_Orient	<---	Autonomy	0.102	0.083	1.23	0.219	No mediation
C_Entrepreneurial_Orient	<---	Reward	0.179	0.091	1.969	0.049	Mediation
C_Entrepreneurial_Orient	<---	Time_availability	-0.069	0.106	-0.654	0.513	No mediation
C_Entrepreneurial_Orient	<---	Organisational boundaries	0.402	0.089	4.522	***	Mediation
B_Corp_Entrepreneur	<---	C_Entrepreneurial_Orient	1.217	0.055	22.186	***	Mediation
Success	<---	B_Corp_Entrepreneur	0.231	0.039	5.993	***	Mediation
Success	<---	C_Entrepreneurial_Orient	0.244	0.061	3.972	***	Partial mediation 53.58%
Success	<---	Management_Support	0.101	0.063	1.593	0.111	Complete mediation
Success	<---	Autonomy	0.008	0.086	0.095	0.924	No unique effect
Success	<---	Reward	0.231	0.095	2.428	0.015	Partial mediation 29%
Success	<---	Time_availability	0.021	0.109	0.196	0.845	No unique effect
Success	<---	Organisational boundaries	-0.028	0.092	-0.307	0.759	Complete mediation
A8	<---	Management_Support	1				
A7	<---	Management_Support	0.851	0.064	13.312	***	
A6	<---	Management_Support	0.822	0.066	12.43	***	
A5	<---	Management_Support	1.035	0.068	15.193	***	
A4	<---	Management_Support	0.988	0.066	15.065	***	
A3	<---	Management_Support	0.923	0.063	14.643	***	
A2	<---	Management_Support	0.615	0.062	9.963	***	
A1	<---	Management_Support	0.913	0.069	13.277	***	
A9	<---	Autonomy	1				
A10	<---	Autonomy	0.779	0.054	14.348	***	
A11	<---	Autonomy	0.936	0.067	13.925	***	
A12	<---	Autonomy	0.811	0.056	14.557	***	
A17	<---	Reward	1				
A16	<---	Reward	1.115	0.069	16.161	***	
A15	<---	Reward	1.065	0.071	15.035	***	
A14	<---	Reward	0.93	0.066	14.164	***	
A13	<---	Reward	1.206	0.074	16.341	***	
A18	<---	Time_availability	1				
A19	<---	Time_availability	1.706	0.198	8.615	***	
A20	<---	Time_availability	1.965	0.225	8.725	***	
A21	<---	Time_availability	1.164	0.161	7.228	***	
A22	<---	Time_availability	1.558	0.19	8.207	***	
A27	<---	Organisational boundaries	1				
A26	<---	Organisational boundaries	1.22	0.118	10.348	***	
A25	<---	Organisational boundaries	1.481	0.134	11.091	***	
A24	<---	Organisational boundaries	0.91	0.105	8.689	***	
A23	<---	Organisational boundaries	0.894	0.12	7.439	***	
D_Finance	<---	Success	1				
D_Customer	<---	Success	1.049	0.062	17.007	***	
D_Int_Business_Process	<---	Success	0.973	0.056	17.438	***	
D_Learning	<---	Success	1.195	0.073	16.469	***	