An assessment of corporate entrepreneurship in the telecommunications sector

by

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ABSTRACT

This study examined the influence of the thirteen corporate entrepreneurial constructs on the entrepreneurial climate in a corporate organisation. The primary objective of this study was to assess the level corporate entrepreneurship in Telkom, and to make recommendations on the encouragement and promoting of a climate conducive to corporate entrepreneurship.

The empirical study was conducted by means of a self-completion questionnaire administered to middle managers in Telkom. The questionnaire was distributed to 1028 middle managers electronically. 162 questionnaires were received from middle managers in Telkom.

Cronbach’s Alpha coefficient values were used to determine the internal consistency amongst items in the research instrument. Only one of the constructs recorded an Alpha value of less than 0.8, indicating a relatively high level of internal reliability of the research instrument.

An analysis was done of the perceptions regarding the presence of constructs of an entrepreneurial climate as well as the perceived success of the organisation. The effect of demographical variables on entrepreneurial constructs was recorded.

The thirteen constructs of an entrepreneurial climate in an organisation, as well as five factors evaluating the perceived success of an organisation were investigated. The relationships between the demographic variables (male: female and M4:M5 management level) were discussed for the thirteen constructs as well as for the factors measuring the perceived organisational success in order to identify statistically significant variances in perceptions.

The study concludes with practical recommendations, a measurement of the achievement of objectives and suggestions for further research.
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CHAPTER 1
NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Cornwall and Perlman (1990:189) posit that during economic downturn periods it is important to identify opportunities and minimise failures and mistakes. To prosper in this Morgan (2006:54) argues that highly successful organisations pursue strategies of constant innovation and product breakthrough. This statement is supported by Cameron and Quinn (1999:4) who maintain that a highly successful organisation is a leader in the industry.

The constantly growing and changing phase of economic activities in the global sphere, the effects on corporate organisation coupled with a consumer movement that is gaining momentum necessitate a greater focus on corporate entrepreneurship (CE). Bhardwaj and Momaya (2006:47,48) declare that corporate entrepreneurship processes refer to the creation of new business ventures, and other innovative activities such as development of new products, services, technologies, administrative techniques, strategies and competitive postures.

Since the primary objective of an enterprise is profit maximisation, corporate entrepreneurship within an organization should therefore translate to a maximised return on investment. Dess and Lumpkin (2005:147) preamble corporate entrepreneurship as encapsulating the creation and pursuit of new venture opportunities and strategic renewal, yielding above average returns and contributing to sustainable advantages when implemented effectively.

The past decade has witnessed high rates of change in the market place in areas of globalisation and industry spheres. Capacity to innovate faster than competitors is about identifying new ways of doing business as well as developing new technologies and
products (Teng, 2007:119). Drucker (1999:1x) interpret innovation as a systematic activity which is characteristic of an entrepreneurial organisation, not being confined to a small start-up venture, but rather as a mindset which can also be practised by large corporate organisations.

Morris and Kurakto (2002:23) present entrepreneurship as being about the creation of wealth, enterprise, employment, change innovation, value and growth. Birkinshaw (2003:3) is of the opinion that corporate entrepreneurship refers to the development of new business ideas and opportunities within large and established organisations. Seatre (2001:120) extends these views by asserting that corporate entrepreneurship could help unlock considerable potential within the existing business.

Bormann (1992:19) insists that being receptive, managers will enable themselves to anticipate new developments which have an input on their organisations which they will be able to accommodate into their strategies. Pinchot and Pellman (1999:11) maintain that innovation is necessary for the differentiation of products as well as to fill gaps in the market place, by keeping up with the productivity of the competitors.

1.2 PROBLEM STATEMENT

The business landscape particularly the Information Communication and Technology (ICT) sector has undergone some metamorphic changes in the last decade. A more liberalised ICT market in South Africa has ushered with it more competitors and role players. This process has effectively terminated Telkom South Africa’s monopoly on the telecommunications landscape, and impressed a new demand of change in the way it conducts business with a focus on corporate entrepreneurship.

As a result of the structural adjustment in the ICT sector, efficient and lean organisational structures have become imperative for continual productivity. To achieve this, organisations need to adopt what Dess and Lumpkin (2005:147) call an
Entrepreneurial Orientation (EO), which refers to the strategy-making practices that businesses use to identify and launch corporate ventures.

As a result of the existing ICT dynamics and the continued pressure on organisations to adjust to these changes, the imperative of having differentiated and targeted business focus with solemn intent to operate small businesses within an organisation have to be established. Longenecker, Moore and Petty (2005:9) in agreeing with the US Small Business Administration assert that SMME’s represent more than 52% of all employers and generate more than 51% of the private sector. A discerning organisation should set itself on this path of being this corporate entrepreneur and effective 21st century organisation of choice.

Doh and Pearce (2004:646) endorsed Zahra (2000:509) assertion that, privatisation of telecommunications services has dramatically altered the competitive landscape by transferring conservative, bureaucratic state-owned corporations from public to private hands, with the attendant opportunities for entrepreneurial transformation of such firms. They further cast a shadow on the South African ICT sector where new entrants into the market compete against the newly privatized incumbent, generating a second wave of competitive impacts (Doh & Pearce, 2004:646).

The liberalisation of the ICT sector galvanised by government regulation in South Africa has resulted in a fierce scramble for the market share. As a result this has exposed Telkom to a lot of legal lawsuits for anti competitive behaviour, insinuating unfair advantage over other role players. Because government policies affect Telkom’s corporate entrepreneurship strategy, this has to be integrated with the corporate political strategy to both affect government policy and to respond to competitor efforts to influence that policy (Hillman & Kein, 1995:193).

Being an ICT solutions provider, Telkom’s corporate entrepreneurship strategy has to be in line with Moore’s Law declaring that technology doubles every two years (Chaffey &
Wood, 2005:130,131). It then logically follows that for this to take root, a lean and agile organisation structure has to be embraced.

The acquisitions of subsidiaries across the borders of South Africa brought about burdens of dealing with other government regulations. Notwithstanding all the efforts undertaken to exude an entrepreneurial culture within its ranks through various initiatives including change in structure albeit infantile, a case for research of this nature is merited to ascertain the state of corporate entrepreneurship within Telkom as a vehicle to maximise sustainable returns.

Organisations need a competitive advantage to survive in the dynamic business environment, in light of the changing landscape and new challenges. It is against this backdrop that a culture of corporate entrepreneurship should be encouraged in Telkom to benefit its strategic intent going forward. Ultimately the measurement and recommendation as to how such an entrepreneurial climate can be enhanced and encouraged thereof, should be worth while and value adding.

1.3 RESEARCH OBJECTIVES

The research objectives consist of primary and secondary objectives.

1.3.1 Primary objective

The primary objective of this research is to evaluate the state of corporate entrepreneurship within Telkom and to make recommendations on creating and enhancing an entrepreneurial climate in the organisation and industry.
1.3.2 Secondary objectives

For primary objectives to be addressed the following secondary objectives were formulated:

- to define corporate entrepreneurship;
- to obtain insight into the dynamics of corporate entrepreneurship by means of a literature review;
- to obtain insight into the business environment of Telkom;
- to determine the reliability of the questionnaire;
- to assess the entrepreneurial climate in Telkom South Africa by means of a questionnaire to be completed by middle management;
- to examine the relationships between selected demographic variables and the constructs measuring entrepreneurial climate and the perceived success of the organisation; and
- to suggest practical recommendations to foster corporate entrepreneurship in the organisation.

1.4 SCOPE OF THE STUDY

1.4.1 Field of study

The field of this study falls within the discipline of entrepreneurship with specific reference to corporate entrepreneurship.

1.4.2 Organisation under investigation

The organisation under investigation is Telkom South Africa (TSA). TSA falls under the ambit of the Telkom Group of companies. Other companies within the group include Telkom International and Data Centre Operations (DCO), with subsidiaries spread across the African continent. Telkom South Africa has got its footprint across the nine
provinces of South Africa. A detailed description of TSA is articulated in chapter 3 for further referral. The geographical network footprint of Telkom South Africa is attached in figure 1.1.

Figure 1.1: Map of South Africa with Telkom South Africa’s network footprint

Source: http://cntrra20appgis/arialphoto.asp

1.5 RESEARCH METHODOLOGY

Although different research processes or steps are identified by authors, most of them have the same basic principles. The systematic flow of the research process assists the researcher to proceed from an identified problem to proposing meaningful solutions and recommendations for improvement.
In this study, a literature review was conducted to secure the definition and background related to secondary objectives. A subsequent empirical study was conducted to complete the study objectives.

1.5.1 Literature review

An extensive literature review was embarked on using a wide variety of books, academic journals and the Internet. Government green and white papers and different reports of government departments responsible for encouraging, regulating and supporting entrepreneurship were also consulted.

The literature study will define the following terms: entrepreneur, entrepreneurship, corporate entrepreneurship, entrepreneurial climate and innovation. The literature study will also investigate:

- the dimension of corporate entrepreneurship;
- the determinants of an entrepreneurial climate;
- how to establish corporate entrepreneurship in an organisation, including different models and frameworks developed to enlarge and foster corporate entrepreneurship;
- the role played by middle managers in creating and fostering an entrepreneurial climate; and
- the specific contributions that middle managers can make to enhance the entrepreneurial climate within an organisation.

Lastly the study will investigate the thirteen constructs that will be measured in order to evaluate the climate suitable to establish corporate entrepreneurship as well as the perceived success of the organisation.

The second part of the literature study will investigate Telkom SA as the organisation under investigation, especially core strategies for the organisation that need to be
aligned with the requirements to establish corporate entrepreneurship. It is therefore important to understand Telkom SA strategic driving factors (evolution of Telkom):

- to grow profitable revenue internationally;
- to grow profitable revenue through broadband and converged services;
- to grow profitable revenue through wireless voice and data services; and
- to defend profitable revenue.

1.5.2 Empirical study

A questionnaire for this study was administered to a sample group that was selected from the population of Telkom staff especially the middle managers dealing and interfacing with customers, products, services, innovation and technology.

1.5.2.1 Selection of questionnaire

An empirical study was done by means of a questionnaire developed by Oosthuizen (2006) and adapted by Jordaan (2008).

1.5.2.2 Study population

The target population for this study is middle managers within Telkom SA. The list of managers at the requested job level was supplied by the Human Resource department. A questionnaire was then electronically sent to all the identified middle managers.

1.5.2.3 Data collection

The human resource system administrator sent all the questionnaires to all managers targeted to take part in the survey. A covering letter guarantying participants of the confidentiality of their responses was attached to the questionnaire. Follow-up notifications were sent to all the people that did not respond in time, in order to get a
better feedback percentage. A thank you message was displayed on the computer screen of respondents once they had completed the questionnaire.

1.5.2.4 Statistical analysis

The collected data was analysed using SPSS (SPSS, 2009) and Statistica (2009). The analysis consist of descriptive statistics entailing arithmetic mean, standard deviation, inferential statistics such as p-value and d-value tests and Cronbach Alpha coefficient testing the reliability of the questionnaire.

1.6 LIMITATIONS/ANTICIPATED PROBLEMS

The study is confined to Telkom South Africa and the scope does not stretch beyond the entire ICT sphere of industry. Because of lack of international benchmark, the scope of the study does not extend to all employees of Telkom, but zooms in largely on middle management level employees. As a result it is difficult to draw conclusions about the whole organisation.

The study seeks to measure the entrepreneurial climate within Telkom as an organisation. The recent global economic meltdown could be a limiting factor, as organisations bent towards bootstrapping as a way of hoarding the negative effects to bottom lines. The seasonal economic conditions could limit the way the organisation would like to entrench an entrepreneurial climate.

Anticipated company restructuring and realignment of strategy in forging a new culture might also be a limiting factor, because employees might be scared to take risks in order to secure their jobs. Intense competition in a scramble for critical skills might result in a mass exodus of employees and thus gravely reducing the population size.

The study measures the perceptions that managers have of the entrepreneurial climate of the organisation as measured by the thirteen constructs of corporate
entrepreneurship. Other factors common to the industry may influence the entrepreneurial behaviour of the organisation like the bureaucracy that exists within the organisation and the economic state the organisation finds itself.

The completion of the questionnaire was voluntary and resulted in not all questionnaires being completed, thus the sample may not be representative of the study population chosen.

1.7 THE LAYOUT OF THE STUDY

Figure 1.3 gives a graphical representation of the layout of the study per chapter.

Figure 1.2: The layout of the study
Chapter 1 - Nature and scope of the study

Chapter 1 drew a road map to the study and introduced the background and context of the study. The problem statement interrogated the level of entrepreneurial climate within Telkom. The problem statement superseded the primary and secondary research objectives. The entrepreneurial climate within in Telkom was gauged and espoused recommendations to enhance an entrepreneurial climate. Finally the study limitation and chapter layout were outlined.

Chapter 2 – Literature review

Chapter 2 reviews the literature on corporate entrepreneurship. This covers literature from the definitions of corporate entrepreneurship and its implementation in organisations. Aspects and factors leading to and encouraging corporate entrepreneurial climate will be explored, coupled with hindrances to attaining such an environment and the perceived success of the organisation.

Chapter 3 – Overview of Telkom South Africa

Chapter 3 deals with the overview and discussion of Telkom from a government owned monopolistic entity to a listed competitive entity. The influence of Telkom in the ICT space will be highlighted and explored further. Over and above that, a spotlight will be cast on future strategic direction Telkom is embarking on. This will include an analysis of management structure and business improvement processes.

Chapter 4 – Empirical research

Chapter 4 explains how the research was carried out and the findings thereof. The research process will be well articulated and the discussions on the statistical methods used elaborated upon. The data gathering process will be discussed and this will include a review on the structure of the questionnaire.
Demographic information of respondents will be analysed by gender, age, functional department and managerial level. The thirteen corporate entrepreneurial constructs identified in the literature review of chapter two as well as the perceived success of the organisation will be analysed.

The reliability of the entrepreneurial climate questionnaire will be tested and established by means of the Cronbach Alpha coefficients, after which the entrepreneurial climate will be analysed and assessed.

The last section of this chapter will analyse and examine the relationship between the constructs with regard to selected demographic variables i.e. gender, age and managerial level.

**Chapter 5 – Conclusions and recommendations**

Chapter 5 is the final chapter and draws conclusions from the findings of the research and the state of corporate entrepreneurship within Telkom. Discussions recommending ways of encouraging an entrepreneurial climate are delved upon. The objectives of the study will be evaluated to determine congruence with the findings.

This chapter will conclude on:
- the demographic information;
- the use of Cronbach Alpha coefficient’s and the reliability of the questionnaire;
- the entrepreneurial climate at Telkom; and
- the relationship between the entrepreneurial climate and the demographic information

Recommendations will be made based on the conclusions reached, after which the achievement of the objectives of the study will be tested. The chapter will conclude by making suggestions for possible further research.
CHAPTER 2
A LITERATURE REVIEW ON CORPORATE ENTREPRENEURSHIP

2.1 INTRODUCTION

Entrepreneurship is recognised as being of fundamental importance to economic growth. By creating new ideas, enterprises and jobs, it nurtures the economy as a whole (Heinonen & Poikkijoki, 2006:80). Entrepreneurial firms account for employment growth of at least twenty percent in the United States of America (Timmons & Spinelli, 2007:51).

Entrepreneurship is regarded as the engine of economic progress, job creation and social adjustment (Gurol & Atsan, 2006:25-26). As a developing country, the crucial role of entrepreneurship would also be applicable to South Africa as a driving force in the economy. The 2006 Global entrepreneurship Monitor report (GEM report) highlights that early-stage entrepreneurial activities in South Africa is currently lacking if South Africa wants to sustain the type of economic growth rates that will create wealth for all (Maas & Herrington, 2006:7).

This chapter reviews the literature on corporate entrepreneurship. It focuses on defining the entrepreneur, entrepreneurship and corporate entrepreneurship. It further explores the dimensions of corporate entrepreneurship including new business venturing, self-renewal, pro-activeness and risk taking. Different types of corporate entrepreneurship like corporate venturing, intrapreneuring, organisational transformation and industry rule bending are also espoused in this chapter. The main content of the chapter is the discussion of the thirteen constructs of corporate entrepreneurship and the perceived success of the organisation.
2.2 DEFINING THE TERMINOLOGY

2.2.1 Entrepreneur

The problem of defining the word entrepreneur and establishing the boundaries of the field of entrepreneurship have still not been solved (Bruyat & Julien, 2000:166). The authors however regard the entrepreneur as the individual responsible for the process of creating new value (an innovation and/or a new organisation) - in other words the individual without whom the new value would not be created (Bruyat & Julien, 2000:169).

Johnson (2001:137) defines an entrepreneur as an individual who takes agency and initiative, who assumes responsibility and ownership for making things happen, is both open to and able to create novelty, who manages the risks attached to the process, and who has the persistence to see end-point, even when faced with obstacles and difficulties.

The value created by the entrepreneur triggers a chain of economic events. Focusing on economic processes, an entrepreneur is a person who establishes new organisations in order to seek higher returns than interest, rent, or wage earnings, i.e. a founder and owner/manager of production factors (Bulut & Alpkan, 2006:65). On the other hand, focusing on individual characteristics, an entrepreneur is an individual taking risk for the sake of innovation creating new products, processes, markets, organisational forms, or resources of supply, i.e. an innovator (Bulut & Alpkan, 2006:65).

2.2.2 Entrepreneurship

Kurakto (2007:3) preambles entrepreneurship as a process, vision, change, and creation which requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. This include willingness to take calculated risk, in terms of time, equity or career, the ability to formulate an effective
venture team, the creative skill of building a solid business plan and the vision to recognise opportunity where others see chaos, contradiction and confusion. It is this contemporary concept that renders entrepreneurship interdisciplinary.

In the process of defining entrepreneurship, Antoncic and Hisrich (2003:8) agree with the consensus that, the concept of entrepreneurship is the process of uncovering and developing an opportunity to create value through innovation and seizing that opportunity without regard to either human and capital resources or the location of the entrepreneur in a new or existing company.

Jacobs and Kruger (2001:1) go as far as defining entrepreneurship as a process by which individuals either on their own or inside organisations pursue opportunities without regard to the resources they currently control. Entrepreneurial actions are any newly fashioned behaviour through which companies exploit opportunities others have not noticed or aggressively pursued (Kuratkko, Ireland & Hornsby, 1993:60).

Entrepreneurial activity within a corporation is the ability to create and capture added value beyond that which the corporation is currently doing (Gaw & Liu, 2004:2). Ireland, Hitt, Ireland, Camp and Sexton (2002:49) concur that entrepreneurship involves creating new resources or combining existing resources in new ways in order to develop and commercialise new products, move into new markets, and/or service new customers.

Entrepreneurship which typically leads to new product introduction or market entry creates value through association with the discovery and exploitation of profitable business opportunities (Sarkar, Echambadi, & Harrison, 2001:701). In addition to this assertion, entrepreneurial activities also create value when they facilitate access relationships to resources and capabilities that are strategic to competitive and performance.
The definition of entrepreneurship poses a bit of a conundrum in that it brings a nexus of different phenomena. Because of this, Shane and Venkaraman (2000:217) concern themselves with three sets of research question about entrepreneurship which are:

- why, when and how opportunities for the creation of goods and services come into existence;
- why, when and how some people and not others discover and exploit these opportunities; and
- why, when, and how different modes of action are used to exploit entrepreneurial opportunities.

Cogliser and Brigham (2004:774) uphold that entrepreneurship focuses not only on the entrepreneur, but on the intersection of that enterprising person and lucrative or entrepreneurial opportunities. They further distinguished managers from entrepreneurs where managers control, guarantee, discipline, and introduce order. Their view is that entrepreneurship is a special case of leadership and distinguished from other forms of leadership in terms of one who created a company rather than managing an existing one.

The area of leadership is primarily concerned with strategy. Dess and Lumpkin (1997:679) argue that strategy making is an organisation-level process that encompasses the range of activities firms engage in to formulate and enact their strategic mission and goals. They identify the strategic activities from analysis, planning, decision making, strategic management, and many aspects of the organisation’s culture, shared value system and corporate vision.

The problem with a field of research such as corporate entrepreneurship is that as a widely researched study, many authors come up with their own definitions. As a result one ends up with what Sharma and Chrisman (1999:13) refer to as definitional ambiguities.
2.2.3 Corporate entrepreneurship

Corporate entrepreneurship generally refers to the development of new business ideas and opportunities within large and established corporations and in most cases it describes the total process whereby established enterprises act in an innovative, risk-taking and pro-active way (Hough & Scheepers, 2008:1).

