

Intrapreneurship for corporate innovation strategy execution in South
African primary sector suppliers

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ABSTRACT

Purpose: Although intrapreneurship as a corporate strategy is a well-researched phenomenon for corporate transformation, there is still a high churn rate of large organisations in the stock market, which is as a result of being surpassed by new innovative technology companies and failure to transform. The researcher sought to understand this phenomenon from the approach whereby the organisation uses it to drive its innovation strategy. The industry problem was supported by the literature that cited that intrapreneurship, as an organisational strategy, could enable corporate venturing and transformation for their competitiveness and sustainability, which is what South Africa requires considering that the primary sector is known to be the biggest employer at this stage. Their sustainability is key to the economy.

The reason for the topic was to understand what the hurdles could be for a large listed company with resources not to take advantage of a well-researched phenomenon, intrapreneurship, to transform the organisation considering the rising tension caused by legislation and a fiercely competitive local and global market. Intrapreneurship is known to drive corporate innovation, as a result of innovative individuals within organisations, intrapreneurs, and is known to be a central strategy to many organisations that wish to transform to stay competitive.

Design/methodology/approach: A qualitative study, using a case study strategy approach, was undertaken to understand the research problem. Data was collected through semi-structured interviews, and the sample was split between the mining and fertiliser divisions of the organisation, with a sample of senior managers and executives in the large organisation. A manufacturing company operating both in the fertiliser and mining sectors was selected for this research and the objective was for the researcher to gain an in-depth insight within one organisation and have diverse views, considering the sample, to contribute to the body of research on this topic. The data obtained was analysed by the means of thematic process.

Findings: The study found that innovation should be a strategic choice for the organisation, and intrapreneurship could be a vehicle to drive its execution. Their co-existence is, however, driven by leadership and the conducive environment in the organisation.

Originality/value: The study contributes to the body of knowledge on the transformation of a large organisations through innovation and intrapreneurship as its strategic choice.

KEYWORDS

Intrapreneurship, corporate innovation, innovation strategy execution; corporate entrepreneurship

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research

Joyce Jabane Bauwens

Signature:

Date:

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1 CHAPTER 1: PROBLEM DEFINITION AND PURPOSE

1.1 Introduction and the Description of the Problem

Perry (2015) highlights that the list of 2017 Fortune 500 companies shows that only 12% of the 1955 Fortune 500 companies were still on the list 62 years later. He mentioned that this means 88% of 1955 Fortune 500 companies had either gone bankrupt, merged or acquired by other firms or they still existed but had fallen from the top Fortune 500 companies, which are ranked by total revenue. Anthony, Viguerie and Waldeck (2016) highlighted that the tenure for the Fortune 500 companies in the S&P500 has dropped from 33 years in 1965 to 20 years in 1990, and it is now forecasted to be 14 years by 2026. He further highlights that the growth strategy of these large companies is undermined by the day-to-day operating decisions, which indicates a neglect of strategic foresight of the business by managers (Appendix 1).

Anthony et al. (2016) highlight that the churn rate is also the result of global economic cycles and the disruptive technologies which result in the rapid growth of medium-size companies, mergers and acquisitions, and the increase in start-ups with disruptive innovation. The author alluded that 66% of 91 global companies on the S&P500 that participated in the survey confirmed that there was a need to transform by changing their core business model to meet the rapidly changing market and technology disruption (Appendix 1). Anthony et al. (2016) mentioned the skills shortage as one of the causes of a lack of transformation and the “strong leadership vision and commitment” to drive the transformation corporations required (Appendix 2).

Anthony et al. (2016) alluded that most large corporations have acknowledged that the neglect of business strategy execution by management on the day-to-day decisions hampers their transformation and sustainability. Anthony et al. (2016) highlighted the need for corporate transformation which speaks to business reinvention or venturing (Ma, Liu, & Karri, 2016; Aggarwal, 2018), and begs the question as to whether intrapreneurs can assist in transforming the corporation through the execution of innovative strategy on daily operations, which Anthony et al. (2016) stress about. Baruah & Ward (2014) cited that “intrapreneurship as an organisational concept” (p.1) has evolved over many years and now incorporates innovation to drive distinct benefits for companies, which include business “performance, innovativeness, profitability and competitiveness” (p.1). Baruah & Ward (2014), however, cautioned that intrapreneurship between a small, medium size and large companies differs due to context, which is business strategy,

structure, rewards and others, although the benefits of intrapreneurship are the same irrespective of the size of the business.

Studies have explored “intrapreneurship as the organisational strategy” (Baruah & Ward, 2014, p.1), but intrapreneurship is now more than increasing the level of innovation and productivity of the business to a concept that takes the organisation in a new direction. These authors have further cited that intrapreneurship which initially was to illustrate innovation inside large organisations, has involved into “major strategy” regardless of the size of the organisation. Christensen (2004) cited that “the answer to today’s hyper-competitive environments is adaptability, flexibility, speed, aggressiveness and innovativeness, which they boil down to one word, entrepreneurship” (p. 302). The well-structured bureaucratic large organisations are said to be known to struggle with adopting intrapreneurship as an organisational strategy due to their nature of going back to ‘old ways’ of doing things that got the company success before, ignoring the rapidly changing market (Christensen, 2004).

South Africa for many remains an industrial economy where the primary sector, mining, manufacturing and agriculture, are the largest sectors contributing to the economy (Fine & Rustomjee, 2018). Most of the companies operating in the primary sector are listed on the Johannesburg Stock Exchange (JSE) and have been for many years the biggest employers in South Africa. The country has been reported to be moving into the service sector, and unfortunately, the skills force is not yet transforming at the same pace as change in the local and the global economy (Visser & Arends, 2016). Visser and Arends (2016) cite that the mining and the agricultural sectors remain the most prominent industries that could absorb the unskilled and semi-skilled workers the country has, but the recent strikes in these sectors have left the sectors unattractive for investors (Bar-Yam, Lagi, & Bar-Yam, 2013).

Statssa (2019) reported a decline in the GDP contribution by the mining and the agricultural sectors for the past ten years, and the small GDP growth in the financial and service sectors hides the negative impact the primary sector has in the growth of the economy. The decline in financial performance by the mining sector was as a result of many factors, in addition to the weaker commodity prices during this period. The outcry regarding the new Mining Charter, which started in 2017 has raised attention, both locally and internationally, and has made South Africa’s mining sector “uninvestable” (Jeffery, 2017) and PwC (2018) highlights high operating costs and socio-economic environment in mining. This legislation came into effect in late 2018, and it demands

an increase in black ownership from 26% to 51% (Mantashe, 2018), and its impact cannot be solely accounted for large mining houses divesting out of South Africa.

The recent labour strikes in the agricultural sector in South Africa have also been highlighted (Bar-Yam et al., 2013), and there is a constitutional amendment for the repatriation of land without compensation which is to be passed into law by the president (South African Government, 2018). The impact of this legislation, land reform, is not yet known on agricultural activities in the country although the lack of investment due to the uncertainties of land ownership is starting to show an impact on the sector (Hall & Kepe, 2017). However the impact of drought on crops in the country has been severe (Jie-hong, Li-qun, & Yu, 2018). Joshi, Singh, & Vig (2014) cite the advancement of green products and technologies as an opportunity to address the agriculture market despite the weather conditions. The organisations have no much control over these external factors, but they can devise strategies that could ensure the sustainability of their businesses within the turbulent local and global climate if successfully implemented. The sectors can, therefore, enjoy the windfall profits which could result as the market or commodity turns (Verbruggen, 2008), and which may hamper the view of business strategy execution if not monitored.

The South African manufacturers that supply the primary sector, especially mining and agriculture, are therefore inevitably faced with a tough market situation and they would be expected to innovate in order to derive value from new territories or face closure. Dai, Maksimov, Gilbert and Fernhaber (2014) cite that the successful pursuit of companies growing into new territories has the potential to produce benefits including economies of scale, higher returns on investment, and improved competitiveness despite the challenges associated with the new territories. Tajeddini and Mueller (2012) indicate that successful firms need to have strong entrepreneurial orientations in order to remain competitive. Burgelman and Sayles (2015) alluded that the challenge with established firms is not being creative or being entrepreneurial but being ambidextrous to incorporate innovation by introducing the strategic tensions of exploitation of existing opportunities and the generation of new opportunities through exploration.

The strategic management approach to corporate re-invention, or venturing, through exploitation and exploration have been researched from the 70s, but is critical for large firms to execute as there are relatively few opportunities available if they seek to develop new opportunities through exploration. Exploitation or incremental innovation of the existing business could be done through technological development e.g. developing a new microprocessor for Intel (Burgelman & Sayles,

2015). Therefore, incremental innovation can also be substantial, depending on the industry. Exploration could also be minimal as it could be something like introducing service as a new business stream or moving into new geographical areas (Burgelman & Sayles, 2015).

1.2 Reason for Selecting the Problem

South African manufacturing corporations have enjoyed protection for decades during the apartheid era as they were isolated from global competition due to sanctions imposed on the country (Majozi & Veldehuizen, 2015). Most of them have grown to become giants, which monopolised the market and diversified into mining and agriculture services, which became a significant portion of their businesses. The examples of such companies include Sasol, AECL, Omnia and others. These companies have a large labour force, and they are classified under the chemical sector (Majozi & Veldhuizen, 2015) and are listed on the JSE. Some of them have reported reduced returns, where transformation is partly a consequence is confirmed by and Perry (2015) and Anthony et al. (2016). Although the country is still on the journey for the redistribution of resources to address the inequality and the injustices of the past (Hall, 2004), it is critical that the country has to create an environment that invites foreign direct investment (FDI) and increases exports for the growth of the economy (Personal, Archive, & Sunde, 2016).

The manufacturing sector, which also supplies mining and agricultural products, has been declining for many years now and cheap imports have been alluded to be one of the causes (Edwards, Jenkins, & Jenkins, 2015) in addition to the increase in the energy and operating costs. The continual decline of the performance of these sectors is reported in the country's gross domestic product GPD (Statssa, 2019), and the impact on job losses and slower growth of the economy cannot be ignored. Then, the question is whether intrapreneurship can be a strategic driver in executing an innovative strategy for the large mining and agricultural corporates in South Africa for their survival? Christensen (2004) and Ibrahim, (2016) highlighted the importance of intrapreneurship for innovation in large companies for the sustainability of organisations. Nonetheless, Anthony et al. (2016) argue that large companies continue to employ the existing business model in the changing environment where innovation is required to adapt to change.

Research has been undertaken to determine intrapreneurship in the South African pharmaceutical sector, the banking sector (Ravjee, 2016; Urban & Wood, 2017) and small mining firms (Gcaza & Urban, 2013) and no research papers have yet been obtained focusing on

intrapreneurship in the mining or agricultural service providers (chemical manufacturers for primary sectors), specifically focusing on corporate innovation strategy execution as proposed for this research. The impact on the chemicals sector for the mining and agricultural market cannot be ignored when land reform and mining policies are developed that affect these sectors, and that may hamper their growth or existence if new strategies are not formulated and implemented.

The focus of this research will be on the large South African organisations manufacturing chemicals which are supplied to the mining and agricultural sectors. These suppliers are some of the biggest mining service providers that provide services from design to construction, ore blasting, mineral processing and for the ongoing maintenance of mines and their process plants. They also produce fertilisers and test their customers' soil for nutrients to ensure they offer valuable products suitable for the growth of crops. Most of these manufacturers have significant capital investment in South Africa (Majozi & Veldhuizen, 2015), especially immovable assets, and they may have to become ambidextrous (Heinze & Weber, 2016) to develop and execute innovative strategies rather than closing down. These are large knowledge-intensive industrial companies where intrapreneurship may ensure their sustainability and growth (Christensen, 2005).

The South African primary sectors, namely mining and manufacturing, are undergoing tough times still (Bar-Yam et al., 2013) resulting from imports of cheap goods facing the local manufacturing suppliers of these sectors (Edwards et al., 2015) which may not change anytime soon. This, therefore, calls for these suppliers to establish and implement innovative ways to survive and grow.

1.3 Purpose of Research

The large mining and agricultural service sectors in South Africa were identified for testing the 'noble idea of corporate reinvention' due to the struggles they are currently facing (Deprez, Leroy, & Euwama, 2018) and their capacity to contribute to the economy. The question to answer: would intrapreneurship assist these suppliers to identify their competitive advantage to execute the strategy to improve their companies' sustainability and performance (Bierwerth, Schwens, Isidor, & Kabst, 2015)?

The researcher, therefore, seeks to establish whether intrapreneurship does exist in the mining and agriculture services sector. If it is practised, does the organisation leverage its relationship with innovation for corporate performance? If so, can this relationship between intrapreneurship and innovation be used to drive corporate innovation strategy for the transformation of the organisation? Does the position of intrapreneurs within the organisation's structure impact the outcome of strategy execution?

1.4 Research Problem

The objective of this research is:

- 1.1.1 Understand the organisation's perception of intrapreneurship, and its impacts on the organisation
- 1.1.2 Understand the company's understanding of innovation, whether it is part of the organisational strategy, and who is involved in its formulation and execution, and how the company rewards and motivates for innovative initiatives
- 1.1.3 Understand whether the company understands the difference in performance due to successful corporate strategy execution and windfalls
- 1.1.4 Understand whether there is a relationship between intrapreneurship and successful innovation strategy execution
- 1.1.5 Understand the ideal structure a large organisation could use to enable intrapreneurship and innovation for corporate transformation

Research underpins the importance of intrapreneurship in large corporates, especially with technology and innovation, to foster their transformation and sustainability. The research indicates that innovation and intrapreneurship is critical for the transformation of the organisation. Therefore, the researcher seeks to understand whether they could be useful in transforming South Africa's primary sectors' suppliers in the mining and agricultural fields, and what the ideal organisational structure would be to enable intrapreneurs to execute the corporate innovation strategy successfully.

2 CHAPTER 2: THEORY AND LITERATURE REVIEW

This chapter outlines the theories and literature pertaining the topic of this research. The topic assumes intrapreneurship to drive innovation strategy execution. This topic, therefore, assumes that the innovations strategy should be in place for intrapreneurs to execute (Porter, 1996). The researcher, therefore, notes the importance of strategy, but this study will focus on intrapreneurship, as an aspect of organisational strategy, in executing the innovation strategy. Porter (1996) highlights that strategy is choosing where to play and how to win, and intrapreneurship will form part of how to examine innovation strategy in the case of this research. Sull (2007) cited the importance of reviewing and adapting the strategy as the market changes to ensure that business is well positioned to win.

2.1 Theory of Intrapreneurship

Research has been carried out mainly to emphasise the importance of the firm's entrepreneurial orientation for the transformation of the business in the changing business environment (Dai, Maksimov, Gilbert, & Fernhaber, 2014; Campos, Parellad, Atondo, & Quintero, 2015; Lages, Marques, Ferreira, & Ferreira, 2017; Urban & Wood, 2017). The entrepreneurial orientation (EO) of the firm comes as the result of organisations instilling intrapreneurship (Cadar & Badulescu, 2015; Ibrahim, 2016) by employing or developing intrapreneurial individuals (Mohedano-Suanes & Garzón Benítez, 2017; Neessen, Caniëls, Vos, & de Jong, 2018). The research highlighted that EO enables corporations to reinvent themselves (Duncan, Ginter, Rucks, & Jacobs, 1988) to adapt to the changing environment of business due to global changes, including technological disruption (Whitelaw & Garcia-Lorenzo, 2017) in order for organisations to remain sustainable (Buekens, 2014; Pedersen, Gwozdz, & Hvass, 2016).

Many authors define intrapreneurship as innovation within a large corporation (Parker, 2011; Ibrahim, 2016; Aparicio, 2017; Thulin, 2018). It is also known as corporate entrepreneurship (CE), corporate venturing or EO of the organisation. Some scholars coined intrapreneurship whereby an “organisation acquires innovation through external networks, such as joint ventures, external venture capital, subcontracting and strategic alliances” as exopreneurship (Christensen, 2004, p. 304). Intrapreneurship is an intrapreneurial behaviour of employees to create substantial value for the enterprise (Frank, Korunka, Lueger & Weismeier-Sammer, 2016; Aggarwal, 2018). Ibrahim

(2016) alludes that corporate innovation is an advantage, as large corporations have resources intrapreneurs can leverage to create value and improve performance for the organisation, unlike the struggles of entrepreneurs who must seek resources to build their enterprises.

Intrapreneurship, which is mostly known as the EO of an organisation, has become a topical topic in the literature for the past 45 years (Hjorth & Kuratko, 2017) due to its impact on organisational performance and has been regarded as an instigator for growth in the turbulent business environment (Deprez, Leroy, & Euwama, 2017). It is also known as a 'noble idea for corporate reinvention' or corporate venturing, which is essential for the future welfare of the corporations and as an enabler for business competitiveness (Duncan, Ginter, Rucks & Jacobs, 1988). Neessen et al. (2018) highlight that "intrapreneurship entails a type of behaviour that goes beyond expectations and impacts the course of the organization" (p. 3), and they indicate it is often defined as the character of the organisation to be innovative, proactive and risk-taking.

Heinze and Weber (2015) highlight that institutional bureaucracy presents a challenge for the adoption of intrapreneurship in large corporations. Dhliwayo (2007) mentioned that intrapreneurship is lacking in public financial companies in South Africa. Nonetheless, Ravjee (2016) highlights that the dimensions of CE have a positive influence on service innovation in the financial services industry. Research mentioned that ownership of intellectual property (IP) rights (Ibrahim, 2016), remuneration (Maier & Iancu, 2016), and bureaucracy (Buekens, 2014) are some of the impediments for the adoption of intrapreneurship in large companies. Ibrahim (2016) alluded that IP rights are the "inventors' dilemma" and they impede inventors to innovate within large companies as they do not have any rights to the IP. Due to the unconducive EO environment, Thulin (2018) highlights that there is mobility of highly skilled intrapreneurs who leave large corporations, some of whom become successful entrepreneurs.

Baruah and Ward (2014) highlighted that the rise of the organisational complexity due to the changing global context through globalisation and technology requires organisations to foster intrapreneurial behaviours. Baruah and Ward (2014) further highlight that fewer than 5% of the employees were found to be intrapreneurial in the global study conducted, and intrapreneurship was found to be more prevalent in high income than low-income countries. This is staggering and contrary to "the Future is Intrapreneurial" (p. 4) approach, which is required for the complexities of the current economic environment. Buekens, (2014) & Xenikou (2017) echoed that leadership plays a role in CE and the innovativeness of the organisation and innovation measures will either

encourage or stifles it. Therefore, leadership plays an important role in CE and how it utilises innovations to pivot.

The researcher recognises that there are challenges in the adoption of intrapreneurship in the large corporates (Aparicio, 2017). Nonetheless, this research focussed on understanding the relationship between intrapreneurship and the execution of the innovation strategy of the organisation, limited to chemical suppliers in the primary sectors. The scope will be limited to intrapreneurship in large corporations, not dismissing that intrapreneurship also exists in the small and medium-size companies (Thulin, 2018).

2.1.1 Theory of intrapreneur

The meaning of the intrapreneur, who is an innovator within a large corporation, and entrepreneurs, an innovators who leave a corporation to start their own enterprise, has been researched for many years and are well-differentiated (Cadaru & Badulescu, 2015; Neessen et al., 2018). The intrapreneur is an individual within a large corporate who drives business growth and profits through risk-taking, proactiveness and innovation for the benefit of the company and indirectly for their benefits (Baruah & Ward, 2014; Cadaru & Badulescu, 2015; Neessen et al., 2018). Beukens (2014) defines an intrapreneur as “someone who manages the business with entrepreneurial flair within the limitation of the business environment” (p.581) and further mentions that intrapreneurs can assist companies during crises by restoring them through innovation. Duncan et al. (1988) state that these individuals are rare as the type of businesses that takes to nurture them, but these businesses do genuinely reinvent themselves, which is quite essential. The classic definitions highlighted by Baruah and Ward (2014) from historical documents states that an intrapreneur is “a person within a large corporation who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation” (p.2).

Neessen et al. (2018) highlight the three antecedents of intrapreneurial behaviour as attitude, behavioural control, and subjective norms. Using the theory of planned behaviour, the author explains the attitude as the “degree to which the person can favourably or unfavourably appraise the intrapreneurial behavior” (p.3), and the behavioural control is determined by the characteristics of the person, while the subjective norms are how individuals behave under pressure. Neessen et al. (2018) highlight that the intrapreneurial behaviours cannot be assessed

in isolation to the organisational factors as they contribute to the employees' behaviours at times. The lack of organisational strategy and lack of managerial support was highlighted as possible obstacles to intrapreneurship (Cadaru & Badulescu, 2015; Selig & Baltes, 2017; Neessen et al., 2018).

Intrapreneurs are employees distinguished by passion, innovative ideas, risk-taking, bravery, driven to succeed and their ability to do; "dreamers who do" (Duncan et al., 1988). Duncan et al. (1988) and Williams (2013) allude that intrapreneurs do not use money as their measurement. Williams (2013) adds that they are 'greenhousers' who know how to pivot, and they behave authentically and with integrity. This, therefore, confirms that the intrapreneurship strategy by the organisation is a sound plan for growth and re-invention (Duncan et al., 1988).

Intrapreneurship and EO is an organisational strategy which speaks to the organisations being innovative to be competitive and sustainable in the market (M. Porter, 2008). Van Wyk & Adonisi (2012), Aparicio (2017), Lages et al. (2017) and Selig & Baltes (2017) suggest that the organisation should offer (a) management support (b) autonomy (c) rewards (d) time available and (e) relax organisational procedures to enable entrepreneurial orientation which encourages intrapreneurial behaviours. Buekens (2014) highlights that Steve Jobs and Steve Wozniak were the entrepreneurs who started Apple, but Jonathan Ive was the intrapreneur within Apple who was behind the MacBook Pro, iMac, MacBook Air, iPod, iPhone, and iPad.

2.1.2 Where are intrapreneur(s) mostly located in the organisational structure?

Frank et al. (2016) and Neessen et al. (2018) highlighted that intrapreneurs stem from the bottom up or at the lower level of organisations and they, therefore, lack decision making power. Research highlights that intrapreneurs should be able to pivot and direct resources when the environment changes, which means they should have decision making power or position to enable them to do what is necessary for the business to succeed (Morris, Davis, & Allen, 1994). The organisation should identify the intrapreneurial behaviours of the employees; then empower, train, develop and socialise them to harness and leverage their drive for the benefit of the organisation (Frank et al., 2016). Due to the benefits the EO firms can realise in the market, Frank et al. (2016) and Deprez et al. (2017) commend the importance of careful selection and structured training and development of intrapreneurs by the organisation to develop competitive organisational capabilities. The other level at which intrapreneurs are present is at the executive

level of the organisation, as they may be the founders or are executives forced to be intrapreneurial to deliver the performance of the organisation to the shareholders (Leavy, 2017). This highlights the possible intrapreneurial gap at the middle management level of the organisations, which Deprez et al. (2017) allude that can be addressed through multilevel training.

2.1.3 Measuring corporate entrepreneurship

Kuratko, Hornsby and Covin (2014) cite that corporate entrepreneurship (intrapreneurship) can be measured with the Corporate Entrepreneurial Assessment Instrument (CEAI) and highlight that (1) management support; (2) work discretionary / autonomy; (3) rewards / reinforcement; (4) time availability; and (5) organisational boundaries are five critical dimensions of the corporate entrepreneurial environment. The CEAI measures "the degrees to which individuals within the firm perceive these five elements critical to an internal environment conducive entrepreneurial activity" (p. 40). Kuratko et al. (2014) allude that management control covers the willingness of the top management to "facilitate and promote entrepreneurial behaviour, including the championing of innovative ideas and providing resources people require to behave entrepreneurially" (p.40). This author further highlights that CEAI is intended to measure the entrepreneurial perception of the individual in management, professional and technical positions as most organisations do not give individuals in the operational positions a mandate or autonomy to be entrepreneurial.

Kuratko et al. (2014) highlight that an organisation can use the CEAI to measure its adoption of entrepreneurship and use the scores to determine where they are. A high score indicates increased entrepreneurial activities/perceptions, while low scores indicate the need for improvement of the internal environment to foster entrepreneurial activities. Kuratko et al. (2014) further indicate that organisations can use external consultants with the CEAI, which has 48 Likert-style questions, to test for individuals' perception about the EO environment of the organisation. Management can then be made aware of the organisational system that creates the perceived gaps and impediments to entrepreneurial activities and in order to rectify them to ensure that employees continually strive to achieve an EO environment to achieve the strategy (Smith, 2014).

2.1.4 Existing intrapreneurship models

Neessen et al. (2018) have demonstrated a possible model showing the interconnectedness of intrapreneurial employees and organisation performance. The three key points that Neessen et al. (2018) found are that (a) the intrapreneurs' actions always benefit the organisation and the intrapreneur indirectly (b) brings in new business, and (c) and enhances the organisation. The author's framework is the interrelatedness of organisational performance to intrapreneurial employees (Appendix 3). Deprez et al. (2017) alluded that intrapreneurship is an instigator for growth and presented a model (Appendix 4) that shows the incremental steps in developing intrapreneurship in a retail store that transformed from a physical to an online store. Lages et al. (2017) conducted a quantitative study to test for the relationship between the proactiveness, risk-taking and innovativeness, which are the firm's EO, in the private health service. The author indicates that the results confirmed the EO of the Physical Medicine and Rehabilitation Services (PMRS) and Physiotherapy Units (PU), which was presented in a model (Appendix 5).

Duradoni and Di Fabio (2019) used the mediation method to analyse and develop the model that determines the relationship between extraversion and innovative implementation behaviour, with intrapreneurial self-capital as a mediator (Appendix 6). The results highlighted that "intrapreneurial self-capital is correlated with both workers' innovative behaviour and innovative implementation behaviour" (Duradoni & Di Fabio, 2019, p. 1). The results confirm that continuous and focused intrapreneurial development and training of workers will increase their ability to innovate and implement innovative solutions for the benefit of the organisation, which agrees with Frank et al. (2016) and Deprez, Leroy, and Euwema (2017). Bierwerth, Schwens, Isidor and Kabst (2015) developed the model they used to assess the relationship between CE and business performance (Appendix 7), and their results indicated significant performance for an entrepreneurial organisation.

2.2 Relationship Between Intrapreneurship and Innovation

Research has already highlighted that intrapreneurs are innovative individuals within large corporations who have access to resources to leverage innovation in order to seize opportunities and protect the organisation for its survival (Ibrahim, 2016). Zhao (2005) highlights that Innovation has moved from its narrowest definition of invention, i.e., creating something new, and now covers various dimensions such as (a) radical or incremental innovation (b) product or process, including

administrative versus technological innovation. Kuratko et al. (2014) highlight that innovation has been recognised as a critical factor for the competitive advantage and sustainability of the organisations irrespective of its size and the industry. Buekens (2014) further highlights that organisations have control over the internal environment that fosters innovation and Zhao (2005) highlights that innovation in a large organisation can be incremental and also radical, i.e. discontinuous.

Most research highlights that innovation is more than invention and it could be incremental changes of the process or product while the business explores discontinuous innovation (Zhao, 2005; Pedersen et al., 2016; Whitelaw & Garcia-Lorenzo, 2017), which is the plural approach to innovation (ambidexterity). Since the researcher has limited the scope to large corporations, the research will focus on the duality of incremental and radical innovation by large corporations, as Anthony, Viguerie and Waldeck (2016) mentioned that this duality would incrementally transform their business to adjust to the changing business environment to ensure their longevity.

Large corporations are therefore forced to be ambidextrous, which is explained as a hybrid strategy where the company's approach is to exploit their current business incrementally and explore new ventures or business considering discontinued processes, products or technologies to gain the competitive advantage (Papachroni, Heracleous, & Paroutis, 2015). Papachroni et al. (2015) cite that the paradoxical approach, exploit and explore, introduced by the theory of ambidexterity is gaining publicity in research as corporate strategy. This author further explains that exploitation and exploration are opposing activities, while Smith (2014) highlights the importance of simultaneously undertaking them for long term business performance which shows the implementation of innovation.

Papachroni et al. (2015) refer to exploration as the approach whereby companies search, deviate, experiment and innovate and to exploitation as refinement, efficiency, selection and implementation to endure business competitiveness. Although exploitation and exploration are competing activities, their duality in the business approach has been deemed to be vital for the sustainability of the corporations. Papachroni et al. (2015) caution against being caught on the failure or success traps of exploitation and exploration innovation; respectively, instead, the corporation must seek to balance them. Zhao, (2005) and Baruah & Ward (2014) have established that intrapreneurship and innovation are positively related, and there is considerable

overlap between them for organisational success in today's dynamic and changing business environment.

Research highlights that companies can gain innovation through acquisition of innovative and technology driven ventures, which is typical when the company wants to venture into the technology market (Zhao, 2005). (Zhao (2005) highlights that mergers and acquisitions show an external focus towards gaining innovation, which Christensen (2004) highlights could be through joint ventures (JV) and partnerships with technology or innovative companies and also brings innovation requirements to the large corporations. Baruah & Ward (2014) highlight that culture difference could be a problem should the acquiring firm wish to integrate the acquired firm, it could then stifle innovation.

2.3 Relationship between Intrapreneurship and Corporate Innovation Strategy Execution

Campos, Parellada, Atondo and Quintero (2015) cite that EO and corporate innovation (Zhao, 2005) should form part of the corporate strategy for organisational sustainability (Dentchev et al., 2016). Criado-Gomis, Iniesta-Bonillo and Cervera-Taulet (2018) highlight that research did not find a relationship between business performance and the EO or intrapreneurship. On the contrary, Bierwerth, Schwens, Isidor and Kabst (2015) highlight that there are "significant positive performance implications" (p.16) for an organisation when CE (intrapreneurship) strategy is successfully implemented (Appendix 7). Baruah and Ward (2014) highlighted that intrapreneurship might have started by focusing on corporate innovation, but it has then established itself in improving business performance. Duradoni & Di Fabio (2019) cited the relationship between self-capital (employee intrapreneurship development), innovation behaviour and innovation execution. The authors highlighted that intrapreneurial self-capital behaviour enables intrapreneurial development to increase the propensity for innovative capacity and execution and Smith, (2014) highlights that long term business performance can be linked to successfully exploiting and exploring simultaneously.