Some researchers see corporate entrepreneurship as embodying entrepreneurial behaviour requiring organisational sanctions and resource commitments for the purpose of developing different types of value-creating innovations (Kurakto, Ireland, Covin & Hornsby, 2005:700). Rutherford and Holt (2007:430) agree with Zahra’s (2005) definition of corporate entrepreneurship as a process of organisational renewal that has two distinct but related dimensions of innovation and venturing, and strategic renewal. They however assert their definition of corporate entrepreneurship as the process of enhancing the ability of the firm to acquire and utilise the innovative skills and abilities of the firm’s members.

Dess et al. (2003:352) go further in emphasising Sharma and Chrisman (1999:18) definition of corporate entrepreneurship as being the process whereby an individual or a group of individuals, in association with an existing organisation, create a new organisation, or instigate renewal or innovation within that organisation.

Johnson (2001:138) identifies and defines three forms of corporate entrepreneurship as follows:

- **Intrapreneurship** – the creation of entrepreneurial new ventures both within and surrounding the organisation.
- **Dispersed entrepreneurship** – building structures and a culture across the organisation to support entrepreneurship and innovation and to stimulate employees to take ownership of the business.
- **Corporate venturing** – building innovative capacity by developing close relationships with small ventures in related sectors.

Christensen (2004:302) proposes a categorisation of the concept of corporate entrepreneurship spanning from both internal perspective and an external perspective. The internal perspective is referred to as intrapreneurship and an external perspective as exopreneurship. It is important to note that the author mentions the reason for creating corporate ventures as the isolation and nurturing of innovative ideas that cannot survive in the bureaucratic structures and formal procedures of a large company (Christensen, 2004:302).

Indeed it is Thornberry (2001:528) who posits that corporate entrepreneurship is not about business as usual, it is about unusual businesses or unusual approaches to business. The maxim that structure follows strategy has, never been more relevant to corporate entrepreneurship than in recent times. Russell and Russell (1992:640) perceive entrepreneurial strategy to involve a persistent, organisationally sanctioned pattern of innovation-related activities and resource allocations that compose one component of the firm’s comprehensive corporate strategy. The authors uphold that a successful entrepreneurial strategy would produce innovations that add value to the firm (Russell & Russell, 1992:645).

### 2.3 DIMENSIONS OF CORPORATE ENTREPRENEURSHIP

Literature is abundant with dimensions of corporate entrepreneurship. Lassen, Gertsen and Riis (2006:360) delve on the concept of entrepreneurial posture and three characteristics of firm level entrepreneurship of innovativeness, pro-activeness and risk taking. Brundin, Patzelt and Shepherd (2006:223) concur that corporate entrepreneurship refers to a company’s commitment to organisational renewal, innovation, constructive risk-taking and the conceptualisation of new opportunities.
2.3.1 New business venturing /Innovation

Literature argues that innovation consists of a variety of different phases including idea generation, research design and development, prototype production, manufacturing and marketing and sales. However theorists have suggested that there is more to innovation than process (McFadzean, O'Loughlin & Shaw, 2005:353).

Morris and Sexton (1996:6) state that innovativeness is the seeking of creative unusual or novel solutions to problems and needs. Innovation takes place in organisations in the form of new products, new processes to use to create products and new administrative structures and routines to use to help the firm operate efficiently and effectively (Ireland, Kurakto & Morris, 2006:10).

The adoption of innovations is conceived to encompass the generation, development, and implementation of new ideas. According to Damanpour (1991:556) an innovation can be a new product or service, a new production process technology, a new structure or administrative system, or a new plan or program pertaining to organisational members. From this the author then defines innovation as the adoption of an internally generated or purchased device, system policy, program, process, product or service that is new to the adoption organisation (Damanpour, 1991:556).

Johnson (2001:139) identifies various forms of innovation thus:

- any change in the product or service range the organisation takes to market;
- any change in the application of a product or service away from its original purposes;
- any change in the market to which a product or service is applied away from the originally identified market; and
- any change in the way a product or service is developed and delivered away from the original operational and logistical design.
Stretching innovation further, O’Connor and Rice (2001:99) elaborate on radical or breakthrough innovation and define it as the creation of a new line of business which is new for both the firm and the marketplace. This however needs management support. According to Seshadri and Tripathy (2006:18), even if top management wants to create an innovative and intrapreneurial organisation, there is a need for intrapreneurs within the system who could execute the process of intrapreneurial innovation.

Chesbrough (2000:34) identifies a very important aspect of corporate venturing, which is that faced by new venture sponsors. The author notes that the problem for a sponsor is one of adverse selection: overtime, the best performing ventures gradually migrated to other divisions, or went off on their own. At the ultimate end the remaining ventures become what he refer to as ‘problem children’ for the sponsor of the new venture division, which is a contrary way of boosting the sponsor’s career within the organisation.

The critical thing to do when establishing a new venture is to obtain a balance of the competing forces as the organisation does not operate in a silo and can therefore not afford to ignore such forces. Garvin and Levesque (2004) emphasise that corporations can grow new businesses by performing three kinds of balancing acts as follows:

**Balancing trial – and – error strategy formulation with rigor and discipline**

- narrow the range of choices before diving deep;
- closely observe small groups of consumers;
- Use prototypes to test assumptions about products, services, and business models;
- Use nonfinancial milestones to measure progress; and
- Know when – and on what basis – pull the plug on infant businesses.

**Balancing operational experience with invention**

- appoint mature turks as leaders of emerging businesses;
• win veterans over by asking them to serve on new businesses’ oversight bodies;
• consider acquiring select capabilities instead of developing everything from scratch; and
• force old and new businesses to share operational responsibilities

**Balance new businesses’ identity with integration**

• assign both corporate executives and managers from divisions as sponsors of new venture;
• stipulate criteria for handling new businesses over to existing businesses; and
• mix formal oversight with informal support by creatively combining – and solid – line reporting relationships.

**2.3.2 Self-renewal**

According to Nicholson-Herbert, Mkhize and Schroder (2000:41), organisational rejuvenation is when the organisation actively seeks to sustain or improve its competitive standing by altering its internal processes, structures and/or capabilities.

Seshadri and Tripathy (2006:18) believe that intrapreneurism enables employees of an organisation to unleash their passion that often results in generating new avenues for business growth or alternatively provides radically different ways of doing existing business. The authors also emphasise that every company requires new ideas to survive and grow profitably and, hence it has to find ways to tap the entrepreneurial potential inherent in its employees (Seshadri & Tripathy, 2006:18).

Antoncic and Hirsch (2003:9) view intrapreneurship as a way of organisational self-renewal. It is fit to for intrapreneurship to serve as a vehicle to avoid the need for excessive retrenchment as new knowledge becomes available, and provide considerable latitude for a theoretical and empirical process to emerge that will
eventually permit the unique parts of the whole to be classified, defined, and understood in relation to that whole (Antoncic & Hirsch, 2003:9).

In referencing Schumpeter (1934) as well as Drucker (1985), Antoncic and Hisrich (2003:9) advance the concept of self-renewal by positioning the entrepreneur as an agent of change, whose creative behaviour in terms of different innovation aspects is seen as a creative disruption in the economic equilibrium of an industry and they also distinguish innovation from what is managerial.

There is a direct link between corporate entrepreneurship and wealth creation of an organisation that pursues self-renewal. Morris and Sexton (1996:5-13) found a positive relationship between entrepreneurial intensity and increased growth in profitability of an organisation.

Stopford and Baden-Fuller (1994:529) observed a case in question whereby for self renewal to take place, old behaviours had to be unfrozen as new ones developed because there were many strands of previous thought, partial action and exploration of other possibilities.

2.3.3 Pro-activeness

Kreisler, Marino and Weaver (2002:78) define proactiveness as the aggressive execution and follow-up actions to drive an enterprise toward the achievement of its objectives by whatever reasonable means required. Scheepers, Hough and Bloom (2008:53) elaborate that as a result, proactiveness has certain underlying attributes such as the enterprise’s disposition towards its competitors, organisational pursuit of favourable business opportunities, its attitude to being a pioneer or fast follower and a high regard for the initiative of employees.

Lumpkin and Dess (2001:434) suggest that pro-activeness is a response to opportunities and it therefore refers to how firms relate to market opportunities by
seizing initiative and leading in the marketplace. Pro-activeness is concerned with implementation thus with doing whatever is necessary to bring an entrepreneurial concept to fruition (Morris & Sexton, 1996:6). The authors further observe that pro-activeness usually involves considerable perseverance, adaptability, and a willingness to assume some responsibility for failure (Morris & Sexton, 1996:6).

Sarkar et al. (2001:702) state that pro-activeness is one facet of the multidimensional concept of entrepreneurship along with autonomy, innovativeness, risk-taking propensity, and competitive aggressiveness. The authors further argue that these dimensions may be independent, rather than covarying and give an example that a highly proactive organisation may not be as innovative or aggressive, yet it may be considered entrepreneurial in terms of its initiatives (Sarkar et al., 2001:702).

### 2.3.4 Risk taking

According to Morris and Sexton (1996:6), risk-taking involves the willingness to commit significant resources to opportunities having a reasonable chance of costly failure. Lassen et al. (2006:363) on the other hand attribute risk taking to highly related uncertainty, lack of planning and unmanageable actions.

Covin and Slevin (1991:7) do not view a firm as entrepreneuring just because it changed its technology or product line simply by imitating competitors while refusing to take any risk. However risk taking firms that are highly leveraged financially are not necessarily entrepreneurial but must also engage in product-market or technological innovation.

Bellone and Goerl (1992:132) took a view on contrasting risk taking and democratic stewardship. The authors concentrate more on public entrepreneurship and argue that entrepreneurial risk taking may be more congruent with democratic stewardship if it is preceded by public information, discussion, and formal acceptance by those who will have their to bear the risks should they fail (Bellone & Goerl, 1992:132).
Bhardwaj and Momaya (2006:134) believe that risk taking propensity indicates the management’s willingness to take risks and tolerate failure, because risk taking propensity has a positive influence on corporate entrepreneurship. The authors emphasise that firms have to take on riskier alternatives, even if it means forgoing methods or products that have worked in the past (Bhardwaj & Momaya, 2006:134).

The dangerous approach to risk-taking is to not exercise caveat and circumspect. Fernald, Solomon and Tarabishy (2005:4) conclude that balancing risk is a necessity of leadership and that leaders must weigh the multitudinous factors involved, while understanding that no one can predict the future with certainty hence inability to deal with uncertainty precludes an organisation from achieving its goals.

### 2.4 TYPE OF CORPORATE ENTREPRENEURSHIP

Thornberry (2003:330-331) preambles four broad typologies or categories of corporate entrepreneurship thus:

- **Corporate venturing**

  Corporate venturing involves the starting of businesses within a business, usually emanating from a core competency or process

- **Intrapreneuring**

  Intrapreneuring is an attempt to take mindset and behaviours that external entrepreneurs use to create and build businesses, and bring these characteristics to bear inside an existing and usually large corporate setting.
• **Organisational transformation**

Organisational transformation fits the root definition of entrepreneurship if the transformation involves innovation, a new arrangement or combination of resources, and results in the creation of sustainable economic value.

• **Industry rule breaking**

Industry rule breaking is a subset of transformation of the enterprise but also the competitive environment of the industry into something significantly different than it was.

Uittenbogaard, Lute and Groen (2005:260) appropriate these typologies in order to garner high levels of value creation within the boundaries of the organisation. This they demonstrate through what they call the Social System of the Firm in Figure 2.1
2.5 THE ROLE OF MIDDLE MANAGERS WITHIN ENTREPRENEURIAL ORGANISATION

Little systematic research has been undertaken to define the nature and scope of middle manager’s contributions to an organisation’s innovations and entrepreneurship, but this situation has changed to some extent as companies sought to revitalise their operations as means of creating strategic change (Kuratko & Hodgets, 2004:14)

Geisler (1993:52) observed that recent trends in organisations and the findings of the entrepreneurship literature suggest that middle managers need to function as internal corporate entrepreneurs. Further on, the assertion is that to survive and to succeed in changing organisations, middle managers need to think and to act as intrapreneurs.
The role of middle managers by and large should be directed at executing the directives of top management. Srivasta and Lee (2005:464) maintain that top management support could be in the form of presenting a vision for the future, communicating a distinctive product concept, giving the approval to the project team to go ahead with a new idea, and providing the necessary resources.

It would be hard to imagine middle managers operating without authority but on the contrary summarily implementing the instructions of top management. It would therefore be ideal for the middle managers to be nimble in their endeavours of corporate entrepreneurship. Echols and Neck (1998) state that managers should construct corporate hierarchies to be as flat as possible, and develop an entrepreneurial culture. They propose a structure that support entrepreneurial behaviours foster thus:

- front-line initiatives with clear communication;
- the creation of new organisational forms that are either separate from or subsets of other forms;
- a reduction of authoritarianism by relinquishing control experts instead of basing it on seniority;
- performance–driven systems with a focus on support, facilitation, and coaching
- high standards in terms of acceptable values;
- high energy toward creatively shaping the organisation while taking calculated risks;
- explicit assignments of authority;
- challenges to stretch people’s skills and ways of thinking;
- measurement designed to enable assessment of different indictors of performance;
- flexibility whereby bureaucracy is minimised and ad-hocracy is maximised;
- an emphasis on the importance of reputation, trust, reciprocity, and mutual interdependence;
- teamwork and participative management styles; and
- celebration for the process more so than the end result.
To further have an outline view of the role of middle managers with regard to corporate entrepreneurship, an adapted version of Kurakto, Ireland, Covin and Hornsby (2005:701) is presented in figure 2.2.

**Figure 2.2: A model of middle-level manager’s entrepreneurial behaviour**

Adapted from: Kurakto et al. (2005:701)

2.5.1 Characteristics of entrepreneurial managers

Entrepreneurial management should be seen in the context of entrepreneurial leadership. Gupta, MacMillan and Surie (2004:242) define entrepreneurial leadership as leadership that creates visionary scenarios that are used to assemble and mobilize a supporting cast of participants who become committed by the vision to the discovery and exploitation of strategic value creation.
Kurakto *et al.* (2005:701) argue that due to their characteristically central roles within the entrepreneurial process, middle manager’s entrepreneurial behaviour may be most critical to the effective implementation of corporate entrepreneurship, regardless of the primary reason (either the creation of new ventures or strategic renewal) it is being pursued.

One of the most important characteristics of entrepreneurial managers is being change agents. Heinonen and Toivonen (2007:168) mention that all at organisational levels are believed to be the dynamos of corporate entrepreneurship processes as they start, implement and champion corporate entrepreneurship behaviour. The authors further stress that entrepreneurial behaviour among middle-level managers may be most critical to the effective implementation of corporate entrepreneurial opportunities and identify, acquire and deploy the resources needed to pursue them (Heinonen & Toivonen, 2007:168).

Cohen (2004:1) identifies entrepreneurial managers as entrepreneurial leaders and split them into two distinct character groups. The first kind of entrepreneurial leader is the people who reside at the top of the organisation chart and who have broad responsibilities across an organisation. The second one refers to someone at any level of the organisation who works to uncover and pursue opportunities for constructive change.

Entrepreneurial managers are learning leaders; otherwise they would not qualify as entrepreneuring as the latter is a dynamic process that requires fluidity. Zahra, Nielsen and Bogner (199:174) link top management to corporate entrepreneurship-based knowledge outcomes. These organisational learning outcomes are indicated in figure 2.3.
Character is a function of mindset and for optimum outcomes; the two should have a synergistic interaction or linkage. Dhliwayo and van Vuuren (2007:125) outline some of the characteristics of the entrepreneurial mindset as follows:

- passionately seeking new opportunities;
- pursues opportunities with enormous discipline;
- pursues only the best opportunities and tightly link their strategy with the choice of projects;
- focus on execution, specifically adaptive execution when the best way to exploit it evolves; and
- engages the energies of everyone in their domain both internally and externally.
The authors further present a strategic entrepreneurial mindset model in figure 2.4 which shows the key dimensions of strategic thinking as well as those of entrepreneurial thinking (Dhliwayo & van Vuuren, 2007:128).

**Figure 2.4: The strategic entrepreneurial mindset model**

Source: Dhliwayo and Van Vuuren (2007:128)

### 2.6 DYNAMICS OF CORPORATE ENTREPRENEURSHIP

Many business executives concur that the ability to drive business growth and implement new and innovative ideas are several of the top priorities of organisations in the 21st century (Scheepers *et al.*, 2008:50). Kurakto and Hornsby (1998:30) identify a number of organisational dimensions associated with corporate entrepreneurship and thus affected by entrepreneurial leadership which include appropriate use of rewards, goals, feedback, emphasis on individual responsibility and results-based-incentives.
Corporate entrepreneurship has both a positive and negative side and has both inhibitors and facilitators as identified by Seshadri and Tripathy (2006:25).

**Facilitators of intrapreneurship:**
- support of the top management to the entrepreneur;
- the freedom to fail; and
- the ability of the top management to condone mistakes and create an atmosphere of learning for them.

**Inhibitors of intrapreneurship:**
- top management inconsistent, intermittent or sporadic enthusiasm or lack of commitment of the top management to the growth of the company as perceived by the employees; and
- a high manpower turnover due to human resources policies or a rigid or myopic approach by the top management.

Chowdhury (2005:729) observed the diverse challenges within corporate entrepreneurship purview, spanning from business, markets and technologies. The Author is of the view that entrepreneurial team rather than a single entrepreneur seems better suited to deal with the uncertainties and volatilities associated with new ventures that require flexibility and complexity of decision making (Chowdhury, 2005:729).

Corporate entrepreneurship has a way of giving an organisation a competitive advantage. Baden-Fuller (1995:3) proposes that the process of creating competitive advantage through strategic innovation is dependent on the capacity to manage change internally, and that this capacity is closely connected to the notion of corporate entrepreneurship.

In their view Bhardwaj, Camillus and Hounshell (2006:249) expect that corporate entrepreneurship should be a continual process. The authors assert that a search for such a continual corporate entrepreneurship has to be enhanced by past entrepreneurial
activities and influenced by past choices, strategic and structural contexts, socio-political and cognitive processes, existing knowledge and capabilities, and temporal economies of scope (Bhardwaj et al., 2006:249).

2.7 INDIVIDUAL CHARACTERISTICS THAT FOSTER ENTREPRENEURSHIP

Based upon the existing literature on entrepreneurship, a set of commonly cited individual traits or characteristics have been identified and they include risk-taking propensity, desire for autonomy, need for achievement, goal orientation, and internal locus of control (Hornsby, Naffziger, Kurakto & Montagno, 1993:33). The authors further include variables such as energy level, conformity, need for autonomy, need for achievement, dominance, high energy level, persistence, a desire for personal control and a desire to build something of one’s own (Hornsby et al., 1993:33). Kanter (2004:9) maintains that people selected for leadership roles will be those characterised by sensitivity towards others rather than a capacity to order people around.

Of cardinal importance, is the defining and contrasting of individualism (a self orientation, an emphasis on self-sufficiency, and control, the pursuit of individual goals that may or may not be consistent with in-group goals, a willingness to confront members of the in-group to which a person belongs, and a culture where people derive pride from their own accomplishments) and collectivism (the subordination of personal interests to the goals of the larger work group, an emphasis on sharing, and group harmony, a concern with group welfare, and hostility toward out-group members) (Morris, Davis & Allene, 1994:3). The authors hypothesised that the relationship between individualism – collectivism is curvilinear, and that progressively higher levels of a group or collective orientation serve to inhibit entrepreneurship (Morris et al., 1994:3).

Srivasta and Lee (2005:464) are of the view that specific characteristics of management are required to foster entrepreneurship. They add to the functional skills of top
management of marketing and production by including important characteristics of top management, such as their experience, expertise, and cognitive diversity. Further on the authors assert that these characteristics could affect management’s innovation and risk-taking capabilities and influence the order and timing of new product moves of their firms (Srivasta & Lee, 2005:464).

To understand characteristics that foster entrepreneurship in organisational context, it is important to know how it will be like without those characteristics. Sadler (2000:29-30) illustrated this nexus by delving on the following five hypotheses:

- decision-making in entrepreneurial organisations will tend to be more participative than in conservative organisations;
- decision-making in entrepreneurial organisations will tend to use more personnel with specialise training than in a conservative organisation;
- entrepreneurial organisations will tend to use fewer integrating devices in decision-making than conservative organisations;
- performance objectives in entrepreneurial organisations will tend to be developed from a shared participation while in conservative organisation performance objectives will tend to be developed unilaterally by top management; and
- managers in entrepreneurial organisation will tend not to be penalised if risky projects fail while managers in conservative organisations will tend to suffer career damage by undertaking risky projects that fail.

It is not enough to just elaborate on the characteristics that foster an entrepreneurial climate, but to know how the jigsaw puzzle fits together. This departure point gives rise to the process involved in enhancing corporate entrepreneurship.

Rutherford and Holt (2007:431) present an integrated model of corporate entrepreneurship that includes process, context and outcome variables where it follows logically that corporate entrepreneurship should be viewed in the context of a particular context composed of different role players with different individual characteristics for a
desired outcome to be attained. Flowing from this, the thirteen constructs measuring the
entrepreneurial climate and the perceived success of the organisation will be discussed.

2.8 THIRTEEN CONSTRUCTS MEASURING THE
ENTREPRENEURIAL CLIMATE IN THE ORGANISATION

When current literature is reviewed, it is soon apparent that there are numerous
constructs that describe an entrepreneurial organisation. The 13 constructs which were
identified, will be discussed as a single list so as to properly integrate the various
perspectives and to provide an overall framework.

2.8.1 Entrepreneurial leadership

Entrepreneurial leadership is visionary in nature and is oriented toward the future, not
just the present state of affairs. The presence of an entrepreneurial vision is imperative
for encouraging intrapreneurial action in an institution, since it provides direction and
purpose to the organisation (Collins & Porras, 1996; Gupta et.al. 2004:244; Lipton,
(2002:25) and Kuratko and Welsch (2004:14) indicate that by creating a vision that
guides the organisation and empowers employees, entrepreneurial behaviour is
promoted. It is also imperative to note as well that, visionary leadership encourages
innovation and maximises opportunities.

Antoncic and Hisrich (2001:495) and Timmons and Spinelli (2007:13) agree that the
ability of an organisation to be innovative has become imperative for success in the
contemporary market place. Organisations have to be creative and quickly able to step
up to the increasingly changing business operating environment, as a result of high
levels of uncertainty and rapid changes which characterise the global business.
Stevenson and Jarillo (1990:19) and Barringer and Bluedorn (1999:422) believe that this
can be obtained by means of high level environmental scanning processes. By using
learned knowledge the organisation improves the ability to expect changes in market
needs and taking appropriate actions in pursuit of profit maximisation and improve market position (Hitt et al. 2002:7).

Various scholars have articulated the benefits of pro-active behaviour patterns in the creation of competitive advantages (Barringer & Bluedorn, 1999:422; Sarkar et al. 2001:702; Antoncic & Hisrich, 2003:18). Van der Merwe and Oosthuizen (2008:17) state that top management has to ensure that a clear and common purpose as articulated in an intrapreneurial strategy is communicated to all employees and especially to middle managers. Middle managers on the other hand have a pivotal role to play in embedding corporate entrepreneurship in an organisation. Goldsby, Kuratko, Hornsby, Houghton and Neck (2006:18) and Ferreira (2002:5) assert that middle managers are instrumental in facilitating the entrepreneurial process and that the autonomous strategic behaviour they exerted, form a basis for strategic renewal in the organisation.

2.8.2 Management support

Robinson (2001:98) and Hough and Bloom (2008:67) are of the view that managers play a crucial role in establishing and maintaining a working environment that facilitate and promote entrepreneurial activity. Kuratko and Hodgetts (2004:63) and Wickham (2004:560) concur that management support for the process include promoting innovativeness; being receptive to ideas put forward by employees and encourage their development as well as providing financial resources needed.

Nayager and Van Vuuren (2005:31) emphasise that top management is instrumental in establishing an environment conducive to corporate entrepreneurship within the organisation. Morris and Jones (1999:76) maintain that top management should foster the belief that entrepreneurial behaviour is valued and appreciated and give reassurance to employees that project failure does not involve unacceptably high personal risks. Antoncic (2000:190) believes therefore to this end that employees need to be encouraged to take intelligent business risks without risking their careers. In order to
achieve that end, leaders need to create a mindset within the organisation that encourages breakthrough thinking and change.

Antoncic and Hisrich (2001) are of the view that top management has to decide on strategies that will lead to improved performance in terms of growth and profitability. Hough and Scheepers (2008:18) highlight the importance of strategy as a driver in the establishment of corporate entrepreneurship. Burns (2005:34) and Zahra (2005:8) maintain that top management should be involved in and be supportive of corporate entrepreneurship efforts within the organisation. This view is supported by Antoncic and Zorn (2004:7) who believe that top management must encourage and reward entrepreneurial activities. Ramachandran, Devaranjan and Ray (2009:15) emphasise the role that top management plays with regard to solving the problems that intrapreneurial employees may experience in the organisation.

2.8.3 Sponsors (champion) for projects

Turner (2002:49) and Oosthuizen (2006:279) assert that sponsors or champions form a vital connection between top management and intrapreneurs and they act as mentors to innovators. Morris and Kuratko (2002:93) allude to the fact that a champion can ease the negotiation process to get buy-in and support from top management and also provide protection to intrapreneurs in case something goes wrong with the project. Sathe (2003:182) contends that an intrapreneur should build support for his venture on three levels, i.e. line management, top management and divisional groups. If the champion network becomes more powerful, the more the innovator manages to build and the greater the support for the venture.

According to Pinchot and Pellman (1999:66), in organisations that are successful in implementing entrepreneurial activities, the presence of sponsors speed up projects. This is affirmed by Van der Merwe and Oosthuizen (2008:14) who argue that a shortage of influential managers that assist and support intrapreneurs to get their work done can negate the process of establishing intrapreneurship in an organisation.
2.8.4 Tolerance for risks, mistakes and failure

Wang (2008:640) is of the view that a risk-tolerant and innovative orientation where managers encourage new ways of thinking, and tolerate mistakes promotes a sense of open-mindedness, since individuals are neither constrained within a frame of thinking nor punished for making mistakes.

Kuratko and Hornsby (1998:30) state that employees and middle managers must be willing to take risks and show a tolerance for failure when it occurs. Kuratko and Welsch (2004:42) argue that one of the ways in which innovation can be promoted, is to establish an environment where failure is allowed.

Kuratko and Welsch (2001:351) reason that encouraging innovation requires a willingness not to only tolerate failure, but also to learn from it. By encouraging experimentation and risk taking, the company has more chances for a new-product success. Dawes (2007:20) views mistakes as inevitable for success and Turner (2002:52) added that the very nature of success demands trial and error.

Cohen (2004:18) states that as long as employees do their homework, use sound business reasoning and try to benefit the organisation, employees shouldn’t be penalised for taking risks on new things, they should be supported and applauded. Nicholson-Herbert et.al. (2004:44) subsequently state that focus should be given to structures that support research and development and allow individuals to take risks and experiment with new ideas.

2.8.5 Innovation and creativity, new ideas encouraged

Lumpkin, Cogliser and Schneider (2009:56) and Rauch, Wiklund, Lumpkin and Frese (2009:763) define innovativeness as the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technological leadership via research and development in new processes. Lowe and
Marriot (2006:70) view innovation as a broad concept, which includes exploitation of existing ideas, whether it being product, process, position or paradigm innovation.

According to Kuratko and Welsch (2001:347), continuous innovation and an ability to compete effectively in international markets are among the skills that are expected to increasingly influence corporate performance in the twenty-first century's global economy. Ireland, Covin and Kuratko (2009:26) also assert that, an entrepreneurial strategic vision represents a commitment to innovation and entrepreneurial processes and behaviour that is expressed as the organisation's philosophical modus operandi.

Kuratko and Welsch (2001:350) state that, for a corporation seeking to establish an intrapreneurial strategy, innovation must be encouraged among employees as the key element in its strategy. It is about creating the space for stimulating ideas to emerge from individuals. Ideas can also be enriched by social interaction and facilitated conversations within teams (Nicholson-Herbert et al., 2004:43).

Morris and Kuratko (2002:104) argue that, creativity is the soul of entrepreneurship. It is required in spotting the patterns and trends that define an opportunity, and is needed to develop innovative business concepts. Most importantly, the corporate entrepreneur has to be highly creative in getting a sponsor, building and using a network, obtaining management buy-in for the concept, forming a team, coming up with resources, and overcoming many obstacles.

### 2.8.6 Appropriate rewards and reinforcement

Morris and Kuratko (2002:244) and McBeth and Rimac (2004:21) are in unison that rewards represent a very persuasive tool to influence employee behaviour on the job, especially the set of rewards over which management has direct control state that one cannot expect creativity and innovation while measuring and rewarding the opposite. Traditional reward and evaluation systems are short-term-oriented and, consequently, encourage safe, predictable behaviour.
Hisrich and Peters (2002:51) concur that the intrapreneur needs to be appropriately rewarded for all the energy, effort, and risk taking expended in the creation of the new venture or process. These rewards should be based on the attainment of established performance goals. Turner (2002:184) contend that encouraging the right people to act in the right roles with an entrepreneurial attitude to create value form opportunity must be founded on a reward system that is meaningful and motivating.

Jones and George (2003:665) believe that organisations must reward intrapreneurs equitably if they wish to prevent them from leaving and becoming outside entrepreneurs who might form a new venture that competes directly against them. Cohen (2004:18) states that entrepreneurial leaders freely and frequently reward and recognise their employees in many ways, encouraging them to take even more initiative. According to Bhardwaj and Momaya (2007:50), the reward for entrepreneurial behaviour should be viewed broadly and measured using the following four criteria, i.e. recognition given to the employee; the formal appraisal process; an appropriate increase in job responsibilities; and the degree to which obstacles are being removed.

### 2.8.7 Vision and strategic intent

According to Hamel and Prahalad (1989) and Pinchot and Pellman (1999:25), corporate entrepreneurship is most effective when it aligns with the strategic intent of the organisation. It follows from this logic that, it is best to begin an intrapreneuring program by widely disseminating a clear idea of what the organisation wants to accomplish. Ireland *et al.* (2006:14) and Ireland *et al.* (2009:20) argue that using the company’s vision and strategic intent, would involve elements of the organisational structure, controls that are in place, human resource practices and the organisational culture argue that a corporate entrepreneurship strategy implies that a company’s strategic intent is to continuously and deliberately leverage entrepreneurial opportunities for growth- and advantage-seeking purposes.
Kuratko and Welsch (2001:349) argue that the first step in planning an intrapreneurship strategy for the enterprise is sharing the vision of innovation that the corporate leaders wish to achieve. As corporate entrepreneuring results from the creative talents of people within the organisation, employees need to know about and understand this vision. Garcia-Morales, Llorens-Montes and Verdu-Jover (2006:25) equate a shared vision to the commitment for a desired future and a common sense of organisational purpose. Cohen (2004:17) stresses that, company leaders need to articulate an inspiring future, in which the organisation makes an important difference for customers or community, and then uses that vision repeatedly to guide decisions, inspire commitment, and motivate action.

Pinchot and Pellman (1999:25) concur that strategic intent that exceeds what seems possible with existing resources inherently calls for innovation. Gaw and Liu (2004:69) further add that most important to the promotion of intrapreneurship will be the alignment of the company’s culture to a new vision of innovation. Employees are more effectively empowered if they are given a clear vision of the future and where the company is trying to go. Pinchot and Pellman (1999:107) emphasise that the need for innovation is then apparent to them, and they know how to direct their efforts.

Garcia-Morales et al. (2006:25) argue that, the decision to innovate in itself is not sufficient. If employees don’t feel part of and understand an entrepreneurial effort, it will impede their ability to find innovative solutions collectively and there will be less dedication to innovation. O’Connor and Rice (2001:102) also found that many projects typically result from management’s articulation of their strategic intent to grow in a particular technology or market domain.

2.8.8 Discretionary time and work

Antoncic and Hisrich (2001:502) and Mathisen, Einarsen, Jorstad and Bronnick (2004:383) concur that, to foster an entrepreneurial climate within organisations, employees need to have some autonomy to decide on how to perform their work most
effectively. According to Kuratko, Ireland, Covin and Hornsby (2005:703) and Bessant and Tidd (2008:66), this implies that top management allows employees some latitude and that bureaucracy is kept to the minimum. But Fesler and Ketti (1991) caution that leeway granted to employees to decide on intrapreneurial activities entails a high level of accountability and morality to be exercised by them.

According to Hisrich et al. (2005:49), an intrapreneurial spirit and attitude should be voluntary, thus employees should not be forced to partake in intrapreneurial activities. Kuratko and Hodgetts (2007: 70) assert that sufficient time should be set aside for intrapreneurs to work on their ideas. On the contrary though, studies by Hough and Scheepers (2008:22) and Scheepers, Hough and Bloom (2008:67) do not support a positive relationship between availability of time and pro-activeness and innovativeness. Anon. (2000:184) however argues the importance of a high level of trust in the relationship between management and intrapreneurs.

2.8.9 Empowered team, multi disciplined teamwork and harnessing diversity

Because the diversity in perceptions, skills, abilities and knowledge that exists in a heterogeneous team is important for solving complex and ambiguous problems, Chowdry (2005:730) suggests that heterogeneous teams are regarded as more effective in solving complex, non-routine problems, which are common to entrepreneurial firms.

Sadler (2000:31) state that diversity in various specialisation fields promotes innovation due to cross-pollination of ideas. Kuratko and Welsch (2001:350) and Oosthuizen (2006:137) are of the view that the leader must ensure that the entire workforce realizes the benefits of intrapreneurship and know how to act accordingly.

Kuratko, Ireland and Hornsby (2001:61) emphasise the importance of new-venture teams that result in so-called collective entrepreneurship in which the benefits of synergy are obtained. This view is supported by Stevenson and Jarillo (1990:25), McGrath and MacMillan (2000:3) and Nayager and Van Vuuren (2005:31). For
successful innovative products and service development, effective new-venture teams should take responsibility for their own activities and share their knowledge within the group.

Morris and Jones (1999:67) hypothesise that the welfare of the group is paramount and the group as an entity should receive rewards. The authors contend that recruitment processes within intrapreneurial organisations must emphasize the attaining of a diverse workforce that would allow organisations to respond better to the needs of complex markets. A study by Rothaermel and Hess (2007:913) support this view by indicating that the recruitment of “intellectual human capital” facilitates organisational learning and innovation.

**2.8.10 Resource availability**

Hisrich and Peters (2002:50) conjecture that resources of the organisation need to be available and easily accessible, and Kuratko, Hornsby, Naffziger and Montagno (1993:29) add that intrapreneurs need discretionary resources to explore and develop new ideas. Timmons and Spinelli (2007:341) define resources to include people, finances, assets and a business plan. Russell (1999:72) further defines organisational resources broadly to include money, time, people, equipment, and competencies.

Antoncic and Hisrich (2004:526) identify organisational support in terms of resource availability as an important driver of entrepreneurial activities of established companies. Kuratko et al. (1993:29) observed that most managers agree that the term entrepreneur refers to entrepreneurial activities that receive organisational sanction and resource commitments for the purpose of innovative results. Hornsby, Kuratko and Zahra (2002:251) argue that managers must perceive the availability of resources for innovative activities to encourage experimentation and risk taking.

Russell (1999:72) forges a view that organisational support systems that provide resources, autonomy, and emotional support to intrapreneurs must be present, thereby
according to Thompson, Strickland and Gamble (2007:48), giving individuals with attractive strategic proposals the latitude and resources to try them out, thus helping renew an organisation’s capacity for innovation and growth.

Russell and Russell (1992:72) reason that in a climate conducive to entrepreneurial activity, managers have more autonomy and more control over resources, enabling them to initiate and test a greater number of creative new ideas that eventually result in a larger number of innovations, and facilitate innovation by allowing participants access to power, resources, and information needed to initiate and develop new ideas. Santora (2007:83) even links the availability of adequate resources to loyalty of employees, stating that studies have proved that employees who are more open to new experiences expect organisational support.

2.8.11 Continuous learning and cross-functional learning

Anon. (2008:1) stipulates that a climate conducive to intrapreneurial behaviour is created, when knowledge is effectively managed in an organisation and employees are allowed to develop and maximise their entrepreneurial potential. The author posits that an effective knowledge-sharing system should be in place that includes benchmarking, thus allowing the organisation to learn from its successes and failures.

According to Robinson (2001:96), intrapreneurship drives knowledge creation, the development of new competencies and the modification of existing ones. The author furthermore mentions that new knowledge lays the foundation on which the organisation can build a competitive advantage. Antoncic and Hisrich (2003:13) postulate that linkages may exist between organisational learning and intrapreneurship, provided the latter evolves over time. Their opinion is that organisational learning starts off with existing knowledge and over a period of time, improves on this knowledge, whereas intrapreneurship by its very nature takes quantum leaps into the unknown.

Sufficient learning opportunities should be provided to employees and they must be
encouraged to stay abreast of new developments in their specific fields in order to facilitate continuous cross-functional learning. Van der Merwe and Oosthuizen (2008:15) argue that cross-functional knowledge sharing should be promoted. Against this backdrop the importance of cross-functional teamwork, whereby cross-functional project teams are autonomous in decision making and acting on them without management approval and resource sharing is thus well clarified. In essence this implies that top management clearly spells out mandates and thereafter restrains its interference.

2.8.12 Strong customer orientation

A customer orientation is a focus on the customer where the goal is to create value based on knowledge of both the customer and the competitor. According to Andotra and Pooja (2006:181), such knowledge can be seen as a core competency and using this, a company can gain significant market advantage. Deshpandé, Farley and Webster (2000:354) view customer orientation as a set of beliefs that customer needs and satisfaction are the priority of an organisation.

Liu, Luo and Schi (2002:367) deem customer orientation as focusing on dynamic interactions between the organisation and customers as well as competitors in the market and its internal stakeholders. Turner (2002:188) further states that entrepreneurial organisations invest their time, energy and imagination in listening to, and understanding customers.

Pinchot and Pellman (1999:113) argue that, focusing on how to better serve customers drive organisations towards productive innovation. Rauch et al. (2009:776) persist that entrepreneurial initiatives are beneficial for businesses operating in dynamic industries where customer preferences change rapidly, to which Corbett, Neck and DeTienne (2007:843) maintain that being close to all levels of customers throughout the entire innovation process is important.
Dess and Lumpkin (2005:150) argue that a customer-focussed ethos involves imagining what the future holds, perceiving how market tends to shift, anticipating what the demand will be and proactively raising the awareness of customers, thereby actually creating and becoming the future. Subsequently according to Cohen (2004:19), a company exists to serve its customers. Hisrich and Peters (2002:54) are of the view that this is why organisations need to develop ways to get closer to the customer and Kuratko and Welsch (2001:352) emphasise that they also need to stay close to the customer. This according to Harris (2004:14), transforms customers’ experience with the business through deep and unique insights into their needs.

2.8.13 Workplace autonomy and freedom (including a flat organisational structure).

A study by Scheepers et al. (2008:67) determined a positive relationship between autonomy and corporate entrepreneurial. Morris, Kurakto and Covin (2002) observed that corporate entrepreneurs have a high level of self-reliance and prefer a degree of autonomy when accomplishing a task. Bellone and Goerl (1992:131) support the view by Burns (2005:23) and Bessant and Tidd (2008:66) that intrapreneurial employees must be given ample freedom to determine how to conduct their work, and they argue that devolution of power or entrepreneurial autonomy should be emphasised within the organisation, allowing employees more freedom to manage their budgets and their projects.

Kuratko et al. (2005:703) and Serfontein (2006) espouse entrepreneurial autonomy as implying a high level of delegation of authority and less stringent control systems within the organisation. Even though they could not find a relationship between loose organisational boundaries and pro-activeness, Hough and Scheepers (2008:22) determine a positive relationship between loose organisational boundaries and innovativeness.
Dhliwayo (2007:112) upholds that a network-oriented organisational structure is more suited than a hierarchical structure in encouraging innovativeness. Chatman and Cha (2003:22) and Kuratko and Hodgetts (2004:65) emphasise that too much reliance on policies, procedures and rigid performance standards must be limited. Fesler and Ketti (1991) argue that autonomy in the workplace should be interlinked with accountability and morality among employees.

The entrepreneurial organisation should preferably be decentralised, nimble and open for experimentation. McBeth and Rimac (2004:20) articulate that the organisational structure is the underlying framework that determines how quickly and to what extent the organisation will be able to change.

New ideas generally don’t fit rigid organisational structures. Therefore innovators have to cross boundaries to get help and support (Pinchot & Pellman, 1999:112). For innovators to have cross functional teams, Rue and Byars (2000:13) are of the view that absence of barriers to communication is essential. To this Wang (2008:640) insists that the breakdown of traditional authoritarian and hierarchical structures also brings about organisation-wide communications that facilitate the development of a shared vision.

Cohen (2004:18) is of the view that reduced hierarchy, flatter organisations, and reduced segmentation of units all contribute to increasing employee initiative. These eliminate the bureaucratic red tape but allow for managerial autonomy. Hisrich and Peters (2002:47) concur that instead of a hierarchical structure, an intrapreneurial climate has a flat organisational structure with networking, teamwork, sponsors, and mentors abounding.
2.9 THE PERCEIVED SUCCESS OF THE ORGANISATION

The perceived success of the organisation means one end of the continuum would be a change in the manager's behaviour, which fosters more innovation, creative problem solving, and circumvention of red tape (Thornberry, 2003: 340). Entrepreneurial thinking and acting were seen as key drivers in the future success of the organisation. Other determinants of the perceived success of the organisation are customer or market measures, people development, financial measures and process measures.