Bierwerth et al. (2015) highlight that business performance is in linked to successful strategy execution and Sull (2007) highlights the importance of closing the gaps between strategy formulation and execution, which could be through the inclusion of the key people required in

strategy execution during the strategy formulation (Harreld, O'Reilly III, & Tushman, 2007). Cadar and Badulescu, 2015; Ma et al. (2016) and Aggarwal (2018) highlight that the intrapreneurial traits, such as proactiveness, continuous sensing and innovative behaviour, enable intrapreneurs to adopt the strategy, should the business operating conditions change during the implementation stage.

Aparicio (2017) highlights inhibiting factors for CE in large organisations due to its complexity and Selig and Baltes (2017) cite that managing innovation (incremental and radical) which are competing activities could add to the complexity of the organisation even though ambidexterity is key to its survival. Heinze and Weber (2016) cite the need for organisational plurality using intrapreneurship as an instigator, but the author highlights that it brings complexity and tension as it challenges the dominant logic. Smith (2014) cites the need for management to manage the organisational strategic paradox, of which the adoption of intrapreneurship could also be seen as a paradox in a large traditional organisation with set policies which may be required to be relaxed to enable intrapreneurship and innovation.

Despite the trend that intrapreneurship and innovation are being hyped as a sound strategic direction for corporations, Hjorth and Kuratko (2017) pointed out that corporate innovation strategy is hardly executed. Understanding the importance of innovation strategy execution for the organisation's survival (Anthony et al., 2016; Sull, 2007), the researcher sought to understand whether there is a relationship between intrapreneurs and the successful execution of corporate innovation strategy. The research will, however, limit the study to the South African primary sector supplier (mining and agricultural supplier).

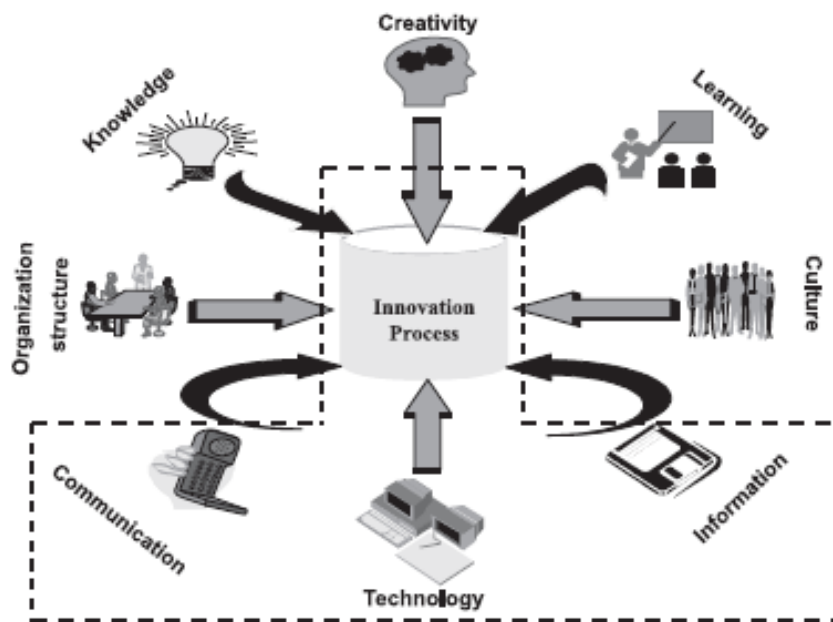
Research highlights that for the successful execution of strategy, leaders must communicate the strategy and ensure that the activities for executing the strategy are prioritised (Crittenden & Crittenden, 2008). Therefore, intrapreneurship as the strategic vision of the company has to be communicated (Bauwn, Locke, & Kirkpatrick, 1998) and be embedded in the business so as to become an organisational practice (Christensen, 2006). Innovation, incremental and radical, has to be recognised, measured and be rewarded (Kaplan & Norton, 2007) to ensure their longevity through employee behaviour.

Kuratko et al. (2014) highlighted that CE can be measured, and Kaplan & Norton (2007) cited the importance of recognising, measuring and rewarding for innovation as with conventional business performance measures. Birchall, Chanaron, Tovstiga, and Hillenbrand (2011) highlighted the

need for managers to measure the innovation output in order to affirm and realise the returns on the investment on innovation. Research has however highlighted the disconnect between conventional performance management measures and innovation management, although innovation is alluded to give organisations competitive advantage (Birchall et al., 2011).

Ahmed (2002) highlights that “to achieve competitive advantage in terms of customer satisfaction or profitability, companies have to link innovation directly to their strategies and their core competencies” (p. 418). This author cited that the organisation will be required to identify “individuals’ capabilities that support the innovation process” (p.418), which includes creativity and the ability to learn in addition to the organisational competencies in Figure 1.

Figure 1: Innovation competencies Positioning. Source (Ahmed, 2002)



Ahmed (2002) highlighted the competencies in Figure 1 as the pillars of innovation in the business to enable innovation to deliver value to shareholders and enjoy profits and longevity. The learning process is critical for the problem-solving process, and the individual’s knowledge allows employees to utilise resources for the success of the organisations. The information system allows information flow in and out of the organisation to enable continuous innovation in the market and internal input. Figure 1 highlighted the importance of the organisational environment, structure and culture to enable innovation (Ahmed, 2002; Buekens, 2014; Aparicio, 2017).

Ahmed (2002) highlights the importance of the incentives to reward innovation and Thomas (2009) echoed the need for intrinsic regard reward, recognition. Kvaløy, Nieken, and Schöttner (2015) cited the combined effect of monetary and intrinsic rewards as effective for motivating employees. Sumo, Van der Valk, Van Weele and Bode (2016) highlighted possible performance-based measures to foster incremental innovation, which is the organisation's internal innovation, and radical innovation, which could come through suppliers and partnerships. Incremental innovation has showed low returns and cannot radically change the business while radical innovation has risks and high returns and attracted a pay for performance approach based on its opportunity to radically transform the organisation (Sumo et al., 2016).

2.4 Conclusion

The literature review highlights that intrapreneurship is not a new topic, and it continues to be of interest due to the complex global business environment (Baruah & Ward, 2014). Research has highlighted the importance of intrapreneurship for business transformation (Aggarwal, 2018), especially in the global complex business environment.

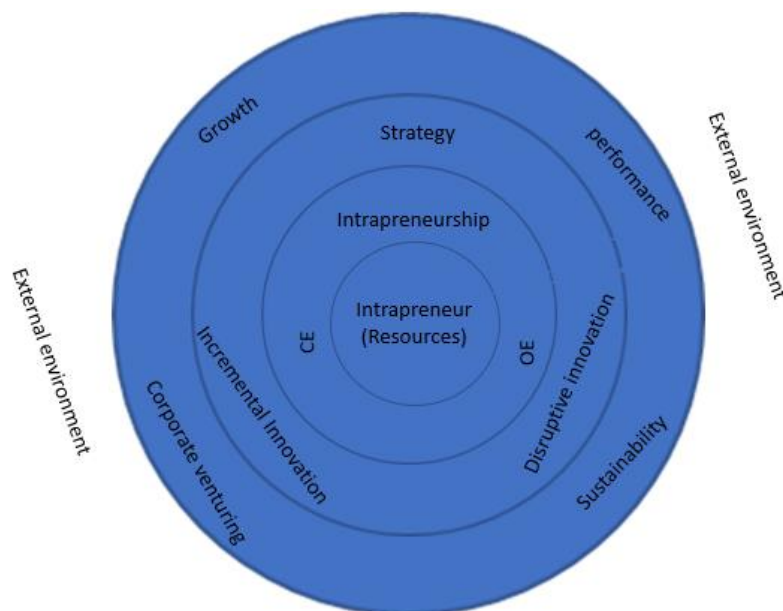
The researcher summarises most of the critical literature readings on the research topic as follows:

- There is a relationship between the EO of an organisation and intrapreneurial employees (Cadaru & Badulescu, 2015)
- There is interconnectedness of intrapreneurial employees and organisational performance (Neessen et al., 2018)
- The EO of a firm is the character of the firm that comes about from the organisations' risk appetite, proactiveness and being innovative to remain competitive (Lages et al., 2017)
- There is a possible relationship between intrapreneurship and corporate innovation (Baruah & Ward, 2014).
- Innovation is crucial as part of the strategy to transform organisations (Heinze & Weber, 2016; Smith, 2014; Ungerer, 2019).
- There is a relationship between innovation implementation and a continuous focus on learning and intrapreneurs' development (Duradoni & Di Fabio, 2019)
- There is a possible relationship between the EO of the organisations and business growth and performance (Bierwerth et al., 2015; Deprez et al., 2017).

- Innovation strategy execution should have a measure against business performance and the individual should be rewarded and recognised in the organisation's conventional performance measures (Ahmed, 2002; Thomas, 2009; Birchall et al., 2011; Kvaløy et al., 2015).
- Despite the profits realised through market turns, the business should be able to use systems and technology to determine whether the strategy implementation or windfall profits are the cause of the business performance (Foley & Guillemette, 2017; Newman, 1978; Verbruggen, 2008).

With the research findings in support of the literature research, the researcher sought to recommend the combined view of intrapreneurship and innovation for corporate strategy and their relationship in the agriculture and mining suppliers in South Africa, which are said to be giant manufactures with large fixed assets and complex organisational structures (Majozi & Veldhuizen, 2015). With literature linking some of the critical theories of this study, the researcher compiled a hypothetical model (Figure 2) taking into account that the principal asset of the industry is its resources, which includes employees (intrapreneurs) to enable them to develop dynamic capabilities to remain competitive (Harreld et al., 2007) and to pivot off the stifled local agriculture and mining sector to transform their business.

Figure 2: Intrapreneurs' Positioning to Effect EO of the Organisation



This model assumes intrapreneurs are central to executing innovation strategy by sensing the external environment and utilising internal resources for the survival of the organisation. The research is, therefore, approaching intrapreneurship as an overarching theory which latches onto the intrapreneurs' ability to sense and adapt the strategy to ensure a positive performance of the organisations (Criado-Gomis et al., 2018). For organisational sustainability, innovation strategy execution is brought in as fundamental for organisational longevity (Heinze & Weber, 2016; Smith, 2014). Considering the complexity of large chemical manufacturing companies in South Africa, the researcher desired to understand the ideal structure of the large organisation to enable intrapreneurship and innovation for corporate transformation.

3 CHAPTER 3: RESEARCH QUESTIONS

The research questions have been developed to discern whether intrapreneurship exists in the large mining and agricultural supplier(s) and whether there is a relationship between intrapreneurship and the execution of innovation strategy, which can derive the ideal organisational structure for the transformation of the corporation. The research questions were derived from the literature to address the research problem.

Research question 1: What is the organisation's understanding of intrapreneurship, and does it have intrapreneurs?

This question seeks to understand the executives and managers' apparent meaning and value of intrapreneurship to the organisation. It was to allow the researcher to understand whether the organisation is aware of the talent its employees possess. If so, then to understand how they are used to differentiate the organisation from its competitors.

Research question 2: Understand how the organisation understands and leverages innovation

The researcher seeks to understand how the respondents understand innovation and whether the business has a strategy in place which can be leveraged to differentiate the business when executed. Besides, the business should explain its understanding of the innovative approach, explain whether it is part of organisational strategy and indicate who is involved in the formulation and execution of its innovation strategy. The researcher would further determine how the company measures, rewards and motivates employees for innovative initiatives

Research question 3: Discern whether the organisation can differentiate between successful strategy execution and windfalls (Newman, 1978).

This question was to determine whether the organisation understands its strategy and how the market conditions can impact business' performance while executing the strategy. This research question, therefore, seeks to clarify the respondents' understanding of the organisational strategy execution, and the benefit of windfalls. The aim was to discern whether managers do differentiate between business performance due to windfalls and strategy execution and whether they do take note of it and adapt the strategy accordingly if need be.

Research question 4: Determine whether there is a relation between intrapreneurship and innovation that can successfully induce innovation strategy execution for the large, diverse organisation

Research Question 4 was to clarify what or whom the organisation thinks it requires in the formulation and execution of innovation strategy. The research question focused on whether the organisation believed intrapreneurs bore any relation to the successful execution of innovation strategy. It was meant, therefore, to understand the possible link, if any, between the intrapreneurs and the business' innovation strategy execution.

Research question 5: Understand the ideal structure to enable intrapreneurship and innovation to transform a large organisation.

Research question 5 was aimed at establishing what the respondents believed the organisation should do to enable the co-existence of intrapreneurship and innovation for the execution of the innovation strategy. This research question, therefore, sought to establish a system that allowed the duality of innovation and intrapreneurship in a large organisation to enable transformation necessary for the company's survival. It is somewhat an antagonistic question extending research question 4, but is aimed at using most of the data collected from some of the inputs addressing research questions 1, 2 and 4, to determine what the respondents believed the ideal situation should be for the organisation to leverage any intrapreneurship the business has to innovate and differentiate the company in order to be competitive in the market.

4 CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

This chapter focuses on the research methodology selected for this study. The methodology approach was based on the foundation laid by the literature review presented in Chapter 3 and the research problem of this study. The researcher chose to use a qualitative research methodology approach for this research as Saunders and Lewis (2012) highlighted that it is a suitable approach when there is a need to understand and clarify a problem and understand relationships in the context.

4.2 Research Methodology and Design

4.2.1 Rationale for the chosen methodology

Saunders and Lewis (2012) cite that a qualitative research methodology is suitable when the information was required to clarify the problem, and when a conclusion cannot be drawn with certainty. Creswell, Hanson, Plano Clark, and Morales (2007) highlight that in that case, the researcher can seek more information through data collection to build theory. A qualitative research methodology is said to give the researcher insight into complex phenomena and contributes to the building of theory within the context (Creswell et al., 2007; Baxter & Jack, 2008; Saunders & Lewis, 2012).

Baxter and Jack (2008) cite that qualitative research is an "approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources" (p.3). The qualitative and exploratory research approach allows the researcher to explore the phenomena through the literature search and data collection from participants in order to discover information about the topic (Saunders & Lewis, 2012). The exploratory approach allows the researcher to gather information through interviews, surveys or experiments to improve the knowledge about the research problem and address the research questions (Saunders & Lewis, 2012). Hence this method was selected for this research to provide an understanding of the topic and a possible solution.

The researcher wished to build and to "advance our knowledge and understanding in many relevant aspects of innovation and understand whether execution can be successfully driven by intrapreneurs" (Creswell, Hanson, Plano Clark, & Morales, 2007, p. 237). This methodology allows the researcher to ask open questions which will guide the interview and will enable the respondents to provide an enriching insight to the research topic to contribute to the body of knowledge on this sector (Creswell et al., 2007; Saunders & Lewis, 2012).

The researcher used a qualitative design to explore and understand (Creswell et al., 2007) whether intrapreneurship could drive the implementation of ambidextrous (innovation) business strategies (Heinze & Weber, 2016) in the primary sector. Saunders and Lewis (2012) highlight the use of an interpretivism approach in a study whereby one needs to gain insight into the topic in a natural environment, and it was found to be relevant for business and management research. Hence, interpretivism philosophy was selected for this research to understand the executives and senior managers' perspective on intrapreneurship, and how it was used or not, to influence an organisational innovation strategy execution for business transformation.

Saunders and Lewis (2012) highlight that the inductive approach is suitable for qualitative study when there is a need to develop theory and add to the body of knowledge of the research topic. In this study, the researcher sought to build the knowledge by developing theory through understanding the relationship between intrapreneurship and innovation strategy execution for the transformation of the primary sector, agriculture and mining services in South Africa. Although research has been undertaken on intrapreneurship and corporate innovation (Buekens, 2014; Dhliwayo, 2007; Ibrahim, 2016), this research aims at gathering primary data to build an understanding of their dualism for corporate strategy execution in this sector.

The researcher finds qualitative exploratory research suitable to gather data that will promote the knowledge of the topic and contribute to designing a possible solution which encourages intrapreneurship to drive corporate transformation through innovation strategy execution for large primary sector suppliers. Hence the inductive approach for qualitative exploratory research was selected to build an exhaustive theory on this phenomenon.

4.2.2 Research Strategy

The researcher's strategy was to use a case study research design (Tellis, 1997) to enrich data collected for the research. Tellis (1997) and Baxter and Jack (2008) highlighted that the case study research approach allows the research to add context to the topic and Saunders and Lewis (2012) cited that it allows the "researcher to get detailed understanding of the context of the research and the activities taking place within that context" (p.122). Research highlights that case study research design is mostly used in the exploratory qualitative research and it enables the researcher to ask the organisations the 'why' question, even though other questions such as what and how are still relevant (Baxter & Jack, 2008; Saunders & Lewis, 2012; Wolf & Plaines, 2017).

The researcher used an organisation which she has access to for data collection, which is a South African large manufacturing corporation that mainly supplies the agricultural and mining sector. The approach was to "use more than one case if need to generalise" (Saunders & Lewis, 2012, p. 122), which will be two cases or different divisions (fertilizer and mining) which are of significant size relative to all business clusters' size contribution in order to report the organisation's insight on the research problem. The strategy also allowed for diverse views of the organisation from the divisions or business clusters selected, but caution was taken in reporting the insight gained.

Saunders and Lewis (2012) highlight that where more than one case study is used, one is able to generalise, which was the case with the sample selected where the researcher reported from the holding company's perspective considering the size of the mining and fertiliser division in the organisation selected, relative to the overall group of companies. However, the researcher cautions about generalising as both intrapreneurship and corporate innovation is based on the organisation's culture which translates to how the business unit executes the strategy (Christensen, 2006; Harreld et al., 2007) and which may also translate to how the organisation performs (Bierwerth et al., 2015). Therefore, if the culture in the organisation is not harmonised throughout its business units or business clusters, it makes it impossible to generalise in this case.

4.3 Population

The relevant population for this study was all the large South African corporations that manufacture chemicals to supply the primary sector, mining and agriculture, that are likely to be available to the researcher (Saunders & Lewis, 2012). According to the description by Majozi and

Veldhuizen (2015) that included all the large chemical and fertilisers manufactures in South Africa, which includes the likes of Sasol, AECL, Omnia and others. Due to the time frame of this research and the quality of data required, it was impossible to gather the data needed from the whole population and a sample was, therefore, suitable for this type of research instead (Saunders & Lewis, 2012).

4.4 Unit of Analysis

In order to gather rich data an organisation which had both mining and fertilizer (agriculture) divisions, which combined contributed over 70% of the business turnover, was selected as a sample and the participants in these divisions were the unit of analysis for this research (Saunders & Lewis, 2012). Their opinions of whether intrapreneurship played a part in the execution of corporate innovation strategy, and whether there was a suitable structure that could enable large corporations operating in the mining and agricultural sectors to address the problem statement and the research questions, were essential in analysing the data. Their input was intended to be used to determine whether there was a possible transformation model for such complex corporations to leverage intrapreneurs and innovation strategy execution to transform large corporations in the primary sector, which could be derived from the findings of the data collected and theory in Chapter 2.

4.5 Sampling Method and Size

Guest, Bunce and Johnson (2006), and Saunders and Lewis (2012) both highlighted that non-probability sampling is an appropriate method for qualitative research and the duration for the study also corroborated this method, as the researcher did not have enough time to interview everyone on the population list. The researcher chose a JSE-listed organisation that primarily operates in both the agriculture and the mining sector as a sample, mainly because it was an epitome of a large South African chemical manufacturer which may need to transform like any other local companies in the same sector.

The organisation used for this study was known, and some of the respondents were easily accessible to the researcher, which made it easier for data collection through interviews comparative to the sample required for the study. Eisenhardt (1989) and Saunders & Lewis (2012) confirmed that access to an organisation was vital for data collection, especially for a case

study research design project. Even though the researcher was employed by one of the mining businesses within the organisation used as a sample, 'non-probability sampling' was used as not everyone in the selected business units could be interviewed due to time constraints, although there was a need for rich data for this study.

Saunders and Lewis (2012) alluded that the purposive sampling approach was the most frequently used for the non-probability sample, which the researcher used for the interviews. The researcher intended to use a critical case purposive sampling approach to provide maximum variation with diverse characteristics in order to give more insight into the research problem (Saunders & Lewis, 2012)

The respondents in the senior management positions interviewed were in sales, technical and supply chain functions. The researcher purposefully selected this sample as the respondents in these types of positions were more likely aware of company strategy and were involved in driving its execution to deliver the results, and they are aware of the functions and understood the views of the employees under them. They, therefore, could give a diverse view of the topic and they were likely to be aware of the company strategy and vision, which were part of the research topic. Table 1 highlights the years of experience of the respondents interviewed, their years of work experience and current function in the company.

Table 1: List of Respondents for the Research Interview

Division	Respondents	Years of Experience	Duration with the Company	Position	Function
Group	1	>25 years	>25 years	Executive	Director
Fertilizer	2	> 18 years	>15 years	Executive	Director
	3	>20 years	> 5 years	Senior Manager	Supply chain
	4	>15 years	>10 years	Middle Manager	Procurement
	5	>25 years	>25 years	Middle Manager	Sales
	6	> 20 years	>15 years	Executive	Director
Mining	7	>25 years	13 years	Executive	Director
	8	> 18 years	> 6 years	Senior Manager	Technical
	9	10 years	6 years	Senior Manager	Supply Chain
	10	17 years	11 years	Senior Manager	Sales
	11	>20 years	4 years	Executive	Director
	12	>13 years	3 years	Senior Manager	Procurement
Total	12				

The researcher used the conventional content analysis approach to code the data as it is well-known for inductive research and codes are derived directly from textual data in the transcripts (Hsieh & Shannon, 2005). Hsieh and Shannon (2005) highlighted that conventional analysis is used when the study sought to describe a phenomenon, especially when there is limited literature on the research topic which is not the case with this research, but instead allows “the categories and names for categories to flow from the data” (p.1). As per Hsieh and Shannon (2005), this approach allowed the researcher to immerse herself in the data so enabling new “insight to merge” (p.1) from the research problem. This coding approach also reduced the possible biases to improve the credibility of this research.

The codes were generated from the interview data and were then grouped as categories. The code dictionary (Appendix 10) was generated as the researcher coded. Then themes were generated from the interview questions and matched with code categories in order to provide insight or the findings of the research questions of the study (Appendix 11). The researcher chose Atlas.ti software due to licence accessibility, and it has increasingly become popular for qualitative data analysis for the past 25 years (Woods, Paulus, Atkins, & Macklin, 2016), although the lack of expertise in using it could be a limitation on the quality of output drawn from it. The necessary training and practice were undertaken before coding the transcripts to mitigate against such limitation.

The researcher carried out 12 interviews, which included the company’s executives and senior management of the mining and fertiliser divisions. The inclusion of the company’s executives, the chief executive officer (CEO) and the managing directors under four business units, two under each division sampled, was to determine whether intrapreneurship and corporate innovation were part of the corporate venturing or transformation strategy at the top of the organisation (Duncan et al., 1988; Heinze & Weber, 2016). This was to ensure that the view of the leader of each business unit in the mining and the fertiliser divisions could provide insight on the topic of this research and strategy which Harreld et al. (2007) highlight is driven from the top but allows many to be involved to formulate and execute it.

The respondents were identified through the mix of convenience and self-selection sampling methods as the researcher interviewed the executives and senior managers who identified other respondents in similar positions throughout the group who were unknown to the researcher (Saunders & Lewis, 2012). The sample selected was in job functions a level or two higher than

the researcher's position in the organisation, which reduced the possibility of the respondents feeling obliged to participate in the interview and the biases that could be introduced by the need of respondents to impress the researcher. The three-way data collection, i.e. interviews of the fertiliser and mining executives and senior managers that were triangulated with the literature, were conducted to enrich the data and to improve the credibility of the research findings (Fusch, & Ness, 2015).

Cross-sectional data collection, snapshot method was used for this research due to the tight timelines of this project, and a semi-structured interview approach was taken which is the approach Saunders & Lewis (2012) cited as being known as one of the suitable methods for exploratory studies for collecting data required for qualitative research studies. The researcher used the interview schedule to guide the interviews which allowed the respondents to provide their opinions about the topic. The clarification questions were asked where necessary to ensure that all the required information was collected to enrich the data and to address the research problem.

4.6 Measurement Instrument

Hsieh & Shannon (2005), Creswell et al. (2007) and Saunders & Lewis (2012) stressed the importance of the quality of the data and noted that biases by the researcher should be noted and avoided when carrying out qualitative research. The data collected was triangulated to ensure its dependability and credibility (Fusch & Ness, 2015), as mentioned in section 4.8. The authenticity and transferability of the data were demonstrated by the ability of the data to answer the research questions (Dierckx De Casterlé, Gastmans, Bryon, & Denier, 2011; Saunders & Lewis, 2012; Prion & Adamson, 2014).

4.7 Data Gathering Process

The literature review and interviews are recommended methods for data collection for exploratory research (Saunders & Lewis, 2012). Academic literature was used as a base for this research. The researcher collected primary data through face-to-face semi-structured interviews with the identified sample and carried out 12 interviews as indicated in section 4.5. Each interview took

between 40 minutes to an hour and was directed by open interview questions which were drafted to give insight and address the research questions of this study.

A pilot test interview was carried out to check the questions for consistency and ensure no ambiguity and to give an indication of the possible length of the interview (Saunders & Lewis, 2012). The pilot test interview was recorded and transcribed through the Temi App to ensure the accuracy of the data collection method and determine possible hitches. This approach was effective in reducing the biases and improving rigour on transcribing the data to ensure conformability (Prion & Adamson, 2014). The interview questions were selected and aligned to a research question to increase the chance of gathering data required to answer research questions as highlighted in Table 2.

Table 2: Interview Questions Concerning the Research Questions

Research Questions	Interview Questions
1. What is the organisation's understanding of intrapreneurship, and does the business have intrapreneurs?	1. How do you describe intrapreneurship, and is it incorporated as part of the business strategy? 2. How would/do you use intrapreneurship to differentiate your business? 3. Do you believe your company has intrapreneurs, and how does your company use them? Do you know where they are in the organisational structure?
2. Understand how the organisation understands and leverages innovation	4. How does your organisation approach or define innovation and incorporate it into the business strategy? 5. How is your company's innovation strategy executed? 6. Who is involved in the innovation business strategy? 8. Has your organisation linked performance to innovation before, and how was it measured and rewarded?
3. Discern whether the organisation can differentiate between successful strategy execution and windfalls	7. Can your business differentiate between success due to successful strategy execution and windfalls?

4. Determine whether there is a relationship between intrapreneurship and successful innovation strategy execution in the large, diverse organisation	9. Do you believe that intrapreneurs are involved in the business innovation strategy, and do they have any link to the successful execution of the innovation strategy? Please explain your answer?
5. Understand the ideal structure to enable intrapreneurship and innovation to transform a large organisation	All the above interview question, but mostly 1,2, 3, 4, 8 & 9.

The interviews were recorded by permission of the participants and any additional information given by the respondents was used to enrich the topic even though it was not part of the questions prepared for the interview (Saunders & Lewis, 2012). In order to reduce the biases, the researcher avoided using her knowledge about the company and did not interject when conducting the interview, thus allowing participants to speak freely but still guided by the research schedule which was standard to all the participants. All the participants agreed to take part in the interview and were comfortable to be recorded and signed the consent form. The respondents were also notified that they were allowed to stop the interview should they not feel comfortable with the questions or wish not to continue with the interview. The interview questions were used as a guide and almost half of the respondent answered the questions in order. Checking and clarification questions were asked to ensure that the relevant data was collected.

4.8 Analysis Approach

A thematic analysis method was used to analyse qualitative data through the identification of themes or patterns. Thematic analysis is a “method for identifying, analyzing, organizing, describing, and reporting themes found within a data set” which the researcher followed in analysing the data collected (Nowell, Norris, White, & Moules, 2017, p.2). Nowell et al. (2017) cited that the thematic analysis method can be used for inductive coding, which is the approach the researcher followed to identify and organise the data.

The researcher listened to the recordings and read the transcripts to ensure that they were correct and removed the errors the Temi App may have had due to the respondents being inaudible,

which was part of cleaning the data collected. The researcher read and reread the transcribed material in order to identify common themes (Dierckx De Casterlé et al., 2011). The codes were then grouped into categories through computer-aided qualitative data analysis software, Atlas.ti, (Saunders & Lewis, 2012; Woods et al., 2016) and themes were allocated (Appendix 11) to the categories to establish standard answers to the research questions. Table 3 details a step-by-step thematic analysis process that the researcher followed.

Table 3: Step-by-step Thematic Analysis Process Undertaken (Nowell et al., 2017)

Activities	Descriptions
1. Familiarising with data	• Reread the data to align against the interview questions. • Removed the identifiers and named the transcripts respondent 1 to 12 as per Table 1 and reread them.
2. Generating initial codes	• Coded as the researcher read the transcription, only the responded views were coded as the researcher went through the transcripts. • Cleaned the codes by removing duplicates codes. • The coding manual was created as the codes were created, and they included definitions (Appendix 10).
3. Searching for themes	• Reviewed the code manual and drafted potential themes. • Reviewed the interview questions to check possible validity of the themes.
4. Reviewing the themes	• Checked whether the themes were in line with the codes generated. • The codes when then grouped into 16 categories, which is one category above the highest number recommended number, 15, by Hsieh & Shannon (2005). The code categories were in line with the interview questions and were then labelled per interview question number at the end as an identifier for creating the themes. e.g. Q1
5. Defining the themes	• The categories (code groups) were reviewed against the codes and the themes • then grouped into themes which were generated from the interview questions (Appendix 8), which were in line with the

	research questions based on the consistency matrix (Appendix 9). This assisted in analysing and defining and naming the themes, which was an ongoing process.
6. Reporting	• The reports were then pulled from Atlas.ti to check the alignment of the categories and themes to the interview questions against the research questions. • The analysis was done several times until the scholar was satisfied and then downloaded the tables and detailed report with codes, categories and quotations and started presenting the findings.

The researcher used the conventional content analysis approach to code the data as it is well-known for inductive research studies and codes are derived directly from text data in the transcripts (Hsieh & Shannon, 2005). The codes were generated purely from the interview data and were then grouped into categories. The code dictionary was generated as the researcher coded (Appendix 10). Then themes emerged from the categories and were matched with the interview questions (Appendix 11) in order to provide insight or answer the research questions of the study (Wolf & Plaines, 2017). Atlas.ti software was used for coding as it has increasingly become popular for qualitative data analysis for the past 25 years (Woods et al., 2016), and the researcher had to undergo necessary training and practice prior to coding the interview transcripts so as to develop the necessary competency to ensure conformity of the output.