2.9.1 Customer or market measures

Despande, Farley and Webster (2000:33) posit that market orientation is the set of beliefs that puts the customer’s interests first. It is the central element of the management philosophy based on the marketing concept. The financial indicators that reflect the results of actions already taken with indicators of operational measures of customer satisfaction, complements the internal processes, and the organisation’s innovation and improvement activities (Dess et al., 2003: 370).

2.9.2 People development

According to Roberts (2007:45), active programs of recruitment and training are positive in the promotion of people, both men and women, to reflect the social reality of the 21st century. Organisations need to offer education and training opportunities for career advancement. Employee development takes the form of e-learning, on-the-job coaching and training, development projects, secondments and classroom-based training. In-house programs are provided to improve productivity by equipping employees with behavioural skills (Roberts, 2007: 46).
2.9.3 Financial measures

Corporate entrepreneurship research must include multiple measures of economic outcomes such as profitability and sales growth to capture the inherent tradeoffs between efficiency and effectiveness, respectively (Dess et al., 2003: 369). Dess et al. (2003: 369) add that the desired outcomes of corporate entrepreneurship initiatives such as investment in research and development, new product development, or re-tooling a production facility with expensive new technology may not be realised for several accounting periods.

Rutherford and Holt (2007:434) in proposing a framework for investigating a link between corporate entrepreneurship and organisational performance, point out that financial measure may be just as important in the study of entrepreneurial outcomes. There is some fairly strong evidence that acting more entrepreneurially as a manager can have a significant impact on both attitudinal and financial measures, even if the manager does not create a new business (Thornberry, 2003:340).

2.9.4 Process measures

Effective measurement systems should encompass a blend of both results and process measures so organizations can not only keep score and measure progress each day, week, or month; but also so they can more reasonably predict what the score will look like (Teng, 2007:131). Kaya (2006:2077, 2087) emphasises that the process measures are slightly more tactical in nature and typically reflect a predictive element of the results measures. Often a process measure has a significant influence on, or is a major contributor toward, the ultimate performance of a results measure.

As in sports, knowing the score at the end of game is useful but limited information (Seshadri & Tripathy, 2006:17). Better insight into what timely actions are required to provide you the outcome you want when the results are tallied is acquired by tracking the key processes which make up the game as it is played. Process measures provide a predictive capacity to let you know how the game is going and the opportunity to
intervene as necessary to adjust events in the direction you desire them to go (Seshadri & Tripathy, 2006:17).

Burns (2004: 143) identified operational definitions that enable a team to fully agree on how a particular characteristic of a process is to be measured:

- it is the process characteristic that is critical to the satisfaction of the customer;
- it is important for the team to fully understand and agree that the definition reflects exactly what information the team is attempting to gather on the process; and
- clarity is even more important when developing and selecting the measures that will be used to determine the performance of a process.

2.9 SUMMARY

This chapter has essentially been about a literature review of corporate entrepreneurship, and a specific emphasis on the thirteen construct of corporate entrepreneurship and the perceived success of the organisation. Because the field of corporate entrepreneurship is very broad and spans generations, with a plethora of authors, innumerable antecedents and involves different cultures, creeds, worldviews and different degrees of technological advancement, it has been imperative to explore different aspects of the discipline.

A broader view of corporate entrepreneurship was explored beginning with the definitions of the concepts. Different views were explored ranging form pure business view, the organisational view, social constructs, learning and development as well as the degree of integration of the different sub elements of corporate entrepreneurship.

The departure point in this chapter was to use literature to define and explore the entrepreneur, entrepreneurship and corporate entrepreneurship. To add to this the dynamics of corporate entrepreneurship were discussed and middle management role in entrepreneurship was elaborated on. Different models were adapted from different authors and appropriate to the discussion in point.
The factors affecting the business environment make it difficult for the free running of enterprises and as a result these dynamics had to be explored. It was important to note that there are different types of characteristic that require and foster individual entrepreneuring credentials.

The thirteen constructs measuring the entrepreneurial climate in the organisation were identified as entrepreneurial leadership, management support, sponsors (champion) for projects, tolerance for risks, mistakes and failure, innovation and creativity, new ideas encouraged, appropriate rewards and reinforcement, vision and strategic intent, discretionary time and work, empowered team, multi disciplined teamwork and harnessing diversity, resource availability, continuous learning and cross-functional learning, strong customer orientation and workplace autonomy and freedom (including a flat organisational structure). These were also discussed at length.

Drawing from the entrepreneurial constructs, the determinants of the perceived success of the organisation were explored and elaborated upon. By embarking on extensive literature research this field of corporate entrepreneurship, it was discovered that there could never be a single way of dealing with the topic but an integrated, versatile approach was needed to fully interrogate the subject matter. The conclusion therefore is that this area of research has not been exhausted but because of constantly changing business environment, it needs to be adapted to fit every generation of business.
CHAPTER 3
OVERVIEW OF THE ORGANISATION

3.1 INTRODUCTION

The chapter seeks to introduce Telkom as an organisation, state its mission statement, give an overview of its strategy, present a history of Telkom and scrutinise its business environment and discuss causal factors to the study.

3.2 OVERVIEW OF TELKOM

Company Profile

On starting out 19 years ago, Telkom was essentially a South African telephone organisation. Then, as the country underwent profound transformation, so did Telkom.

After digitising and modernising the network, Telkom opened its Network Operations Centre to monitor and manage it 24 hours a day, 365 days a year. Then they branched out into Internet services, managed data networking, data hosting, information technology security and virtual private network services.

Plain old telephony was phased out and Telkom worked hard to improve operating efficiencies and cost-effectiveness and, most importantly, the quality of the customer experience. At the same time, Telkom projects itself as one of South Africa’s most demographically representative companies and biggest investors in Information Communication and Technology (ICT) skills development.

In March 2003, Telkom listed on the Johannesburg Stock Exchange (JSE) and the ICT landscape changed. The old Telecommunications Act of 1996 was replaced by the Electronic Communications Act of 2006, paving the way for converged services, service-based competition and a new licensing regime.
Embracing the move towards convergence, Telkom began the evolution to the new broadband rich, IP-enabled Next Generation Network. In February 2007, Telkom made its first acquisition outside South Africa, namely Africa Online, the largest Pan-African Internet Service Provider in Sub-Saharan Africa.

In May 2007, Telkom extended its footprint to West Africa by acquiring 75% in Multi-Links, Nigeria's second largest private telecommunications operator. In January 2009 it acquired the remaining 25% stake in Multi-Links, thereby increasing its shareholding to 100%.

On 21 April 2009, Telkom acquired a 100% interest in MWEB Africa Limited, which owns approximately 88% of AFSAT Communications Limited, and a 75% interest in MWEB Namibia (Proprietary) Limited. MWEB Africa is a group of companies offering internet services and its own Very Small Aperture Terminal (VSAT) access services in Sub-Saharan Africa (excluding South Africa).

Telkom formally launched its data centre operation, branded Cybernest, in Bellville, Cape Town on November 19, 2009. The current economic downturn is creating opportunities as organisation's look to cut costs. Telkom is actively pursuing strategic alliances to bolster its product offering and will capitalise on the decreasing cost of bandwidth and the convergence opportunities provided by its next generation network and move into mobile services.

As competition intensified in South Africa it realigned its business strategy. Telkom state that they will seek to differentiate themselves from competitors by moving from a provider of basic voice and data connectivity to become Africa's preferred information, communications and technology service provider, offering fully converged voice, data, video and Internet services (Telkom, 2010).

Telkom’s core strategy is to defend and grow profitable revenue, while managing costs. It will seek to defend profitable revenue by providing superior, customised solutions that meet the needs of consumer, business and wholesale customers. It will pursue growth of profitable revenue through fixed-wireless and mobile data services, broadband
services and converged services both in South Africa and internationally. It will seek to grow both organically as well as through partnerships and acquisitions, while managing costs.

Telkom concluded the disposal and sale of Vodacom, its mobile segment that provided mobile services through its 50% joint venture interest in Vodacom, effective as of 20 April 2009. This transaction enables Telkom to execute its strategies in the areas of mobile services, integrated solutions and the provision of converged fixed-line, mobile and data solutions. The deal also frees the organisation from the geographic limitations previously imposed by the shareholder's agreement with Vodafone.

To further support its ability to maintain its leadership position in South Africa while building a strong footprint on the continent, it has embarked upon a process of renewal - in essence, a complete transformation of the way it focuses on servicing its customers and creating value for its stakeholders.

As part of this transformation drive, three major business units of the new organisational structure came into being on 1 April 2009. These are Telkom SA, Telkom International and Telkom Data Centre Operations.

### 3.3 MISSION STATEMENT

**Vision**

Being Africa’s preferred ICT service provider by:

- Customers recognising Telkom as their first choice when deciding on ICT communication solutions;
- Employees viewing Telkom as the preferred employer in the ICT industry;
- Shareholders regarding Telkom as a company that offers competitive returns;
- Government and the Regulator considering Telkom as a trustworthy and respectful enabler of the economy;
• Suppliers recognising Telkom as a valued partner in delivering world-class ICT services, and
• The community distinguishing Telkom as a responsible, caring and trustworthy South African corporation.

Mission

Telkom SA Limited is a leading South African-based international ICT services group focused on long-term profitability through growth in existing and new markets by:

• Providing differentiated high quality fixed, wireless & converged products & services directly or through our subsidiaries and partners;
• Striving for excellence in serving our valued domestic retail and wholesale, as well as international customers;
• Achieving unprecedented organic growth of existing assets;
• Targeting acquisitions and new partnerships to achieve core strategies; and
• Acting as a responsible and caring corporate citizen.

Core Values

They are:

• **Inspired to deliver value to customers**
  Meeting the needs of customers is our core inspiration
• **Dedicated to agile & excellent performance**
  Diverse, positive, aligned & passionate people
• **Determined to continuously improve**
  Learning, changing & innovating to own the future
• **Committed to act with integrity**
  Honest, empathetic & approachable in all we do
3.4 GROUP OVERVIEW STRATEGY

Telkom’s group strategy is based on five pillars which are discussed below:

3.4.1 Grow profitable revenue through wireless voice and mobile data services

Goals:
- Provide integrated bundled offerings; and
- Combine with mobility to enhance fixe-line offering.

Actions
Transform fixed line business to incorporate key value-added services, including mobile converged voice services.

Build a cost-effective wireless voice and mobile data network in selected areas to offer:
- Wireless access in campus environments, gated communities, security complexes and other developments;
- Mobile data services; and
- Fixed and nomadic wireless voice services.

3.4.2 Grow profitable revenue internationally

Goals
- Increase revenue and long-term profitability from international investments and services; and
- Increase international revenue from acquired African subsidies.

Actions
- International communications and internet connectivity;
- Hosting and managed data services; and
- Wireless voice and mobile broadband solutions.
3.4.3 Grow profitable revenue through broadband and converged services

Goals

- Increase broadband penetration;
- deliver superior dataspeed and quality through fixed-line network;
- Increase converged services revenue;
- Partnerships with content providers;
- Improve market share information technology services sector; and
- Expand domestic datacentre operations;
- Improve innovation capability; and
- Grow organically and through acquisitions.

Actions

- Expand broadband footprint;
- Increase bandwidth to offer higher bandwidth applications;
- Provide converged information, communications and technology solutions to the enterprise market and enable the digital home in the consumer market;
- Bundle of content to provide added value in subscription and pay-as-you go models;
- Target the medium to large business segment to meet their demand for end – to – end solutions;
- Satisfy customer demand for converged one stop solutions for communications and information technology infrastructure;
- Develop improved value propositions through customer understanding enabled by the customer centricity programme; and
- Enhance availability to successfully partner with others where synergistic opportunities exist.
3.4.4 Grow profitable revenue through wireless voice and data services

**Goals**
- Provide integrated bundled offerings; and
- Combine with mobility to enhance fixed-line offering.

**Actions**
Transform fixed-line business to incorporate key value-added services, including mobile converged voice services.

Build a cost-effective wireless voice and mobile and mobile data network in selected areas to offer;
- Wireless access in campus environment, gated communities, security complexes and other developments;
- Mobile data services; and
- Fixed and nomadic wireless voice services.

3.4.5 Defend profitable revenue

**Goals**
- Maintain fixed-line net revenue;
- Retain leading fixed-line market share; and
- Increase annuity revenue as a percentage of total fixed-line operating revenue.

**Actions**
- Improve competitiveness through tariff rebalancing;
- Build customer retention initiatives that entice customers to stay with Telkom;
- Build customer loyalty by providing superior value proposition that position Telkom as the service provider of choice; and
- Convert revenue streams to annuity revenue.
3.5 HISTORY OF TELKOM SA

To understand the history of Telkom, one has to refer to its timeline, a walk through South African telecommunications that showcases milestones of the country’s communications history, to chart the growth of the company from its company formation in 1991 to the present day.

1991 – Telkom Founded
Telkom was founded on 1 October 1991. On this date, the Department of Posts and Telecommunications was divided to form three separate entities, namely the department of Posts and Telecommunications, and the two fully state owned companies of Telkom and South African Post Office. Upon commercialisation from the department of Posts and Telecommunications, Telkom inherited gross interest bearing debt of R10, 2 billion (Telkom, 1991).

1993
Telkom was allowed 50% of one of the licences to operate a mobile cellular service. They entered a joint venture with Vodafone PLC of the United Kingdom and Rembrandt Group to form the company Vodacom Group (Pty) Ltd (Telkom, 1993).

1994
Telkom entered into a joint venture in April 1994 with QD electronics where upon they obtained 70%, to form Q-Trunck which operated a radio trunking network. The very same year the first democratic elections were held in South Africa and Telkom provided services and infrastructure at several polling stations. The company spent R311 million on infrastructures on elections and these included telephones, cables, poles and equipment masts (Telkom, 1994).

1995
Telkom participated fully in the debate on a white Paper on Telecommunications Policy in 1995. Telkom also began rebalancing the tariff structure by introducing different
charges to business and residential lines, reduction in a unit call charge and adjustment of trunk call distance intervals (Telkom, 1995).

1996
For the first time telephone directories were hand delivered door-to-door using black taxi operators. Penetration leapt 48% to 90% in areas where directories were delivered. Telkom and British telecom signed an agreement to interconnect frame relays network and offer communication solutions from concert facilities. For the first time, television coverage was used via an optic cable installed between Johannesburg and Cape Town by Telkom in 1996 and it was one of the longest systems in the world (Telkom, 1996).

1997
Telkom was a state owned enterprise until 14 May 1997 when a 30% stake was sold to a Strategic Equity Partner, Thintana the consortium of SBC (USA) and Telecom Malaysia Berhad. The purchase was R5.58 billion, the biggest single inflow of capital in South Africa at the time. The concept of representativeness unions was introduced and unions wishing to engage with Telkom in collective bargaining were allowed (Telkom, 1997).

1998
For the first time Telkom endorsed the King report on corporative governance (Telkom, 1998).

2000
A world-class National Network Operations centre opened in Centurion and its backup in Cape Town, and it co-ordinated the entire network across the country (Telkom, 2000).

2001
The introduction of competition which was facilitated by the promulgation in November 2001 of the Telecommunications amendment Act started to erase some of Telkom’s
revenue. Telkom entered into interconnection agreements with three mobile operators (Telkom, 2001).

2002
Telkom Internet powered by ADSL was launched in August 2002, providing broadband access to residential and small business. In May of the same year Telkom’s exclusivity in the market came to an end (Telkom, 2002).

2003
Telkom listed for the first time on the Johannesburg Stock Exchange and the New York Stock Exchange. The Initial Public Offering (IPO) was also concluded and members of the public were able to own shares (Telkom, 2003).

2007
Telkom acquired Africa online for R150 million and a 75% in Multilinks (Telkom, 2007).

2008
The acquisition of MWeb Africa was concluded as a way of consolidating the presence in the African market by Telkom (Telkom, 2008).

2009
Telkom entered into a memorandum of understanding with AT&T, one of the global communications leaders. This they hope will see regional network connect with AT&T global network. The disposal and sale of Vodacom, its mobile segment that provided mobile services through its 50% joint venture interest in Vodacom, was concluded on 20 April 2009 (Telkom, 2009).

The Next Generation Network (NGN) has now become the technology backbone of Telkom. From a sustainability point of view, Telkom was the official sponsor of the FIFA 2010 Soccer World Cup. To reinforce the visibility of its involvement with the World Cup, two giant footballs have been erected on two prominent Johannesburg and Pretoria landmarks at the formerly Hillbrow and Lukasrand towers respectively. Telkom believes
that its brand has matured since it was formed in 1991 and, as a result, a process was
initiated during the year to rebuild it and create a fresh, innovative look and feel to give it
a more modern, vibrant and customer-focused brand.

3.6 GROUP STRUCTURE

The group structure of Telkom is as follows:

Company details

Telkom group has a footprint both in and outside South Africa. The group has got the
following subsidiaries that will be discussed:

Trudon (Pty) Limited - 64.9%

Trudon (Pty) Limited (formerly known as TDS Directory Operations (Pty) Ltd) is the
market leading directional media and publishing company in Southern Africa. By
distributing approximately 7.4 million directories per year (Yellow and White pages, an
electronic directory service), 10118 (The Talking Yellow Pages and an online web
directory service), Trudon provides world-class directional information services to
millions of users within South Africa.

Swiftnet - 100%

Swiftnet (Pty) Limited, trading as FastNet is a Wireless Service Provider for the
transmission of data for i.e. point-of-sale systems, specifically applications that require
rapid, cost-effective transfer of relatively small amounts of data between two or more
sites. FastNet operates a national wireless data access network across South Africa,
with solutions including GPRS and X.25 technology. FastNet offers customers the most
reliable data communication solution, with seamless connectivity and unrivalled
reliability.
Multi-Links Telecommunications - 100%

Multi-Links Telecommunications Limited is one of Nigeria's pioneer private telephone operators. As one of the leading providers of telecommunications solutions in Nigeria, Multi-Links was one of the first to locally introduce the CDMA technology. Multi-links was granted a license by the Nigerian Communications Commission (NCC) to run telecommunications systems specifically for the provision and operation of Fixed Terrestrial Network comprising of radio, cable or a combination of any of these systems within Nigeria.

Africa Online - 100%

Africa Online (AFOL) is a Pan African Internet Service Provider operating in Cote d'Ivore, Ghana, Kenya, Namibia, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. Africa Online is a pioneer in the provisioning of Internet communication services on the African continent. They provide their customers with a wide range of relevant and reliable solutions and products to satisfy any corporate or individual need and offer a level of service delivery that is unparalleled in the markets in which they operate.

MWeb Africa - 100% (Includes 75% of MWeb Namibia)

MWeb Africa is the premium Internet service provider in Sub-Saharan Africa. It is well positioned to deliver the latest technology in VSAT (Very Small Aperture Terminal) and Internet connectivity, as well as proven web hosting, development and email services. MWEB Africa operates through subsidiaries and other joint ventures in Sub-Saharan Africa (Telkom, 2008).
3.7 OPERATING ENVIRONMENT

Industry Overview

Telkom is an integrated communications service provider offering bundled voice, data, broadband and internet services with its service offerings expanded to business and residential customers.

Competition in the South African fixed-line communications market is intense and is increasing as a result of the Electronic Communications Act and determinations issued by the Minister of Communications.

The new licensing framework included in the Act has resulted in the market becoming more horizontally layered with a large number of separate licences being issued for electronic communications network services, electronic communications services, broadcasting services and radio frequency spectrum and, as a result, this will substantially increase competition in Telkom’s fixed-line business.

In the areas where Telkom currently face competition, and expect to compete for public switched telecommunications services, Telkom competes primarily on the basis of customer service, quality, dependability and price. In addition, Telkom intend to introduce new products, services and tariff structures to enable it to maintain and grow revenue. (Telkom, 2008)

Fixed-line voice competition

In September 2004, South Africa’s Minister of Communications granted an additional licence to provide switched telecommunications services to Neotel, a company that was 30% owned by Transtel Telecoms, a division of Transnet Limited, and Esitel, which is beneficially owned by the South African government and other strategic equity investors, including a 26% shareholding owned by TATA Africa Holdings (Pty) Ltd, a member of the TATA Group, a large Indian conglomerate with information and communications operations. On March 19, 2008, Neotel announced that the Competition Tribunal of
South Africa had approved its acquisition of Transtel without any conditions. Subsequently, TATA Africa Holdings (Pty) Ltd acquired the government's 30% equity, extending its equity in Neotel to 56%.

Neotel started providing services to large corporations and other licensees at the start of the 2007 calendar year and on April 25, 2008, announced that the first of its consumer products were available to limited parts of Johannesburg and Pretoria.

As a result of an amendment to the Electronic Communications Act to enable state investment and licensing in the sector, the government created an infrastructure company, Broadband Infraco (Pty) Ltd, in 2007, to provide inter-city bandwidth at cost based prices to Neotel and, later, to the rest of the industry, which added further competition to Telkom's communications network. Broadband Infraco will also be involved in some of the undersea cable projects.

**Licences**

On October 29, 2008, the Minister of Communications published for public comment, a draft policy direction which would direct ICASA to grant Broadband Infraco individual Electronic Communications Services (ECS) and Electronic Communications Network Services (ECNS) licences.

On March 13, 2009, ICASA published an invitation for a public entity to apply for individual ECNS and individual ECS licences for a public entity', inviting Broadband Infraco to submit applications for these licences.

The process to issue additional licences to small business operators for the purpose of providing telecommunications services in underserviced areas with a teledensity of less than 5% started in 2005. To date, the Minister of Communications has identified 27 underserviced areas and ICASA has issued licences to seven successful bidders with the Minister issuing invitations to apply for licences in an additional 14 areas.
All existing USAL licences, including Telkom’s, have been converted into ECS and ECNS licences, and all future licences for this category will be issued as ECS and ECNS licences.

These licences provide the authorisation to construct, maintain and operate an electronic communications network and provide ECNS and ECS. All the obligations contained in Telkom’s public switched telecommunications service licence, including licence fees to be paid, minimum services to be provided to customers and other service obligations, will be contained in regulations, some of which have been promulgated and some of which are in the process of being promulgated.

Telkom’s licence fee under the public switched telecommunications service licence amounted to 0.1% of its annual revenue generated from the provision of the licensed public switched telecommunications services. This provision was retained following the conversion to the ECS and ECNS licences. However, in terms of a regulation published on April 1, 2009, Telkom’s annual licence fees for ECS and ECNS were set at 1.5% of gross profit from licensed activities, defined as total revenue obtained from the provision of licensed services, less total costs directly incurred in the provision of such services. As a result, there may be a material increase in Telkom’s annual licence fee.

On March 25, 2009, the telecommunications industry put forward proposals to ICASA regarding a Service Charter regulation that stipulated standard levels of service. The standards stipulated in the regulation are extremely demanding and, the communications industry has made representation to ICASA. On July 24, 2009, ICASA has repeated the previous Service Charter regulation and published a new regulation that implements many of the recommendations made by the industry (Telkom, 2010)

**Other licences**

In August 1995, Telkom’s subsidiary, Swiftnet, was granted a telecommunications licence and a radio frequency spectrum licence for the provision of:
• The construction, maintenance and operation of a national wireless data network and the provision of wireless data telecommunications services; and
• Interconnection with Telkom's network.

In terms of the licence agreement, Swiftnet was required to have at least a 30% black economic empowerment (BEE) shareholding. In spite of Telkom entering into an agreement in 2007 to sell 30% of Swiftnet to the Radio Surveillance Consortium, a group of empowerment investors, an agreement that received Competition Commission approval, ICASA did not approve the transaction. As a result, Swiftnet was in breach of its licence.

Swiftnet, assisted by Telkom, has subsequently had two meetings with ICASA on this matter and ICASA has indicated that currently there is no agreement within the industry as to acceptable BEE shareholding percentages for all licensees. ICASA also indicated that the shareholding issue for the Swiftnet licence would have to be in line with the BEE values applicable to other similar licensees.

Swiftnet received a new licence from ICASA on January 16, 2009 which stipulated that the company still needed to secure a 30% BEE shareholding. However, ICASA has said that in the 2010 financial year it will be reviewing the equity shareholdings of all licensees, after which it is anticipated that all licensees will be given sufficient time to meet their equity shareholding requirements. Telkom's Board of directors has decided to dispose of Swiftnet, and Telkom is currently seeking potential purchasers that would comply with Swiftnet's BEE requirements. (Telkom, 2010)

**Carrier pre-selection**

The now repealed Telecommunications Act mandated that fixed-line operators were required to implement carrier pre-selection to enable customers to choose and vary their fixed-line telecommunications carrier for long distance and international calls. These provisions were retained in the Electronic Communications Act and on June 24, 2005, regulations were published for the implementation of carrier pre-selection in two phases (the implementation of call-by-call pre-selection and fully automatic pre-selection, to be
implemented and provided within two months and 10 months, respectively, of them being requested by another operator). Telkom had already conditioned its exchanges to handle call-by-call carrier pre-selection by December 31, 2003. Telkom has met with Neotel to discuss its request for implementing carrier pre-selection.

Until Neotel's interconnection systems and its inter-operator process and systems to support carrier pre-selection become available, Telkom cannot fully implement carrier pre-selection. However, Telkom does not believe it can meet the 10 months deadline for automatic carrier pre-selection.

**Number portability**

The Telecommunications Act mandated that number portability, to enable customers to retain their fixed-line and mobile telephone numbers if they switch between fixed-line operators or between mobile operators, be introduced. These provisions were retained in the Electronic Communications Act. A framework number portability regulation was published at the end of 2004 that generically provides for the introduction of fixed-to-fixed and mobile-to-mobile number portability. Telkom is required to implement number portability in blocks of 10,000 numbers within two months after Neotel launches such retail services and individual number portability within 12 months of receiving a request from Neotel. Telkom has received a request from Neotel to implement both block and individual number portability and Telkom and Neotel implemented number portability in blocks of 10,000 and 1,000 numbers in May 2009. After several delays mobile number portability phase one was launched on November 11, 2006. Phase 2, which was implemented during April 2007, includes multi-line porting, secure file transfer protocol access to third parties and operational software upgrades on the central reference database.

The set-up and per-operator costs are typically the largest cost components of implementing number portability. Similar to carrier pre-selection, there is a risk of not fully recovering system set-up costs. The implementation of these requirements in a timely manner could result in Telkom's business being disrupted and cause its net profit
to decline and the implementation of these requirements will likely further increase competition and cause churn rates to increase.

**Fees and tariffs**

Telkom has made significant progress in rebalancing its fixed-line tariffs with a view to focusing more on the relationship between the actual costs and tariffs of subscriptions and connections and traffic in order to more accurately reflect underlying costs and to be more competitive.

Regulations made under the repealed Telecommunications Act, but which are still in effect, imposed a price cap (3.5% below inflation, effectively implying a continuous real decrease in prices) on a basket of Telkom’s specified services. These include installations; pre-paid and post-paid line rentals; local, long distance and international calls; fixed-to-mobile calls; public payphone calls; ISDN services; its diginet product and its megaline product. A similar cap applies to a sub-basket of those services provided to residential customers, including leased lines up to and including lines of 2 Mbps of capacity and the rental and installation of business exchange lines.

Approximately 57% of Telkom's operating revenue in the year ended March 31, 2008 was included in this basket, compared to approximately 54% in the year ended March 31, 2009 (Telkom, 2009)

### 3.8 CAUSAL FACTORS TO THE STUDY

Given the historical background of Telkom form a parastatal to a fully competitive company with a vision for playing a major role in the global market, it is very important to position this organisation in a space that will accomplish these objectives. Because the field of corporate entrepreneurship allow for fresh new innovative ideas to be implemented in improving the bottom line profits off the organisation, it was essential to explore this field with particular relevance to Telkom in forging its new path.
As the organisation does not operate in a silo but as a part of major players in the market, the context of corporate entrepreneurship had to be clarified and reinforced. Since technology change ever so rapidly, the Information communications and Technology sphere has to come to the party and buy into the concept of corporate entrepreneurship.

A general perception exists that Telkom does foster an entrepreneurial climate. This study seeks to assess the perception of middle managers, as the key in the innovation initiatives at Telkom, in the current entrepreneurial climate within Telkom. The causal factors for this study can be summed up by raising the following questions:

- Are the initiatives currently implemented fostering an entrepreneurial climate;
- Does the strategy followed by top management contribute to the enhancement of corporate entrepreneurship; and
- Does this perceived entrepreneurial climate show the true elements of an entrepreneurial organisation or are these merely continued improvement initiatives.

### 3.9 SUMMARY

This chapter has zoomed into Telkom as and organisation in question. In the process of focussing on Telkom, different aspects impacting on the business environment both internal and external were interrogated. The organisational overview of Telkom, its group structure, history and the causal factors to the study were discussed.

It was discovered that Telkom has been a changing organisation from a government owned monopoly to a publicly listed organisation on both the Johannesburg Exchange and the New York Stock Exchange. This metamorphosis has affected the way the organisation conducts business even for the foreseeable future. Telkom has conducted a lot of business transaction including the acquisitions of Multilinks and Africa on line. Technologically Telkom has been moving with the times from the days of only voice
telephony to the Next Generation Networks. The changing business environment has triggered an interest appropriating corporate entrepreneurship to Telkom. The chapter concludes with the causal factors to the study which include the changing global business environment.
CHAPTER 4
RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

This chapter combines the company background of Telkom with the literature study discussed in chapters two and three.

The primary objective of this study was to assess the level of corporate entrepreneurship in the telecommunications sector, with specific reference to Telkom and to make recommendations on the encouragement and promotion of a climate conducive to corporate entrepreneurship in this organisation.

The empirical study was conducted by means of a self-completion online questionnaire administered to middle managers employed by Telkom. To test the hypothesis for this study permission was obtained from the organisation’s Information Technology Risk Management and Human Resources Intelligence, to conduct the survey in the organisation. Following a sampling approach an invitation to participate in this research project was sent out to 1028 managers, under the name of the researcher, via email with the Universal Resource Locator (URL) address of the online electronic survey attached. The participants accepted the invitation by opening the online electronic survey (by clicking on the URL) signed in and started completing the online questionnaire. The questionnaire was constructed by Oosthuizen (2006) and adapted by Jordaan (2008).

Refer to Annexure A for an example of the questionnaire.

This chapter provides insight into the methods used in gathering the information for the empirical research of this study, the sample used (including the sampling method and size), the demographic framework of the population, the method used for gathering information, the presentation and discussion of the research results.
4.2 GATHERING OF DATA

Participants had to follow the instructions, complete the survey by highlighting or marking the appropriate box they selected with an “X”, and once they completed they would click the submit button. The results were then stored in the URL in electronic format. After the respondents submitted their answers at the close of a transpired seven days period, the web designer released the results.

The details regarding the gathering of data will be discussed in this section.

4.2.1 Study population

In this study the survey population is made up of 1028 Telkom middle managers. The identifying of the population for the study entailed a name list of all the permanently employed middle managers. This list was obtained from the head office Human Resources intelligence department and included the job levels of incumbents. Due to confidentiality restrictions and in adhering to the business code of ethics, this list will not be included as an annexure in this research document.

The levels of management in Telkom include:

- Top management M1, M2 and M3.
- Senior management M4
- Middle management M5
- Junior management M6.

The study population consisted of middle managers working in various functional departments such as business operations, consumers’ Customers Processing Management (CPM) and marketing, consumer sales, customer service and call centre, corporate customers, Data Centre Operations (DCO), enterprise risk management, human resources, information technology solutions, large and government business services, legal services, subsidiary in Nigeria, network field operation, network centre
operation, network infrastructure provisioning, procurement services, product house, small and medium business services, strategy, international, mobile, wholesale and networks and wholesale services. A category “other” was also included in the questionnaire to accommodate middle managers working in departments other than the listed departments.

Permission to conduct the study was granted after an Information System Development (ISD) form was generated, filled, signed and approved. The questionnaires were thus distributed to all of the 1028 middle managers employed by the Telkom. Not all middle managers responded within the set seven days survey period, except for the 162 that participated.

4.2.2 Questionnaire used in this study

In order to confirm and substantiate the outcomes of the literature review and to assess corporate entrepreneurship in Telkom, a detailed, unambiguous and structured questionnaire was used. Oosthuizen (2006:130-146) conducted a comprehensive literature study on the characteristics of an entrepreneurial climate in terms of corporate organisations. He identified 13 themes or constructs that seem necessary for an entrepreneurial climate in corporate organisations, and constructed a questionnaire based on the literature study. The version of the questionnaire used in this study was also adapted, and a section measuring the perceived success of the organisation was added (Jordaan, 2008).

The questionnaire consists of three parts, namely:

Part 1: Assessment of the entrepreneurial climate

The purpose of this part is to assess the current entrepreneurial climate in the organisation. The measuring instrument assessed the 13 constructs of a climate conducive to corporate entrepreneurship with 65 statements on the basis of a 5-point
Likert type scale ranging from Strongly Disagree (1) to Strongly Agree (5). In respect of each statement, subjects have to indicate the degree to which they agree or disagree with a certain statement.

**Part 2: Measuring the success of the organisation**

In this section, 17 items were identified to measure the perceived success of the organisation in terms of financial, customer or market, process, people development and long term success. In respect of each item, respondents have to indicate the degree to which they agree or disagree with a certain statement (also on the 5-point Likert scale).

**Part 3: Demographical information**

Demographical information was system generated and gathered in order to draw correlations between the demographical information and the results obtained from the entrepreneurial climate survey as well as the perceived success of the organisation. Because of sensitivity and personal nature of demographical data, subject’s age group, gender, race, highest academic qualification and functional department in which they work were drawn from the updated SAP database linked by HR intelligence.

**Confidentiality**

Confidentiality was ensured for each participant. No individual results were or will be made available, and even whether or not respondents chose to complete the questionnaire will not be divulged in order to ensure anonymity.

**4.2.3 Statistical analysis of data**

Data collected during the survey was analysed by the Statistical Consultation Services of the North-West University (Potchefstroom-Campus) using Statistica (Statsoft, 2009) and SPSS (SPSS, 2009). In this study frequency distributions will be portrayed graphically with the form of histograms and bar charts. The mean will be employed as
measure of central tendency and the standard deviation to indicate dispersion of data. Thereafter, the association between the demographic variables and the variables was explored by means of t-tests and effect sizes.

4.3 RESPONSES TO THE SURVEY

In Table 4.1 a tabular presentation is given of the responses to the survey.

Table 4.1: Responses to the survey

<table>
<thead>
<tr>
<th>Response type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of questionnaires distributed</td>
<td>1028</td>
<td>100%</td>
</tr>
<tr>
<td>Number of questionnaires returned</td>
<td>162</td>
<td>15.76%</td>
</tr>
<tr>
<td>Number of questionnaires analysed</td>
<td>162</td>
<td>15.76%</td>
</tr>
</tbody>
</table>

A total of 1028 questionnaires were sent to respondents in Telkom, and 162 were returned by the cut off date of 26 August 2010. The response rate was thus 15.76% and all the received questionnaires were analysed.

4.3.1 Demographic information of respondents

Part 3 of the survey questionnaire consisted of demographical information where respondents had to indicate their age group, gender, race (according to South African race classification), highest academic qualification and functional department they work in.

4.3.2 Gender of respondents

In this question the split between male and female participating middle managers was determined as indicated in table 4.2.
Table 4.2: Gender of respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>Cum count</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>134</td>
<td>134</td>
<td>82.72</td>
<td>82.72</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>162</td>
<td>17.28</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>458</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Of the 162 respondents who completed the questionnaire, 134 (82.72%) were male and 28 (17.28%) were female respondents. All the respondents’ genders were accounted for.

4.3.3 Racial group classification of respondents

The organisation complies with government policy and employment equity and as such the employees are required to comply on SAP about their racial grouping. By using the updated SAP database, the racial group according to South African racial profiling were obtained. Table 4.3 indicates the frequency distribution per race group.

Table 4.3: Race group classification of respondents

<table>
<thead>
<tr>
<th>Race</th>
<th>Count</th>
<th>Cum count</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>76</td>
<td>76</td>
<td>46.91</td>
<td>46.91</td>
</tr>
<tr>
<td>Black</td>
<td>19</td>
<td>95</td>
<td>11.73</td>
<td>58.64</td>
</tr>
<tr>
<td>Coloured</td>
<td>38</td>
<td>133</td>
<td>23.46</td>
<td>82.10</td>
</tr>
<tr>
<td>Indian</td>
<td>26</td>
<td>159</td>
<td>16.05</td>
<td>98.15</td>
</tr>
<tr>
<td>Foreigner</td>
<td>3</td>
<td>162</td>
<td>1.85</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>787</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The majority of the respondents are white 76 (46.91%) while 19 (11.73%) respondents are black, 26 (16.05%) Indian, 38 (23.46%) Coloured and 3 (1.85%) foreign middle managers participated in this study. All the respondent’s races were profiled.
4.3.4 Age group classification of respondents

The purpose of this question was to understand the age distribution of the respondents, because the younger generation could have different points of views and perspective in the way they approach business to someone of an older generation. Respondent’s age group were to be indicated in one of the predetermined categories. The results of the age group classification of the participating respondents are presented in table 4.4.

Table 4.4: Respondents by age group

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
<th>Cum count</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;29</td>
<td>1</td>
<td>1</td>
<td>0.62</td>
<td>0.62</td>
</tr>
<tr>
<td>30-39</td>
<td>29</td>
<td>30</td>
<td>17.90</td>
<td>18.52</td>
</tr>
<tr>
<td>40-49</td>
<td>72</td>
<td>102</td>
<td>44.44</td>
<td>62.96</td>
</tr>
<tr>
<td>50-59</td>
<td>58</td>
<td>160</td>
<td>35.80</td>
<td>98.77</td>
</tr>
<tr>
<td>60+</td>
<td>2</td>
<td>162</td>
<td>1.23</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>455</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The majority of the participating respondents fall in the age group category 40 to 49 (44.66%) years old and 30 to 39 (30.10%) years old respectively. These two age group categories amount to 80.24% of the total responses. All respondents completed this question.

4.3.5 Highest academic qualification achieved by respondents

The purpose of this question was to determine the respondents’ highest academic qualification in order to establish the relationship between level of qualification and corporate entrepreneurship. The ability to manage, operate and sustain an entrepreneurial climate is very complex, and an entrepreneur’s educational background could play an important role in this regard.

Table 4.5 presents the highest academic qualification achieved by the participating respondents.
Table 4.5: Highest academic qualification achieved by respondents

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Count</th>
<th>Cum count</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade12</td>
<td>8</td>
<td>161</td>
<td>4.94</td>
<td>99.38</td>
</tr>
<tr>
<td>Certificate</td>
<td>12</td>
<td>153</td>
<td>7.41</td>
<td>94.44</td>
</tr>
<tr>
<td>Diploma</td>
<td>44</td>
<td>120</td>
<td>27.16</td>
<td>74.07</td>
</tr>
<tr>
<td>Degree</td>
<td>21</td>
<td>141</td>
<td>12.96</td>
<td>87.03</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>76</td>
<td>76</td>
<td>46.91</td>
<td>46.91</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>162</td>
<td>0.62</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>162</strong></td>
<td><strong>813</strong></td>
<td><strong>100.00</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The largest group (71.84%) of respondents had obtained a qualification in the qualification groups higher than a National Certificate (which includes the National Diploma, Degree and Post Graduate Degree groups). Respondents with a postgraduate or equivalent qualification constitute the single largest group (76) and they account for 46.91% of the sample. The second largest group (21) posses a degree and they constitute 12.96% of the sample.