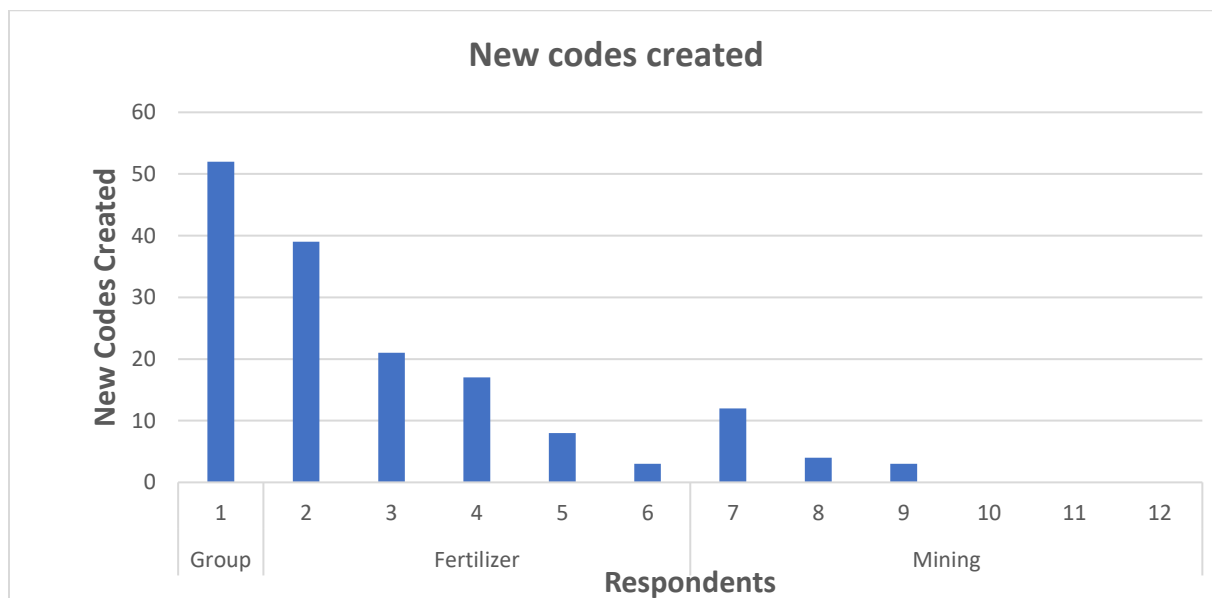
The codes were created, and Figure 3 highlights that the data reached saturation at transcript 10. The data generated a total of 1149 codes with a total of 159 new codes created, and there were 3 new codes created at respondent 9, with no new codes thereafter. As highlighted in Figure 3, there was a spike in new codes from respondent 7, who represented a separate division, mining. The codes subsequently decreased, and the data reached saturation after respondent 10 as no new codes were generated, which gave credence to data saturation as highlighted by Fusch & Ness (2015).

Fusch & Ness (2015) also highlighted that data saturation can be reached at interview six depending on both the richness (quality) and the thickness (quantity) of the data, which is possible in the case where the same interview questions are asked to multiple people in the same

organisation. This author cautioned about data saturation as a result of interviewing someone who specialised in the topic, which can overshadow the data.

The researcher can therefore explain that the data saturation was not due to the overshadowing of the data as within the first division (Fertiliser) that the data was coded, the sample consisted of respondents at different levels in the organisation and none of them had specialised knowledge on the research topic. Therefore, the quick saturation can be explained to be as a result of the case study approach, which gave rich and thick data (Fusch & Ness, 2015).

Figure 3: Presentation of Data Saturation for this Study



4.9 Data Validity and Reliability

Morse, Barrett, Mayan, Olson and Spiers (2002) highlighted that the data for qualitative research must be able to test for authenticity, validity, relevance and credibility to ensure quality research. Fusch and Ness (2015) highlighted the multiple sources of data and triangulation as a method that gives credence to data collected used for the study to improve its credibility, dependability and authenticity. Saunders and Lewis (2012) highlighted the importance of data to answer the researcher's questions about data credibility. Baxter and Jack (2008) highlighted that case study research design allows data to be collected from various lenses such as reports, interviews and

literature to improve the validity and reliability of the data, which enables data triangulation. The literature research was another source of data collected for this study.

In the case of this research, the individuals in the two divisions of the organisation, mining and agriculture, were interviewed and the sample was split between the executives and senior management, which was triangulated with the literature to improve the credibility of the data collected. The conventional coding contributed to the reduction of biases that are likely with a case study design, as the codes came from the text data rather than preconceived literature-derived codes from deductive coding (Hsieh & Shannon, 2005). This therefore improved the credibility of the data. Fusch and Ness (2015) indicated that data triangulation entails multiple sources of data collection and analysis and it enhances objectivity and credibility for qualitative research studies. The primary and secondary sources used for data collection include a literature review, the interviews and the triangulation of the sample; i.e. mining versus fertiliser and senior management versus the executives.

Qualitative research is considered subjective by nature, and bias can be expected from the interviewer (Saunders & Lewis, 2012), more so if the interviewer is familiar with the organisation from which the data is collected. Interpreter bias was avoided when analysing the data by adopting the conventional inductive coding method (Hsieh & Shannon, 2005). The initial step to reduce bias was the standardised semi-structured interview questions which were used for each participant, and this was also vital for data saturation and validity (Fusch & Ness, 2015).

The researcher avoided talking over the respondents and only asked questions when clarity was needed. The participants were mostly in similar positions across the two divisions the data was collected from, to ensure consistency of the sample chosen. The articulations of data from the recorded interviews were accurately captured to ensure accuracy that determined whether the data measured the concept it was intended to (Shenton, 2004). The interviews were recorded through the Temi App, which also transcribed the recording to allowed the researcher to reduce the personal lens that could introduce bias (Fusch & Ness, 2015). Although the researcher had to review the transcripts for accuracy, especially for words and names that were uncommon to the App, the transcripts were sent to the supervisor for a random check before coding for spot checks and to ensure conformity (Prion & Adamson, 2014).

For validation of the data, the researcher used the data collected and compared the opinions of the senior management versus those of the executives, versus the mining and fertiliser division concerning the standardised interview questions. The intent was to understand the organisation's view concerning the research topic, considering that these two divisions account for at least 70% of the organisation's revenue and profit contribution. The researcher's supervisor's input was taken into consideration, which added a third data point to improve validation and allowed triangulation. The key to data validity was whether the data collected addressed the research questions, which the researcher certainly believes the questions covered fairly. The method used for data analyses, inductive coding, ensured reduced bias as no theory was thought of before coding and the data was coded as per given codes which were grouped into categories and only then the data was grouped into themes that were relevant to the research questions (Hsieh & Shannon, 2005).

As indicated in section 4.2.2, data was collected from multiple sources in order to enrich the findings of the research and address the research problem with less biased information (Fusch and Ness, 2015). The findings from the senior managers and the executives were compared per division, mining and fertiliser, and the field notes were used to describe the aptitude and the behaviour of the respondents observed when answering the questions, which allowed for multiple sources of data to increase the validity, reliability and the conformity of the data collected (Prion & Adamson, 2014).

4.10 Limitations

Qualitative research is known to be subjective even though the data can be tested for credibility and transferability to reduce biases (Creswell et al., 2007; Saunders & Lewis, 2012). The limitation of this research is that the findings will not be tested in this study. The researcher, therefore, recommends that the findings of this research be tested using quantitative research methodology and design in future research. The researcher also suggests that a study be undertaken to understand where best to position or employ intrapreneurs in large organisations for effective transformation of the business. The researcher also notes that there might be some potential biases from the case study research approach when the researcher is part of the organisation.

5 CHAPTER 5: RESULTS

5.1 Introduction

This chapter outlines the findings of the interviews, the research used to address the research questions which are presented in Chapter 3. In this chapter, the data collected through the one-to-one interviews guided by the interview questions are analysed and reported under each research question through the use of a consistency matrix (Appendix 9), which ensures that the data is aligned to the question. The data collected is analysed and assessed to understand the views of the senior managers and the executives and then the divisional views, from the fertiliser and mining units are compared. The objective was to gain an insight into the perspectives of the senior managers versus the executives and then compare the view of the mining and the fertiliser divisions regarding the research topic. The findings were used to understand whether there is a common view of the topic which the organisation holds or whether there is a need for the organisation to develop or do something to encourage intrapreneurship and innovation for business transformation.

5.2 Description of the sample

The sample composed five executives and seven senior managers and was split between mining and agriculture, as highlighted in Table 1 in Chapter 4. Table 1 highlights that the years of experience of the respondents varied from 13 to over 25 years and only one respondent had been with the company for less than five years. Four out of five executives had been with the company for at least ten years. The years of service of the respondents differed from 3 years to 25 years, with the majority of the sample employed by the company for 10 to 25 years. The respondents had at least six years of experience in senior management, which gives fair credence to their insight regarding business strategy and their views regarding the research topic. The background of the respondents varied from engineering, finance, supply chain, procurement and sales, although they all had general management experience in their current functions.

The researcher highlighted that the interviews were conducted between a month and two months after the annual financial results of the organisation was released. The company declared a significant loss and the share price was back to where it had been over ten years ago. The executives were, therefore, apprehensive and hard at work looking for ways to turn the company around. Senior management throughout the business clusters were inundated with continuous reporting. The interviews with the CEO and the executives were however quite relaxed even though the research topic may at times have seemed to question the understanding or clarity of the business strategy. Almost all the respondents gasped when question four (Appendix 8) on innovation was asked.

The respondents were observed to be very slow and very engaged when answering this question and mostly in doubt after sharing their own view. What was incredible was how they easily relaxed once they started answering it and they felt like it was a safe space to share their views of the organisation strategy opposed to innovation and intrapreneurship, the challenges they believed the business experienced concerning these two theories. Despite the time constraints, the executives had, the interviews with them where the longest. The longest interview lasted for 1hour 13 minutes with one of the executives whom after the interview carried on for another 30 minutes regarding the topic of this research. The shortest interview was 45 minutes, which was because the executive was running between meetings. Therefore, the large amount of data under research question 2, which spoke of innovation, did not come as a surprise.

5.3 Presentation of results

5.3.1 Research Question 1

What is the organisation's understanding of intrapreneurship, and does it have intrapreneurs?

This research question seeks to determine the participants' understanding of the meaning of intrapreneurship. The interview questions were designed to delve into the subject to understand whether the organisation incorporates intrapreneurship as part of its business strategy, whether it has intrapreneurs, what characteristics the respondents believed intrapreneurs have, at what

levels of the organisational structure the intrapreneurs are, and whether the business can use them to differentiate itself from competitors.

Table 4 shows that frequency of the codes for the categories identified, which seem to be balanced in general, other than the opinions of senior management and executives about the level of intrapreneurs in the organisational structure. Based in the ranking on code frequencies, the results in Table 4 show that the business recognises that the use of intrapreneurship is more important than where the intrapreneurs are in the organisational structure.

Table 4: Codes Frequencies for Research Question 1

	Frequency			
	Executives Gr=536; GS=5	Senior management Gr=613; GS=7	Totals	Construct
Totals	218	284	502	
Use to Differentiate Q2 Gr=128; GS=17	51	77	128	The intrapreneurial characteristics that differentiate the company from their competition
Have intrapreneurs Q3 Gr=125; GS=21	59	66	125	Understanding whether the company has intrapreneurs or is intrapreneurial
Traits Q1 Gr=122; GS=18	55	67	122	The characteristics that identify intrapreneurs and/or the entrepreneurship of the business
Organisational Strategy & Alignment Q1 Gr=99; GS=17	44	55	99	Understanding whether intrapreneurship is part of the company strategy or practice
Levels in organisation structure Q3 Gr=28; GS=1	9	19	28	Intrapreneurs are at different levels of the organisation structure

Table 4 indicates that more codes came from senior managers, which does not mean that the senior managers had a different opinion from the executives, only that there are more different opinions from senior managers than from executives. The views of the senior managers and the

executives and the divisional inputs, mining and fertiliser, and will be reviewed when summing up this research question.

5.3.1.1 Organisational strategy and alignment

Although the frequency code ranking of organisational strategy appeared lower than others for this research question; the researcher sought to highlight the importance of organisational strategy by beginning the results with it, as mentioned by respondent 6 who highlighted that "having intrapreneurship is part of the organisational strategy". Respondent 4 agreed by saying that "intrapreneurial organisation" is what the business has always pushed for. It was further alluded that "having strategy is key for intrapreneurs" as they "see the bigger picture" and they use their "skills and knowledge to make it happen". In terms of the strategy, respondents 6 and 7 highlighted that these are individuals who "enable the business to expand into the new geographical strategic regions".

5.3.1.2 Have intrapreneurs

Respondent 1 highlighted that "we have always been an intrapreneurial company" and respondents 6 and 4 mentioned that the company "always employs intrapreneurs", who are "people who see a bigger picture", and "individuals with entrepreneurial thinking". We have intrapreneurs, which are "individuals with creativity and drive" that the business should "nurture". Respondents 3 and 6 have highlighted that "having strategy is key" in enabling intrapreneurs as they "see the big picture" and they "use people to make things happen".

Respondent 11 declared that "you have to give them time, space and resource" and give them "support to execute". Resource allocation was highlighted by most respondents and respondent 11 noted that intrapreneurs "typically brought their capabilities to participate in strategy" for their organisation; respondent 4 also mentioned that they "need access to all individuals within the organisation" and "use people to make it happen", and they behave "similar to what an entrepreneur should do". Respondent 5 cited that "when there is a problem, you make a plan ... the typical person that we attract is the intrapreneur, the guy who can make plans".

Respondent 3 stated that "I think we have got many phenomenal people that would fit this profile", who are "entrepreneurs within an organisation". All the respondents mentioned that their divisions and the Group "have intrapreneurs", and most of them emphasised this by saying, "yes, definitely" or "absolutely" and respondent 9 highlighted that they have them "to a limited extent". "I think there is entrepreneurial thinking in this business", which was one of the indications of the

intrapreneurship. At least a third of the respondents (1, 6 and 7) highlighted that they are present in their business and that the business mostly uses them “for the perspective of penetrating markets outside of South Africa” because they “add a lot of agility” to the business.

Most respondents highlighted that “job descriptions force people into particular roles and functions” and that “stifles intrapreneurship”. They further mentioned that job descriptions are legacy issues, and “they dictate what is expected of the people, what sort of animals ... they should be”. “They are rare to find”, stated respondents, 10 and 11. Respondent 5 highlighted that “the success of our business for many, many years was the fact that we had an intrapreneurial culture”.

5.3.1.3 Use them to differentiation

Intrapreneurs "understand what is required" and they "think beyond the value chain" - they can be "innovative" around the value chain to deliver for the business and to meet customer needs. "They identify opportunities and solve problems" and "the intrapreneur will make a plan" and "sort things out". They will "innovate to solve problems", and "they are credible" and the customer believes us and trusts our product. The business differentiates "on a need" basis, which the intrapreneurs identify and address them accordingly. Respondent 7 said that "the real value of the intrapreneurs is really visible during the bad times ... when times are tough", even when a low price does not matter. The thinking was that intrapreneurs differentiate the business by being in tune with the market and utilising company resources to deliver customer expectations. Their use "for the perspective of penetrating markets outside of South Africa" increases the success rate for the company to grow in new territories.

5.3.1.4 Intrapreneurs' traits

The respondents highlighted intrapreneurs are characterised as individuals who have a "willingness to find opportunities", "solution mindset", "resonate with the purpose of the business", "work independently and has got the bigger picture", "non-conformers", "vision of something different" and have a "positive energy". They further stated that they "challenge the status quo", have "courage", are "innovative", "make a plan", are "constantly looking for opportunities", break "new ground and boundaries", are "highly self-motivated", "tenacious", "competitive" and "risk-takers".

5.3.1.5 Intrapreneurs' presence in the organisation structure

Most of the respondents who believed that "the organisation has innovative or creative individuals" confirmed that "we have them in different levels" of the organisational structure. Some respondents mentioned that they are present in the executive and middle management levels, and the job functions frequently mentioned were "R&D", "customer-facing", "sales", "supply chain" and "technical". The "middle and senior management" were areas where most respondents believed there to be intrapreneurs in the organisation. The sites with production facilities, respondents 2, 4, 5 and 11 highlighted that they had them because "people innovate because they want to make their lives easier" and respondent 2 highlighted that in production "they innovate because they are lazy" and that "most people are reasonably innovative". The intrapreneurs' presence in the organisational structure therefore differed, but there was a consistent belief that they were present in the middle, senior and executive management levels. Respondent 10 mentioned that "I think we need to be more intrapreneurial from the top". Respondent 12 highlighted that "people at the bottom are not given an opportunity" to be intrapreneurial.

5.3.1.6 Summary of findings on Research Question 1

There was a balanced view on the presence of intrapreneurs in the organisation, and the business believes that they use them to differentiate the business, although three out of five executives, respondents 6, 7 & 11, specifically stated that they used them for geographical expansion. Two of these executives, 7 & 11, were in the mining business units. Respondent 6 was in the fertiliser international business unit. The senior management in both mining and fertilisers said that they have intrapreneurs, but they believed that they could "use them better" or "they want more of them". The other executive, respondent 2, did not reveal much that stood out about intrapreneurship other than "everyone is innovative" and respondent 1 highlighted that business needed more intrapreneurs, although he repeatedly mentioned the difficulties of driving intrapreneurship and governance and "lack of collaboration" by divisions which is known to effect change required for innovation.

The researcher observed the respondents when answering the questions related to intrapreneurship and could confidently highlight that although entrepreneurship is well understood, some of the respondents, 2 and 4, were not familiar with the term 'intrapreneurship'. They all however believed that the business had intrapreneurs and most of them mentioned the company's ethos of "*maak 'n plan*", which is an Afrikaans term that means to "make a plan" as

the foundation the business was built on. Some of the respondents had a bit of difficulty mentioning intrapreneurship or intrapreneurs at the beginning of the interview, and they became a lot freer to speak of them and even mention the names of team members who were intrapreneurial. All the respondents highlighted the need to balance the risk associated with intrapreneurs versus governance, but they also battled to indicate how intrapreneurship could exist with governance, and they cited the corporate and governance "stifles intrapreneurship".

5.3.2 Research Question 2

To discern how the organisation understands and leverage innovation.

This research question was to establish how the respondents define innovation and their understanding of the business' innovation strategy in relation to organisational strategy. It also unpacks the way the business formulates and measures innovation strategy and its execution. Based on the respondents' understanding and the strategy in place, if any, the researcher will establish whether or how the business also measures performance related innovative activities and products. Table 5 shows the frequency of the code against the research schedule, which will enable the researcher to analyse the data obtained relative to Research Question 2.

The coding theme allocated to this research question is 'innovation strategy', indicated in Appendix 11. The findings in Table 5 may be perceived as a balanced view of management and senior management on innovation due to the close number of codes per category. The code report shows innovation strategy as the highest ranked and the linkage of innovation to performance being the lowest on the number of codes. Innovation strategy execution came second, followed by the respondents' understanding or definition of innovation and strategy formulation. Senior management has double the number of codes on "who is involved in innovation strategy formulation" compared to the codes from the executives, which brings an interesting view which will be explained when unpacking the findings of the interview questions relating to the innovation strategy theme.

Table 5: Codes Frequencies for Research Question 2

Rank		Executives Gr=536; GS=5	Senior management Gr=613; GS=7	Totals
	Totals	218	236	454
1	Innovation Strategy Q4 Gr=132; GS=21	64	68	132
2	Innovation Strategy Execution Q5 Gr=131; GS=19	60	71	131
3	Innovation definition & strategy formulation Q4 Gr=104; GS=15	57	47	104
4	How is performance measured & rewarded Q8 Gr=47; GS=5	24	23	47
5	Involved in innovation strategy Q6 Gr=25; GS=3	7	18	25
6	Performance linked to innovation Q8 Gr=15; GS=3	6	9	15

Innovation definition was the first question under the interview schedule (Appendix 8) as the researcher aimed to gain an understanding of how the respondents understand innovation. It was followed by the innovation strategy question for the researcher to delve further into the business' view and the use of innovation, then a question aiming to establish whether innovation is part of the business strategy, and finally how it is measured opposed to the business performance. The researcher will, therefore, write up the findings of the interview schedule for Research Question number 2 based on the interview schedule sequence. The findings were written so that they followed the sequence of this Research Question. The researcher began with the respondents' understanding of innovation and ended with the question that sought to understand whether the business links innovation to performance measures. The findings were aimed at determining the business' execution of innovation strategy for the transformation of the organisation.

5.3.2.1 Innovation Definition & Strategy formulation

Innovation "adds value to the participant as well as to company", and "if you really want to create value for the business" you must identify and solve problems through innovation, cited respondent 1. It was further highlighted that innovation can be through "product extension" or "the way they are producing the equipment" or developing a "new product", such as a "green fertiliser product", a "new blasting technology" that may compete with current chemical products which are the core business. Respondent 1 highlighted that "innovation is different from research and development" (R&D) and that "innovation is in the products and services". He further stated that "when you are innovative, you are constantly changing those products and services to match the customer demand" - which other respondents concurred with innovation being "continuous development".

One of the types of innovation mentioned was "continuous innovation", which was highlighted by most respondents as the primary innovation the organisation executes. The respondents highlighted the "continuous innovation", which the fertiliser division highlighted that "we do see it as a core and valuable part of what we do", as "our industry is mature". "So, the danger with maturity is obviously everybody doing the same old thing. There is a feeling that there is nothing new. So, innovation is nurtured; it is highly-prized. We see it obviously as something new or different and value-adding". Innovation taking place is the "new way of thinking and you at your new application" of the products. Having an open mindset allows the business to do "something completely disruptive and maybe even disrupting your own business", cited respondent 1. "Our fertiliser business is not in disruption technology yet", cited respondent 2 who contradicts respondent 6 who is in the fertiliser business, but in the international market.

Most respondents stressed that the value adds of innovation in the "core business" is by "increasing efficiency". Respondent 9 stated that innovation could be "doing something slightly different with intangible value" that benefits both the customer and the supplier. Most respondents cited that the business used "innovation to increase the efficiency", "add new product" and "services" to "add value to participants as well as our customers and suppliers". "To do something better is a form of innovation", highlighted respondent 2.

Respondent 6 highlighted as part of innovation the business has "some of the research and development [R&D] decentralised. We live in the regions, and we have come up with brilliant ideas where managers see an opportunity in the market and being allowed to do some research and trial work to solve a specific problem. So, some of the products we came up with are to address a disease called greening in citrus"

Respondent 11 highlighted that "innovation is also discretionary effort" which is "key to some organisation's surviving in these tough times". He described "discretionary effort" as "that extra 5% that every employee will put in beyond what they are paid to do".

The second type of innovation, "business of tomorrow" or "transitional innovation" was highlighted by respondents 1, 2 and 3. These respondents did not, however, say much about it. Few of the respondents saw "innovation as something new", which the business of tomorrow could include creating a "new product" or "technology", which "some of them just die because you cannot find a market for them", cited respondent 11. Respondent 2 stated that the new products were developed to complement the existing product as R&D finds improved formulations, which is therefore product extension.

The third type of innovation was described as "disruptive innovation", which respondent 1 highlighted "It's not that easy to come up with successful disruptive technology" and "some companies are really good at developing, disrupting the market", and "unfortunately, no disruptive innovation" fertiliser division is yet involved in cited respondent 2. Disruptive innovation requires a long-term investment, as "you have to invest in something that is not going to deliver the goods for a while. It is only going to deliver it ... much later", cited respondent 1. This respondent stated that "you actually need an environment to say just invest into something that might not work and let us fail and let us fail fast and fail small, but let us fail when we need to", which is difficult when the organisation is going through a difficult financial time. "Mining, notoriously a conservative industry" has "investment horizons" which "are very long" was cited by respondent 7 and confirmed by the respondents 10 and 11. The strategy should allow for innovation that may not deliver results in the short term for all business "to invest in it."

In summary, innovation was mostly defined as "efficiency", "adding value", "new product development", "new technology development", "new service", "solving problems", "discretionary effort" and "doing something completely different". Respondent 2 highlighted that "you want to make your life easier", and respondent 6 highlighted that innovation improves profit margins, while others stated that innovation creates "new revenue" streams. The "disruptive innovation" was said to be a long-term innovation, which required the business to invest keeping in mind that the returns were not immediate. Innovation was a 'necessity' to improve business performance now and tomorrow or cause disruption to the market.

5.3.2.2 Innovation strategy

"The business needs to write down what does innovation mean" to it and the "types of innovation" it will focus on in the business strategy. Respondent 1 stated that the "different types of innovation; adjacent, core and transformative" to be highlighted in the strategy as to when and where they will be practised, and the "goals and who got all R&D" should be specified and "has to all be in line with the business strategy". Respondent 3 mentioned that "has probably more tactical than strategic" plans for innovation, such as their "clearly defined systems and procedures" for logistics which the team can innovate around "cost-saving". "There are always tactical initiatives that one can do to reduce your costs" in all the employees' "own work environment". Our business strategy "doesn't talk directly to innovation as a standalone", but "innovation is changing the path of businesses on all the possible parts of the business", such as "making that business more efficient or making it more profitable", but respondent 2 explained that "unfortunately, no disruptive innovation" is considered in the fertiliser business.

The business should do "more than trying to fill the pipeline for the future" concerning innovation, but also reimagine the future by allowing employees "to come to us with the blue-sky thoughts" and "we are prepared to fund it" according to respondents 5 and 11.

Most respondents highlighted that "the Group has innovation in the strategy", but the business unit does not have a clear innovation strategy for their operations. Respondents 3, 7 and 8 highlighted that "there is no written documentation on innovation", although the business unit is innovative by "developing new products and services", and growing into new geographical areas through innovation and intrapreneurship". Respondent 2 declared that "the main motivation for most people is selfishness" in coming up with innovations, as "it makes lives easier" for a guy "working from the factory side" and for senior employees "the business makes more money, they get a bigger bonus", and hence they innovate. Respondents 4, 7 and 11 highlighted the importance of time concerning innovation, "to do something better is a form of innovation ... do it in a faster time".

Respondent 3 mentioned "that my guys who might not be directly involved in the formulation of the strategy, at least ... are aware of or we are doing ... indirect representation". Most of the respondents mentioned that senior management and the executive committee (EXCO) were involved in strategy formulation and everyone else execute it. This respondent further highlighted that "the strategy's not perfect at the first pass", but the business has to develop "coherent, functioning, well-understood strategy" and be "more open-minded to get input ... whether they are

entrepreneurs or somebody who has a brainwave, and it should also be much quicker to tweak the strategy to incorporate that" for ease of execution.

Respondent 9 stated that "it is important that everyone" is involved in innovation strategy formulation "because everyone can contribute or be innovative... and maybe you can find a fresh set of eyes that can see something" different that the business may have "missed" and "that helps in terms of not only formulating, but refining and integrating the strategy".

5.3.2.3 Innovation strategy execution

Respondent 1 highlighted that the business units ensure that business and innovation strategy "are aligned. So, that is why you have to define your strategy properly so that they know where innovation fits into this strategy" in order to be able to execute innovation strategy. Some of the respondents highlighted that innovation strategy execution "does not talk directly to innovation as a standalone success" and "if someone innovates" "that should be recognised". Respondent 7 highlighted that the operation changed because they had been measured accordingly. Respondent 1 highlighted the importance of having an open mindset "when you walk into the meeting" in order to allow or embrace an innovative mindset to learn and avoid being disrupted by others.

a) Fertiliser division innovation strategy execution

Respondent 2 highlighted that the company "love to be the first" on innovation, but "we are doing like everybody else" in the industry. The respondent further added that "we are looking at internet of things and remote sensing and data and artificial intelligence and all of that fun stuff... and all the things of globalizing and digitizing - all those good words, but we are not as successful as everybody else in the world". Respondent 3 highlighted that "we're just tweaking at an incremental level and then we are looking for the major innovations, which are the business of the future. Whether that is instead of supplying fertiliser, nutrients, supplying consulting services around Agronomy", the business requires it to improve from the "1% growth" it has realised in the past years in the fertiliser division. This respondent stated that "we should do sooner, the lowest hanging fruits" as "the main priorities", which is "the stuff that we can do as soon as possible, and we have the resources, the skills, the money" to execute them.

Respondent 3 alluded that the fertiliser division has "brainstormed a whole lot of areas that we believe we could explore - we have prioritised them in terms of timelines needed to explore them". Execution can be "stifled by a lot of different people having inputs and the project". Respondent

6 added that, "for instance, we say you want to be a leading player in the green agricultural technology business. They all sit in building blocks that we require. So, there are certain products and services that you have to incorporate if you want to play in this space. We could clearly see the ones we have at the moment, and the aim would be how we can either increase sales or make these products better suited for the markets in which we operate, or we then say, how do we go? Do we bring some of the other building blocks into our portfolio? Moreover, that is really what we tried to focus our attention".

Respondent 6 stated that when the business does "not have either the resources or the footprint, either we will try to buy into your product or service or get exclusive rights ... internationally. I have an option to buy into the business at the latest stage if it works, or we incorporate it into ours" in order to expand into "new geographical strategic regions". This respondent further added that "through the new acquisition offerings, we have gained some new products and technologies and we are also looking for other new novel products and services that we do not necessarily own because we have the international footprint". Respondent 1 assented by highlighting that "we bought them ...we do not want to integrate them too much in the group because we want to make sure that we get what they will deliver on those innovations that they are doing".

Respondents 5 and 11 highlighted that the innovation strategy is executed through "commercialisation of innovative products and technologies" and it is measured monthly. Respondent 2 confirmed that "we are executing it incrementally to a large extent" and we "would know when it has successfully disrupted, all of us would know. Actually, the price would be different" and an indicator as the company would not have to compete at that level.

Respondent 3 cited that "we have been able to grow market share, despite having a, a very high-cost base suggested we must have done something successfully. Moreover, I would argue that that is 99% on the back of innovation", but respondent 4 suggested that the growth was because "we are the single largest supplier in this market".

b) Mining division innovation strategy execution

Respondent 8 reported "yes, there is a lot of innovation on that front, but again, that external innovation, that is product innovation, process innovation and sales innovation, which is a different way of targeting the customers". Respondent 11 highlighted that "the new technologies require more salesmanship and more time" and hence the team "put more energy into the tried and true" products and services if the business does not measure the commercialisation of innovation and technology.

Respondent 1 highlighted that “innovation commercialisation” is key to innovation strategy. Although respondent 11 highlighted that “some of them just die because you cannot find a market for them, but some of them do come to continuous improvement cause sometimes. What has happened is you have innovated quicker than the customer can adopt it”, which means the business also innovates to create a market for the mining products. This respondent cited that “organic growth of technologies within an industry is very slow”, which was confirmed by respondent 7, who stated that “mining is a notoriously conservative industry. Investment horizons are very long. You have got a 20-year investment horizon”.

Respondent 12 highlighted that “the strategy is executed most probably I’ll say to you 45, we’re getting close to 55%, uh, execution with strategy but, you can feel the shift in terms of the moment from an innovation perspective in the company” due to the market conditions that require innovation for the company to compete in the mining sector. Respondent 12 added that coordination means “another guy can be innovative conceptually and if you link those two, that is where you have success”, which means “you have to put these skills together” increase the chance of execution as “not all innovators can execute”. Respondents 7, 9 and 10 who were all in mining highlighted that “innovative products and services” are executed “not well enough” and can be measured through the systems in place, although respondent 8, in the same division, highlights that “innovation strategy is not documented” to be measured when executed.

c) innovation strategy execution summary

The view is that the executives in the fertiliser unit speak of ‘incremental innovation’ to improve efficiency for the high-cost production plant and operations and highlighted the acquisitions approach to service the market, the business does not have products and technology to serve. Mining, however, believes in creating the market “develop the product which does not have the market” and partnering with suppliers and customers to market and deliver value to customers. There seem to be balanced views by senior management and executives on innovation execution, although 9 out of 12 do not believe there is an innovation strategy in place. There is an indication of a disjointed understanding of what disruptive innovation is as respondent 2 stated that the fertilizer division is not into disruptive innovation, but respondents 5 and 6 highlighted that business had made acquisitions which brought in disruptive technologies and products. Respondents 2 and 6 are both the executives in the group and respondent 5 is a senior manager. Respondents 2 and 5 serve the local market and respondent 6 services the international market.

Although the indication is that there is an execution of innovation to some extent, only three out of 12 respondents (5, 11 and 12) highlight that the innovation strategy is well documented and executed, although they believe it can still improve. The business “needs to change. We have to be faster; we have got to be more decisive. We have got to agree as a team, that is what we can do. Besides, we define it; we do it, and we were not good at that” regarding innovation. Respondent 10 stated that “we need to do more of it. We are slow concerning “innovation”. Respondent 7 cited that “what tends to happen is that in pursuit of shareholder reward - first get the money, do the basics”, and then the business can consider innovation. This cannibalises innovation and when times are tough, the business turns to “focus internally” and doing this “has made us successful in the past”, and the “cream is the entrepreneurial stuff, the high-risk stuff”, which delays intrapreneurship and innovation.

5.3.2.4 How is performance measured and rewarded?

Most of the respondents highlighted that the business “never had a formal performance management program”, i.e. “formal KPI” (key performance indicators), and highlighted the reason being “part of the company's legacy”. Respondent 2 mentioned that “we do not really do performance measures as such”, but “we have our basic way” of measuring performance. All the respondents however mentioned that they “are not on KPIs” and the business is “moving there now”. Respondent 1 cited that the business is now “finding it difficult to keep people accountable” and to “do performance management, due to the lack of a formal performance management system”.

It was emphasised that intrapreneurs want “to better their lives, to pursue something that might be a passion to them, something that will generate income” and therefore the company's reward system could be an enticing “revenue stream” for them. Most of the respondents highlighted that “we have a target for volume, revenue and profits” which is formally used to measure and reward performance. For intrapreneurs, “it is balancing risk with the reward”, and “we do reward them in terms of the overall incentive programs”, stated respondent 10 and respondent 12 highlighted the need for reward and recognition for those not in sales.

All the respondents have highlighted that there are no formal KPIs in place and the business uses various measures, such as sales, volumes, profit margins, production throughput and safety as a measure for business performance and the teams are incentivised accordingly. They all have highlighted that a “formal performance measure” should be put in place to ensure everyone is measured accordingly. All the divisions have confirmed that only the sales team is rewarded

based on profits, or production throughput depending on the job functions, and the executives are measured based on the overall performance of the business and safety.

5.3.2.5 Performance measure linked to innovation

The business has "to think differently" on "what constitutes an innovation in terms of a measure when you are getting" the output. The respondents believed that innovation changes the conversation from "development into a new market" or maybe go "a little further and ... develop another product, which might be a good interplay that makes you successful". Respondent 1 highlighted that "if you really want to create value for the business... maybe we need to take this concept" and "give it to the guys who are not as intrapreneurial" as "innovators are not always good with execution".

a) Fertilisers

Respondent 2 asked, "how do you measure innovation?" and further stated that "that is very subjective and horrible", because "we do not capture it. We have got to get it documented" and respondent 8 concurred. "Therefore, we actually do not see, recognise, celebrate innovations". Respondent 4 asked, "how do we measure innovation? Where is the graph?". That, therefore, posed a challenge of whether innovation was part of the strategy or whether it is defined and communicated clearly. Respondent 4 highlighted that it "does not mean that people are not innovative because we did not make a profit". Contrary to the response of respondent 2, respondent 3 highlighted that the business has an informal process which could link innovation to "superior customer service or superior product offering, superior quality". "There is no reward for innovative ideas" and asked respondent 6 "what is the motivation for him?". Respondent 11 stated that there is recognition through other means, such as "monthly internal print articles" which have been effective. Respondent 6 highlighted that for innovative products, the business realises "good returns on the sales" with high-profit margins.

b) Mining

Respondent 12 further highlighted that "we do not have the exhaustive or the right KPIs. We will only have one which has new sales, new customers, and current customers' conversion. So that plays a part in terms of missing out from an intrapreneurial driving innovation strategy". Respondent 12 added that "we are starting to look at different KPIs just for innovation perspective", but the business "just needs to move away from only monetising the KPIs". Respondents 8 and 9 highlighted that "there is no recognition ... or system to indicate ...

innovation success ... or the number of innovations that are put into the organisation", which most of the respondents concurred with.

Respondent 9 highlighted that they are "looking for innovative ways to do business", and "we do measure it to a certain sense as well, specifically in terms of performance and value add". Respondent 9 further stated that it "is measured in terms of sales and GP attributable to different innovative business compared to normal business". Respondent 11 highlighted that the business "measured it on a monthly basis", and there were times where there is a "need" to determine "how are we going to price" innovative products and services.

"We do measure commercialised innovative ideas or products", and "the goal is to extract 25% of our EBIT from innovation". "You would you have to design yourself something to do that; because most traditional businesses look at everything either geographically or functionally. It gets more complicated when you want to report across functions in the organisation. So, you need to have some of your innovative products almost set up in their own profit and loss account"; cited respondent 11.

c) Summary

Respondents 7 and 11, executives in the mining division, both cited that the sales of innovative products and services are measured and rewarded in their business. The senior management in the mining division, respondents 8, 9,10 and 12, confirmed that due to the lack of a clear innovation strategy, which constitutes what innovative products and services targeted, it is not easy to say the business executes on innovation. Respondent 12, also in mining, highlighted that "the only KPI that we have used, and which rightly or wrongly is sales", means the reward has been given to the sales team for innovation profit shares. Respondent 10 added that "we have never actually put innovation on the KPI and said and defined how are we going to succeed at that".

There were no clear indications whether innovation was measured in the fertiliser division by senior management. Respondents 2 and 4 asked more questions about how to measure innovation, but respondents 3, 5 and 6 highlighted that innovation is measured and recognised. The executives confirmed that "safety" and other factors are linked to their performance, but the business "does not have a measurement tool for innovation".

The three executives, (6, 7 and 11) highlighted that the business could measure the sales of innovative technologies and products. One senior manager, respondent 3, highlighted that there

are systems that measure and recognise innovation and innovative people, but respondent 12 believed only the sales team was rewarded for innovation. Therefore, a total of 7 out of 12 respondents, of which 2 out of 7 were executives, did not believe that there was a clear innovation strategy that could be used to measure or reward the teams or individuals.

5.3.2.6 Summary of Research Question 2

The respondents mostly used the same words to describe innovation, but the concern raised was the clarity of the innovation strategy and the type of innovative technologies, especially how the business approached the disruptive innovation. Respondents 1 and 2 highlighted the difficulties in coming up with disruptive technologies and the fertiliser market. These two respondents were executives, one in fertiliser local production facilities and the other in the group. However, respondent 6 (fertiliser executive) highlighted the acquisitions that have been made in the fertiliser market which were for business diversification and to serve the international market. Respondent 5 highlighted the introduction of drones for data collection that the company has developed through a JV with an entrepreneur which will enable the fertiliser business to compete in the South African market and later globally, by using the data to determine fertiliser requirements in agronomy. Soil fertility will also be measured in order to advise farmers of suitable crops to farm based on the data collected.

The mining respondents mostly defined innovation similarly to their knowledge and highlighted that they went to the extent of developing technology and services to create markets. Most respondents highlighted that innovation strategy is included in the group strategy, but was not documented in the business units' business strategy, except for respondent 11 (an executive) who cited that their business unit has documented an innovation strategy that they measure against. It, therefore, indicates that most of the mining innovation is random or situational and may not be monitored if it is not part of the strategy.

5.3.3 Research Question 3

Discern whether the organisation can differentiate between successful strategy execution and windfalls. (Theme 3: Windfalls and strategy execution)

This research question allows the researcher to understand whether the organisation can differentiate between business performance due to windfall profits and successful strategy execution. Most respondents highlighted that successful strategy execution is understood to be business realised through "those factors that we can control", and "those factors that we cannot control when they turn in our favour; then those would be windfalls". Windfall profits were defined as market favours that occur while the business is executing the strategy. The windfalls are seen to be "opportunistic business", as some respondents stated, which happens "while executing the strategy". Both the senior managers and executives seem to agree with the common meaning of windfalls and successful strategy execution irrespective of the industry, mining or agriculture, i.e. fertiliser in this study, as indicated by the balanced view showing the frequency of the codes in Table 6.

Table 6 confirms that five executives (GS=5) and senior management (GS=7) were interviewed and there was a total of 536 grounded codes of which 25 were relevant to the executives' opinions and a total of 613 grounded codes from senior management and only 23 were relevant to this research questions. Research question 3 had fewer codes compared to questions 1 and 2. The researcher asked this question to discern the whether there is a clear understanding of strategy execution to ensure the respondents clearly understood research question 4, which is the centre of the research problem.

Table 6: Codes Frequencies for Research Question 3

	Executives Gr=536; GS=5	Senior management Gr=613; GS=7	Totals	Construct
Success due to Strategy Execution Q7 Gr=24; GS=4	14	10	24	Success due to actions that can be controlled
Success due to windfalls Q7 Gr=24; GS=3	11	13	24	Additional profits due to opportunistic business of luck due to market conditions
Totals	25	23	48	

It was highlighted that "whether you can attribute it all to your strategy and say this is what we set out to do" may not always be possible as some respondents said "yes", others said "no" and others "yes and no" when asked whether they could differentiate business performance due to successful strategy execution or windfalls. Respondents 3 and 4, however, highlighted that the difference is not always clear.

"Windfall was actually according to them, a consequence of a good strategy or a good tactic", cited respondent 3. Respondent 4 highlighted that he "believes that our success was largely... because the external windfalls that have helped us get to where we are" in the market. "There was a market to grow into. Now the market is not there, and we are making losses". This respondent further added that "I do not believe that our successes, many of our successes in the past have been the ability for us to move quickly" through "innovation" and "entrepreneurs within the organisation that kept the business great", it has however been through windfalls as "we've been isolated ... far South away from the competitors in Europe and North Africa" and "we had a huge market to play with" to grow the business.

The business has "taken advantage of the circumstance and the opportunity", "but when those two come together, "which is strategy innovation and intrapreneurship, "we succeed on a large scale", stated respondent 7. This respondent further emphasised that "good fortune favours the brave. The more you are looking for the opportunities, the more you are putting yourself out there exploring, etc., the more likely you come across an opportunity". Respondent 2 highlighted that with "innovation from 15 years ago, we are in a position we are today, and now, we just call it; that is how we do business". He further highlighted that "If we did not do that 15 years ago, one of the things such as the nitrate plant, that is a big part of our business which we did that 20 years ago then we would not have the product range now. So that is one buying our explosive division and a bunch of other stuff". This respondent also highlighted that "there are windfalls as well".

Respondent 10 cited that "the windfalls in the business; no doubt, we have them every year". This respondent further highlighted that "the strategy of being in a place at a point in time has worked" and "that is a strategy". "if we were not in the DRC, we would not have known about the opportunities", but "there is no luck involved in that whatsoever". Respondent 11 highlighted that "especially in my industry, the opportunities were everywhere" before 2015. The reasons cited were that "there was not enough supply. People were putting in place five and ten-year-long supply contracts because they were worried that they were going to get down on the supplies". This respondent added that there haven't been windfalls since then and questions whether "the strategy in place" may no longer be suitable. Respondent 6 highlighted that were the business has diversified, "that you also get the windfalls... it falls within our strategy for our current patents, and we allowed people to actually have time and resources just to develop it" and "I would say that we never expect one product to have such a huge impact. So, you need some bit of luck in there as well".

Respondent 7 highlighted that chasing the windfalls can "periodically... come at the cost of the strategy because it becomes the short-term gain and it becomes almost more attractive than the investment required in time, energy and resources in the longer-term strategy execution". Respondents 1 and 11 highlighted that the business now is facing headwinds rather than realising windfalls, and respondent 2 cited that "our innovation ... is helping us to make money and sometimes alleviate the headwinds".

5.3.4 Research Question 4

The aim of the Research Question 4 is to determine whether there is a relation between intrapreneurship and if it can be a successful innovation strategy execution for a large, diverse organisation.

This research question, theme 4 (Appendix 11), seek to understand the views of the executives and senior management regarding the relationship between intrapreneurship and innovation strategy execution versus the relationship between intrapreneurship and regular organisation strategy execution.

Table 7 shows a higher concentration of codes on the interview questions about the intrapreneurship link between innovation strategy execution versus their relationship purely with successful strategy execution. The results of Table 7 highlight the imbalance of codes compared to the results of most research questions addressed so far. The results highlight that only 6 (GS=6) respondents conversed about the intrapreneurship link to innovation strategy execution and only two (GS=2) respondents confidently gave views on the link between intrapreneurship and successful strategy execution. Hence, research question 5 was derived from understanding what the ideal situation could be for the organisation to allow the co-existence of intrapreneurship and innovation for the execution of innovation strategy. There were a total of 31 codes out of 536 codes from the executives' interviews of which 27 were on the intrapreneurs' in innovation strategy execution versus 36 grounded codes out of a total of 613 codes from senior management which were relevant to this research question.

Table 7: Codes Frequencies for Research Question 4

	Executives Gr=536; GS=5	Senior management Gr=613; GS=7	Totals	Constructs
Intrapreneurs in innovation strategy execution Q9 Gr=52; GS=6	27	25	52	Intrapreneurs are highly required for the execution of innovation strategy
Intrapreneurship in successful strategy execution Q9 Gr=15; GS=2	4	11	15	Intrapreneurs are less involved in successful strategy execution
Totals	31	36	67	

5.3.4.1 Intrapreneurs in successful innovations strategy execution

Respondent 1 cited that there is a “battle to commercialise those concepts”, innovation, is a real challenge for the organisation which some respondents concurred with. This respondent further highlighted that they have “challenges in commercialising those innovative solutions” and stated that “our challenges are, making it easier for our teams to innovate faster”. The business “wants to be innovative, and you need to encourage that. But you also need those innovators that are going to take the business to the next level” to ensure there are returns realised through commercialising innovation, cited respondent 4.

Respondent 4 mentioned that “I definitely do not see that relationship between the intrapreneurs within the strategy of this organisation”. Respondent 12 also confirmed that “from our business unit's perspective there is no link” and further mentioned that “we do not measure the success rate of that also plays a role” and “part in terms of missing out from an intrapreneurial driving innovation strategy”. Respondents 1 and 5 highlighted that “innovators are not always good with execution”.

On the contrary, respondent 7 highlighted that the “global chemical” and the mining sector, “let alone all the issues that we face operating in the different countries that we are trying to conduct our business in, the sovereign risk becomes a huge issue. However, if we are unable and unwilling both to develop the people in this business on those two fronts, intrapreneurship and innovation, we will not have a business”. This indicates that the business has sufficed due to the co-existence

of innovation and intrapreneurship, which the respondent 10 concurred with, and further highlighted that “people actually are realising” that, but “we have a limited capacity”. This respondent further highlighted that lack of capacity “detracts from activities, detracts from innovation because ... there's only so many hours in a day”.

The challenge is, an “intrapreneur, if you stifle him or her too many times, then they become just like all the rest of the ants”, “goes back to doing what they're told to do” and the business loses out on “people who are thinking dynamically disruptively sometimes” and who are “pushing back on the status quo”. Respondent 7 also highlighted that “I truly believe that the success of our business into the future depends on this, our ability to think differently all the time about various opportunities, various issues that are out there”, referring to intrapreneurship.

Adding value to customers is part of strategy execution, and respondent 10 highlighted that “the right thing to do is, decide... by looking at the broader picture” before making decisions that impact the execution of the strategy. Respondent 6 added that “if you have a guy that comes up with a novel idea or a service, he will push it very hard. It could help the team” to ensure it is commercialised.

Respondent 12 highlighted that intrapreneurs identified a problem and “ran many tests and we came up with two products”, a possible solution and “we're able to go in the back” to the market to indicate “what we can offer” as a solution, which is the intrapreneurs aspect of solving the customer's problem.

“from a technology or product perspective, we know in the past that one of our products used to be impacted by lightning. We moved on to develop a product that is not impacted by lightning. So now we have created a safety element into it. Now we are looking at incorporating our electric detonating system into a WIFI system”, stated respondent 12

Respondent 7 mentioned that “whereas the intrapreneurial aspect when that is linked, that talks to successful commercialisation of innovative technologies”, which backs the need for intrapreneurship and innovation in the organisation. Respondent 11 added that “you do not just innovate for the sake of innovation as “innovation comes from necessity” and “innovation strategy has to have a commercialisation plan”, which speaks to measures ensuring that innovation is executed. This respondent indicated the returns on innovations should be able to pay off the cost of innovation fast, and competitors are always seeking to imitate if you are in a leading position.

Intrapreneurs should be given “the resources, give you support now execute or implement based on the innovation strategy that we have”. Respondent 12 highlighted that this approach reduces the “broken telephone concept” which is caused by “job descriptions” which cause “silos” which limit “innovation commercialisation”. However, respondent 12 highlighted “the power of the intrapreneur is to execute”. This respondent eluded that “there are people who are innovative and here are very few people that can have this innovation, hidden the cloud idea” and “go through the strategy and operationally make it happen”.

Respondent 1 highlighted that intrapreneurs “battle to commercialise those concepts” and this respondent posited that most intrapreneurs are not good in sustaining innovative business as they want to get to the next innovative idea. This respondent mentioned that the innovative team should “hand over the innovative ideas concepts” proven to other team members to execute, for the sustainability of the business. Nonetheless, respondent 6 cited that “in the end, you still need that same drive to make things happen”, which was echoed by respondent 11 who cited that “we need to have people who are thinking dynamically disruptively, sometimes pushing back on the status quo.”

5.3.4.2 Intrapreneurship in successful strategy execution

They have the capacity to develop “more than adequate detailed understanding of whatever it is that is going on, knowing what to look for, knowing the signs, when people talk about it”, “but it is listening”, and “it means they execute”. Respondent 7 stated that people with this broad thinking “they execute. They are excited. It is not just the theoretical ideas and the conceptualisation”, but they do implement strategy. Respondent 10 highlighted that intrapreneurs have “sort of characteristics” such as “looking for new things, identifying gaps, identifying opportunities consistently, not just, and then delivering against” the business expectations.

Respondent 12 added that “my business unit is trying to become a maverick. So, one being a maverick is about creating. We are looking to be a niche. So, you need to create. You can always respond to a need, but sometimes you need to create that need”, and hence respondent 11 mentioned that they sometimes come up with detonator “technology that a customer does not yet know” and they then convince the customer about its value, which is part of strategy for being ahead of the technology in the explosives field.

“I think one of the things that makes this business unit successful” is “the ease to a larger extent and understanding of the capabilities and the capacity in the business”, which is the use of the business unit's intrapreneurial skills to seize the opportunities. Respondent 7 stated that

sometimes we "do not even know how we reach the record all the time" concerning profits and growth which is attributable to "on the job experience" as the business unit does not manufacture or have intellectual properties (IP). Respondent 10 highlighted that experience earns the team credibility and the ability to address "the issue from a responsibility point of view, not just the dollars and cents point of view" allowing the team to see the bigger picture in terms customer value and potential to grow the business against the strategy rather than just being transactional.

Respondent 12 highlighted that "the power of the intrapreneur is to execute, and that will result in success" but it "does not mean you get the right products. It could mean that sometimes we set to be implemented, but the product had low uptake by the market", which means the plan needs to be undertaken whether the market accepted the results or not. With regard to intrapreneurs being problem solvers; they "solve a problem" by going "the full circle and then commercialise the solution". Respondent 6 cited that an intrapreneur should be able to sell his or her idea and obtain the resources to commercialise it. This respondent further highlighted that "in the end, you still need that same drive to make things happen as with a normal intrapreneur" for the business to realise the results. The organisational ethos of "*maak 'n plan*", highlighted by many respondents, encourages the team to make a plan and "solve the problems" in order to execute the business strategy.

5.3.5 Research Question 5:

Aimed at understanding the ideal structure to enable intrapreneurship and innovation to enable the transformation of a large organisation.

This research was brought about crafting the ideal situation from the views of the respondents about the co-existence of innovation and intrapreneurship in a large and listed organisation. It was, therefore, built on what the respondents cited to be necessary for the organisation to create the duality of intrapreneurship and innovation to transform large corporations. It mainly relied upon the findings of interview questions 1,2, 3, 4, 8 and 9 (Table 2 in section 4.7), especially where the respondents indicated that shortfalls of the organisation concerning innovation and intrapreneurship and their opinions of how the organisation should encourage them. The

researcher honed in on the shortfalls' respondents highlighted in interview question 9 with regard to what is required for a possible relationship between intrapreneurship and innovation strategy execution in the large organisation.

Table 8 highlights the frequency of the codes from the findings, and it shows that there were more codes related to this research question than Research Question 4 in total. It also highlights that all the respondents interviewed had some opinion on how intrapreneurship could co-exist with innovation in the large organisation. The results show that 93 grounded codes were generated out of the total codes of 1149, which is the total codes for the 12 transcripts coded. The executives' results show slightly highly code frequencies than that of the senior management.

Table 8: Codes Frequencies for Research Question 5

	Codes Frequency		
	Executives Gr=536; GS=5	Senior management Gr=613; GS=7	
Innovation Intrapreneurship co-existence in large organisation Q9 Gr=93; GS=4	51	42	93
Totals	51	42	93

Respondent 4 stated that the business grew because of intrapreneurship over the years, and respondents 1, 2, 5, 7, 10 and 11 highlighted that growth could be obtained through innovation, although respondents 6, 7 and 10 mentioned that intrapreneurship and innovation were required to expand into "new geographical strategic regions". The respondents cited that "bringing a leader" who creates an "entrepreneurial environment, who will also drive innovation and intrapreneurship" as a business strategy is vital for the organisation. Most respondents highlighted that "a leader in an organisation ... has to create the time and space and resources for people to be creative". Some of the respondents agreed with respondent 1, who mentioned that

"the Group being a publicly-traded company, we have so many governance requirements. None of those governance requirements allows for intrapreneurship if anything. It is the opposite of that". The organisation strategy, structure and culture should, therefore, allow for intrapreneurship, concurred respondent 1.

“Have to be very entrepreneurial ... because there is no textbook answer on how to deal with those problems. The point being ... people who are entrepreneurial look at innovation as being a framework. I'm saying that intrapreneurial people ... need the time, and space and ... the accountability, the ability to go and be intrapreneurial, but they do not require a framework. Whereas most innovative people, scientists, engineers, those kinds of people who are more structured minds, more specific backgrounds, they tend to require a framework because they need to know in the value chain, where do I hand off my thinking?", cited respondent 11.

The boundaries for intrapreneurs to be set; suggested respondent 4, and respondent 2 cited that "often you need rules to be innovative, but that does not mean many rules create innovation". Some respondents alluded that the rules were to be guided by the innovation strategy to ensure that a listed organisation still complies with governance. Respondent 6 highlighted that this approach will avoid people leaving to "start their own thing where there's less legislation, less rules, less boxing", which is a loss for the organisation, and further cited that the business "has to balance the requirements of being a big corporate listed entity, with taking calculated risks to grow and expand".

5.3.5.1 Creature an environment for intrapreneurship and innovation

The respondents highlighted the need to create a platform where everyone "down to the shop floor" could bring forward their innovative ideas to the organisation. The platform can stimulate and "empower the employees to have an outlet for them to voice their intrapreneurship", which the business realised when running it in one business unit. Such platforms tend to allow "alternative suggestions and things people tend to have" and could create a collaboration culture, highlighted respondent 1 who further stated that "we identified the need to really do some culture work" in order to "collaborate" and "innovate". The Group intends to drive the initiative that allows "managers understand how to manage people differently ultimately", which is addressed through the "culture change initiative" taking place; cited respondent 1. Respondent 9 highlighted that "the Group is also looking to be a lot more collaborative, which certainly helps, and it will help with entrepreneurship and innovation".

There is a "huge push from group level to be more innovative and to do things differently, than we have done them before", and to "measure because we have never done that before. We have to do that because we need to be able to look at each other and not have a theoretical discussion" so the business can quantify what has been achieved; cited respondent 10. This respondent

further mentioned that "some aspect of innovation must be quantified to sell" and to be measured and create an environment whereby we can ask "what are the stumbling blocks? What are the issues? However, you come from a perspective of how we can improve".

Respondent 11 added that the right environment eliminates the situation where "you have got some guy with an idea", and he "gets shot down", and he then keeps to himself and only does what is in the job description. Respondent 1 highlighted that "what is missing in most organisations ... those guys who have worked out what it takes to be able to pull it all together, get like-minded individuals, and think together to be able to take this thing forward". This respondent stated that culture is "something that you build over a long period", and respondent 11 cited that it will require "discipline" to change it.

Most respondents highlighted that "the Group" has always been intrapreneurial", but most of them cited being slow in "innovation" and the lack of "clear" and "documented innovation strategy" being factors for the slow growth for the organisation. Historical "legacies", which included "no formal performance management system" as a deterrent for innovation.

"What is ultimately considered important in terms of reporting, in terms of activity, in terms of all, is the strategy you have. All too often ... the odd word tossed in about is entrepreneurial thinking, the metrics of performance, it is how businesses are run", cited respondent 7.

The respondents highlighted that it "is very difficult to cover the current governance and to keep that entrepreneurial flair" and "very often people contrast intrapreneurship with governance" which required a mechanism to manage these competing activities, which are vital for the growth of the organisation. Respondent 4 stated that the business has been very intrapreneurial and "never had any controls in place", until becoming "a listed entity", and now "governance or regulations restrict risks intrapreneurs bring in a large company".

Respondent 1 highlighted that the company has grown from "300" to "over 4000" employees over the years and is now operating in "diverse countries" and that leads to lots of controls to adhere to governance. Nonetheless, this respondent highlighted the need for the organisation to increase the rate of "innovation" and for innovators be allowed to "fail quickly" and "fail small", which most respondents thought could be brought about by encouraging an "innovative environment", whereby the "platform" is created for employees to "bring their idea", "recorded", "tested", and "commercialised" even if they are commercialised by different people, as respondents 1 and 5 described "not all innovators can execute". The business to define innovation targets in "the

innovation strategy", which should be communicated to all, "measure", "recognise", and "reward" for "innovation" and "innovators" for the innovation culture to thrive.

5.3.5.2 Create a separate team or structure for innovation

"The Group being a publicly-traded company" brings "quite improperly acceptable bureaucracy" that makes it challenging to ignore governance and solely drive intrapreneurship, although intrapreneurs do find "ways out to circumvent them". "What are necessary structures in the business for innovation?", asked respondent 1, although it sounded like a rhetorical question. "People just get frustrated because they do not know where to go" concerning innovation, and "people are stopping to innovate because they run into barriers", highlighted most respondents.

Respondent 1 found that "creating a separate team", a team that innovates and the team that implements innovation, may allow the leader to "remove the barriers" to innovation and "this is a stage approached innovation". Respondents 1 and 11 cited that "your existing teams that do not buy into it necessarily, or they take a potentially rejected idea", which they saw as a problem. The innovation team "do not want to have these boundaries within which they have to operate", especially when innovating around "the business of tomorrow and the business of the future" cited respondent 3. "People who are used to the old way of doing things", will carry on with "problem-solving" as they "get frustrated" when told to innovate for the future. The business to

"decide, do you want to have them innovative parts of the business or teams or departments that are there to go in innovation, and if it works, then integrated back into the business", cited respondent 1.

This respondent further mentioned that the innovation team could act as a third party to test development and test the idea, while the rest of the team is running the usual business. This respondent cited that:

"you need external parties to go and test ideas, test innovations, test concepts, and if it works, we integrate it back into the business, I think Microsoft AX was probably one of our biggest successes in a way it was rolled out. Let us go for the smaller business tests that there... We realised we made mistakes and it got better as AX evolved into business I believe".

"I think we do in the business to a certain extent. Not that much, but more on an ad hoc basis, not having dedicated people to that function. However, I think that could help the business quite a lot by having these dedicated people who maybe do not have all the other day to day

issues that are going to prevent them from being innovative and intrapreneurial"; cited respondent 9.

"you need to break out the innovative technologies to make sure that they have the support structure when you put them out into the market, and it also helps you to measure it as well. The pipeline opportunities, and the hit rates", cited Respondent 11

The "stage approached innovation" to allow "things will fail quickly" and "fail small" and to "move quickly" as "one of the problems with innovation is it happens". Some divisions have "seen the benefits, but it is all about balance" and "empowered and accountable people" as stated by respondent 6. The leadership to align mindset and "the culture" as "culture is really important to underpin the nurturing of innovation" and "try and foster an environment where we implement" innovation and measure its "commercialisation".

A separate structure to avoid the situation whereby "those people with the bright ideas and supreme motivation are just lost in the system", "and they get frustrated, and the organisation gets frustrated with them" and "we really ended up in a lose-lose place". It must allow the "idea to be tested through the system, and it is either accepted or not". Avoid the "structure and that hierarchy" that will stifle innovation, and ensure you give them clear strategy, allocate them resources and measure the output, as highlighted by respondent 6.