### 4.3.6 Functional departments

Different working conditions, skills required to perform specialised duties, coupled with different departments of the respondents are some of the factors that could be contributing factors in the way the subjects answered the questionnaire. To underscore this, different department split was done according to middle managers service organisations as indicated in table 4.6.
Table 4.6: Department where respondents work

<table>
<thead>
<tr>
<th>Functional Department</th>
<th>Count</th>
<th>Cum count</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Operations</td>
<td>2</td>
<td>2</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Consumer CPM and Marketing</td>
<td>1</td>
<td>3</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Consumer Sales, Cust Serv and Call Centre</td>
<td>10</td>
<td>13</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>Corporate Customers</td>
<td>7</td>
<td>20</td>
<td>0.04</td>
<td>0.12</td>
</tr>
<tr>
<td>DCO Operations</td>
<td>7</td>
<td>27</td>
<td>0.04</td>
<td>0.17</td>
</tr>
<tr>
<td>Enterprise Risk Management</td>
<td>3</td>
<td>30</td>
<td>0.02</td>
<td>0.19</td>
</tr>
<tr>
<td>Finance</td>
<td>5</td>
<td>35</td>
<td>0.03</td>
<td>0.22</td>
</tr>
<tr>
<td>Finance (SA)</td>
<td>2</td>
<td>37</td>
<td>0.01</td>
<td>0.23</td>
</tr>
<tr>
<td>Human Resources (International)</td>
<td>11</td>
<td>48</td>
<td>0.07</td>
<td>0.30</td>
</tr>
<tr>
<td>Human Resources (SA)</td>
<td>5</td>
<td>53</td>
<td>0.03</td>
<td>0.33</td>
</tr>
<tr>
<td>Information Technology Solutions</td>
<td>8</td>
<td>61</td>
<td>0.05</td>
<td>0.38</td>
</tr>
<tr>
<td>Large and Government Business Services</td>
<td>2</td>
<td>63</td>
<td>0.01</td>
<td>0.39</td>
</tr>
<tr>
<td>Legal Services</td>
<td>1</td>
<td>64</td>
<td>0.01</td>
<td>0.40</td>
</tr>
<tr>
<td>Subsidiary (Nigeria)</td>
<td>1</td>
<td>65</td>
<td>0.01</td>
<td>0.40</td>
</tr>
<tr>
<td>Network Centre Operations</td>
<td>22</td>
<td>87</td>
<td>0.14</td>
<td>0.54</td>
</tr>
<tr>
<td>Network Field Operation</td>
<td>27</td>
<td>114</td>
<td>0.17</td>
<td>0.70</td>
</tr>
<tr>
<td>Network Infrastructure Provisioning</td>
<td>27</td>
<td>141</td>
<td>0.17</td>
<td>0.87</td>
</tr>
<tr>
<td>Procurement Services</td>
<td>3</td>
<td>144</td>
<td>0.02</td>
<td>0.89</td>
</tr>
<tr>
<td>Product House</td>
<td>3</td>
<td>147</td>
<td>0.02</td>
<td>0.91</td>
</tr>
<tr>
<td>Small and Medium Business Services</td>
<td>1</td>
<td>148</td>
<td>0.01</td>
<td>0.91</td>
</tr>
<tr>
<td>Strategy</td>
<td>2</td>
<td>150</td>
<td>0.01</td>
<td>0.93</td>
</tr>
<tr>
<td>International</td>
<td>4</td>
<td>154</td>
<td>0.02</td>
<td>0.95</td>
</tr>
<tr>
<td>Mobile</td>
<td>2</td>
<td>156</td>
<td>0.01</td>
<td>0.96</td>
</tr>
<tr>
<td>Wholesale and Networks</td>
<td>2</td>
<td>158</td>
<td>0.01</td>
<td>0.98</td>
</tr>
<tr>
<td>Wholesale Services</td>
<td>4</td>
<td>162</td>
<td>0.02</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>162</strong></td>
<td><strong>1082</strong></td>
<td><strong>1.00</strong></td>
<td><strong>12.85</strong></td>
</tr>
</tbody>
</table>

The Network Field Operation (27) and Network Infrastructure Provisioning (27) service organisations topped the list of the largest category (17.00%) respectively, followed by Network Centre Operations (22) at 14.00%. The majority of the service organisations are fairly and evenly distributed, ranging from 7.00% (Human Resources International) to 1.00%.
4.3.7 Distribution of management level

For the purpose of this study, participating managers were classified as being all middle managers (M4 and M5). Table 4.7 presents the management level of the participating respondents.

Table 4.7: Management level of respondents

<table>
<thead>
<tr>
<th>Management level</th>
<th>Count</th>
<th>Cum count</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4</td>
<td>37</td>
<td>37</td>
<td>22.84</td>
<td>22.84</td>
</tr>
<tr>
<td>M5</td>
<td>125</td>
<td>162</td>
<td>77.16</td>
<td>100.00</td>
</tr>
<tr>
<td>Grand Total</td>
<td>162</td>
<td>361</td>
<td>100.00</td>
<td>223.00</td>
</tr>
</tbody>
</table>

Questionnaires were only distributed to employees on middle management level according to the employee information as captured and updated on SAP. All respondent’s (100%) middle management level was accurately drawn by sorting from employee database per grade level.

4.4 RELIABILITY OF THE QUESTIONNAIRE

In order to assess the internal consistency between the items in the research instrument, Cronbach Alpha coefficients were calculated. The Cronbach Alpha coefficient is based on the average correlation of variables within a test (Struwig & Stead, 2004:132). The greater the value of the Cronbach Alpha coefficient, the higher the internal consistency and the more reliable the scale used in the study (Struwig & Stead, 2004:133). The closer Cronbach’s Alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Nunnally and Bernstein (1994:265) suggest that for acceptable reliability the Cronbach Alpha coefficient should be equal or greater than 0.7.
Table 4.8 indicates the Cronbach Alpha coefficients of the constructs measuring the entrepreneurial climate and perceived success of the organisation ranked from high to low.

**Table 4.8: Cronbach Alpha coefficients of constructs (ranked in order of value size)**

<table>
<thead>
<tr>
<th>No</th>
<th>CONSTRUCT</th>
<th>Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>CONSTRUCTS MEASURING ENTREPRENEURIAL CULTURE</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Management support</td>
<td>0.8253</td>
</tr>
<tr>
<td>10</td>
<td>Resource availability and accessibility</td>
<td>0.8192</td>
</tr>
<tr>
<td>11</td>
<td>Continuous and cross-functional learning</td>
<td>0.8136</td>
</tr>
<tr>
<td>3</td>
<td>Champions and sponsors</td>
<td>0.8109</td>
</tr>
<tr>
<td>7</td>
<td>Vision and strategic intent</td>
<td>0.8077</td>
</tr>
<tr>
<td>12</td>
<td>Customer orientation</td>
<td>0.7991</td>
</tr>
<tr>
<td>1</td>
<td>Entrepreneurial leadership</td>
<td>0.7939</td>
</tr>
<tr>
<td>6</td>
<td>Appropriate rewards and reinforcement</td>
<td>0.7809</td>
</tr>
<tr>
<td>4</td>
<td>Tolerance</td>
<td>0.7784</td>
</tr>
<tr>
<td>5</td>
<td>Innovation and creativity/new ideas encouraged</td>
<td>0.7752</td>
</tr>
<tr>
<td>9</td>
<td>Empowered teams</td>
<td>0.7572</td>
</tr>
<tr>
<td>13</td>
<td>Flat organisational structure</td>
<td>0.7469</td>
</tr>
<tr>
<td>8</td>
<td>Discretionary time/work</td>
<td>0.5631</td>
</tr>
<tr>
<td></td>
<td><strong>PERCEIVED SUCCESS OF THE ORGANISATION</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Customer/market measures</td>
<td>0.8371</td>
</tr>
<tr>
<td>1</td>
<td>Financial measures</td>
<td>0.8016</td>
</tr>
<tr>
<td>3</td>
<td>Process measures</td>
<td>0.7919</td>
</tr>
<tr>
<td>4</td>
<td>People development</td>
<td>0.7479</td>
</tr>
<tr>
<td>5</td>
<td>Future (long term) success</td>
<td>0.4618</td>
</tr>
</tbody>
</table>

The results as indicated in table 4.8 suggest that the research instrument used in this study to access the corporate entrepreneurial climate within the telecommunication...
organisation, has acceptable reliability, since only one of the constructs, i.e. **discretionary time/work** (0.5631), had a Cronbach Alpha coefficient lower than 0.7.

It would seem as if preposition 2 ($P^2$) would have been rejected at face value. However the Cronbach Alphas shown in in Tabl 4.7 were discussed with statistical consultation services of North West University (Potchefstroom campus). It would appear that the resulting alphas are not consistent with this study. It was suggested that the reliability of the measuring instrument should be accepted with the Cronbach Alpha ranging form 0.5 and above. Field (2005:688) notes that the questionnaire designed to measure attitudes may have a lower alpha (<0.70) and still be acceptable.

For the purpose of this study, **discretionary time/work** will be included in the research because it’s Cronbach Alpha coefficient is closer to 0.7, as confirmed by Nunnally and Bernstein’s (1994:265) view and supported by Field (2005:688).

Regarding the constructs measuring the perceived success of the organisation, only one of the variables i.e. **future (long term) success** (0.4618), had a Cronbach Alpha coefficient lower than 0.7. For the purpose of this study, this variable will be included in this research as supported by Field (2005:688).

### 4.5 ASSESSMENT OF THE ENTREPRENEURIAL CLIMATE

**Variables measuring entrepreneurial climate**

Now that the reliability or the statements relating to the 13 constructs has been established, the results can now be scrutinised.

As previously discussed, a Likert scale was used to evaluate the sixty-five statements. In respect of each statement, respondents had to indicate their degree of disagreement (1) or agreement (5) with the statement’s content. Thus a higher number representing disagreement with the statement suggests that the statement is perceived to be untrue.
Likewise a low number representing agreement with the statement suggests that the statement is perceived to be true.

Levine, Stephan, Krehbiel and Berenson, (2008:108) confirm that, in a normal distribution, the majority of the observed values lie within an interval of plus and minus one standard deviation above and below the mean. The more dispersed the data, the larger the standard deviation. The results of the means analysis for the 13 constructs are presented in table 4.9.

**Table 4.9: Entrepreneurial climate survey results**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>n</th>
<th>Mean.</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Entrepreneurial leadership</td>
<td>162</td>
<td>3.127</td>
<td>0.872</td>
</tr>
<tr>
<td>2 Management support</td>
<td>162</td>
<td>3.051</td>
<td>0.899</td>
</tr>
<tr>
<td>3 Champions and sponsors</td>
<td>162</td>
<td>3.011</td>
<td>0.862</td>
</tr>
<tr>
<td>4 Tolerance of risks, mistakes and failure</td>
<td>162</td>
<td>2.821</td>
<td>0.859</td>
</tr>
<tr>
<td>5 Innovation and creativity/new ideas encouraged</td>
<td>162</td>
<td>2.952</td>
<td>0.873</td>
</tr>
<tr>
<td>6 Appropriate rewards and reinforcement</td>
<td>162</td>
<td>3.130</td>
<td>0.910</td>
</tr>
<tr>
<td>7 Vision and strategic intent</td>
<td>162</td>
<td>3.526</td>
<td>0.893</td>
</tr>
<tr>
<td>8 Discretionary time and work</td>
<td>162</td>
<td>3.411</td>
<td>0.674</td>
</tr>
<tr>
<td>9 Empowered teams</td>
<td>162</td>
<td>3.394</td>
<td>0.770</td>
</tr>
<tr>
<td>10 Resource availability and accessibility</td>
<td>162</td>
<td>2.520</td>
<td>0.828</td>
</tr>
<tr>
<td>11 Continuous and cross-functional learning</td>
<td>162</td>
<td>3.244</td>
<td>0.881</td>
</tr>
<tr>
<td>12 Customer orientation</td>
<td>162</td>
<td>3.264</td>
<td>0.879</td>
</tr>
<tr>
<td>13 Flat organisational structure</td>
<td>162</td>
<td>2.935</td>
<td>0.868</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>162</td>
<td>3.107</td>
<td>0.693</td>
</tr>
</tbody>
</table>

The average mean of all constructs as evaluated by managers was $\bar{X} = 3.107$, indicating that the prevalence of corporate entrepreneurship constructs within Telkom is equivalent to about three out of five on the Likert scale. Deductions from this could be that the
constructs for an entrepreneurial climate have a reasonable strong presence, however there is still room for improvement.

The results of the survey are graphically represented in a clustered bar chart in figure 4.1 that compare the values across the constructs ranked from the highest to lowest mean score.

**Figure 4.1: Entrepreneurial climate analysis**

![Clustered bar chart comparing constructs](image)

Six of the 13 constructs, **Flat organisational structure** (*x̅* =2.935), **Resource availability and accessibility** (*x̅* =2.520), **Management support** (*x̅* =3.051), **Champions and sponsors** (*x̅* =3.011), **Tolerance of risks, mistakes and failure** (*x̅* =2.821) and **Innovation and creativity/New ideas encouraged** (*x̅* =2.952) evaluated yielded a mean below the average mean (*x̅* =3.107), but all of the constructs still had a mean above three out of five.

The other seven constructs being **Customer orientation** (*x̅* =3.264), **Continuous and cross-functional learning** (*x̅* =3.244), **Empowered teams/Multidiscipline teamwork**
and diversity \( (\bar{x}=3.394) \), Discretionary time/work \( (\bar{x}=3.411) \), Strong customer orientation \( (\bar{x}=3.694) \), Vision and strategic intent \( (\bar{x}=3.882) \) and Entrepreneurial leadership \( (\bar{x}=3.127) \) evaluated had a mean ranked higher than the average mean of 3.107. The three constructs with the highest mean were Vision and strategic intent \( (\bar{x}=3.882) \) Strong customer orientation \( (\bar{x}=3.694) \) and Discretionary time/work \( (\bar{x}=3.411) \).

Variables measuring the perceived success of the organisation

The results of the means analysis of the variables determining the perceived success of an organisation are presented in table 4.10. Important to note is that the variable Future success was included in the research as discussed in section 4.4.

Table 4.10: Perceived organisational success survey results

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer/market</td>
<td>162</td>
<td>3.153</td>
<td>0.845</td>
</tr>
<tr>
<td>People development</td>
<td>162</td>
<td>2.961</td>
<td>0.963</td>
</tr>
<tr>
<td>Process measures</td>
<td>162</td>
<td>2.918</td>
<td>1.038</td>
</tr>
<tr>
<td>Future success</td>
<td>162</td>
<td>2.586</td>
<td>0.889</td>
</tr>
<tr>
<td>Financial</td>
<td>162</td>
<td>2.438</td>
<td>0.973</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>162</td>
<td>2.811</td>
<td>0.768</td>
</tr>
</tbody>
</table>

The results of the survey are graphically represented in a clustered bar chart in figure 4.2 that compare the values across the constructs ranked from the highest to the lowest mean score. Only one of the five variables measuring the perceived organisational success customer/market was reported by respondents to have a mean above three. This is indicative of a relative strong presence of an entrepreneurial climate.
The average mean yielded ($\bar{x} = 2.811$). The construct **Customer/market** ($\bar{x} = 3.153$) obtained the highest average score. Other four constructs, **People development** ($\bar{x} = 2.961$), **Process** ($\bar{x} = 2.918$), **Future success** ($\bar{x} = 2.586$) and **Financial** ($\bar{x} = 2.438$) obtained a mean of lower than three out of five on the Likert scale. It would seem fair to suggest that the constructs for an entrepreneurial climate have very weak presence and therefore urgent attention needed to raise these to acceptable levels of three and above.

The following is an exposition of the variables determining the respondents’ perceived success of the organisation:

**People development** ($\bar{x} = 2.961$; $s = 0.963$). Managers pointed out that although the organisation tries to drive home the point that employees are the most valuable asset, this does not improve commitment by employees. The job satisfaction has not improved drastically over the past few years.

**Process measures** ($\bar{x} = 2.918$; $s = 1.038$). Managers were of the opinion that the competitive position of the organisation has not drastically improved over the past few
years. Evidence from results does not suggest a clear improvement in the efficiency and effectiveness of the organisation.

**Future success** \( (\bar{x} = 2.586 \; s = 0.889) \). Managers did not express a highly positive outlook on the future success of the organisation. The past decline in market share has put a damper on the general perception of the future success of the organisation.

**Financial** \( (\bar{x} = 2.438; s = 0.973) \). Even though the organisation has perpetually been experiencing some degree of conservative growth, managers were of the opinion that this leaves room for improvement and is not true reflection of where the organisation should be. This could be attributed to a loss in market share due to disinvestment in subsidiaries.

### 4.6 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND ENTREPRENEURIAL CONSTRUCTS INCLUDING THE PERCEIVED SUCCESS OF THE ORGANISATION

In order to test for statistical significance, the independent (two-sample) \( t \)-test was used. The results of this test are the \( p \)-values. For the purpose of this study, the simple conservative approach was applied and the \( t \)-test that does not assume equal variances was used (Elliott & Woodward, 2007:59).

A small \( p \)-value for example smaller than 0.05, indicates significance (Ellis & Steyn, 2003:51). However, Ellis and Steyn (2003:51) caution against the drawback of using the \( p \)-value, being that larger sample sizes tend to result in smaller \( p \)-values without necessarily indicating significance in practice.

In order to overcome the effect of the sample size on the \( p \)-value, the \( d \)-value will also be calculated. For the purpose of this study, the effect sizes/\( d \)-values will be interpreted according to Cohen's' guidelines, as follows: Small effect \((d = 0.2)\), medium effect \((d =\)
0.5) and large effect \((d = 0.8)\). Results with medium effects can be regarded as visible effects and with \(d \geq 0.8\) as practically significant, since it is the result of having a large effect (Field, 2005:32; Ellis & Steyn, 2003:51-53).

For the purpose of this study, the demographical data are classified according to the following categories: **Managers**: male; female and **Management level**: M4; M5.

### 4.7 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND ENTREPRENEURIAL CONSTRUCTS

The purpose of the analysis to determine the relationship between selected demographic variables and entrepreneurial constructs is to determine if there is a significant difference between the evaluations based on the mean score for instance male and female respondents with regard to a specific construct.

The relationship between the demographical variables and the 13 constructs were examined by independent \(t\)-tests and effect sizes

#### 4.7.1 Relationship between entrepreneurial constructs and the gender of respondents

Table 4.11 indicates the relationship between the 13 constructs measuring entrepreneurial climate and the demographic variable gender, with mean \((\bar{x})\), standard deviation \((s)\), \(t\)-test \((p-values)\) and effect sizes \((d-value)\).
Table 4.11: Relationship between the construct measuring entrepreneurial climate and the demographic variable gender

<table>
<thead>
<tr>
<th>Construct</th>
<th>Male</th>
<th>Female</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>( \bar{x} )</td>
<td>s</td>
</tr>
<tr>
<td>Leadership</td>
<td>134</td>
<td>3.116</td>
<td>0.880</td>
</tr>
<tr>
<td>Support</td>
<td>134</td>
<td>3.070</td>
<td>0.886</td>
</tr>
<tr>
<td>Sponsor</td>
<td>134</td>
<td>3.001</td>
<td>0.840</td>
</tr>
<tr>
<td>Tolerance</td>
<td>134</td>
<td>2.796</td>
<td>0.843</td>
</tr>
<tr>
<td>New ideas</td>
<td>134</td>
<td>2.945</td>
<td>0.865</td>
</tr>
<tr>
<td>Rewards</td>
<td>134</td>
<td>3.152</td>
<td>0.911</td>
</tr>
<tr>
<td>Vision</td>
<td>134</td>
<td>3.515</td>
<td>0.885</td>
</tr>
<tr>
<td>Timework</td>
<td>134</td>
<td>3.427</td>
<td>0.665</td>
</tr>
<tr>
<td>Teams</td>
<td>134</td>
<td>3.373</td>
<td>0.781</td>
</tr>
<tr>
<td>Resources</td>
<td>134</td>
<td>2.499</td>
<td>0.813</td>
</tr>
<tr>
<td>Learning</td>
<td>134</td>
<td>3.210</td>
<td>0.914</td>
</tr>
<tr>
<td>Customer</td>
<td>134</td>
<td>3.246</td>
<td>0.844</td>
</tr>
<tr>
<td>Structure</td>
<td>134</td>
<td>2.907</td>
<td>0.858</td>
</tr>
</tbody>
</table>

None of the \( p \)-values are smaller than 0.05. This indicates that men are not statistically significantly more positive than women or vice versa regarding any of the 13 constructs of an entrepreneurial climate.

When taking the \( d \)-values into account, which means that the sample size does not distort the results, it can be seen that in all the instances the effect sizes are too small to be of any practical significance since none of the effect sizes even came close to a medium effect (\( d \)-value = 0.5).
4.7.2 Relationship between entrepreneurial constructs and the management level of respondents

Table 4.12 indicates the relationship between the 13 constructs measuring entrepreneurial climate and the demographic variable management level (M4 and M5), with mean (\( \bar{x} \)), standard deviation (s), t-test (p-value) and effect sizes (d-value).