"You need an environment from a leadership perspective and a management point of view that fosters and grows intrapreneurial type thinking practically; operationally, you need the capacity and the capability, finance, structures, all that stuff in place to allow to happen". "If we do not feed this business currently with those kinds of people, this will start; we will reach the top quickly, and then quickly we will move down". - respondent 10.

Respondent 10 further added that intrapreneurship should be "like an ethos within the business", and the business should understand the strategy will never be perfect, and the business is prepared to fail quickly" concerning innovation. Respondent 7 cited that those two, "intrapreneurship and innovation" are the reason our business unit have "succeeded", exceeded targets "year-on-year" and grown into "new geographical areas".

5.4 Results Conclusion

The findings highlighted that the business has intrapreneurs in various levels in the organisation, and they use them to differentiate the business. Some respondents highlighted that is a business strategy in place which incorporates innovation as a tactic to compete in the market. There were concerns by many respondents that there was no clear indication in the strategy, where it was in place, on what innovation the business will undertake. the respondents however highlighted there are innovation activities, either incremental or disruptive, taking place in the organisation, but there is a need for more innovation and to innovate faster.

Most respondents highlighted that they can differentiate between strategy and successful strategy execution with windfall profits. This however echoes that windfalls happen while the business is executing the strategy. They therefore indicated that windfalls are not luck, but opportune business that the business realised in the areas or products it chose to play in.

Few respondents could clearly cite that there is a relationship between intrapreneurs' involvement in the business and innovation strategy execution. Others highlighted there is no relationship between intrapreneurs and innovation strategy execution, and they cited separation of duties as the reason. Bureaucracy and governance were highlighted as inhibitors for intrapreneurship and lack of collaboration was highlighted as one of the aspects that hindered innovation in addition to the lack of a documented innovation strategy in place. The respondents highlighted the need for leadership to create an environment that is conducive for intrapreneurship and innovation.

6 CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

This chapter discusses the findings in Chapter 5 in detail and uses the literature covered in Chapter 2 to support and/or contrast the findings related to the research problem. It further aims to establish whether the findings in chapter 5 address the research questions in Chapter 3. This chapter will use the findings of the research and the literature review in chapter 2 to establish whether there is an ideal model, organisational structure and environment that can enable the co-existence of intrapreneurship and innovation to drive successful innovation strategy execution for the transformation of a large, diverse organisation.

6.2 Research Question 1 Discussion

What is the organisation's understanding of intrapreneurship, and does it have intrapreneurs?

6.2.1 Organisation Strategy and Alignment

The focus of research question 1 was on the understanding of the definition of intrapreneurship, and how the business could use intrapreneurs to differentiate the business and on understanding whether management knew who the intrapreneurs were in the business. In order to understand the view of the respondents on this research question, the researcher sought to understand whether intrapreneurship was part of the organisation's strategy. All the respondents agreed that it was and said that they were familiar with company strategy (Baruah & Ward, 2014; Duncan et al., 1988; M. E. Porter, 1996). The results indicated that without defining the strategy, "the goal", intrapreneurs becomes dependent, and they "form part of the "ants" which "the business cannot afford" in the competitive market (Baruah & Ward, 2014)

The study found that "strategy does not need to be perfect" but the business must be open to adapting it, which is the message Sull (2007) highlighted, especially for the changing economic

market. The findings indicate that intrapreneurship has been part of the organisation's ethos and coined; "that is what this business does" (Baruah & Ward, 2014; Deprez et al., 2017). The results highlight that organisations attract and employ intrapreneurs; i.e. those people who "identify problems" and "make a plan" to "solve problems". Cadar & Badulescu (2015), Selden & Fletcher (2015) and Duradoni & Di Fabio (2019) highlighted that intrapreneurship is part of solving problems and "market sensing" which confirms the findings of this research.

The study echoed that the lack of the strategy in the business could be a deterrent to a point where intrapreneurs leave an organisation. Baruah and Ward (2014), Frank et al. (2016) and Neessen et al. (2018) highlight that it should also be a business strategy to retain intrapreneurs as much as to attract them. Although governance was echoed as a contrast of intrapreneurship, Heinze & Weber (2016) cited it as "institutional bureaucracy" and Ungerer (2019) cited that it is a risk control measure which the business needed to manage without hindering the strategy, intrapreneurship. The study established that the business's strategy is to expand globally and into "new geographical regions", which Dai, Maksimov, Gilbert, & Fernhaber (2014) assent that intrapreneurship is vital in competing in the complex global context.

6.2.2 Intrapreneurs and their Traits

The researcher observed discomfort from participants when they were first asked about the meaning of intrapreneurship and could confidently note that although intrapreneurship is well-researched topic as Cadar and Badulescu (2015) cited, the term was not that familiar to all the participants. Although once the participants warmed to the concept, they became comfortable to an extent that they even named intrapreneurs within the business. The study found that the organisation believed that "*maak 'n plan*", an Afrikaans term that means to "make a plan" to solve problems, is the intrapreneurial ethos the business was built on (Duradoni & Di Fabio, 2019).

There was a common understanding of the meaning of intrapreneurship in an organisation and the interpretation that intrapreneurs are innovative people who make plans to "solve problems" in agreement with Duradoni & Di Fabio (2019). Neessen et al. (2018) cited that intrapreneurs' traits such as "innovativeness, proactiveness, risk-taking, opportunity recognition/exploitation and internal/external networking are important behavioural dimensions of intrapreneurship" (p. 1). These are the traits mentioned by most participants as reported in section 5.3.1.4. There was a notion that intrapreneurs are innovative individuals within an organisation (Ibrahim, 2016). The

intrapreneurs' "agility" and their ability to "recognize and then capitalize on an opportunity" for the customer's satisfaction while meeting the company's goal was honed in on (Neessen et al., 2018).

The findings indicated a balanced view of the presence of intrapreneurs in the organisation and the view that the business uses them to differentiate the organisation from its competitors. The study found that the business deliberately attracts and recruits intrapreneurs and there was an indication that the business could 'use them better' and 'it wants more of them' to grow (Duncan et al., 1988; Dai et al., 2014; Neessen et al., 2018). Nonetheless, the study found that the organisation, especially the business units operating globally, utilises intrapreneurs successfully for geographical expansion (Sull, 2007; Aparicio, 2017; Selig & Baltes, 2017).

The findings indicate that some of the executives did not have views that stood out about intrapreneurship other than "everyone is innovative", which is a point the researcher could not find literature to support or contradict. The study established that the organisation found it challenging to drive intrapreneurship due to governance and "lack of collaboration" by divisions (Morris et al., 1994; Hattori & Lapidus, 2004). The need to balance the risk associated with intrapreneurship versus governance was identified, but there was no clear distinction as to what the balance should be. However, there was a notion that governance "stifles intrapreneurship" in the organisation, which Heinze and Weber (2016) alluded to by highlighting bureaucracy as a main killer of intrapreneurship.

The study found that business deliberately "employs" and "attract" intrapreneurs, which speaks to the emphasis laid down by Frank et al. (2016) and Deprez et al. (2017) on the careful selection and structured training and development of intrapreneurs by the organisation to develop competitive organisational capabilities. Intrapreneurs' traits identified were "risk-takers", proactiveness and innovativeness (Neessen et al., 2018). Buekens (2014) highlights that "innovation means questioning the status quo" (p.585), which corresponded to the findings that intrapreneurs are "nonconformists" who "challenge the status quo". There was a notion that they had the best interest of the company at heart and they would do whatever it took to reach the company's goal (Buekens, 2014).

The research findings concur with Duncan et al. (1988) that intrapreneurs are 'rare' and emphasises that the business must nurture them. Neessen et al. (2018) cautioned that intrapreneurship could not be assessed outside the organisational context. The reason being some of the factors cited such as lack of clear organisational strategy, managerial support and

business structures could impact intrapreneurship (Cadaru & Badulescu, 2015; Selig & Baltes, 2017).

6.2.3 Intrapreneurs' Levels in the Organisation

The research identified that intrapreneurs are present in different levels of the organisation's value chain due to the business deliberate intent to solely recruit them (Frank et al., 2016; Neessen et al., 2018), although they frequently cited the middle to senior management levels. The findings indicated that business believes that intrapreneurs are in their "sales, supply chain, procurement, and technical" functions. Some of the findings indicated that, given the opportunity and the "right platform", people on the "shop floor" level are innovative and they bring about solutions that address both their problems and business efficiencies, which agrees with Neessen et al. (2018) who cited that intrapreneurship is usually present from the bottom-up in an organisation.

The study found that the business identified its "country managers" as intrapreneurs that the business utilised for global strategic expansion due to their characteristics of appetite for risk and agility which confirms the findings of the literature on intrapreneurs' use in business venturing (Dai et al., 2014) and their ability to execute strategy (Duncan et al., 1988).

This study found that the business believed that there is a need for the organisation to encourage intrapreneurship at lower levels of the organisational structure to create a platform for employees at that level to bring forward their ideas and be developed to improve the overall OE, which is supported by Frank et al. (2016) and Deprez et al. (2017).

This study identified a strong leadership requirement at all levels of the business as the possible driver to ensure the EO required, which is supported by Buekens (2014) and Selig & Baltes (2017) who cited the importance of the right leadership to encourage and manage the plurality intrapreneurship brings in a large organisation. The study found that the organisation had recently embarked on culture change and awareness training aiming to equip "managers to manage differently", which supported the notion cited by Baruah & Ward (2014) highlighting that intrapreneurship has become a management issue in order to benefit and impact the organisation

6.2.4 How Intrapreneurs Differentiate the Business from Competitors

This study established that the intrapreneurs' ability to sense the market, identify customer needs, "identify and seize the opportunity" and assist the business to "expand geographically" is what was cited as their differentiator to its competitors who do not recruit intrapreneurs. The literature cites intrapreneurship in the organisation's strategy as a differentiator (Baruah & Ward, 2014; Heinze & Weber, 2016). The intrapreneurs' ability to sense the market will, therefore, enable the business to adapt its strategy as the market changes (Sull, 2007).

The real value of intrapreneurship was said to be realised "when times are tough" and when "it is a buyers' market", which is explained by Heinze & Weber (2016) emphasising that intrapreneurs have tactics to innovate response when under external pressure. Buekens (2014) agrees with the notion that intrapreneurs innovate to solve problems, and they are credible, which is part of the findings concerning how they differentiate the company from the competitors. This study found that intrapreneurs can be disruptors, i.e. "game changers" in new territories or markets, and they offer the business an opportunity to pivot and grow as they are not always bound by detailed corporate procedures (Baruah & Ward, 2014).

6.2.5 Summary of Research Question 1 Discussion

Collectively, this study found that there was a balanced view on of the presence of intrapreneurs in the organisation and that the business believes that they use them to differentiate the business. Their clear differentiator was in the geographical expansion of the business, which was mainly in the mining division and the fertiliser's international business unit which ties in with Selig & Baltes (2017) view for the need of intrapreneurship when operating in changing markets and where global competition is fierce.

It can also be summarised that this study found that the senior management in both mining and fertilisers wish they could use intrapreneurs better to grow the business, which is what most literature cites as the benefit of intrapreneurship (Baruah & Ward, 2014; Buekens, 2014; Frank et al., 2016; Deprez et al., 2017). The study found that one of the executives did not have much of an opinion that stood out about intrapreneurship other than "everyone is innovative", although Zhao (2005) refutes this statement by citing that "innovation is viewed as everyone's responsibility, and as the source of every employee's job satisfaction", (p.35).

6.3 Research Question 2 Discussion

Discern how the organisation understands and leverages innovation
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The researcher observed hesitation and reflection when the researcher asked question 4 from the interview schedule (Appendix 8), which sought to understand the view of the respondents on the organisation's approach and definition of innovation. It became even harder for respondents to articulate how an innovation or whether innovation is incorporated into the business strategy. The research's approach was that innovation should be intentional and should be part of the organisational strategy, as Baruah & Ward (2014) emphasised. The researcher kept the theory of intrapreneurship separate from innovation for this study as the researcher understands that the business can choose to undertake innovation, but not use intrapreneurship as a vehicle, although intrapreneurship is a subset of innovation (Baruah & Ward, 2014). As highlighted in Chapter 2 of this report, this study focused on the duality of the incremental and radical innovation in the large organisation to understand the research problem.

6.3.1 Innovation Definition & Strategy formulation

Baruah & Ward (2014) emphasised the need for the strategic alignment of intrapreneurship and innovation to the firm's goal and "within their key strategies" (p.7). The study found that not all the business units have documented innovation strategy aligned to the organisational strategy and where there were innovative activities, there were not documented and communicated throughout the organisation. Papachroni, Heracleous, & Paroutis (2015) cited an exploitation and exploration approach through incremental and discontinuous innovation as a business practice on innovation to become competitive in the market.

This study found out that the organisation has decentralised R&D to allow each business unit to innovate to solve problems in their specific areas, which Selden & Fletcher (2015) and Duradoni & Di Fabio (2019) support by highlighting that entrepreneurs identify and solve problems through innovative ways. It was found that the organisation, the corporate/group, has developed and documented the innovation strategy and that not all the business units have an innovation strategy

which they can follow. The group has recently started driving the new strategy, in which innovation is central, which is what Baruah & Ward (2014) were concerned about if everyone was not familiar with the organisation's innovation strategy.

The study found that the innovation strategy formulation was mainly derived by executives which defeats the need for diverse input from different skill sets and knowledge to be leveraged when formulating a strategy that is implementable (Harreld et al., 2007). There was no indication of frequent reviews of the innovation strategy, but that was a limitation on the side of the researcher as no probing questions were put to the organisations concerning how often the strategy was reviewed. The indication that the business highlighted was taken as is, which was once a year when the budget and a performance review took place.

The study found that the business tends to hold back the strategy with the aim of perfecting it and this, therefore, leaves the organisation unclear as to what direction the business is taking thus affecting the opportunity to adapt to necessary changes and execute the strategy (Porter, 1996; Sull, 2007).

The study identified the three types of innovation that the business understood which were "continuous innovation", "transitional innovation" which they call it the innovation of tomorrow and "disruptive innovation" in the products and services. This is explained by Baruah & Ward (2014) when citing that innovation has extended beyond intellectual property or novel technology, which are usually the products of R&D and now exists in product, process and services. Pedersen, Gwozdz, & Hvass (2016) agree with the findings that highlighted that innovation adds value to the business and customers.

6.3.1.1 Incremental innovation

This study found that the business' manufacturing facility incrementally innovates by introducing product extensions and improving efficiencies in order to meet customers' need and to remain profitable (Burgelman & Sayles, 2015; Smith, 2014). The fertiliser industry was found to be mature at the core, had high-cost investment in assets and was found to focus on continuous innovation to improve customer value and to remain competitive (Bocconi, Kampylis, & Punie, 2013). It was further established that employees were innovating to make their jobs easier; for example, an employee at the bagging plant who devised an innovative solution to reduce the manual loading of the bags and improve the speed to meet targets (Ahmed, 2002; Zhao, 2005).

The study found that the value-add realised through incremental innovation was for customers' satisfaction from an increase in the product range through product extension and the company used its core competencies to exploit this innovative approach as part of the strategy Papachroni et al. (2015) recommended for large organisations. The study did not find any major discontinuous technology used in the large production facility, which contrasts with what Papachroni et al. (2015) and Heinze & Weber (2016) emphasise about the need to practice both incremental and discontinuous innovation for the business to remain competitive.

As part of the incremental innovation, the study established that the business believes that 'discretionary effort' is a type of innovation and it is vital to business performance. However, Sundry (2011) cites discretionary effort as the increase in level of engagement and commitment an employee has towards the organisation which the study highlighted as when an employee goes "beyond what they are paid to do", which seems to hold some similarity with the attributes of intrapreneurs. This author highlights that discretionary efforts improve organisational effectiveness. Neessen et al., (2018) highlight that an increase in employee's discretion comes with "employees being relied upon to be flexible, proactive and innovative" (p. 2), although the researcher does not necessarily see discretionary effort as being a type of innovation that an employee can bring into the organisation, but as a value necessary for all employees in the organisation.

6.3.1.2 Disruptive innovation

This study found that the business units operating in the global market were involved in the exploitation and exploration of innovations which is a paradoxical approach to innovation (Papachroni et al., 2015). The business uses incremental and discontinuous (disruptive) innovation to compete in the dynamic global market through which they develop and offer a new products, technology and services (Zhao, 2005). Zhao (2005) cited that innovation has moved from creating something and now covers various aspects including products, services and discontinuous or disruptive innovation.

The study further established that the business' fertiliser international division had adopted organic / environmentally friendly products and technology to disrupt the global market. This strategy is directly the opposite of the local fertiliser business unit strategy. The Fertiliser international business unit has acquired a disruptive technology company to extend its product offering (Dai et al., 2014). The study found that this business unit could compete directly with their local fertiliser business unit with the increase in the demand for green products, which introduces

a paradox of the competing poles of incremental and discontinuous innovation (Papachroni et al., 2015). Baruah & Ward (2014) and Heinze & Weber (2016) highlighted that this was vital for organisation competitiveness.

The study also found that the mining division uses disruptive technologies and services in the explosives and mineral processing market. The explosive division was found to be innovating faster than customers could adapt to their electronic new technologies. The study established that this business unit was innovating to develop the market as their strategy was to stay ahead of competitors in blasting technology and identify opportunities for their technologies (Porter, 1996). Some of their new technologies seemed to be cannibalising their existing product offering, but the team deemed it necessary to stay ahead of technology due to the global competitive space they operate in and their product offering which enabled them to break into new territories (Dai et al., 2014). The study noted the concerns regarding the slow rate of strategy execution. Hence, the business has not realised the return on innovation spend (Baruah & Ward, 2014) although innovation seemed to be a strategic intent for the mining explosive and fertiliser international business units (Anthony et al., 2016).

6.3.1.3 Innovation definition & strategy formulation discussion summary

In summary, the study found that executives formulate the innovation strategy which is then sent through to the divisions for them to formulate their divisional and business units' strategies aligned to the group strategy. Not all the business units sampled in this study had a documented innovations strategy, although they used innovation as a tactic to compete in the market.

The study further established that the mining and fertiliser divisions were found to leverage their resources to exploit and explore innovation for the businesses, and this exploration through innovation has achieved diversification and ventures into new markets. The study has established that the organisations' divisions are prepared to disrupt their own business by using discontinuous technologies and products in the market they are not currently operating in which confirms Zhao's (2005) emphasis on the interplay between incremental and disruptive technologies in large companies.

6.3.2 Innovation Strategy and Execution

The study found that the business innovation strategy should cite the types of innovation the business wishes to focus on, and how (Aparicio, 2017). Although it was established that there is an innovation strategy in the organisation, it has not filtered through the divisions or to everyone in the business units (Burgelman & Sayles, 2015). Crittenden & Crittenden (2008) emphasise that strategy not clearly communicated defeats building a capable organisation, and some of the findings are that the business practices innovative tactics to compete. The study found that the business needs to monitor and measure the strategy executions (Baruah & Ward, 2014) in order to close the gaps while executing the strategy (Sull, 2007).

The study found that the fertiliser's international business units had a strategy to partner and to acquire companies that would bring necessary innovation (disruptive technology) to compete in the international market (Porter, 1996; Zhao, 2005; Aparicio, 2017; Urban & Wood, 2017). In executing the strategy, the business unit made the acquisitions, which included the addition of green fertilisers and technology to the core chemicals' fertiliser business (Joshi et al., 2014). This was seen as a possible future investment to replace the current core chemicals business. The study found the use of disruptive technology in business' agriculture's international market to reduce the impact of drought on the agricultural business (Joshi et al., 2014; Jie-hong et al., 2018), which was the organisation's response to global trends in the use of green fertilisers and technologies to counter market changes and to remain competitive.

The study found that the local fertiliser production business unit is involved in the execution of an incremental innovation strategy to improve the operations' efficiency that has made the business reasonably competitive. It has continuously introduced value for both customers and the business by addressing the changes required in the chemical fertiliser market to stay sustainable. The study found that the local fertiliser business unit was not interested in disruptive technologies as they have long lead times and mentioned that they already have large resources in place they believe they can always leverage.

The findings are that the fertiliser's international business unit is mostly focussed on disruptive technologies (green housers and drones) for the fertiliser and agricultural business, and they leverage incremental innovation on various products and services to supply countries neighbouring the local fertiliser production site in South Africa. This shows some collaboration in innovation between these two divisions, but the local fertiliser business unit does not utilise any of the innovations from their international business unit (Hattori & Lapidus, 2004).

In summary, the approach of the local fertiliser entity is to exploit, and the international entity explores innovation to enable the fertiliser division to compete globally (Papachroni et al., 2015). Heinze & Weber, 2016 and Papachroni et al. (2015) emphasise the dual approach to innovation, and the question is whether each business unit or business cluster within the organisation should embark on the dual approach or should they each choose one to avoid the paradox of the competing poles of exploitation and the exploration approach.

The study found that the mining division employed both incremental and discontinuous technology as a strategy (Heinze & Weber, 2016; Papachroni et al., 2015; Selig & Baltes, 2017) to remain very competitive in the market. The approach of products, service and technology and the explosive market had a big impact on new product and technology development. It was established that innovation did give the business advantage. However, not all mining business grew despite their aggressive approach to the discontinuous technology drive and the researcher cited the approach to managing the paradox of exploitation and exploration could have been the balance required to realise returns on innovation (Papachroni et al., 2015).

The study found the executives and senior management in both the mining and fertiliser divisions realised that innovation has not developed and commercialised fast enough. It was established that the Group, holding company, was not yet sure how to separate innovation activities for these divisions to expedite the rate of commercialisation, but the business identified low innovativeness as a serious business problem (Baruah & Ward, 2014; Kuratko et al., 2014).

The study found that where there was no written documentation on innovation strategy in three of the four business units sampled, but the business still innovates using a tactical approach to grow the business (Baruah & Ward, 2014). This highlights the company's response about having intrapreneurs and their link to innovation in solving problems. The study further found various barriers such as governance, bureaucracy and others which hindered innovation (Buekens, 2014; Heinze & Weber, 2016; Ibrahim, 2016). The researcher linked these challenges and gaps to management concern about not making reasonable progress in the execution of innovation.

In summary, the study established that it was not clear to across all the business units whether the businesses had a documented innovations strategy in place supporting the group strategy. Although four of the five executives alluded that innovation strategy was in place at the group level and in their business units, most at senior management level indicated there was none in place. This highlights a lack of communication or gaps in the business regarding innovation strategy (Crittenden & Crittenden, 2008). The study found that the senior managers were

concerned about who gets involved in strategy formulation, and Harreld et al. (2007) cited the importance of diverse team and collaboration of strategy formulation to improve execution. The study found that the organisation was concerned about the speed at which innovation was carried out and commercialised.

6.3.3 Performance Measured and Rewarded and the Link to Innovation

The study found that the organisation does not have formal KPIs in place. Nonetheless, the business has a basic conventional measure for business performance concerning safety, sales, volumes and profits which is the measure used for rewards, but this measure does not include innovation. The study found that the business units believe that the measure in place is to motivate for sales to improve business performance (Segalla, Rouziès, Besson, & Weitz, 2006; Maier & Iancu, 2016) and the business believed that innovation performance was captured in the sale of the innovative products and technology.

Maier & Iancu (2016) highlighted that incentives, in addition to management support, motivated intrapreneurs, and Kuratko, Hornsby, & Covin (2014) agree with reward as a form of motivation for intrapreneurs. Kaplan & Norton (2007) cited that innovation must be measured, recognised and be rewarded like the conventional business performance. Thomas (2009) suggested that business should use an intrinsic approach to recognise innovative activities and ideas in addition to other rewards and recognition systems.

It was established that the organisation rewarded the sales-related functions on the sales of innovative products and technologies in addition to their usual business performance (Kaplan & Norton, 2007). The other job functions involved in innovation were not rewarded or recognised, which refutes what the scholars have highlighted as being vital in encouraging innovation execution for the business to realise a return on the organisation's innovation investment (Ahmed, 2002; Kuratko et al., 2014; Maier & Iancu, 2016).

The study established that the organisation finds it challenging to get its sales team to sell innovative products because they easily revert to the usually known products and highlighted that they required more support in selling innovative products and services. Baruah & Ward (2014) encourage measuring the returns on innovation products in order to encourage the right behaviour and ensure that the innovation strategy is executed.

The study found that Innovation “creates value for the business and customers”, and hence Birchall et al., (2011) and Kuratko et al. (2014) emphasised the importance of managers measuring innovation and knowing the value of its investment. The study found the business rewards for the sales of innovative products and technologies by comparing the sales targeted, the returns (margins) and profits. The study found that there was a consensus that rewards were only given to those involved in sales which was said to possibly discourage innovative people who were not in the sales function. Some of the performance target indicators on innovative sales returns were "25% EBITDA from innovative products and services". The study also found that the business had previously recognised a non-sales team that was innovative through vouchers or by naming them on internal communication boards. This was found to be intrinsically satisfying to the individuals (Thomas, 2009).

The study also found that the fertiliser division rewarded the sales of innovative products (Birchall et al., 2011; Kuratko et al., 2014), but other innovators in the business were recognised publicly and those innovative individuals had improved business efficiencies. Kaplan & Norton (2007) highlighted the need to measure the subjective aspect of performance and recommended the balanced score card as one of the measures that could cater for subjective and qualitative measurement of performance.

In summary, the mining division indicated that innovation is measured and rewarded by recognising the sales and profit of innovative products and services (Birchall et al., 2011; Kuratko et al., 2014). The mining business had sales targets in place, which they measure and reward against. The study found that the mining business measures and rewards for innovation for the sales team are monetised (Kuratko et al., 2014; Segalla et al., 2006). Therefore there is a need to put measures in place and recognise innovative people and ideas throughout the business, and give some form of recognition and reward to motivate employees to continually innovate (Ahmed, 2002; Kaplan & Norton, 2007; Birchall et al., 2011; Kuratko et al., 2014).

The study found that the fertiliser and the mining divisions both rewarded and recognised the sales team for the performance of innovative products and service through the measurement of sales, profits and margin returns. The local Fertiliser unit was the only business unit that recognized individuals involved in incremental innovation solutions, such as in the supply chain or production, improved business efficiency and profitability, and it highlighted that the intrinsic rewards have proved to be more effective (Thomas, 2009).

The study found that some participants believed that people innovate to make their lives more comfortable, and believed that no additional rewards or recognition was necessary as employees were already compensated for it. This approach is what Kaplan & Norton (2007) and Birchall et al. (2011) discourage in executing the strategy as it does not motivate people to be innovative and the organisation will lose by not realising returns on innovation investment.

The study found that the organisation acknowledges that innovation measurement and rewards are not adequately included in the current performance measurement, but the business will incorporate them into the KPIs that are being developed to support the innovation strategy in place.

6.3.4 Research Question 2 Discussion Conclusion

The researcher concluded that not all the divisions have an innovation strategy in place. The business units operating globally, the Mining division and Fertiliser international, utilise both incremental and disruptive technology to stay competitive, which approach Heinze & Weber (2016) cite as vital in competing in the complex and global platform. The organisations' local fertilizer production site practices and benefits from incremental innovation by improving efficiencies, but are oblivious to exploring discontinuous innovation which is a blind side for the business. Despite varying views, the fertiliser division, i.e. the local business unit and international business combined, play a role in both the incremental and disruptive technologies, products and services market, which is the plural strategy Papachroni et al. (2015) and Heinze & Weber (2016) cite for the transformation of the organisation.

The study found that the mining division and chemicals and explosives business units combined exploit and explore incremental and disruptive technologies. Although the explosives business is mostly involved with disruptive technologies, while mining chemicals is in the disruptive services arena, they both use a plural innovation strategy (Heinze & Weber, 2016; Smith, 2014)

The innovation performance measure drives the sales of innovation in the business units operating globally. However, this study found that the organisation does not recognise most of the innovative people, but rewards the team involved in the direct sales of innovative products, technologies and services. The study also established the need to improve and increase innovation activities and their commercialisation through any possible measures for the

organisation to become more competitive (Birchall et al., 2011; Kaplan & Norton, 2007). The study further cites that the business needs to communicate and measure innovation strategy execution in addition to the current measures of business performance (Ahmed, 2002; Bauwn, Locke, & Kirkpatrick, 1998; Dess, Lumpkin, & McGee, 1999; Buekens, 2014; Sull, 2007; Kuratko et al., 2014).

6.4 Research Question 3 Discussion

Understanding of windfall profits versus strategy execution

This study found that the organisation is aware of the difference between profits made due to successful strategy execution and the impacts of windfall profits on business performance. It was found that the organisation has implemented the business intelligence (BI) systems, Microsoft AX and Power BI throughout the organisation, which strengthen Ahmed's (2002) case about the importance of information systems. The BI system was said to allow the organisation to view the business performance in all the business clusters and also identify where the gaps are which is useful when deriving or updating the business strategy (Sull, 2007; Foley & Guillemette, 2017). Foley & Guillemette (2017) highlight that the BI systems allows the enterprises to "report business performance, uncover new business opportunities, and make better business decisions regarding competitors, suppliers, customers, financial issues, strategic issues, products and services" (p.1). The organisation's BI system can distinguish between the business performance due to strategy execution and windfall profits.

This study found that the business recognises windfall profits as opportunistic business gained by "being in the right place" when executing the strategic choices of the organisation (Foley & Guillemette, 2017; Verbruggen, 2008). The organisation strategic choices identified were the countries the mining and the fertiliser divisions operate in, which include the Democratic Republic of Congo [DRC], Australia, Zimbabwe, South America and others, and the products, services and technologies these divisions offer the market. The study established that the mining divisions have realised windfall profits in the strategic countries they operate in due to the increase in demand resulting from global commodity price changes which the market dictated, although one

of the mining business units indicated they had not realised windfalls since 2015, which led them to question the validity of their current strategy (Sull, 2007; Verbruggen, 2008).

The study established that the fertiliser division has made acquisitions globally to compete in green fertiliser technology, which favours the business in territories where organic products are in demand over chemical fertilisers, and it gives the business vast opportunities to play in various countries, in some cases even to compete with its own products in addition to its competitors. The fertiliser division business, therefore, enjoys windfalls in the wealthy economies while the business in Southern Africa and other regions is faced with drought and extreme climate conditions not conducive to conventional farming (Jie-hong et al., 2018).

This study found that the business refutes that luck has anything to do with windfall profits but cited that market favours happen when the business is executing the strategy (Porter, 1996) and adapting the strategy as the market changes, which Sull; (2007) agrees with. It further found that the strategic positioning of the business (Porter, 1996) and executing the business strategy (Kuratko et al., 2014) and continually adapting by sensing the market and leveraging the company's capabilities and resources increases the windfall opportunities of the business (Verbruggen, 2008; Foley & Guillemette, 2017).

The study established that when the strategy is not adapted, the business may miss the windfall profit opportunities as it will miss the market changes and its benefits, or the organisation may misallocate the profits that should have been allocated to successful strategy execution to windfalls. Hence, Sull (2007) highlights the importance of adapting the strategy the business executed and Foley & Guillemette (2017) emphasise the need for BI systems to enable the organisation to assess business performance against the strategy.

In summary, the study found that the organisation can distinguish between business performance due to windfalls and successful strategy execution (Verbruggen, 2008). There were concerns realised that some business thrived on windfalls to meet budgeted profits annually and this was raised as a concern to the business. The researcher, therefore, saw that as a possible gap in adapting the strategy by the business frequently (Sull, 2007), which possibly gave windfalls more headlines that it should (Verbruggen, 2008).

The limitation identified for research questions 2 was that the researcher did not ask the business how often it reviewed its strategy, but instead relied on the indications on the budget and strategic choices are made annually. Hence, the researcher assumed that the strategy was revised once

a year when the budget was presented and approved by the group. Therefore, there may have been a bias that may have caused an oversight due to the researcher's knowledge of the business budget and the review cycles which may be incorrect in different business clusters.

6.5 Research Question 4 Discussion

Understanding the link between intrapreneurs and innovation strategy execution
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This study found that 50% of the organisation believed there is involvement of intrapreneurs in successful strategy execution, although the other half believed that there is no strategy in place for intrapreneurs to deliver against. Therefore, this question feeds from some of the findings from the research question 1, on intrapreneurs, and research question 2 on innovation strategy execution. Zhao (2005) and Heinze & Weber (2016) highlighted that intrapreneurship and innovation are central to the organisations' strategy for corporate venturing in order for the business to remain competitive. Hence the combined findings of intrapreneurship and innovation as the business strategy is vital in addressing the research problem.

6.5.1 Intrapreneurship in Successful Strategy Execution

The study found that the understanding of the organisational goal by intrapreneurs allowed the intrapreneurs to deliver against the company's expectations (Baruah & Ward, 2014; Buekens, 2014). Their broad thinking, 'ability to identify gaps and opportunities' and deliver against business expectations enhanced their chances of executing the business strategy (Baruah & Ward, 2014). The study identified the traits such as ability to 'solve problems', 'adding value to the customers and the business', understanding the 'capabilities and capacity in the business' and leverage their knowledge to seize opportunities (Harreld et al., 2007). These findings speak to the intrapreneurs ability to leverage the organisations' core competencies to develop dynamic capabilities to enable the company to compete in the complex market space through innovation, as Baruah & Ward (2014) cited.

The study has found that intrapreneurs use their 'job experience' and resources to deliver business performance (Baruah & Ward, 2014; Smith, 2014). Bierwerth, Schwens, Isidor, & Kabst

(2015) highlighted that business performance is linked to successful strategy execution. Although the study found that ‘the power of the intrapreneur is to execute, it was highlighted that it “does not mean you get the right product” or solutions. This highlights what Duncan et al., (1988) cited; i.e. they are the ‘dreamers who execute what the business requires’. Sull (2007) suggests that the business adapts the strategy as it executes it to close the gap in order to deliver performance.

6.5.2 Intrapreneurs in Successful Innovation Strategy Execution

The study highlights that intrapreneurs can be perceived to struggle to commercialise innovative ideas. This is supported by the view of Hjorth & Kuratko (2017) who cited that corporate strategy innovation is hardly executed and Ahmed (2002) who cites that the business environment and strategy are the cause of failure to execute innovation. It will, therefore, be agreed if there is no innovation strategy in place as alluded to in some cases, the business units do not have a written innovation strategy that can be implemented (Zhao, 2005).

Some of the findings of this study highlighted that there is no relationship between intrapreneurship and innovation strategy execution, which is contrary to the view of Duradoni & Di Fabio (2019) who emphasise the relationship between intrapreneurs, “self-capital” (intrapreneur development), innovation behaviour and innovation execution. The job description and governance were highlighted to be some of the main reasons for the lack of a relationship between intrapreneurs and innovation strategy execution as it brings about a separation of duties, and innovators are then not involved in strategy execution in most cases. This finding confirms the views of Baruah & Ward (2014), Buekens, (2014) and Kuratko et al. (2014) who highlight that job descriptions can stifle innovation as it restricts autonomy for intrapreneurs.

The study found that the success of the organisation in the foreign market with “sovereign risk” was due to the duality of intrapreneurship and innovation (Baruah & Ward, 2014; Heinze & Weber, 2016), and the country manager, intrapreneurs, were part of the acquisitions of innovative companies to serve the global market (Dai et al., 2014). The study, therefore, highlights that both the fertiliser and mining divisions execute the strategy using innovation and intrapreneurship for the global expansion of the business, but the pace at which the innovation strategy execution took place was echoed as not being sufficient nor fast enough to allow the transformation the business required urgently. These findings echo that without these two, innovation and intrapreneurship, they “will have no business”, which agrees with the views of Heinze & Weber (2016) and Selig &

Baltes (2017) on the importance on intrapreneurship and innovation when the business operates in a complex global market.

The study found that the future of the business depends on the ability to think differently about various opportunities”, which is intrapreneurship, as confirmed by Baruah & Ward (2014) who further cited that intrapreneurship has been established as a strategy for improving an organisation’s performance. It was further established that the organisations’ business clusters operate in silos and they require collaboration within the divisions to encourage and improve the rate of innovation output and execution (Ahmed, 2002; Hattori & Lapidus, 2004; Morris et al., 1994). Hattori & Lapidus (2004) cited that collaboration is one of the effective ways of bringing about breakthrough innovation in the organisation. The study highlighted that intrapreneurs are involved in innovation strategy execution, and the business delivers on innovation strategy through acquisitions that enable the offering of innovative products and technologies (Zhao, 2005).

6.5.3 Research Question 4 Discussion Conclusion

The study found that the intrapreneurs are involved in successful strategy execution and highlighted that their understating the company's goal is what makes intrapreneurs execute the strategy successfully. The study found that although the organisation has an organisational strategy, some of the senior managers believe that the business units have no documented innovations strategy which was contrary to the view of the executives.

It was established that few business units have an innovation strategy in place, but many use innovation tactics to improve business performance. The study found that the organisations believe the execution of the strategy is prolonged. Hence the business claims it has not yet realised a good benefit on innovation returns (Baruah & Ward, 2014).

The study found that intrapreneurs execute on innovation strategy and tactics to deliver business performance and enable the business to compete in the market (Baruah & Ward, 2014; Bierwerth et al., 2015; Heinze & Weber, 2016; Selig & Baltes, 2017). The results showed that three executives and four senior managers believe that there is a link between intrapreneurs and successful execution of innovation strategy or tactics. The study also found that there is a disconnection between intrapreneurship and innovation strategy execution due to the fulfilment

of job specifications, which creates silos due to the separation of duties as governance requirements (Ibrahim, 2016; Kuratko et al., 2014). This was highlighted to stifle the execution of innovation in the publicly listed organisation and the need to ease the bureaucracy was raised.

6.6 Research Question 5 Discussion

Innovation Intrapreneurship co-existence
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Kuratko et al. (2014) cited that “innovation is now widely recognised as the part to competitive advantage and success in organisations of all types and sizes” (p.44), and Baruah & Ward (2014) and Bierwerth et al. (2015) cited intrapreneurship vital in executing the innovation strategy. That essentially calls for establishing whether there is an ideal organisational structure, culture and environment that can hold intrapreneurship and innovation together to transform a large organisation, considering their known complexity (Selden & Fletcher, 2015).

This study found that the business needs to ‘create space where people working in different business clusters and teams’ are coordinated to derive innovation and intrapreneurs are included to enable commercialisation of innovative ideas. This agrees with the views of Duncan et al., (1988), Harreld et al. (2007) and Neessen et al. (2018). Baruah & Ward (2014) highlight that lack of systematic encouragement and empowerment of innovative actions can deteriorate innovation propensity” (p. 10), which is one of the concerns found in this study.

The study identified the need to ‘create an environment and a platform for everyone in the organisation to bring forth innovative ideas’ which will be filtered and recognised. It was established that intrapreneurship is key as intrapreneurs have the ability to execute, and therefore the platform to be for both intrapreneurship and innovation should become the ethos of the business (Baruah & Ward, 2014; Heinze & Weber, 2016).

The study highlighted ‘leadership and organisational strategy’ to be the business drivers in creating the necessary environment conducive for the pluralism of intrapreneurship and innovation for the longer-term success of the organisation (Buekens, 2014; Xenikou, 2017). As Deprez et al. (2017) cited, the study highlighted that organisations could realise growth through innovation and found that there is a link between intrapreneurship and innovation strategy or tactics execution, which Baruah & Ward (2014) agrees with.

The study established that the organisation recruited and attracted intrapreneurs over the years, and that is how it succeeded in the past (Baruah & Ward, 2014; Cadar & Badulescu, 2015; Neessen et al., 2018), but innovation awareness and practice have not become a feature of the business, although the study found that intrapreneurship is a subset of innovation (Baruah & Ward, 2014). The study further established that the organisation requires the 'duality of innovation and intrapreneurship' to transform (Heinze & Weber, 2016). Baruah & Ward (2014) echoed that in order to create an innovative environment, the organisation should be aware of the culture and the structure necessary.

The study found that at least 30% of the sample highlighted there is a link between intrapreneurs and execution of innovation strategy, as stated in the findings of the research question 4. In order to achieve the co-existence of intrapreneurship and innovation, the study found two critical aspects required; which is creating an environment for the duality of innovation and intrapreneurs and creating a separate team to innovate and another to execute innovation. The following aspects are the shortfalls, or the requirements highlighted by the study in order to create a successful duality of intrapreneurship and innovation to transform a large organisation:

The organisation is required to:

- create an innovative environment (Ahmed, 2002; Smith, 2014; Heinze & Weber, 2016), with leadership that creates space and time to encourage innovation in the organisation (Buekens, 2014; Xenikou, 2017)
- document innovation strategy, which is part of the organisational strategy, and must be clearly communicated and adopted by all in the business (Bauwn et al., 1998; Baruah & Ward, 2014)
- create an organisational structure and culture to support the innovation strategy (Ahmed, 2002; Buekens, 2014; Kuratko et al., 2014; Aparicio, 2017)
- avoid "job descriptions" as they "box people" and that hinders innovation, which is known to come from an autonomous space and structures that support innovation (Baruah & Ward, 2014; Kuratko et al., 2014)
- create structural separation to support innovation (Papachroni et al., 2015)
- incorporate performance measures, rewards and recognition to support innovation strategy execution (Kaplan & Norton, 2007; Birchall et al., 2011; Kuratko et al., 2014; Kvaløy, Nieken, & Schöttner, 2015; Sumo, van der Valk, van Weele, & Bode, 2016)
- continually review and adapt the strategy that the business executes (Sull, 2007).

The study found that organisations that stifle intrapreneurship and governance could be an anathema to intrapreneurship. Although Ungerer (2019) highlights governance as a risk mitigator for a publicly listed company in South Africa, the scholar does not deny its bureaucracy. Hence, governance needs to be relaxed or balanced to enable the duality of innovation and intrapreneurship in the organisation (Selig & Baltes, 2017) and to allow internal venture capital funding to increase the investment in innovation as highlighted by Ibrahim (2016) for the growth of the organisation.

7 CHAPTER 7: CONCLUSION

7.1 Introduction

The researcher identified high churn rate of large organisation in the stock market as an industry problem, which Duncan et al. (1988), Christensen (2004), Dai et al. (2014) and Selig & Baltes (2017) cited as a result of lack of corporate venturing and transformation. Research cited that innovation is an enabler for the competitiveness of the organisation, and its execution could allow organisational growth. The research problem was derived from aiming to understand whether intrapreneurship, as an organisational phenomenon, could be used to drive the execution of strategy and innovation to transform large, diverse corporations in the fast-changing business environment. The research problem was derived as an industry problem, supported by literature that highlighted the difficulties that large organisations face to transform, which leads to their closure (Anthony et al., 2016).

A literature research was undertaken which identified intrapreneurship (innovation) as a possible strategic pillar for corporate venturing to enable the organisation to be competitive in a tough market (Baruah & Ward, 2014; Heinze & Weber, 2016; Selig & Baltes, 2017). The study focused on an organisation that primarily operates in the primary sectors, fertilisers and the mining as its main business, in South Africa.

A qualitative research approach was undertaken, with a case study design strategy, to collect data through semi-structured interviews with an aim to contribute to the body of knowledge on this topic, specifically in the large corporation operating in the primary sectors, mining and agriculture, in South Africa. Hence, the inductive approach was selected even on the conventional coding of the data collected.

7.2 Critical Findings

Research question 1: The study found that the organisation has intrapreneurs, and it has attracted them over the years to sustain its intrapreneurial flair (Neessen et al., 2018). The characters of the intrapreneurs cited included “risk-taking”, “market sensing”, “goal-oriented”, innovativeness and others (Duncan et al., 1988; Heinze & Weber, 2016; Neessen et al., 2018),

which the business highlighted as their differentiator in the market and the enabler for the company to expand in various geographical locations (Dai et al., 2014).

The business identified corporate governance, especially its requirement of separation of duties, as an aspect of bureaucracy that stifles intrapreneurship, but Ungerer (2019) cited it as a risk mitigation factor for organisations. Although the views of the respondents alluded that governance takes away the critical aspects for intrapreneurs, which are innovation and execution (Duncan et al., 1988), their need to establish ways to relax it and create an environment conducive to innovation was identified.

Research question 2: It was realised that innovation as a strategy is not vested across the organisation, and that creates challenges such as knowing the type of innovation the business should embark on and measures to ensure execution and to realise the investment returns (Baruah & Ward, 2014). There was a gap identified on measuring, rewarding and recognising innovation, and that could explain why the business complained about the sluggish development and commercialisation of innovation.

Some business units highlighted that the business mostly does not measure business performance concerning innovation, but Ungerer (2019) cited that it is vital to review the business' strategic goals and measure its success to guide the innovation strategy execution which is vital for innovation strategy renewal. It is therefore undeniable that the organisation has to include innovation measurement as the business performance measure to ensure it is executed.

Research question 3: The business understood the impacts of windfall profits on business performance, but it raised concerns about the execution of their strategy. The challenge was that strategy is not updated regularly, and the frequent windfalls and the tough commodity markets could be an indication that the business needs to update the strategy as the market changes (Sull, 2007). The lack of a strategy update could, therefore, result in the misallocation of business performance due to strategy execution and windfall profits (Verbruggen, 2008).

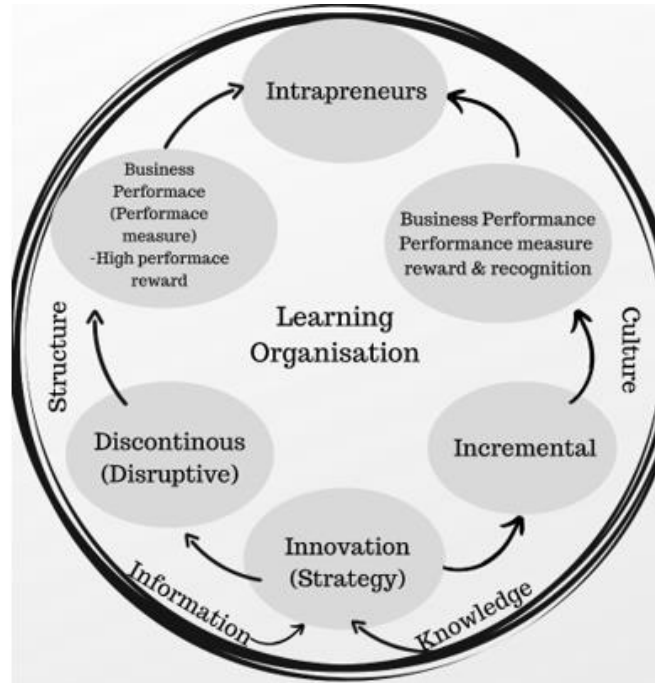
Research question 4: The business is aware of the link between intrapreneurship and innovation strategy execution, but the absence of innovation strategy in the business made it difficult for many respondents to answer the question confidently. Many respondents were left wondering how the business could approach innovation as a business strategy, and they highlighted that there was a gap in innovation strategy and execution in the business, although they tried to encourage intrapreneurship and innovative tactics to grow the business.

Research question 5: Considering the challenges the organisation faced regarding the paradox of corporate governance and intrapreneurship, the business echoed the need to create an environment that will enable innovation and intrapreneurship within the ambit of a listed company's requirements. The need for leadership was identified as critical in heading the innovation strategy and creating an environment conducive to innovation which rewards and recognises innovation to realise its return on investment. Innovation was cited to be a big challenge in strategy formulation and execution, the need to involve intrapreneurs more in exciting innovation structure was cited. The study highlighted that this can only be achieved through a different model where the business is centred around innovation as its core strategy, with the right leadership and conducive environment to enable the transformation of the large organisation to compete through innovation.

7.3 Proposed Framework

The major finding was that although the business claimed to have intrapreneurs, there was a large gap in the innovation strategy and activities. This highlighted the need for the organisation to have innovation as a strategic pillar of the organisation (Baruah & Ward, 2014; Heinze & Weber, 2016) and build around it by creating an environment, including the culture and the structure, that is conducive for innovation and then attract intrapreneurs to ensure its execution. The researcher created a framework (Figure 4) which aims to align the research findings and the literature in Chapter 2 to the research problem.

Figure 4: Proposed Framework: Dualism of Innovation and Intrapreneurship as Strategy for Transforming a Large Organisation



This framework highlights that innovation has to be a strategic centre of the business and the organisation to employ intrapreneurs and continually measure its intrapreneurial nature (Kuratko et al., 2014) to ensure it retains the environment conducive to innovation and intrapreneurship. The organisation has to measure the business performance concerning innovation and reward and recognise individuals to encourage and motivate for innovation, creativity and commercialisation (Birchall et al., 2011; Kuratko et al., 2014; Kvaløy et al., 2015).

To support this framework, the researcher recommends a performance measurement, reward and recognition for discontinuous and incremental innovation, whereby high rewards are awarded to risky disruptive technology execution which increases the rate at which the organisation will transform in the rapidly changing market (Sumo et al., 2016). The leadership is paramount to the success of the framework proposed (Buekens, 2014; Sarafidou & Xafakos, 2014) and the involvement of the employees is critical in executing the strategy, and it should not be ignored (Harreld et al., 2007). The framework requires an interactive and ever-changing process in the learning environment.

7.4 Implications for Management

Management has a challenge to formulate the innovation strategy and allow different views on the strategy (Harreld et al., 2007). They then have to decide how the framework (Figure Y) will be implemented, taking the organisational structure and culture into consideration. The business will lose intrapreneurs that the business has, and will cease to grow and eventually face closure should the business continue as is (Anthony et al., 2016).

7.5 Limitations of the Research

The time frame allocated to this research was short and more time could have allowed the researcher to immerse more in the topic and to observe the behaviours concerning the intrapreneurial flair the respondents indicated the business has. The sample should have included the middle managers to gain an insight into their views regarding the topic and whether they share similar concerns, or the views cited by the senior management and the executives on the topic.

7.6 Suggestions of Future Research

For future research, the researcher suggests that scholars investigate innovation as the centre piece of organisational strategy and how it can be incorporated into the organisation where corporate governance is vital, as in a publicly listed company. In addition, qualitative research is suggested in taking this topic forward in the same sector as it will include a cross sectional sample and provide more insight into this topic, especially in the sector chosen.

7.7 Recommendations

The researcher recommends that the business consider implementing the framework (Figure 4) developed for organisational transformation. The approach should be in stages and the points below are not set to be approached systematically.

- Innovation should be central to the business and intrapreneurs should drive it to ensure execution (Baruah & Ward, 2014; Heinze & Weber, 2016). Management is to ensure that innovation becomes an ethos of the organisation.
- The business should consider innovation as a strategic pillar of organisational strategy and drive down the innovation strategy into the divisions down to employees on the shop floor level. The organisation is to be clear that it will exploit and explore by using incremental and discontinuous innovation as the strategy (Papachroni et al., 2015), and it must have managers who can manage the paradox of the competing poles of these types of innovation.
- The strategy should be simple and clear, ensuring which markets, technologies and innovative products the company wishes to play in, and drive collaboration and culture as a first shift toward innovation (Hattori & Lapidus, 2004; Christensen, 2006).
- The business must be willing to train and re-assess current employees before placing them under either incremental or disruptive innovation functions (Figure 4 above).
- The business should create an atmosphere and platform conducive to innovation, such as think tanks, as other respondents highlighted, and reward and recognise innovation throughout the organisation.
- As Selig & Baltes, (2017) cited, the business should consider the dualism of innovation and intrapreneurship in the organisation, but “how the interface should be designed, plays a crucial role” (p.1) in its success. The Framework in Figure 4 is to be considered for interactions and should be frequently reviewed.
- The organisation should continually review the structure, and review and adapt the strategy to ensure it is executed successfully (Sull, 2007).

8 REFERENCES

- Aggarwal, A. K. (2018). Entrepreneurship as a strategic development intervention to transform the corporate culture and creating values. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.3184125>
- Ahmed, A. M. (2002). Virtual integrated performance measurement. *International Journal of Quality & Reliability Management*, 19(4), 265–671.
<https://doi.org/10.1108/02656710210421580>
- Anthony, S. D., Viguerie, S. P., & Waldeck, A. (2016). *Corporate longevity: Turbulence ahead for large organizations - Executive briefing*. Retrieved from <https://www.innosight.com/wp-content/uploads/2016/08/Corporate-Longevity-2016-Final.pdf>
- Aparicio, M. E. (2017). *Driving and inhibiting factors for intrapreneurship*. Norwegian University of Science and Technology. Retrieved from
[https://brage.bibsys.no/xmlui/bitstream/handle/11250/2455644/Mario Ek Aparicio - Driving and Inhibiting Factors for Intrapreneurship-REV2.pdf?sequence=1](https://brage.bibsys.no/xmlui/bitstream/handle/11250/2455644/Mario%20Ek%20Aparicio%20-%20Driving%20and%20Inhibiting%20Factors%20for%20Intrapreneurship-REV2.pdf?sequence=1)
- Bar-Yam, Y., Lagi, M., & Bar-Yam, Y. (2013). *South African riots: Repercussion of the global food crisis and US drought*. USA. Retrieved from <https://arxiv.org/pdf/1307.5268.pdf>;
- Baruah, B., & Ward, T. (2014). Metamorphosis of intrapreneurship as an effective organizational strategy. *International Entrepreneurship and Management Journal*, 1–13.
<https://doi.org/10.1007/s11365-014-0318-3>
- Bauwn, R. J., Locke, E. A., & Kirkpatrick, S. A. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83(1), 43–54. Retrieved from
[https://s3.amazonaws.com/academia.edu.documents/32163409/J._Robert_Baum.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1556105138&Signature=96u09GaYnrg49RHOSrmz3x6oZp8%3D&response-content-disposition=inline%3Bfilename%3DA_Longitudinal_Study_of_the_Relat](https://s3.amazonaws.com/academia.edu.documents/32163409/J._Robert_Baum.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1556105138&Signature=96u09GaYnrg49RHOSrmz3x6oZp8%3D&response-content-disposition=inline%3Bfilename%3DA_Longitudinal_Study_of_the_Relation_of_Vision_and_Vision_Communication_to_Venture_Growth_in_Entrepreneurial_Firms.pdf)
- Baxter, P., & Jack, S. (2008). *Qualitative case study methodology: Study design and implementation for novice researchers*. *The qualitative report* (Vol. 13). Retrieved from <https://nsuworks.nova.edu/tqr/vol13/iss4/2>
- Bierwerth, M., Schwens, C., Isidor, R., & Kabst, R. (2015). Corporate entrepreneurship and

- performance: A meta-analysis. *Small Business Economics*, 45(2), 255–278.
<https://doi.org/10.1007/s11187-015-9629-1>
- Birchall, D., Chanaron, J. J., Tovstiga, G., & Hillenbrand, C. (2011). Innovation performance measurement: current practices, issues and management challenges. *International Journal of Technology Management*, 56(1), 1–20. <https://doi.org/10.1504/IJTM.2011.042492>
- Bocconi, S., Kampylis, P., & Punie, Y. (2013). *Framing ICT-enabled Innovation for Learning: the case of one-to-one learning initiatives in Europe*. Retrieved from
https://s3.amazonaws.com/academia.edu.documents/45225483/Framing_ICT-enabled_Innovation_for_Learn20160430-14876-rekoz8.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1551995958&Signature=QtE437u0vxVnbWt3kqOzzFypmzg%253D&response-content-disposition=inline%25
- Buekens, W. (2014). Fostering intrapreneurship: The challenge for a new game leadership. *Procedia Economics and Finance*, 16, 580–586. [https://doi.org/10.1016/S2212-5671\(14\)00843-0](https://doi.org/10.1016/S2212-5671(14)00843-0)
- Burgelman, R. A., & Sayles, L. R. (2015). *Inside corporate innovation: Strategy, structure and managerial skills*. (S. U. Robert A. Burgelman, Ed.), *Management* (Vol. 18). Free Press (1986). <https://doi.org/10.3917/mana.202.0204>
- Cadar, O., & Badulescu, D. (2015). *Entrepreneur, entrepreneurship and intrapreneurship. A Literature Review*. Romania. <https://doi.org/https://mp.ra.ub.uni-muenchen.de/82793/>
- Campos, H. M., Parellada, F. S., Atondo, G. H., & Quintero, M. R. (2015). Strategic decision making , entrepreneurial orientation and performance: an organizational life cycle approach. *Journal Belo Horizonte*, 14(2), 8–24.
- Christensen, C. M. (2006). What is an organization's culture? *Harvard Business Review*, 1–8. https://doi.org/10.1057/9780230250932_4
- Christensen, K. S. (2004). A classification of the corporate entrepreneurship umbrella: labels and perspectives. *International Journal of Management and Enterprise Development*, 1(4), 301–315. <https://doi.org/10.1504/IJMED.2004.004635>
- Christensen, K. S. (2005). Enabling intrapreneurship: the case of a knowledge-intensive industrial company. *European Journal of Innovation Management*, 8(3), 305–322. <https://doi.org/10.1108/14601060510610171>

- Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, 35(2), 236–264.
<https://doi.org/10.1177/0011000006287390>
- Criado-Gomis, A., Iniesta-Bonillo, M. Á., & Cervera-Taulet, A. (2018). Sustainable entrepreneurial orientation within an intrapreneurial context: effects on business performance. *International Entrepreneurship and Management Journal*, 14(2), 295–308.
<https://doi.org/10.1007/s11365-018-0503-x>
- Crittenden, V. L., & Crittenden, W. F. (2008). Building a capable organization: The eight levers of strategy implementation. *Business Horizons*, 51(4), 301–309.
<https://doi.org/10.1016/j.bushor.2008.02.003>
- Dai, L., Maksimov, V., Gilbert, B. A., & Fernhaber, S. A. (2014). Entrepreneurial orientation and international scope: The differential roles of innovativeness, proactiveness, and risk-taking. *Journal of Business Venturing*, 29(4), 511–524.
<https://doi.org/10.1016/j.jbusvent.2013.07.004>
- Dentchev, N., Baumgartner, R., Dieleman, H., Ohannsd, J., Jonker, J., Nyberg, T., ... Van Hoof, B. (2016). Embracing the variety of sustainable business models: social entrepreneurship, corporate intrapreneurship, creativity, innovation, and other approaches to sustainability challenges. *Journal of Cleaner Production*, 113, 1–4.
<https://doi.org/10.1016/j.jclepro.2015.10.130>
- Deprez, J., Leroy, H., Euwema, M., & Euwema, L. (2017). Three chronological steps toward encouraging intrapreneurship: Lessons from the Wehkamp case. *Business Horizons*, 1434–1441. <https://doi.org/10.1016/j.bushor.2017.09.013>
- Dess, G. G., Lumpkin, G. T., & McGee, J. E. (1999). Linking corporate entrepreneurship to strategy, structure, and process: Suggested research directions. *Entrepreneurship Theory and Practice*, 85–102. Retrieved from <https://journals-sagepub-com.uplib.idm.oclc.org/doi/pdf/10.1177/104225879902300306>
- Dhliwayo, S. (2007). The relationship between the practice of strategic planning and levels of corporate entrepreneurship in South African public companies. Retrieved from <https://repository.up.ac.za/handle/2263/24283>
- Dierckx De Casterlé, B., Gastmans, C., Bryon, E., & Denier, Y. (2011). QUAGOL: A guide for qualitative data analysis An experience-based and detailed description of the strengths and

- pitfalls of the Qualitative Analysis Guide of Leuven (QUAGOL). *International Journal of Nursing Studies*, 49, 360–371. <https://doi.org/10.1016/j.ijnurstu.2011.09.012>
- Duncan, W. J., Ginter, P. M., Rucks, A. C., & Jacobs, T. D. (1988). Intrapreneurship and the reinvention of the corporation. *Business Horizons*, 31(3), 16–21. [https://doi.org/10.1016/0007-6813\(88\)90004-3](https://doi.org/10.1016/0007-6813(88)90004-3)
- Duradoni, M., & Di Fabio, A. (2019). Intrapreneurial self-capital and sustainable innovative behavior within organizations. *Journal of Sustainability*, 11(2), 1–10. <https://doi.org/10.3390/su11020322>
- Edwards, L., Jenkins, R., & Jenkins, R. (2015). The impact of Chinese import penetration on the South African manufacturing Sector. *The Journal of Development Studies*, 51(4), 447–463. <https://doi.org/10.1080/00220388.2014.983912>
- Eisenhardt, K. M. (1989). *Building theories from case study research*. *The Academy of Management Review* (Vol. 14). Retrieved from http://euroac.ffri.hr/wp-content/uploads/2010/06/Eisenhardt_1989_Building-Theories-from-Case.pdf
- Fine, B., & Rustonjee, Z. (2018). *The political economy of South Africa*. Routledge. <https://doi.org/10.4324/9780429496004>
- Foley, É., & Guillemette, G. M. (2017). *Taxonomy of Business Intelligence Strategies in organizations*. *Prisme Intelligence d'affaires*. Canada.
- Frank, H., Korunka, C., Lueger, M., & Weismeier-Sammer, D. (2016). Intrapreneurship education in the dual education system. *International Journal of Entrepreneurial Venturing*, 8(4), 334. <https://doi.org/10.1504/ijev.2016.10001847>
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416. Retrieved from <http://www.nova.edu/ssss/QR/QR20/9/fusch1.pdf>
- Gcaza, W., & Urban, B. (2013). *Corporate entrepreneurship strategies in the South African mining industry*. Wits Business School. Retrieved from [http://wiredspace.wits.ac.za/bitstream/handle/10539/12963/Corporate Entrepreneurship Strategies in South African Mining Industry.pdf?sequence=1&isAllowed=y](http://wiredspace.wits.ac.za/bitstream/handle/10539/12963/Corporate%20Entrepreneurship%20Strategies%20in%20South%20African%20Mining%20Industry.pdf?sequence=1&isAllowed=y)
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Sage Publishing*, 18(59), 57–82.