Table 4.12: Relationship between the construct measuring entrepreneurial climate and the demographic variable management level

<table>
<thead>
<tr>
<th>Construct</th>
<th>M4</th>
<th>M5</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>( \bar{x} )</td>
<td>s</td>
</tr>
<tr>
<td>Leadership</td>
<td>37</td>
<td>2.957</td>
<td>1.008</td>
</tr>
<tr>
<td>Support</td>
<td>37</td>
<td>2.832</td>
<td>1.005</td>
</tr>
<tr>
<td>Sponsor</td>
<td>37</td>
<td>2.870</td>
<td>0.849</td>
</tr>
<tr>
<td>Tolerance</td>
<td>37</td>
<td>2.503</td>
<td>0.975</td>
</tr>
<tr>
<td>New ideas</td>
<td>37</td>
<td>2.632</td>
<td>0.802</td>
</tr>
<tr>
<td>Rewards</td>
<td>37</td>
<td>3.027</td>
<td>0.726</td>
</tr>
<tr>
<td>Vision</td>
<td>37</td>
<td>3.416</td>
<td>0.935</td>
</tr>
<tr>
<td>Time work</td>
<td>37</td>
<td>3.368</td>
<td>0.684</td>
</tr>
<tr>
<td>Teams</td>
<td>37</td>
<td>3.395</td>
<td>0.725</td>
</tr>
<tr>
<td>Resources</td>
<td>37</td>
<td>2.243</td>
<td>0.788</td>
</tr>
<tr>
<td>Learning</td>
<td>37</td>
<td>3.162</td>
<td>0.902</td>
</tr>
<tr>
<td>Customer</td>
<td>37</td>
<td>3.032</td>
<td>0.875</td>
</tr>
<tr>
<td>Structure</td>
<td>37</td>
<td>3.027</td>
<td>0.866</td>
</tr>
</tbody>
</table>

Eleven of the constructs registered the p-values greater than 0.05, which indicate that M4 managers are not statistically more positive than M5 managers concerning any of the eleven constructs of an entrepreneurial climate. Only in terms of the construct tolerance (p-value=0.010) and new ideas (p-value=0.011) are M4 managers significantly more positive, relative to M5 managers.
In all instances the effect sizes are too small to be of any practical significance since none of the effect sizes had a large effect \((d\text{-value} = 0.8)\). The variable **new ideas** \((d\text{-value} = 0.47)\) had a medium effect because it came close to 0.5 medium effect.

### 4.8 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND THE PERCEIVED SUCCESS FACTORS OF AN ORGANISATION

#### 4.8.1 Relationship between perceived success factors and the gender of respondents

Table 4.13 indicates the relationship between the factors measuring the perceived success of the organisation and the demographic variable gender, with mean \((\bar{x})\), standard deviation \((s)\), \(t\)-test \((p\text{-values})\) and effect sizes \((d\text{-value})\).

**Table 4.13: Relationship between the factor measuring the perceived organisational success and the demographic variable gender**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Male</th>
<th>Female</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n)</td>
<td>(\bar{x})</td>
<td>(s)</td>
</tr>
<tr>
<td>1 Financial</td>
<td>134</td>
<td>2.405</td>
<td>0.939</td>
</tr>
<tr>
<td>2 Customer market</td>
<td>134</td>
<td>3.157</td>
<td>0.825</td>
</tr>
<tr>
<td>3 Process measures</td>
<td>134</td>
<td>2.871</td>
<td>1.040</td>
</tr>
<tr>
<td>4 People development</td>
<td>134</td>
<td>2.970</td>
<td>0.964</td>
</tr>
<tr>
<td>5 Future success</td>
<td>134</td>
<td>2.575</td>
<td>0.887</td>
</tr>
</tbody>
</table>

All the \(p\text{-values}\) are bigger than 0.05. It flows from this that men are not statistically significantly more positive than women regarding any of the factors indicating perceived success of the organisation.
When taking the $d$-values into account, which means that the sample size does not distort the results, it can be seen that in all instances the effect sizes are too small to be of any practical significance since none of the effect sizes even came close to a medium effect ($d$-value = 0.5). Only the process measures factor ($d=0.26$) came close to a small effect ($d$-value = 0.2).

### 4.8.2 Relationship between perceived success factors and the management level of respondents

Table 4.14 indicates the relationship between the factors measuring the perceived success of the organisation and the demographic variable management (M4 and M5), with mean ($\bar{x}$), standard deviation (s), $t$-test ($p$-values) and effect sizes ($d$-value).

<table>
<thead>
<tr>
<th>Factor</th>
<th>M4</th>
<th>M5</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$\bar{x}$</td>
<td>$s$</td>
</tr>
<tr>
<td>1 Financial</td>
<td>37</td>
<td>2.162</td>
<td>0.967</td>
</tr>
<tr>
<td>2 Customer market</td>
<td>37</td>
<td>2.829</td>
<td>0.813</td>
</tr>
<tr>
<td>3 Process measures</td>
<td>37</td>
<td>2.712</td>
<td>1.028</td>
</tr>
<tr>
<td>4 People development</td>
<td>37</td>
<td>3.108</td>
<td>0.794</td>
</tr>
<tr>
<td>5 Future success</td>
<td>37</td>
<td>2.704</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Two of the construct **customer market** ($p$-value=0.007) and **future success** ($p$-value=0.002) registered the $p$-value smaller than 0.05. This indicates that M4 managers are statistically significantly more positive than M5 concerning the factors indicating the perceived success of the organisation. For **financial measures** ($p$-value=0.049), **process measures** ($p$-value=0.291) and **people development** ($p$-value=0.170) M4
managers are statistically significantly more positive than M5 managers regarding the factors indicating perceived success of the organisation.

A closer scrutiny of the $d$-values, which is meant to suggest that the sample size does not distort the results, it can be observed that in all instances the effect sizes are too small to be of any practical significance since none of the effect sizes even came close to a large effect ($d$-value = 0.8). The factor **customer market** ($d$-value = 0.50) had a medium effect, and the factor **process measures** ($d$-value = 0.26) had a small effect.

### 4.9 SUMMARY

This chapter outlined the research procedures used to obtain the necessary information for the research. The empirical study, detailed in this chapter, used a survey questionnaire to investigate the 13 constructs of an entrepreneurial climate in an organisation, as well as five factors evaluating the perceived success of an organisation. The descriptive analysis consisted of frequency distributions of the responses to all sections of the questionnaire. The sample size for the study consisted of the whole study population, since the research questionnaire was distributed to all middle managers in the population. A total of 162 questionnaires were returned and analysed. The frequency distributions of the variables were generated and presented as pie charts and tables for easy reading and understanding.

The demographic information of the respondents were analysed in terms of gender (134 males and 28 females), Management level (M4 and M5), age group ($\leq 29 = 1$, 30-39 = 29, 40-49 = 72, 50-59 = 58, 60+ = 2), highest qualification (132 of respondents obtained a qualification above a national certificate level, 12 certificate, 8 Grade 12 and 1 missing) and the functional departments the middle managers are working in (relative evenly distributed, from the highest of 27 each in the Network Infrastructure Provisioning and Network Field Operation departments to the lowest of 1 each in the Consumer
CPM and Marketing, Legal Services, Subsidiary and Small and Medium Business Services related departments).

Cronbach’s Alpha coefficient values were used to determine the internal consistency among items in the research instrument. All the constructs Alpha values were calculated to the equivalent conventional acceptable level of 0.8 save for only three, indicating a relatively high level of internal reliability of the research instrument. By applying Nunnally and Bernstein (1994:265) suggestion that for acceptable reliability the Cronbach Alpha coefficient should be equal or greater than 0.7, only one construct falls short and thus increasing the internal reliability of the research instrument.

The means of six constructs were lower than the average mean (\( \bar{x} = 3.107 \)) while seven constructs were ranked higher. The three constructs with the highest mean were Vision and strategic intent (\( \bar{x} = 3.882 \)), strong customer orientation (\( \bar{x} = 3.694 \)) and discretionary time/work (\( \bar{x} = 3.411 \)).

The future success variable measuring the perceived success of the organisation was included in the rest of this study as per Field (2005:688). The variables measuring the perceived organisational success were reported by respondents to have a mean above three. The average mean was \( \bar{x} = 3.00 \).

An analysis was done to determine the relationship between demographic variables and responses relating to the 13 constructs of corporate entrepreneurship as well as the variables measuring the perceived organisational success was conducted. The effect of gender and management level the above was analysed, and effect sizes and practical significance were determined. In all instances the effect sizes were too small to be of any practical significance since none of the effect sizes had a large effect (\( d\text{-value}=0.8 \)).

The results of the empirical study have been discussed in this chapter. The researcher is satisfied with a response of 162 respondents. This rate is considered sufficient to regard this study to be valid and reliable. The next chapter will discuss the achievement
of the primary and secondary objectives of this research, recommendations will be made on how to foster a corporate entrepreneurial climate within Telkom.
CHAPTER 5
CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The potential advantages of corporate entrepreneurship as a means to drive change and innovation have been illustrated in chapter four, and in particular the manner in which this could be of benefit to Telkom.

This chapter will aim to practically recommend ways in which corporate entrepreneurship could be implemented as part of the corporate culture at Telkom should they wish to reap the benefits associated with it.

This chapter concludes this study, projects the scene for possible recommendations, and suggests possible areas for future research. The results from the empirical data form the base for the conclusion and recommendations. The achievement of the study objectives will also be discussed.

5.2 CONCLUSIONS AND MAIN RESEARCH FINDINGS

The purpose of this study was primarily to research the entrepreneurial climate in a telecommunications organisation. This was approached by choosing Telkom as a case study and a corporate entrepreneurial assessment was conducted. The study attempted to determine whether the organisation creates the environment conducive for entrepreneurship and encourages employees to be entrepreneurial within the organisation.

The importance of corporate entrepreneurship has been demonstrated (Chapter 2) and the constructs which support a climate of entrepreneurship as well as the perceived success of the organisation explored. The organisation was discussed at length (Chapter 3). Data pertaining to the perceived presence of constructs of an
entrepreneurial climate as well as selected success factors of the organisation was processed and presented in Chapter 4. The purpose of this section is to interpret and draw conclusions from the data of the empirical study.

The final section of this study determines adherence to the objectives of the study and concludes by suggesting further areas for research.

Conclusions will follow the basic structure of the questionnaire, and will firstly address the basic demographic information, followed by an evaluation of the Cronbach Alpha coefficient to establish the reliability of the measurement used for the assessment of the constructs of an entrepreneurial climate as well as the assessment of the factors of the perceived organisational success. Lastly the factors indicating perceived organisational success will be discussed.

5.2.1 Demographic information

From the results of the survey questionnaire, the following conclusions about demographical information were made:

- The gender representation of middle managers in Telkom is skewed, with 82.2% identified as male, and 17.28% female.

- Most of the middle managers, who responded to the item on race, are white 46.91% but more than half are non-white.

- The majority of middle managers are between 40 and 59 years of age, with a split between managers in the 40 to 49 years range (44.44%) and managers in the 50 to 59 years range (35.80%). Given that the majority of middle managers are older than 49, could present a challenge in because attracting young people with new innovative ideas might be stifled by the low attrition rate.
• The largest group (46.91%) of respondents have post graduate degrees, with almost a similar portion of the respondents having a national diploma (27.16%). SAP records on academic qualifications might not be up to date, because of the immediate supervisor not complying or respondents not supplying such information. As a result, caution should be exercised when interpreting findings concerning this variable.

• The respondents are relative evenly spread over several departments with the majority of the middle managers in the Network Infrastructure Provisioning (17.00%), Network Field Operations (17.00%) and Network Centre Operations (14.00%). All respondents’ functional departments were accounted for because they were extracted from an automated SAP page, and therefore making the data reliable.

5.2.2 Reliability of the entrepreneurial climate questionnaire

Extrapolating from the results of the survey, twelve of the constructs measured above the normal cut-off value of 0.7. For the purpose of this study, discretionary time/work was included in the research because it’s Cronbach Alpha coefficient was closer to 0.7, as confirmed by Nunnally and Bernstein’s (1994:265) view and supported by Field (2005:688).

Regarding the constructs measuring the perceived success of the organisation, only one of the variables i.e. future (long term) success (0.4618), had a Cronbach Alpha coefficient lower than 0.7. For the purpose of this study, this variable was included in this research as supported by Field (2005:688).

Because Cronbach Alpha coefficient values exceeding 0.7 and higher were recorded concerning most of the constructs measuring corporate entrepreneurial climate, and the variables measuring perceived success of the organisation, it has been concluded that the research instrument used in this study to assess the corporate entrepreneurial climate in Telkom has acceptable reliability.
5.3 ASSESSMENT OF THE CORPORATE ENTREPRENEURIAL CLIMATE

From the five point Likert scale employed in this study, a score of 3.000 is regarded as an average score. The average mean of corporate entrepreneurial constructs as evaluated by middle managers was 3.107, which can be regarded as an above average score in terms of the five point Likert scale. The average score on the Likert scale (3.000) is used as a benchmark for the purpose of making recommendations. For the purpose of this study, mean scores of \( \bar{x} < 3.000 \) are interpreted as being indicative of perceptions by middle managers that those constructs have lower than average prevalence in Telkom and therefore indicates areas that require development.

Ranked relative to each other, mean scores of \( \bar{x} > 3.000 \) are interpreted as being indicative of a higher than average prevalence, identifying areas that could be built on to further enhance the corporate entrepreneurial climate in the organisation. Nine of the thirteen constructs measured \( \bar{x} > 3.000 \) which is a majority. From this the impression is that the constructs for an entrepreneurial climate have a fairly strong presence, even though there is room for improvement for the remaining four constructs. Because no norms exist, the interpretation of low or high is not based on norms.

Seven of the constructs evaluated had a mean ranked higher than the average mean of 3.107. For the purpose of this study, this demonstrates a relatively strong prevalence of corporate entrepreneurship constructs within Telkom since all the constructs had a mean closer to three and this is an indication of a slight agreement with the relevant items. Based on the survey results, the current climate in Telkom is averagely entrepreneurially oriented.

Conclusions about the construct will be discussed in order of ranking from the highest to the lowest, based on the mean value.
5.3.1 Vision and strategic intent

The construct, **vision and strategic intent**, received the highest score with $\bar{x} = 3.526$ meaning just more than “slightly agree” with the statement. All statements scored above $\bar{x} = 3.107$. It would appear that respondents feel that they are well informed and kept in the loop about strategic intent and that the vision of the company has been translated to departmental goals. A strong strategic alignment indicates receptiveness to a culture of intrapreneurship, because a well-formulated, communicated and accepted strategy is seen as the first step of implementation of corporate entrepreneurship (Pinchot & Pellman, 1999:25).

Employees are well informed about the organisational vision and strategies since this regularly communicated via corporate communication platforms. The vision and strategies of the organisation often help employees in setting priorities in their work. The measurement instrument tested whether the company’s current strategy was well communicated and accepted and not whether an intrapreneurial strategy was already entrenched. However, should the company choose to explore the corporate entrepreneurship route it is clear that its leadership will be pliable to executing and implementing the new strategy effectively.

5.3.2 Discretionary work/time

With a mean score of $\bar{x} = 3.411$ the construct, **discretionary time and work**, is ranked second of the 13 constructs evaluating the entrepreneurial climate. This means that in Telkom, employees are given enough leeway in developing new ideas and time needed for this is often taken into account and allowed to employees during working hours. The creativity of employees in the organisation is enhanced by allowing employees time at work to explore new ideas and by providing ample opportunities for learning and growth.
5.3.3 Empowered teams/Multi-disciplined teamwork and diversity

The construct relating to empowerment of teams and the presence of multi-disciplined teamwork and diversity obtained an above average score and was ranked third with a mean score of $\bar{x}=3.394$. This means that respondents tended to slightly agree with the fact that cross-functional or cross-business unit teams are used effectively within Telkom. Although working together in project teams is encouraged in the organisation and cross-functional teams are characterised by diversity based on the skills required by the project, projects do not have enough choice in recruiting and selecting new team members due to budgetary constraints.

5.3.4 Customer Orientation

The construct, strong customer orientation was ranked fourth with an above average rating of $\bar{x}=3.264$. Managers tend to strongly agree that customers are treated as very important stakeholders and that product and service innovation are driven by a strong customer orientation at Telkom. This is considered to bode well for the entrepreneurial climate of the company because customers are the reason for the company’s existence and customer satisfaction is the only path to financial sustainability of an organization (Cummings & Worley, 2005:281).

5.3.5 Continuous and cross-functional learning

Continuous learning and cross-functional learning was rated the fifth strongest construct and with mean score of $\bar{x}=3.244$. Respondents were slightly convinced that employees are encouraged to talk to their colleagues in other departments of the organisation about ideas for new projects, and slightly agreed with the statement that people are keen to share knowledge within the organisation.
5.3.6 Appropriate rewards and reinforcement

With a rating of $\bar{x} = 3.130$ appropriate rewards and reinforcement is closer to the average means score ($\bar{x} = 3.107$) of all 13 entrepreneurial constructs. This is a positive rating as individuals implementing successful innovative projects do not regularly receive additional rewards and compensation, nor are effective intrapreneurs generally rewarded. It should however be taken into account that rewards encompass both extrinsic (e.g. money or share options) and intrinsic (positive reinforcement and increase of self-worth) alike (Kinicki & Kreitner, 2007:282) and that the questionnaire was specifically broad in order to cover both types of rewards. Within Telkom, recognition rather than criticism should be emphasised, with specific focus on recognition for entrepreneurial behaviour or activities by making sure that the basic link between effort and reward are internalised by employees.

5.3.7 Entrepreneurial leadership

An average rating of $\bar{x} = 3.127$ was reported for entrepreneurial leadership, almost equal to the average of $\bar{x} = 3.107$. This translated to respondents perceiving their leaders to taking a long-term and opportunity-obsessed view of the organisation, whilst inspiring employees to act in the same way. An intrapreneurial climate would be invigorated through this style of leadership, because it leads to rousing employees at any level to vigorously endeavour to discover and pursue opportunities for growth (Cohen, 2004:16).

The impression created is that entrepreneurial leadership is beginning to be perceived as being prevalent in the organisation, with employees being inspired by their leaders to explore every opportunity. However the questionnaire did not specify whether the opportunities which are continuously exploited, refer to growth prospects or rather to areas for improving the cost-effectiveness of an operation. Given the aggressive and sustained cost-cutting exercises that the company underwent in the recent past, it would be speculated that the latter premise holds true. On the other hand though, movement into other areas of business like mobile might suggest otherwise.
5.3.8 Management support

The construct, management support, obtained a score of $\bar{x} = 3.051$. Less than “slightly agree” but more than “Neither agree nor disagree” and is reported as the eighth highest score, below the average mean score of all 13 entrepreneurial constructs ($\bar{x} = 3.107$). The respondents are of the slight impression that management encourages employees to develop ideas that would improve the organisation and the creation of innovative ideas is a fairly regular occurrence in the organisation. This was demonstrated when the CEO invited suggestions from all employees to be directed to his office. From this the best ideas would then win prizes. It is then not surprising why this construct falls a bit on the positive side of the Likert scale. They also agreed that top management is receptive to the employees’ ideas and suggestions and those employees who come up with innovative ideas on their own receive management’s encouragement for their activities because they have seen some of these ideas being implemented.

5.3.9 Sponsors for projects

The construct, sponsors for projects ranked ninth with a score $\bar{x} = 3.3011$ indicating that respondents perceive this construct as relatively positive as all of the statements received a score above $\bar{x} = 3.000$. Many of the respondents agreed that the organisation’s managers have the skills, commitment and courage to be effective champions of corporate entrepreneurial initiatives.

Respondents slightly agreed that their managers help them to get their work done by removing obstacles in their way. This goes hand in hand with the perception that the organisation has people with influence that support, coach, protect, and find resources for a corporate entrepreneurial project and its team. Originators of new ideas thus find it easy to implement because of the support rendered by influential people within the organisation. Respondents were fairly negative in their assessment of the ease to build coalitions of sponsors to help projects succeed within the organisation.
5.3.10 Innovation and creativity/New ideas encouraged

The construct, innovation and creativity, was ranked tenth and obtained a mean score of $\bar{x} = 3.952$. Respondents slightly agreed that the organisation provides them with the chance to be creative and try out new methods of doing their jobs, the organisation quickly implements these improved work methods. Training is provided to ensure that innovative new processes are implemented effectively and employees are inspired to push their boundaries and to think "out-of-the-box".

Respondents were fairly neutral in their perception of the number of employees at the organisation that are involved in generating and implementing innovative ideas. The organisation’s value system is furthermore well known and management challenges the status quo. Management also inspire the workforce to think and act in innovative ways. A Minority of the respondents agreed that the leaders lead by example and people are eager to voluntarily follow them.

5.3.11 Flat organisational structure and open communication

The middle managers rated this construct at number eleven, with an average mean score of $\bar{x} = 2.935$. The only statement that received a high mean score is that employees determine their key performance areas in co-operation with their supervisors ($\bar{x} = 3.3641$). Middle managers were of the perception that people need to go through elaborate justification and approval procedures when making decisions about their work, and that the degree of hierarchical control is relatively high in the organisation.

5.3.12 Tolerance for risks, mistakes and failure

This construct, tolerance for risks, mistakes and failure, obtained the second lowest score ($\bar{x} = 2.821$). This indicated that the concept of taking calculated risks is not really recognised or valued, with the corollary being that persons making mistakes are not easily forgiven. Success based on innovation is invariably preceded by trial and error.
(Kuratko & Welsch, 2004:42) and therefore a culture of blaming people for mistakes destroys the potential for innovation (Hisrich & Peters, 2002:50). Respondents were fairly negative in their assessment of the value placed on projects involving calculated risk, even when things do not always turn out according to plan, but were more not so positive that if they make a mistake in this organisation they will be forgiven.