<https://doi.org/10.1177/1525822X05279903>

- Hall, R. (2004). A Political economy of land reform in South Africa. *Review of African Political Economy*, 31, 213–227. <https://doi.org/10.1080/0305624042000262257>
- Hall, R., & Kepe, T. (2017). Elite capture and state neglect: new evidence on South Africa's land reform. <https://doi.org/10.1080/03056244.2017.1288615>
- Harreld, J. B., O'Reilly III, C. A., & Tushman, M. L. (2007). Dynamic capabilities at IBM: Driving strategy into action. *California Management Review*, 49(4), 2157–2160. [https://doi.org/10.1016/0957-4166\(95\)00289-2](https://doi.org/10.1016/0957-4166(95)00289-2)
- Hattori, R. A., & Lapidus, T. (2004). Collaboration, trust and innovative change. *Journal of Change Management*, 4(2), 97–104. <https://doi.org/10.1080/14697010320001549197>
- Heinze, K. L., & Weber, K. (2016). Toward organizational pluralism: Institutional intrapreneurship in integrative medicine. *Organization Science*, 27(1), 157–172. <https://doi.org/10.1287/orsc.2015.1028>
- Hjorth, D., & Kuratko, D. F. (2017). *Corporate entrepreneurship 2.0: Research Development and Future Directions. Foundations and Trends in Entrepreneurship*, (Vol. 13). Hanover, USA: Now Publishers. <https://doi.org/10.4337/9781781009055.00023>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Ibrahim, D. M. (2016). *Intrapreneurship. Washington and Lee Law Review* (Vol. 73). Retrieved from <http://scholarship.law.wm.edu/facpubs><http://scholarship.law.wm.edu/facpubs/1835>
- Jeffery, A. (2017). South Africa's deadly new Mining Charter - IRR. Retrieved May 23, 2019, from <https://www.politicsweb.co.za/opinion/south-africas-deadly-new-mining-charter--irr>
- Jie-hong, Z., Li-qun, T., & Yu, X. (2018). Estimating the average treatment effect of adopting stress tolerant variety on rice yield in China. *Journal of Integrative Agriculture*, 17(4), 940–948. [https://doi.org/10.1016/S2095-3119\(17\)61848-3](https://doi.org/10.1016/S2095-3119(17)61848-3)
- Joshi, R., Singh, J., & Vig, P. A. (2014). Vermicompost as an effective organic fertilizer and biocontrol agent: effect on growth, yield and quality of plants. *Rev Environment of Science Biotechnol*, 1–24. <https://doi.org/10.1007/s11157-014-9347-1>

- Kaplan, R. S., & Norton, D. P. (2007). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 85(7–8), 75–86.
- Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 57, 37–47.
<https://doi.org/10.1016/j.bushor.2013.08.009>
- Kvaløy, O., Nieken, P., & Schöttner, A. (2015). Hidden benefits of reward: A field experiment on motivation and monetary incentives. *European Economic Review*, 76, 188–199.
<https://doi.org/10.1016/J.EUROECOREV.2015.03.003>
- Lages, M., Marques, C. S., Ferreira, J. J. M., & Ferreira, F. A. F. (2017). Intrapreneurship and firm entrepreneurial orientation: insights from the health care service industry. *International Entrepreneurship and Management Journal*, 13(3), 837–854.
<https://doi.org/10.1007/s11365-016-0428-1>
- Leavy, B. (2017). Drivers, explorers, crusaders and captains: identifying and nurturing four types of entrepreneurial business builders. *Strategy & Leadership*, 45(5), 10–17.
<https://doi.org/10.1108/SL-06-2017-0062>
- Ma, H., Liu, T. Q., & Karri, R. (2016). Internal corporate venturing: Intrapreneurs, institutions, and initiatives. *Organizational Dynamics*, 45, 114–123.
<https://doi.org/10.1016/j.orgdyn.2016.02.005>
- Maier, V., & Iancu, A. L. (2016). The impact of incentives upon the entrepreneurial spirit of employees. Study within the North-Western Region of Romania. *Managerial Challenges of the Contemporary Society*, 9(2), 40–45. Retrieved from
<https://search.proquest.com/openview/7b8eb89bcc73ced05dda25c4b264317a/1?pq-origsite=gscholar&cbl=1606337>
- Majozi, T., & Veldhuizen, P. (2015). The chemicals industry in South Africa. *American Institute of Chemical Engineers (AIChE)*, (July), 46–51. Retrieved from www.aiche.org/cep
- Mantashe, S. G. (2018). *Implementation guidelines for Mining Charter*. *African Mining and Minerals Industry* (Vol. 201). Retrieved from www.gpwnonline.co.za
- Mohedano-Suanes, A., & Garzón Benítez, D. (2017). *Intrapreneurs: Characteristics and behavior*. *Inside the Mind of the Entrepreneur*. <https://doi.org/10.1007/978-3-319-62455-6>
- Morris, M. H., Davis, D. L., & Allen, J. W. (1994). Fostering corporate entrepreneurship: Cross-

- cultural comparisons of the importance of individualism versus collectivism. *Journal of International Business Studies*, 25(1), 65–89. Retrieved from https://www.jstor.org/stable/pdf/154852.pdf?casa_token=Yw7FvIS92doAAAAA:xS_0hngXBJoBGfuDuig04F4NU4M_ANAwZYUoYFNdt6dJCcb05qtVssOOqo4FRMCpknbN8yqnZitWQgotB1Oe6V4NGJSXHUgz26RzPynBfo83dCjC0aLo
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2). Retrieved from <https://journals.sagepub.com/doi/pdf/10.1177/160940690200100202>
- Neessen, P. C. M., Caniëls, M. C. J., Vos, B., & de Jong, J. P. (2018). The intrapreneurial employee: toward an integrated model of intrapreneurship and research agenda. *International Entrepreneurship and Management Journal*, 1–27. <https://doi.org/10.1007/s11365-018-0552-1>
- Newman, H. H. (1978). Strategic Groups and the Structure-Performance. *The Review of Economics and Statistics*, 60(3), 417–427. <https://doi.org/10.2307/1924167>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1–13. <https://doi.org/10.1177/1609406917733847>
- Papachroni, A., Heracleous, L., & Paroutis, S. (2015). Organizational ambidexterity through the lens of paradox theory: Extending the research agenda. *Applied Behavioural Science*, 51(1), 71–93. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.720.2856&rep=rep1&type=pdf>
- Parker, S. C. (2011). Intrapreneurship or entrepreneurship? *Journal of Business Venturing*, 26(1), 19–34. <https://doi.org/10.1016/j.jbusvent.2009.07.003>
- Pedersen, E. R. G., Gwozdz, W., & Hvass, K. K. (2016). Exploring the relationship between business model innovation, corporate sustainability, and organisational values within the fashion industry. *Journal of Business Ethics*, 1–47. <https://doi.org/10.1007/s10551-016-3044-7>
- Perry, M. J. (2015). Fortune 500 firms in 1955 v. 2015; Only 12% remain, thanks to the creative destruction that fuels economic prosperity, 1–5. Retrieved from <https://www.aei.org/publication/fortune-500-firms-in-1955-vs-2015-only-12-remain-thanks->

to-the-creative-destruction-that-fuels-economic-growth/

- Personal, M., Archive, R., & Sunde, T. (2016). *M P RA Foreign direct investment and economic growth: ADRL and causality analysis for South Africa*. Retrieved from https://mpra.ub.uni-muenchen.de/72382/1/MPRA_paper_72382.pdf
- Porter, M. (2008). The five competitive forces that shape strategy. *Harvard Business Review*.
- Porter, M. E. (1996). What is strategy? *Harvard Business Review*, 74(6), 61–78.
<https://doi.org/10.1098/rspb.2008.0355>
- Prion, S., & Adamson, K. A. (2014). Making sense of methods and measurement: Rigor in qualitative research. *Clinical Simulation in Nursing*, 10, 107–108.
<https://doi.org/10.1016/j.ecns.2013.05.003>
- PwC. (2018). SA Mine 10th edition: Highlighting trends in SA Mining industry. Retrieved May 23, 2019, from <https://www.pwc.co.za/en/publications/sa-mine.html>
- Ravjee, B. (2016). *The impact of corporate entrepreneurship on service innovation in the financial services industry*. University of Pretoria.
- Sarafidou, J.-O., & Xafakos, E. (2014). *Transformational leadership and principals' innovativeness: Are they the "keys" for the research and innovation oriented school? Multidimensional Perspectives on Principal Leadership Effectiveness*.
<https://doi.org/10.4018/978-1-4666-6591-0.ch015>
- Saunders, M., & Lewis, P. (2012). *Doing research in business and management : an essential guide to planning your project*. Financial Times Prentice Hall. Retrieved from <http://epubs.surrey.ac.uk/817620/>
- Segalla, M., Rouziès, D., Besson, M., & Weitz, B. A. (2006). A cross-national investigation of incentive sales compensation. *International Journal of Research in Marketing*, 23(4), 419–433. <https://doi.org/10.1016/J.IJRESMAR.2006.10.003>
- Selden, P. D., & Fletcher, D. E. (2015). The entrepreneurial journey as an emergent hierarchical system of artifact-creating processes. *Journal of Business Venturing*, 30(4), 603–615.
<https://doi.org/10.1016/j.jbusvent.2014.09.002>
- Selig, C. J., & Baltes, G. H. (2017). *Clarifying the roles in corporate entrepreneurship*. *Researchgate*. Retrieved from <https://www.researchgate.net/publication/317872616>

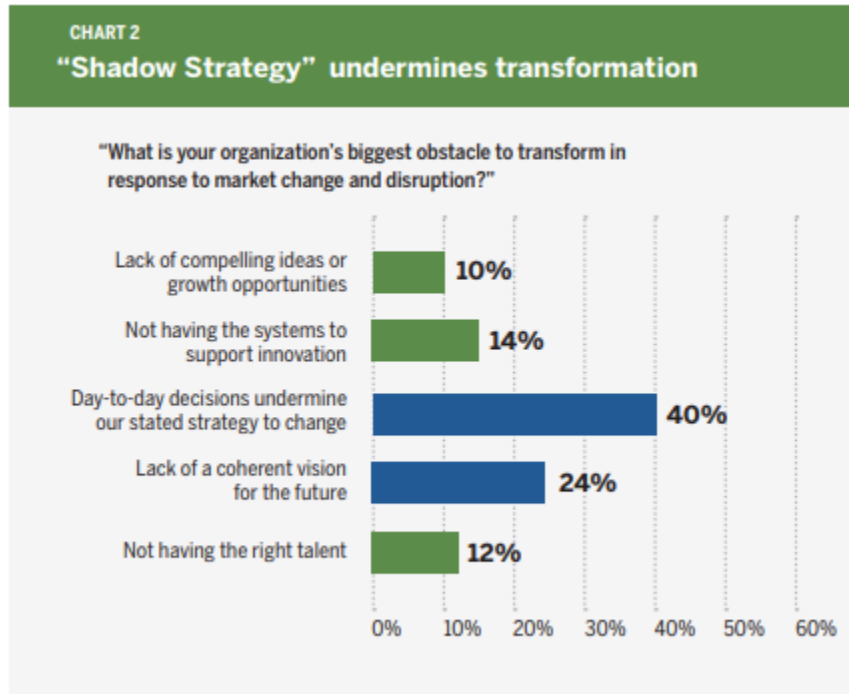
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information* 22, 63–75. Retrieved from <https://content.iospress.com/articles/education-for-information/efi00778>
- Smith, W. K. (2014). Dynamic decision making : A model of senior leaders managing strategic paradoxes. *Academy of Management Journal*, 57(6), 1592–1623. <https://doi.org/10.5465/amj.2011.0932>
- South African Government. (2018). Land reform | South African Government. Retrieved May 20, 2019, from <https://www.gov.za/issues/land-reform>
- Statssa. (2019). *Statistical Release P0441: Gross domestic product fourth quarter 2018*. Retrieved from www.statssa.gov.za
- Sull, D. (2007). Closing the gap between strategy and execution. *MIT Sloan Management Review*, 48(4), 30–38. Retrieved from <https://www.researchgate.net/publication/39334469>
- Sumo, R., van der Valk, W., van Weele, A., & Bode, C. (2016). Fostering incremental and radical innovation through performance-based contracting in buyer-supplier relationships. *International Journal of Operations and Production Management*, 36(11), 1482–1503. <https://doi.org/10.1108/IJOPM-05-2015-0305>
- Sunday, Kumar, B. (2011). Employee engagement : A driver of organizational effectiveness. *European Journal of Business and Management*, 3(8), 53–60.
- Tajeddini, K., & Mueller, S. L. (2012). Corporate entrepreneurship in Switzerland: Evidence from a case study of Swiss watch manufacturers. *International Entrepreneurship and Management Journal*, 8(3), 355–372. <https://doi.org/10.1007/s11365-011-0179-y>
- Tellis, W. M. (1997). *Application of a case study methodology. The Qualitative Report* (Vol. 3). Retrieved from <https://nsuworks.nova.edu/tqr/vol3/iss3/1>
- Thomas, K. (2009). Improving practice of management: The Four Intrinsic Rewards that Drive Employee Engagement •. Retrieved April 30, 2019, from <https://iveybusinessjournal.com/publication/the-four-intrinsic-rewards-that-drive-employee-engagement/>
- Thulin, P. B. (2018). The knowledge spillover theory of intrapreneurship. *Small Business Economics*, 51, 1–30. <https://doi.org/10.1007/s11187-017-9928-9>

- Ungerer, M. (2019). Conceptualising strategy-making through a strategic architecture perspective. *Management Studies*, 7(3), 169–190. <https://doi.org/10.17265/2328-2185/2019.03.001>
- Urban, B., & Wood, E. (2017). The innovating firm as corporate entrepreneurship. *European Journal of Innovation Management*, 20(4), EJIM-10-2016-0100. <https://doi.org/10.1108/EJIM-10-2016-0100>
- van Wyk, R., & Adonisi, M. (2012). Antecedents of corporate entrepreneurship. *South African Journal of Business Management*, 43(3). Retrieved from https://repository.up.ac.za/bitstream/handle/2263/21994/VanWyk_Antecedents%282012%29.pdf?sequence=1&isAllowed=y
- Verbruggen, A. (2008). doi:10.1016/j.enpol.2008.05.032. <https://doi.org/10.1016/j.enpol.2008.05.032>
- Visser, M., & Arends, F. (2016). *Skills Supply and Demand in South Africa*. LMIP Publication, Human Sciences Research Council. Retrieved from www.lmip.org.za
- Whitelaw, L. A., & Garcia-Lorenzo, L. (2017). Creative disruption: the everyday innovation practices of intrapreneurs at a technology company. *Academy of Management*, (1), 12869. <https://doi.org/10.5465/AMBPP.2017.25>
- Williams, D. K. (2013). The 4 Essential Traits Of “Intrapreneurs.” *Forbes*, 29–31. Retrieved from <http://www.forbes.com/sites/davidkwilliams/2013/10/30/the-4-essential-traits-of-intrapreneurs/>
- Wolf, L. A., & Plaines, D. (2017). What qualitative research can do for you: Deriving solutions and interventions from qualitative findings. *Journal of Emergency Nursing*, 43(5), 484–485. <https://doi.org/10.1016/j.jen.2016.06.001>
- Woods, M., Paulus, T., Atkins, D. P., & Macklin, R. (2016). Advancing Qualitative Research Using Qualitative Data Analysis Software (QDAS)? Reviewing Potential Versus Practice in Published Studies using ATLAS.ti and NVivo, 1994–2013. *Social Science Computer Review*, 34(5), 597–617. <https://doi.org/10.1177/0894439315596311>
- Xenikou, A. (2017). Transformational leadership, transactional contingent reward, and organizational identification: The mediating effect of perceived innovation and goal culture orientations. *Frontiers in Psychology*, 8(OCT). <https://doi.org/10.3389/fpsyg.2017.01754>

Zhao, F. (2005). Exploring the synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behaviour & Research*, 11(1), 25–41.
<https://doi.org/10.1108/13552550510580825>

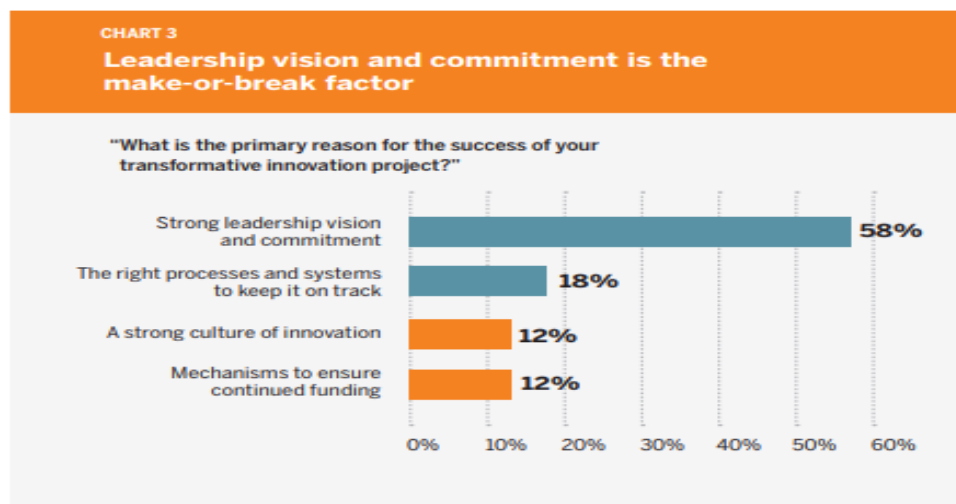
9 APPENDICES

9.1 APPENDIX 1. Impediments for large corporate transformation – a survey of S&P500 Respondents



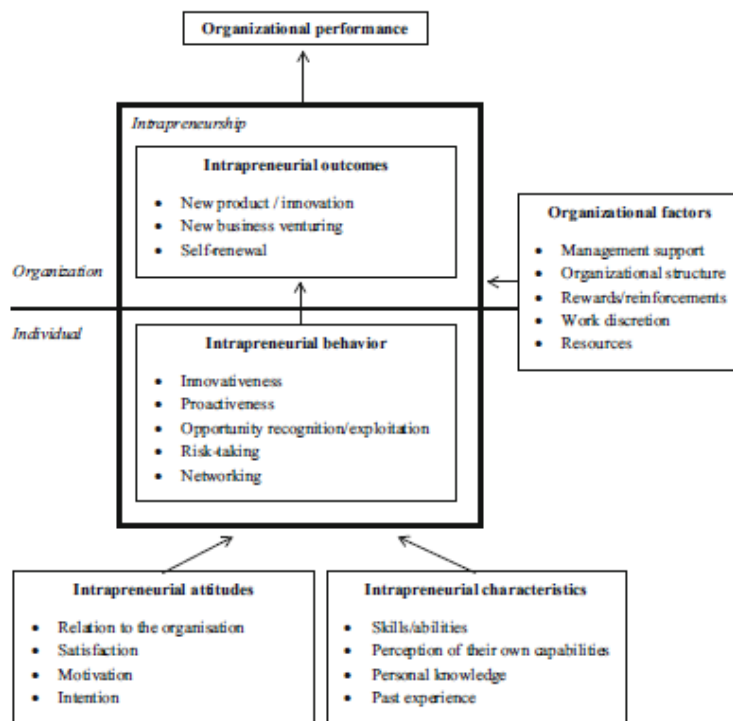
Source: Anthony et al. (2016)

9.2 APPENDIX 2: Leadership vision and commitment to corporate transformation



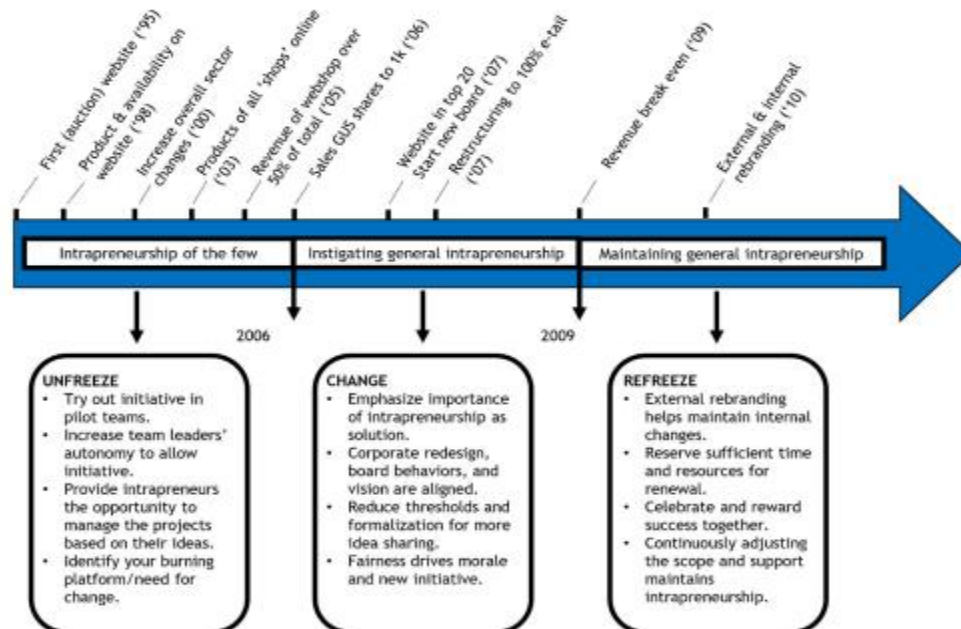
Source: Anthony et al. (2016)

9.3 APPENDIX 3: Framework of intrapreneur and intrapreneurship



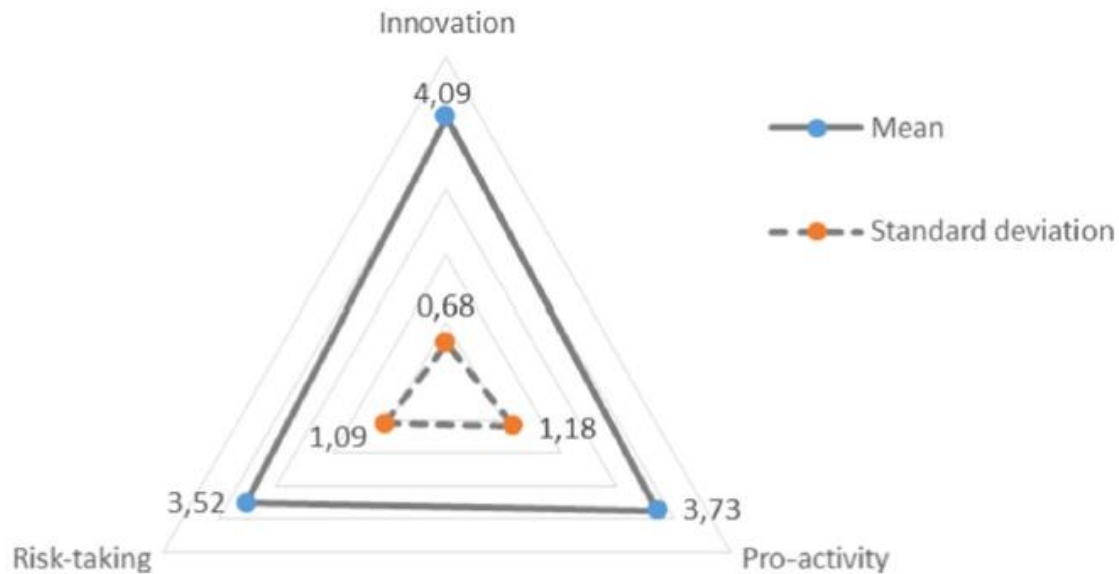
Source: Neessen et al. (2018)

9.4 APPENDIX 4: Summary model for three chronological steps towards encouraging intrapreneurship



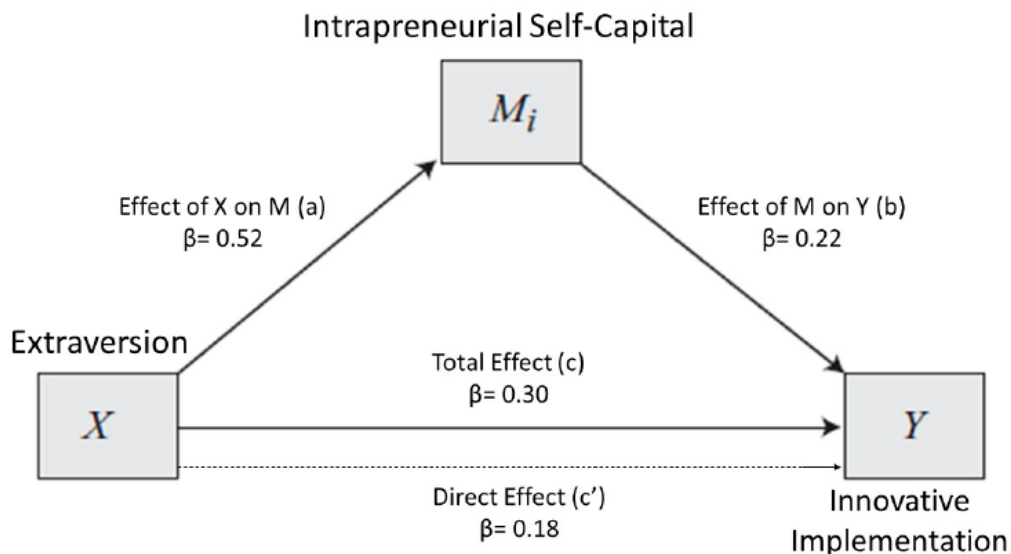
Source: Deprez et al. (2017).

9.5 APPENDIX 5: The means and standard deviations in the dimensions related to a firm's entrepreneurial orientation of PMRS/PU team in the private health sector



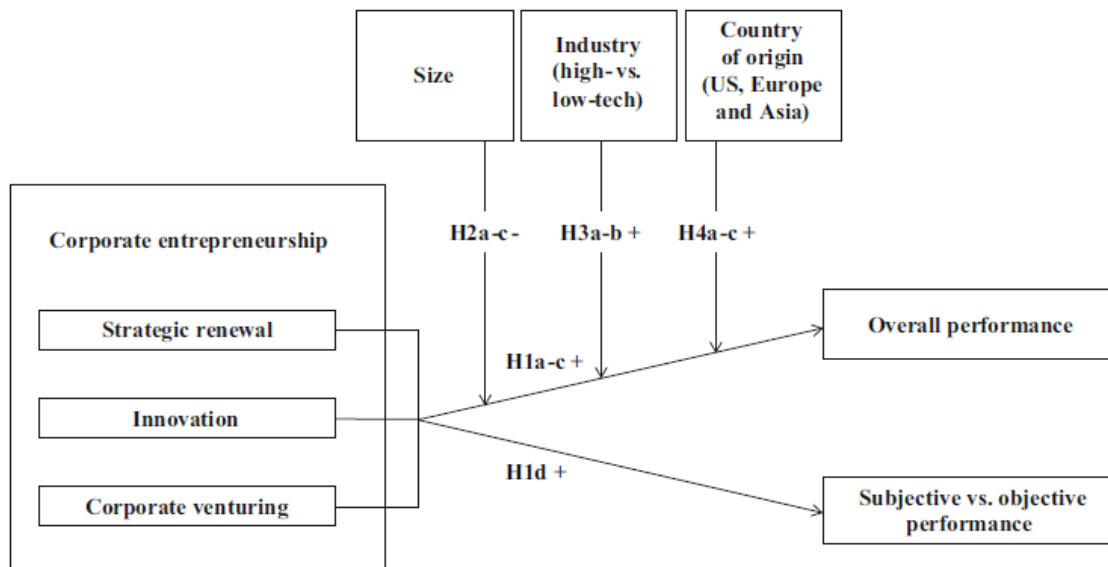
Source: Lages et al. (2017)

9.6 APPENDIX 6: Relationship between extraversion and innovative implementation behaviour, with intrapreneurial self-capital as a mediator.



Source: Duradoni and Di Fabio (2019)

9.7 APPENDIX 7: Corporate entrepreneurship performance model.



Source: Bierwerth et al. (2015)

9.8 APPENDIX 8: Interview Schedule

1. How do you define intrapreneurship; what do you think intrapreneurial traits are? Do you think your business should be considered then when formulating/executing the business strategy? how and why?
2. How would you or do you use intrapreneurship to differentiate your business?
3. Do you believe your company has intrapreneurs? And how does your company use them? Do you know where they are in the organisational structure of your business unit?
4. How does your organisation approach or define innovation? And how does it incorporate it into the business strategy?
5. How is your company's innovation strategy executed?
6. Who is involved in the innovation business strategy?
7. Can your business differentiate between success due to successful strategy execution and windfalls? Please explain
8. Has your organisation linked performance to innovation before? Please explain. How was it measured and rewarded?
9. Do you believe that intrapreneurs are involved in the business innovation strategy? And do they have any link to the successful execution of the strategy? Please explain your answer

9.9 APPENDIX 9: Consistency Matrix

PROPOSITIONS/ QUESTIONS/ HYPOTHESES	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
1. What is your organisation's understanding of intrapreneurship?	(Parker, 2011) (Neessen et al., 2018) (Dai et al., 2014)	Question 1 & 2 in questionnaire	Frequency analysis on questions categorised answer
2. How does your company leverage intrapreneurship and innovation to differentiate itself?	(Ma et al., 2016) (Baruah & Ward, 2014)	Question 2 & 3 in the questionnaire	Frequent count "entrepreneurship, innovation, and differentiation" words count
3. What and who do you think is required for corporate innovation strategy execution for a large diverse organisation in the primary sector, agriculture and mining supply?	(Harreld et al., 2007) Bierwerth et al. (2015) (Burgelman & Sayles, 2015)	Question 3, 4 & 5 in questionnaire	Content analysis questionnaires 3, 4, 5 specifics to content, what requirements are?
4. What relationship do you believe exists between intrapreneurship and corporate innovation strategy execution?	(Baruah & Ward, 2014) (Burgelman & Sayles, 2015)	Question 5, 6, 7 & 9 in questionnaire	Content count to what the opinion is on the relationship
5. Understand the ideal structure of a large organisation to enable intrapreneurship and innovation for corporate transformation	(Harreld et al., 2007) (Baruah & Ward, 2014) (Campos et al., 2015) (Heinze & Weber, 2016)	Question 3, 8 & 9 in questionnaire	Frequent count on the levels mentioned to which managers believe the intrapreneurs should be in their organisation

9.10 APPENDIX 10: Code dictionary

Code	Comment - Codes Definition	Density	Code Groups
Ability to expand geographically	The intrapreneurs are present and are strong drivers in the geographical expansion of the business, which are mostly country managers which we appoint selectively to start our business in new countries	0	Have intrapreneurs Q3
Adapt strategy as you execute	The strategy does not have to be perfect to execute; we still execute while innovating at the same time	0	Organisational Strategy & Alignment Q1
Align culture and structure to innovate	The company culture and structure have to be aligned throughout the divisions and more so aligned with organisational strategy	0	Organisational Strategy & Alignment Q1
Align innovation to business strategy	The business unit's innovation strategy must be aligned to its overall strategy for ease of implementation	0	Innovation Strategy Execution Q5
Allow them space to think and do	Intrapreneurs need to be given time to think and devise solutions to implement. Forcing them into a job specification takes away their thinking space and autonomy which is key for their effectiveness for the business	0	Traits Q1
Autonomy boosts the intrapreneurs' ability to execute	Need freedom to execute the innovative ideas	0	Traits Q1
Being agile and adapt to changing environment	Agility is part of the definition of intrapreneurship	0	Use to Differentiate Q2
Business strategy to be clear and communicated	Knowing where to play allows the business to choose the right people and resources, which speaks to clear	0	Organisational Strategy & Alignment Q1

	strategy. The strategy is also clear if it is well understood by those who have to execute it		
Business unit strategy to include innovation strategy	The business unit's overarching divisional strategy includes the innovation strategy	0	Innovation Strategy Q4
Business units have no clear or documented innovation strategy	The business units have a strategy, which others see as tactical plans. They however have no written and communicated innovation strategy, therefore, nothing to execute against with regard to innovation and technology development	0	Innovation Strategy Q4
Can be misfits in corporate culture	Intrapreneurs are said to break rules and be hard to manage, which makes them a misfit for corporate requirements	0	Traits Q1
Can the business differentiate between windfalls and strategy execution	Others say yes or no or both. If you do not have Windfall profit, it may mean you are not diversified or not in the right area or the market has dried up despite executing the strategy.	0	Success due to Strategy Execution Q7
Collaboration, partnerships and relationships	Collaboration within the business, partnership with our customers and suppliers could differentiates our business in the market	0	Use to Differentiate Q2
Competency and motivation to authenticate value proposition	Competitive and motivated intrapreneurs could naturally convince the customer about the business value proposition	0	Use to Differentiate Q2
Complacency can affect the business	Complacency is the opposite of intrapreneurship, and can become a problem for large organisations	0	Intrapreneurship in successful

			strategy execution Q9
Constantly looking for success	Always looking for new ventures and success stimulates them	0	Traits Q1
Coordinate and collaborate resources to execute innovation strategy	Coordinate and collaborate resources between the diverse teams and companies, especially newly acquired technology to innovative the company, could use the large organisation's resources to develop and grow further by executing the strategy. They turn to priorities the ideas and execute them	0	Innovation Strategy Execution Q5
Could use them more to differentiate	The business could use intrapreneurs effectively to differentiate the business from the competitors, through their market sensing and their innovative way of thinking	0	Use to Differentiate Q2
Courage to challenge status quo	The don't like being restricted by lots of rules and are always looking for better way of doing things and are not afraid to change things that are not working. Have courage to face challenges and the status quo irrespective of the circumstances	0	Traits Q1
Create a culture for intrapreneurship within boundaries	Creating a platform where people who submitted their innovative solutions created intrapreneurial thinking amongst the employees. Others indicated that boundaries needed to be set considering the size and type of the organisation	0	Organisational Strategy & Alignment Q1

Create a think box or email for innovation	Allow people a platform to submit or share their innovative ideas	0	Innovation Intrapreneurship co-existence in large organisation Q9
Create collaboration culture for innovation	The Group is insisting and creating sessions where the business units meet and discuss innovative projects, which is the intent to improve innovation through collaboration. The managers will hold each other to account with regard to innovation targets	0	Innovation Strategy Q4
Create environment that supports the balance of innovation/intrapreneurship and governance	Intrapreneurship is synonymous with innovation, and intrapreneurs tend to operate contrary to corporate governance requirements. Balance is required which was said to be brought about by creating an environment that will allow people to try new ideas and stimulate innovation by reducing fear of failure	0	Innovation Intrapreneurship co-existence in large organisation Q9
Create novel accessible solution	Innovation is something new or novel that is accessible to use to solve a problem	0	Use to Differentiate Q2
Create separate team or structure to start innovation	The respondents indicated the difficulties of allowing the same people to run the usual business and also be expected to innovate is a competing task. These employees tend to carry out the usual business rather than looking into innovative products, processes and sales which is easier	0	Innovation Intrapreneurship co-existence in large organisation Q9

	for them. They are therefore saying there might be a need to have a separate team for innovation, which will hand over the developed product and process to those who will execute or commercialise it.		
Culture can hinder innovation mindset	Culture will have to be aligned to the strategy the business embarks on	0	Innovation Strategy Execution Q5
Deploy their skills and knowledge to execute the business needs	They use their acquired knowledge, gut feel and sense to establish and secure the business	0	Intrapreneurship in successful strategy execution Q9
Determine how it needs to be done	The seek to understand customer needs and resolve them without compromising quality	0	Use to Differentiate Q2
Develop another product	Innovation may mean to develop another product due to market demand	0	Innovation definition & strategy formulation Q4
Different input required for innovation strategy formulation	Most divisions in the Group are different and could bring different input into the innovation discussions. The Group should however create an environment where the team would have the courage to keep trying and learning from one another to stimulate innovation	0	Involved in innovation strategy Q6
Different mindset and curiosity	Their view and perspectives are different from many, and that is what differentiates them	0	Traits Q1

Difficult to make people innovate	Innovation comes through stimulation and the need to improve things. therefore, you cannot force people to innovate. Curiosity and stimulation is not embedded in everyone and the environment also enables people to use innovative and creative thinking. It is even more difficult to bring change to people who have been doing the same thing for many years. They tend to go back to what they are used to, which make it difficult for older organisations that have employees who have been with them for a long time to get them to start innovating	0	Innovation Strategy Q4
Discretionary effort form of innovation	More companies survive due to employees putting in discretionary effort which is seen as a form of innovation. It is said to be able to stimulate intrapreneurship	0	Innovation definition & strategy formulation Q4
Disruptive innovation technologies	The business is not really into disruptive technologies due to its nature and its current financial situation, but has advanced novel technologies which fall into the adjacent space for innovation	0	Innovation definition & strategy formulation Q4
Diverse business difficulties to innovate	It may become difficult to innovate in a company that has diverse businesses	0	Organisational Strategy & Alignment Q1
Do not innovate fast enough and execute	The business believes that it is not innovating fast enough to catch up with the market demand or realise the	0	Innovation Strategy Execution Q5

	innovation benefits before competitors copy it.		
Doing what worked in the past might cannibalise innovation	Historical performance might hold the company back during difficult financial times and it may abandon innovation and want to do more of what got it success in the past. This might not be relevant considering the change in the business environment	0	Innovation Strategy Execution Q5
Don't have structure to support innovation	The business structure to align and support innovation	0	Innovation Strategy Q4
Don't see relationship between intrapreneurs and strategy execution	The relationship between innovation / technology development and intrapreneurs is not that clear due to the separation of duties in departments. Therefore, the innovator may never be part of the execution or vice versa	0	Intrapreneurs in innovation strategy execution Q9
Don't want to manage people or build business	They don't want to manage people although they may appear to be leaders and prepared to make hard decisions	0	Traits Q1
Driven by reward	Intrapreneurs are driven by reward, financial, and hence the appetite for risk	0	Traits Q1
Execute our innovation strategy	The business units execute against innovation strategy	0	Innovation Strategy Execution Q5
Factors that can be controlled - strategy	That factors that can be controlled and executed as planned are seen as strategy, but not windfalls	0	Success due to Strategy Execution Q7

Find a way around the structure and systems	Intrapreneurs are known to find a way around the systems and structures when they are determined to deliver	0	Traits Q1
Finding easy way to carry out work	People innovate because they want an easy way to do their tasks	0	Innovation definition & strategy formulation Q4
Future lies on the link between intrapreneurship and innovation	Intrapreneurs will bring innovation or manage innovation to the market while sensing the market changes, which is where the business operates. Hence, the future depends on their dual existence. The business has been existing from hand to mouth and "making a plan" which is known by Omnia employees when they lose a business, they just get another one. Therefore, some business units never measure their performance against 1. strategic objectives 2. innovation objectives and the financial performance due to windfalls or randomly seeking business and allowing the business to deviate from strategic targets. This is a clear indication of what happens in the absence of a formal performance measure, that goes beyond financial targets	0	Intrapreneurs in innovation strategy execution Q9
Governance or regulations restrict risks intrapreneurs bring in a large company	It is highlighted that the organisation must create a system / culture to allow innovation and intrapreneurship to co-exist with corporate governance for the survival of the organisation	0	Organisational Strategy & Alignment Q1

Growth experienced through intrapreneurship	The culture of intrapreneurship still remained many years after the founders left the company. The tougher the market the more agile the company is required to be, and the value of intrapreneurship prevails in those conditions	0	Have intrapreneurs Q3
Have a system to record and monitor innovative ideas and their implementation	The business has a system to record and measure the innovation ideas and their commercialisation, which includes products, technologies and services	0	Innovation Strategy Q4
Has innovation strategy	The business has an innovation strategy which guides the business as to where to play and what innovation or technology the business will be investing in	0	Innovation Strategy Q4
Has innovative individuals	Has innovative individuals with the character of intrapreneurs in our business	0	Has intrapreneurs Q3
Has innovative team	The organisation has an innovative team or individuals	0	Has intrapreneurs Q3
Has no system that records and recognises innovation	The company does not keep records of innovative ideas and has no reward or recognition programme	0	How performance is measured & rewarded Q8
Have other operational measures other than innovation	There are measures other than financial returns, such as safety and throughput, which are rewarded, other than innovation	0	How performance is measured & rewarded Q8
Highly motivated individuals	Individuals that are intrinsically motivated compared to others	0	Traits Q1

Identify opportunities	Identify the opportunities with their ability to see the bigger picture	0	Traits Q1
Identify opportunities and solve problems	Identify the gaps and find innovative ways to solve the problems to offer the customer a solution that adds value to their business	0	Use to Differentiate Q2
Importance of recognising innovation or successes	Celebrating wins makes people want to do more and recognition will encourage others to also bring innovative ideas forth	0	Use to Differentiate Q2
In a phase of diversifying the business into service	Intrapreneurs are key to identifying the customers' needs and response to the introduction of service in addition to the traditional products. Market sensing is key for the growth and diversification of the business	0	Organisational Strategy & Alignment Q1
Incremental innovations to get rid of irritations	It is continuous innovations that remove irritants and reduce waste, and also improve efficiencies	0	Innovation definition & strategy formulation Q4
Individuals thinking out of the box	They think differently and seek to understand and bring in what is happening in the market to business to create a different conversation and to build relevant solutions and products. They have courage to think and to be heard	0	Traits Q1
Innovate around market changes and show foresight	Company market sensing for future changes	0	Innovation Strategy Q4
Innovate to improve efficiency	The company is pursuing more production and process efficiency to improve profits as it has limited	0	Innovation definition &

	resources to invest in disruptive technologies at this stage		strategy formulation Q4
Innovation and the future of the business	Innovation can change the future of the company as it will allow people to try new things and learn. Will reduce the fear of failure	0	Innovation Strategy Q4
Innovation brought through acquisitions	Large companies can obtain innovation by acquiring innovation intrapreneurial firms which complement their business	0	Innovation Strategy Q4
Innovation enabled growth	Over the years the company has realised growth through innovation and still could do more to increase the rate of innovation to counter the rate of market changes	0	Innovation Strategy Q4
Innovation has a long lead time and can be classified as risky	Innovation strategy should focus beyond a short term as innovation takes a long time to show results. Innovation can be classified as risky where resources are short, especially in tight market conditions	0	Innovation definition & strategy formulation Q4
Innovation is a subset of intrapreneurship	Intrapreneurship is a subset of innovation therefore, intrapreneurship cannot exist without innovation, but innovation can exist without intrapreneurship. Therefore, to commercialise innovation, you need an intrapreneur	0	Innovation Intrapreneurship co-existence in large organisations Q9
Innovation is not always good	Innovation should not be for its own sake. It should always solve a problem or set the company up for the future	0	Innovation definition & strategy formulation Q4

Innovation is part of the Group business strategy	The Group has recently updated the strategy and innovation is the core of its organisational strategy, which it is currently communicating down into the organisation through champions in the business units	0	Organisational Strategy & Alignment Q1
Innovation is recognised	Innovation is recognised by mentioning the innovator in the monthly internal newsletter, as it may be difficult to reward those who commercialise innovation by financial rewards based on profits brought in.	0	Performance linked to innovation Q8
Innovation measured by the customer	Customers are more aware of competitors' offerings and they can determine whether the offering is new / innovative or not.	0	Performance linked to innovation Q8
Innovation not linked to business unit strategy	The business units did not develop the detailed business unit innovation strategy despite the Group investing and anchoring company strategy by innovation.	0	Innovation Strategy Q4
Innovation not linked to performance management	The business currently does not have a formal performance measuring process other than sales, which also does not measure innovation	0	Performance linked to innovation Q8
Innovation should create value	Innovation creates value for the supplier and the customer, which could involve changing or improving formulation for the benefit of the customer resulting in improved returns for the company.	0	Innovation definition & strategy formulation Q4
Innovation solves problems	Innovation must serve a purpose like solving a supplier or customer	0	Innovation definition &

	problem, but should show value and /or returns		strategy formulation Q4
Innovation strategy is executed through discipline	Innovation strategy requires discipline for execution to occur.	0	Innovation Strategy Execution Q5
Innovation strategy not executed	Innovation is not clearly defined in the business strategy. There are no consequences when it is not executed as it is not really prioritised	0	Innovation Strategy Execution Q5
Innovative individuals in an organisation	Innovative individuals or entrepreneurs in an organisation or company with intrapreneurial flair	0	Have intrapreneurs Q3
Internally focused strategy formulation as company becomes large (strategy formulation becomes internally focused)	Large companies with a large market share or who are faced with financial trouble may start to focus internally to reduce costs and drive efficiency	0	Organisational Strategy & Alignment Q1
Intrapreneurial spirit differentiates us	The knowledge, agility, innovative thinking and the autonomous approach gives the business intrapreneurial flair and enables it to compete timeously	0	Use to Differentiate Q2
Intrapreneurial thinking confused with consultancies	Definition of consultants versus intrapreneurship, which are innovators within organisations. Consultants are intrapreneurial firms that offer specific services for a fee to the organisation	0	Have intrapreneurs Q3
Intrapreneurs are key in the growth of the organisation	Intrapreneurs are key to the growth of a company, more importantly, when the company reaches a stage of decline, they could add value	0	Use to Differentiate Q2

Intrapreneurs commercialise innovation or ideas	Innovators sees their ideas to comercialisation	0	Intrapreneurs in innovation strategy execution Q9
Intrapreneurs link to innovation strategy execution	Intrapreneurs tend to take their ideas to execution as they become very passionate about it	0	Intrapreneurs in innovation strategy execution Q9
Intrapreneurs need strict guidelines in large organisations	In listed companies, intrapreneurs require strict guidelines as they cannot do as they please and must account for losses if they are perceived to be part of innovation. Their actions have to be recorded	0	Organisational Strategy & Alignment Q1
Intrapreneurs require decision making power to execute strategy	To be able to allocate and coordinate resources, one needs to be in an empowered position to command some sort of authority. Hence intrapreneurs at floor level tend to lose their positions and become instruction takers as they have no decision-making powers to command any changes necessary	0	Intrapreneurs in innovation strategy execution Q9
Intrapreneurs still need regulations or boundaries to conduct business	Indicated that intrapreneurs in listed companies require boundaries within which to operate while executing their ideas / innovation or conducting business	0	Organisational Strategy & Alignment Q1
Involved in innovation strategy execution	To execute the strategy, understanding the value chain is key. Every department or individual who is part of the value chain should be part of strategy execution and formulation	0	Innovation Strategy Execution Q5

	to understand the business plan, i.e. what to do, where, and how and by whom. "Respond to strategy" is being seen to be executed		
Involved in innovation strategy formulation	Indicate who comes up or is involved in innovation strategy formulation. The words "come up" also defines this involvement in formulation.	0	Involved in innovation strategy Q6
Job descriptions and strict guidelines hinder intrapreneurship	Job descriptions tend to limit people from what they can do beyond what they are employed to do. They mainly restrict intrapreneurship and they were also created as part of compliance	0	Have intrapreneurs Q3
Lack of collaboration hinders innovation strategy execution	Collaboration and coordination of teams would more likely increase the chance of innovation execution success. The separation of duties is understandable in large companies, but might hinder execution by the inventor especially if he/she is an intrapreneur	0	Innovation Strategy Execution Q5
Lack of collaboration to innovate	Lack of collaboration may hinder or delay innovation formulation and execution	0	Innovation Strategy Q4
Lack of innovation commercialization	Some innovations remain ideas and never move into a commercialization stage.	0	Innovation Strategy Execution Q5
Laziness motivates innovation	Not enough innovation	0	Innovation definition & strategy formulation Q4

Leadership to lead innovation and culture change	The culture of the company will determine how innovation and intrapreneurship are embraced and adopted. The leadership initiates the change required and then creates the environment that will enable innovation and intrapreneurship to grow the business even in declining markets.	0	Innovation Strategy Q4
Learning with a bigger picture in mind	Learning includes informal and formal skills development to enable an intrapreneur or the organisation to develop new knowledge to stimulate innovation and the expertise to sense market changes and respond accordingly.	0	Use to Differentiate Q2
Link between intrapreneurship and innovation	Intrapreneurship is a subset of innovation, but innovation can be a stand-alone as an innovator is not necessarily an intrapreneur. Hence, there is a link between them as an intrapreneur may be an innovative individual	0	Intrapreneurs in innovation strategy execution Q9
Market intelligence is critical in defining business strategy	The customer facing team and/or intrapreneurs are likely to provide market intelligence for the organisation to position itself	0	Use to Differentiate Q2
Measure and reward financial performance	Measure and rewards for volumes, sales, profits and others excluding innovation	0	How is performance measured & rewarded Q8

Most people are innovative given the opportunity	Most people are innovative, including at lower or floor levels, when the opportunity or a safe platform is created	0	Innovation definition & strategy formulation Q4
Needs satisfaction and to generate wealth	Intrapreneurs identify and satisfy customers' needs which resulted in growing our business	0	Have intrapreneurs Q3
No formal performance measure in place	Due to historical or the legacy of the business, there are no KPI or any formal measures other than profit, production and safety. Because the business always did well, it was assumed that innovation was part of the business and did not need to be measured, rewarded or even recognised.	0	How is performance measured & rewarded Q8
No process to record innovation	The business does not have a process or system to record innovative ideas	0	Innovation Strategy Execution Q5
Not all innovators can execute	Most intrapreneurs do execute their ideas, but some departments are structured so that there is a separation of duties which may prevent intrapreneurs from executing their ideas.	0	Innovation Strategy Execution Q5
Not considered in strategy formulation	Intrapreneurs are not considered in strategy formulation. Executives decide where they want the business to go and they formulate strategy accordingly without taking into account the talent available to contribute or execute it.	0	Have intrapreneurs Q3

Not everyone is innovative	Not everyone is innovative. Others may need encouragement	0	Innovation definition & strategy formulation Q4
Open mindset for innovation	The company is trying to encourage an open mindset for learning to enable the business to innovate	0	Innovation definition & strategy formulation Q4
Opportune profits while executing strategy	Following your strategic direction and business opportunities is sufficient to push business profits beyond the expectation of normal strategy. Luck happens when you are at the right time at the right place, executing strategy and the market turns in your favour	0	Success due to windfalls Q7
Organisation allows them space to contribute	Definition of intrapreneurship - organisations that allow employees or innovators space to bring ideas and innovations within the organisation	0	Have intrapreneurs Q3
Organisation has system that hinders innovation	Some of the organisational systems may hinder innovation which include systems such as job grading or performance measures, amongst others	0	Innovation Strategy Q4
Organisations ignore strategy and innovation when delivering results	The business strategy become critical when the organisation is not performing well	0	Organisational Strategy & Alignment Q1
Our structure supports intrapreneurship	The business structures in place must support strategy and intreprenurship which is core to the business	0	Have intrapreneurs Q3

People innovate because they are selfish	The respondent highlighted that people innovate because they are selfish - either to make their lives easier or to make them recognised. However, he mentioned that people at the higher level of the organisation innovate for both the organisation and their benefit.	0	Innovation definition & strategy formulation Q4
Positive energy	Positive energy is well-known for motivated people, which is one of the intrapreneurial traits	0	Traits Q1
Present at different organisational levels	Intrapreneurs are present in different levels, At lower levels, they need encouragement and empowerment and they innovate to make their lives easier. At lower levels may be hesitant to ask permission to do anything outside their job spec At senior levels, they impact the future of the business	0	Levels in organisation structure Q3
Push boundaries and break rules	They push the boundaries and break the rules, if they have to, to make things happen.	0	Traits Q1
R&D and innovation differentiates our business	Research and development and innovation can become a differentiator as for the company it is part of the resources for continuous improvement, adjacent innovation, or used to develop disruptive innovation	0	Use to Differentiate Q2

Requires and allocates resources to meet business needs	The intrapreneurs should have authority to allocate and coordinate resources to meet the business or customer needs	0	Have intrapreneurs Q3
Resources are required to innovate and fix problems	innovation requires resources in order to be executed	0	Innovation Strategy Q4
Risk takers	They are motivated by risk as it is associated with reward	0	Traits Q1
Risky to be intrapreneurial for a large listed company	Risky meaning it is different from what is known and some of the responses to the market by intrapreneurs might be impromptu and fall within any procedures the company adopted as agility is key for intrapreneurship	0	Innovation Strategy Q4
Running decades behind on innovation	The industry is behind in technology, and lags behind in technology or innovation adoption. Certain countries are however moving faster though	0	Innovation Strategy Q4
Sees a bigger picture	They see a bigger picture as they are broad-minded	0	Traits Q1
Skilled and self-starters	They only need to know the goal or understand the strategy and they deliver. They don't necessarily have formal education	0	Traits Q1
Strategy execution is measured	You can measure what you said you are going to do, either by reporting on the countries you said you will operate in, or on performance the business was set to deliver, or the activities planned for business performance	0	Innovation Strategy Execution Q5

Strategy is not well understood	The business unit strategy is not well defined which makes it difficult to deliver and measure against	0	Organisational Strategy & Alignment Q1
Strategy ownership is important for execution	Clear strategy communication and ownership creates buy in and ownership of the strategy, which improves the rate of execution	0	Organisational Strategy & Alignment Q1
Strategy well executed but no windfalls	Strategy execution means making decisions to operate in certain industries and countries, which it gets done. No windfalls realised as the market has been in decline for the past few years	0	Success due to Strategy Execution Q7
Systems and innovative people are differentiators	The suppliers in the mining market are very intrapreneurial. What differentiates us is innovation in addition to intrapreneurship, which comes from our people and systems	0	Use to Differentiate Q2
Technology comes from technical field	The team expect technology development to be done by the technical team	0	Involved in innovation strategy Q6
That's a difficult question - innovation	Hesitant to answer the question the respondent did not like money to reward innovation	0	Innovation Strategy Q4
The business can facilitate innovation strategy	The business should facilitate innovation strategy on their strategy and business model	0	Innovation Strategy Q4
The business introducing KPI to address the innovation and strategy execution	The business implementing key performance indicators which will be aligned to the strategy and also measure innovation formulation and execution	0	Innovation Strategy Execution Q5

The company employs intrapreneurs	The company recruits intrapreneurs to ensure it retains its intrapreneurship, which is its philosophy. There is a need to nourish them	0	Have intrapreneurs Q3
The company was intrapreneurial	the company employs individuals that are innovative and have courage	0	Have intrapreneurs Q3
They are confident and complex	They are very confident about themselves and might seem complex at times	0	Traits Q1
They are creatives within an organisation	Intrapreneurs are creative individuals within the organisation	0	Have intrapreneurs Q3
They are critical for the long-term success of organisations	Long-term sensing and seizing opportunities by intrapreneurs	0	Organisational Strategy & Alignment Q1
They are difficult to find and manage	They require a different approach to manage and they are difficult to find as it is not a common skill that can be developed	0	Have intrapreneurs Q3
They are not in the disruptive technology	The local operation has a large asset base and it is not in disruptive technology, rather to improve efficiency through incremental innovation and stretch it, but further by introducing adjacent technologies	0	Innovation Strategy Q4
They are reliable and credible	Intrapreneurs come across as reliable and credible due to their knowledge	0	Have intrapreneurs Q3
They identify the opportunities and seize them	they identify opportunities and seize them in whichever way possible, including allocating resources required to seize the opportunities	0	Use to Differentiate Q2

	keeping in mind the customer needs, market situation and the competitor position		
They put themselves out there to execute the strategy	They are driven by success and they therefore put themselves out there to succeed	0	Innovation Strategy Execution Q5
Thrive irrespective of the conditions	they are driven and the environment does not stop them	0	Use to Differentiate Q2
Understand customer needs	They make an effort to understand the customer need so they are able to meet the customer requirement. Therefore, to execute	0	Have intrapreneurs Q3
Understand value chain	They make an effort to understand the value chain and the cost and offer value accordingly	0	Have intrapreneurs Q3
Understand what innovation is	the business needs to clarify what it means when it speaks about innovations and what the expectations are as innovation is different in many people's minds	0	Have intrapreneurs Q3
Understand what strategy is	many people do not understand what strategy is and what is required in the strategy formulation and documenting	0	Have intrapreneurs Q3
Using knowledge and learning to create new products and services quickly	The business has skilled and knowledgeable intrapreneurs who have been with the business for some time. Some of them differentiate the business from the competition through their market knowledge and being able to devise a strategy to seize opportunities	0	Innovation Strategy Execution Q5

Value add and innovative people differentiate us	We add value for our customers by using technology to assess their needs, produce and partner with companies to offer value for their needs. Our intrapreneurs in the markets outside South Africa leverage collaboration well to offer customers value at improved margins for the business.	0	Use to Differentiate Q2
Visionary leaders enable employees to own the strategy	A vision is key to intrapreneurs, and a visionary leader may be able to set the goal to be achieved clearly to make it easy for intrapreneurs to execute	0	Organisational Strategy & Alignment Q1
We do measure commercialised innovative ideas or products	The innovative products or technologies are classified accordingly in the system which makes it easy to measure their sales and profits	0	How is performance measured & rewarded Q8
We fail on strategy execution	we start the execution of the strategy, but get distracted by windfalls and never really execute the strategy as detailed	0	Innovation Strategy Execution Q5
We measure and reward for commercialised innovation	people behave the way they are measured and rewarded	0	Innovation Strategy Execution Q5
Windfalls are additional luck while executing strategy	additional luck, through market turns, while executing the strategy	0	Success due to windfalls Q7
Windfalls could be at the cost of the strategy	the team does not lose focus on strategy when opportune business happens as it is temporary, but the	0	Success due to windfalls Q7

	strategy is long term and ensures business sustainability		
Work environment may change people	If the working environment is not conducive for innovation and intrapreneurship, it can change the intrapreneurs as the company said they are always employing them	0	Organisational Strategy & Alignment Q1
Yes and no on windfalls and strategy well executed	Yes, I know what windfalls are and at the same time I am not necessarily sure that the business knows the difference between the results due to the success of strategy execution and opportunistic business.	0	Success due to Strategy Execution Q7

9.11 APPENDIX 11: Codes Categories & Themes Report

	Executives Gr=536; GS=5	Senior management Gr=613; GS=7	Totals	Theme	Research Question
Totals	543	621	1164		
Innovation Strategy Q4 Gr=132; GS=21	64	68	132	Innovation	2
Innovation Strategy Execution Q5 Gr=131; GS=19	60	71	131	Innovation	2
Use to Differentiate Q2 Gr=128; GS=17	51	77	128	Intrapreneurship	1
Have intrapreneurs Q3 Gr=125; GS=21	59	66	125	Intrapreneurship	1
Traits Q1 Gr=122; GS=18	55	67	122	Intrapreneurship	1
Innovation definition & strategy formulation Q4 Gr=104; GS=15	57	47	104	Innovation	2
Organisational Strategy & Alignment Q1 Gr=99; GS=17	44	55	99	Intrapreneurship	1
Innovation Intrapreneurship co-existence in large organisation Q9 Gr=93; GS=4	51	42	93	Large Organisation Innovation Intrapreneurship - Ideal Model	5
Intrapreneurs in innovation strategy execution Q9 Gr=52; GS=6	27	25	52	Innovation Intrapreneurship link	4
How is performance measured & rewarded Q8 Gr=47; GS=5	24	23	47	Innovation	2
Levels in organisation structure Q3 Gr=28; GS=1	9	19	28	Intrapreneurship	1
Involved in innovation strategy Q6 Gr=25; GS=3	7	18	25	Innovation	2
Success due to Strategy Execution Q7 Gr=24; GS=4	14	10	24	Strategy excetution & Windfalls	3
Success due to windfalls Q7 Gr=24; GS=3	11	13	24	Strategy excetution & Windfalls	3
Intrapreneurship in successful strategy execution Q9 Gr=15; GS=2	4	11	15	Innovation Intrapreneurship link	4
Performance linked to innovation Q8 Gr=15; GS=3	6	9	15	Innovation	2