5.3.13 Resources

Of all 13 entrepreneurial constructs assessed, resource availability and accessibility received the lowest rating with a mean score of \( \bar{x} = 2.520 \). Middle management perceive the process for accessing and acquiring resources to pursue new opportunities as not streamlined and that it takes time for approval for resources to be granted. Resources are essential to corporate entrepreneurs wishing to implement innovative projects (Antoncic & Hisrich, 2004:526). Nevertheless, a natural scarcity of resources also tests the innovative ability of entrepreneurs (Thompson et al., 2007:48). The general view is that the current lack of access to resources experienced could easily be rectified once a strategy of corporate entrepreneurship is implemented provided that it is recognised as one of the pillars of such a culture.

5.4 ASSESSMENT OF THE PERCEIVED SUCCESS OF THE ORGANISATION

The Likert scale was used to assess how middle managers perceive the success of the organisation. The perceived success of the organisation was evaluated through 17 statements in terms of five variables. The variables identifying the perceived success of the organisation are financial measures, customer/market measures, people development measures process measures and future success.

The average mean score of all five variables is \( \bar{x} = 2.811 \). This is relative low indicating that respondents disagree strongly with the statements. Care should be taken when interpreting the results of the assessment of the perceived results of the organisation
since one of the variables measuring the perceived success of the organisation obtained a Cronbach Alpha Coefficient calculated below 0.7. **Future success** obtained 0.4618.

### 5.4.1 Customer and market success

**Customer/market** measures was rated first out of five with a mean score of $\bar{x} = 3.153$ which is just above the average mean score of all five variables ($\bar{x} = 2.811$). This indicates that managers feel that Telkom has a high customer retention rate and that customers are well-served. This is should be much higher with the result of the entrepreneurial climate section, with respondents perceiving that a strong (internal) customer focus translates into external success comprising satisfied customers and secure markets. Managers therefore strongly agreed that taking care of customers is Telkom’s top priority; the organisation will therefore have to develop product/services with customers’ needs in mind which result in the customers being satisfied with the organisation’s product/service offerings.

### 5.4.2 People development

The mean score of the variable **people development** ($\bar{x} = 2.961$) is ranked as the second highest of the five perceived organisational success variables, and it is above the midpoint of three on the Likert scale rating. The middle managers at Telkom agreed that employees are viewed as a relatively important asset of the organisation. Middle managers perceived the employees as having a moderate commitment towards the organisation, but they did not think that the morale (job satisfaction) of the employees has improved over the past few years as this fell below the average. This is an area that needs urgent attention by top management.

### 5.4.3 Process measures

With a mean score of $\bar{x} = 2.918$, **process measures** was ranked third of the four perceived organisational success variables evaluated. Middle managers slightly agreed
with the statements that the competitive position, the effectiveness (doing the right things) and the efficiency (doing things right) of Telkom has improved over the past few years.

5.4.4 Financial measures

With an average mean score of $\bar{x} = 2.438$ this variable was rated the lowest of all the organisational success variables even below the midpoint of three on the Likert scale rating. This variable consisted of only three statements. Managers disagreed slightly that Telkom has experienced growth in turnover over, growth in profits as well as growth in market share over the past few years. This can be attributed to the changes in the dynamics of the ICT industry with regards to drop in call charges and the recent divestitures the organisations underwent.

5.5 RELATIONSHIPS BETWEEN DEMOGRAPHIC VARIABLES AND ENTREPRENEURIAL CONSTRUCTS

Conclusions on the analysis of the significance of relationships between demographic variables such as gender (male versus female) and management level (M4 versus M5), and corporate entrepreneurial constructs as well as perceived success of the organisation are indicated below.

If a visible difference in terms of the $d$-value is determined, it would mean that should you the middle managers be divided into two groups (male and female or M and M5) and an observer were to spend enough time with each group, he/she would be able to tell that a specific group have a more positive view regarding a specific construct or variable than the other group (De Villiers, 2008:164).
5.5.1 Relationship between gender and corporate entrepreneurial climate constructs

Drawing from the results of the analysis regarding the relationship between gender and corporate entrepreneurial climate constructs, it has been concluded that gender does not visibly influence respondents’ perceptions of the corporate entrepreneurial climate at Telkom. The results did not indicate a statistical significant difference ($p<0.05$) in the mean values between the perceptions of male and females with regard to all the 13 constructs relating to a corporate entrepreneurial climate.

When measuring the effects ($d$-values), it can be observed that in all the instances the effect sizes are too small to be of any practical significance since none of the effect sizes came close to a medium effect ($d$-value=0.5). This means the male managers did not perceived the entrepreneurial climate at Telkom any significantly different from their female counterparts.

5.5.2 Relationship between gender and perceived organisational success variables

The results indicated no statistical significant difference ($p<0.05$) in the mean values between the perceptions of male and female managers with regard to all the perceived organisational success variables. Females rated process factors and the future success higher than the male middle managers. Males rated the customer market and people development in the organisation marginally higher than their female counterparts. The differences were not practical significant and only a small effect ($d=0.02$; $d=0.26$; $d=0.05$; $d=0.7$) could be determined.
5.5.3 Relationship between management level and corporate entrepreneurial climate constructs

Based on the results of the analysis regarding the relationship between management level classification and corporate entrepreneurial climate constructs, it has been concluded that management level does not visibly influence respondents’ perceptions of corporate entrepreneurial climate at Telkom. The results did not indicate a statistical significant difference (p<0.05) in the mean values between the perceptions of M4 and M5 managers with regard to all 13 constructs relating to a corporate entrepreneurial climate.

The differences in effects between M4 and M5 managers were not of practical significance ten of the thirteen constructs and only a small effect (d=0.22; d=0.28; d=0.21; d=0.14; d=0.15; d=0.08; d=0.00; d=0.12; d=0.34; d=0.14; d=0.27 respectively) could be determined. Three of the constructs did have a moderately practical significant if compared to the other effect sizes. The tolerance, new ideas; and resources “entrepreneurial leadership” construct had an effect size of (d=0.42 d=0.47, d=0.43 respectively) which is close to having a medium effect (d=0.5). This indicates that management level had a have a medium effect on the rating of these three constructs and M5 managers had higher perceptions in them than M4 managers.

5.5.4 Relationship between management and perceived organisational success variables

The results indicated no statistical significant difference (p<0.05) in the mean values between the perceptions of M4 and M5 managers with regard to all the perceived organisational success variables. White middle managers rated the perceived organisational success higher than their black counterparts on people development variable analysed and M5 managers rated customer market, process measures and future success higher than M4 mangers. Only customer market and future success’s differences were of practical significant with medium effects of (d=0.5 and 0.54
respectively). Small effects were determined with process measures and people development ($d=0.26$ and $d=0.19$ respectively).

5.6 RECOMMENDATIONS

Evidence point to a relatively fairly average entrepreneurial climate at Telkom, based on the conclusions made on the 13 constructs measuring entrepreneurial climate and the five variables measuring the perceived success of the organisation. To establish an effective entrepreneurial climate in an organisation, top management commitment and support is essential in acting as a cohesive force that drives all elements of entrepreneurship in a positive direction as demonstrated in the literature study.

From the analysis of the thirteen constructs of corporate entrepreneurship in Telkom, six areas stood out because they received a rating of less than $\bar{x}=3.107$. These areas clearly need urgent attention will be discussed and ways of improving them suggested.

5.6.1 Management support

Management should serve as an oasis of safety and fortress in times of entrepreneurial discourse. To keep new venture success rate high, management need to establish trust by being supportive of new venture ideas from infancy to maturity stages. This will ensure that management become a conduit of success in advancing a perpetually growing organisation that is technically sound with world class business savvy.

Robust structures need to be in place to ensure that innovative ventures are not relegated to the back burner in favour of more pressing operational initiatives. A support structure is very important, especially since corporate entrepreneurship is not the primary activity and focus area. Support should therefore be given in the form of mentors located in middle to upper management levels of the organisation. In this way managers must create a supportive environment in the working place which stimulates
entrepreneurial thinking and which creates a supporting base for employees with new ideas.

5.6.2 Sponsors (Champions)

A venture sponsor provides the interface between ownership and delivery, forming the single client focal point responsible to the new venture owner for day-to-day management of the client’s interests in the entrepreneurial drive. The sponsor acts as the client’s (entrepreneur) representative. Not all problems in the organisation should be escalated to top management but Telkom needs to have sponsors who champion, coach, protect and marshal resources for corporate entrepreneurial endeavours. Different sponsors could be identified and given autonomy to champion dedicated entrepreneurial activities per sponsor’s business interest.

5.6.3 Tolerance for risks, mistakes and failure

Telkom should give employees leeway to take calculated risks and practical experimentation and allow room for failure and mistakes. This should be accepted and viewed as part of a learning process as trial and error sometimes needs to be put to the test. Management needs to be seen as objective, encouraging and supportive to subordinates as opposed to being punitive in the way they deal with employees.

It is therefore incumbent for top management to create a conducive environment, whereby an entrepreneurial spirit is inculcated in the minds of employees. This will go a long way in allowing them the free flow of ideas and new ways of venturing.

5.6.4 Innovation and creativity/New ideas encouraged

New ideas need to be encouraged at Telkom to thrust the organisation into a new wave of growth. The CEO suggestion box should be cross functional as well and top management play an active role in ensuring a flow of innovative and creative ideas.
Peer to peer conversation platforms need to be established whereby entrepreneurs share ideas and support each others ventures. This will go a long way in establishing a knowledge based organisation that is indispensible

5.6.5 Resource availability and accessibility

Employees need to have access to resources to enable them perform optimally without barriers of lack of resources. For employees to pursue new ideas, opportunities and entrepreneurial ventures, management need to make a concerted effort in ensuring proper budgeting is allowed for acquisition of resources. Specific focus areas identified by top management where entrepreneurial effort must be directed should be combined with procedures in order to arrive at a point where pivotal leaders of the process can be appointed. The allocation of funds, human resources and other means must be clarified up to departmental level, taking the focus area into account.

Suggested ways to improve resource availability and accessibility include:

- establish systems for easy access to resources,
- methods and procedures to access resources should be made clear to all,
- emergency funds set aside for adhoc requirements,
- resource management processes enforced, and
- integration of operations to ensure optimum sharing of resources.

5.6.6 Flat organisational structure

In contrast to a tall organisation, a flat organisation will have relatively few layers or just one layer of management. This means that the chain of command from top to bottom is short and the span of control is wide. Due to the small number of management layers, flat organisations are often small organisations.
One of the reasons why this construct ranked so low in Telkom could be because the crippling effect of a long chain of command. The structure could therefore be flattened further to allow for more interaction across different department and pockets of excellence begin communicating with each other. Decision making powers should also trickle down to subject matter experts and people directly involved with entrepreneurial activities.

Devolution of power or “entrepreneurial autonomy” should be emphasised, allowing employees more freedom to manage their budgets and their projects (Bellone & Goerl, 1992:131). Different cost centres could be attributed different responsibilities where decentralisation of powers, which help in the reduction of decision making levels could be realised.

5.7 ACHIEVEMENT OF OBJECTIVES

The evaluation of the success of this study is based on the achievement of the research objectives as indicated in section 1.3.

5.7.1 Primary objective

The primary objective of this study was to assess the level of corporate entrepreneurship in the telecommunications sector, with specific reference to Telkom and to make recommendations on the encouragement and promoting of an entrepreneurial climate.

The primary objective was achieved by realising the secondary objectives of the study.
5.7.2 Secondary objectives

In order to address the primary objective, the following secondary objectives were formulated:

- to define corporate entrepreneurship;
- to obtain insight into the dynamics of corporate entrepreneurship by means of a literature review;
- to obtain insight into the business environment of Telkom;
- to assess the entrepreneurial climate in Telkom SA by means of a questionnaire to be completed by middle management;
- to determine the reliability of the questionnaire;
- to examine the relationships between the demographic variables and the constructs measuring entrepreneurial climate; and
- to suggest practical recommendations to foster corporate entrepreneurship in the organisation.

The first two objectives were attained by means of a comprehensive literature study as presented in chapter two.

The third objective, which focuses on Telkom, was achieved in chapter three where the overview, history and management structure of Telkom were discussed.

The fourth secondary objective was to measure Telkom’s current entrepreneurial climate and the perceived success by means of a questionnaire. To achieve this objective, the reliability of the measuring instrument was firstly confirmed by using the Cronbach Alpha coefficient. Secondly the corporate entrepreneurial climate was evaluated by means of the questionnaire as discussed in chapter four.

The fifth objective was to examine the relationships between the demographic variables and the constructs measuring entrepreneurial climate. To achieve this objective, the
reliability of the measuring instrument was firstly confirmed by testing the statistical significance using ($p$-values) and the effect sizes using the ($d$-values) in chapter four.

The last objective which was to propose recommendations to ensure and promote an entrepreneurial climate in Telkom was attained in chapter five.

5.7.3 Suggestions for further research

Based on the findings of the study, the following suggestions are put forward for consideration pertaining future research on corporate entrepreneurship in the telecommunications industry:

The scope of the study was limited to middle management within Telkom. Junior management including supervisors was excluded. The views of junior management should be included in future studies on this topic since in Telkom junior management employees are the first line of defence and play a significant role in managing groups of employees/teams. For even better representation of the state of the organisation, future studies should include the whole of Telkom as an organisation to ascertain corporate entrepreneurial climate as a function of the organisation’s turnover.

Areas of further research to facilitate the fostering of corporate entrepreneurial constructs in the organisation:

- a similar study could be conducted to determine the challenges and strategies used by other organisations operating in the telecommunications and ICT sector;
- an updated study into the international trends and best practices adopted by other telecommunication organisations;
- a study on whether the rapidly changing ICT environment has a bearing in advancing corporate entrepreneurship;
- develop procedures and processes regarding tolerance for risks, mistakes and failures;
• develop a strategic plan to ensure incorporation of corporate entrepreneurial constructs; and
• assessment and evaluation system revisited to incorporate corporate entrepreneurial behaviour patterns.

5.8 SUMMARY

Conclusions drawn from the empirical research results in chapter four was discussed. The basic demographics of age, gender, division management level and qualification were firstly discussed.

The Cronbach Alpha coefficient established the reliability of the items evaluating each construct, after which each of the 13 constructs present in a corporate entrepreneurial climate were discussed in relation to the results of the questionnaires distributed. The relationships between the demographic variables (being male and female; and M4 and M5 management) were discussed for the 13 constructs as well as for the factors measuring the perceived organisational success in order to identify statistically significant variances in perceptions. The top three ranking constructs (stars) were management support, resource availability and accessibility as well as continuous and cross-functional learning. The lowest performing constructs (dogs) are discretionary time/work, flat organisational structure and empowered teams.

The chapter concluded by addressing the achievement of all the objectives, and by recommending possible future research that could be undertaken based on this study.
REFERENCES


TELKOM GROUP. 2009. 2009 Annual report.

TELKOM GROUP. 2010. 2010 Annual report.


WWW.TELKOM.CO.ZA. Date accessed: 2010/08/02.


Note: All responses are confidential and neither the individual nor the organisation would be identified in any report or release.

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Dear Respondent

Corporate entrepreneurship is becoming increasingly important for the competitiveness of Telkom as we face dynamic competition unleashed by globalisation as well as by local competitors. Internal environmental factors play a crucial role in translating entrepreneurship into performance. Corporate entrepreneurship (entrepreneurship) with concomitant creativity and high rates of responsiveness should be the preferred mode of operations in Telkom as a whole. The role of middle management therefore becomes crucial as the responsibility lies with them to move the bottom line.

With the 2007 Global Entrepreneurship Monitor (GEM) Report again indicating that South Africa performs poorly in comparison to other emerging economies in terms of entrepreneurial activity and development, attention should be focused on interventions which support and encourage business initiatives and development.

Very little to no research has been conducted on corporate entrepreneurship in any ICT sector in South Africa. Corporate entrepreneurship in Telkom should therefore emphasise the establishment of business models, processes and structures in the ICT sector so as to increase the level of corporate entrepreneurship in the various departments within Telkom.

The focus of this research study is on middle management within Telkom.

This questionnaire attempts to measure the intrapreneurial climate in your department in order to determine whether it is conducive to foster an intrapreneurial spirit, as well as to indicate possible barriers or trigger factors. Your contribution is highly valued and appreciated.

Please complete every question / statement to ensure the validity and reliability of the study.

GENERAL INSTRUCTIONS

Virtually all questions may be answered by ticking (X) or highlighting the relevant block.

Use the following key to indicate your preference:

<table>
<thead>
<tr>
<th>SCALE</th>
<th>TERM USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>4</td>
<td>Slightly agree</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>2</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>
Please select the number which best describes your opinion about a specific question or statement. In the example beneath, the respondent slightly agreed to the statement listed.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Slightly Disagree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A03</td>
<td>My manager helps me to get my work done by removing obstacles in my way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### SECTION A: CORPORATE ENTREPRENEURIAL CLIMATE

This section consists of 65 statements. Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>A01</td>
<td>Our leaders take a long-term view of our organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A02</td>
<td>Management encourages us to develop ideas that would improve the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A03</td>
<td>My manager helps me to get my work done by removing obstacles in my way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A04</td>
<td>Development at our organisation is based on taking calculated risks at the right time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A05</td>
<td>Our organisation quickly implements improved work methods that are developed by employees.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A06</td>
<td>Individuals implementing successful innovative projects receive additional rewards and compensation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A07</td>
<td>I am well informed about our organisational vision and strategies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A08</td>
<td>An employee with a good idea is often given time to develop that idea within working hours.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A09</td>
<td>Working together in project teams is encouraged at the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A10</td>
<td>There are several options within the organisation for individuals to get financial support for their innovative projects and ideas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A11</td>
<td>People are keen to share knowledge within the organisation, even over departmental or functional boundaries.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A12</td>
<td>A great deal of resources is spent in determining customer needs and satisfaction.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A13</td>
<td>People are allowed to make decisions about their work processes without going through elaborate justification and approval procedures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A14</td>
<td>Our leaders challenge the status quo and they inspire us to think and act in innovative ways.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A15</td>
<td>Top management is receptive to my ideas and suggestions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A16</td>
<td>Originators of new ideas find it easy to implement because of the support rendered by influential people at the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A17</td>
<td>Projects involving calculated risk are highly valued, even when things do not always turn out according to plan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A18</td>
<td>There is considerable number of employees at the organisation that are involved in generating and implementing innovative ideas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A19</td>
<td>In this organisation recognition rather than criticism is emphasised.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A20</td>
<td>I have regular meetings with my manager where information is shared between us.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A21</td>
<td>A staff member who has initiated a new project/process is allowed to carry it through to completion/implementation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A22</td>
<td>We use cross-functional teams effectively at the organisation to develop and implement new ideas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A23</td>
<td>Money is often available to get new project ideas off the ground.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A24</td>
<td>Employees are encouraged to talk to their colleagues in other departments of the organisation about ideas for new projects.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A25</td>
<td>Product and service innovation are driven by a strong customer orientation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

147
<p>| A26 | Employees are given ample opportunity for independence and freedom in how they do their work. | 1 2 3 4 5 |
| A27 | This organisation has a specific value system which we all know and live up to. | 1 2 3 4 5 |
| A28 | Those employees who come up with innovative ideas on their own receive management’s encouragement for their activities. | 1 2 3 4 5 |
| A29 | Our organisation has people with influence that support, coach, protect, and find resources for an intrapreneurial project and its team. | 1 2 3 4 5 |
| A30 | We occasionally take big risks to keep ahead of our competitors. | 1 2 3 4 5 |
| A31 | This organisation provides me with the chance to be creative and try out new methods of doing my job. | 1 2 3 4 5 |
| A32 | My supervisor will give me special recognition if my work performance is outstanding. | 1 2 3 4 5 |
| A33 | Great effort has been made to clarify what the vision and strategy of the organisation mean to us in our own department. | 1 2 3 4 5 |
| A34 | Nobody at the organisation is forced to develop new ideas. | 1 2 3 4 5 |
| A35 | Top management encourages the establishment of teams from various departments whenever needed for a project. | 1 2 3 4 5 |
| A36 | Resources are readily accessible in pursuit of new ideas and opportunities. | 1 2 3 4 5 |
| A37 | Our organisation has open communication channels in which all employees participate. | 1 2 3 4 5 |
| A38 | Our organisation involves customers in service and product development. | 1 2 3 4 5 |
| A39 | I have autonomy to decide how to do my work. | 1 2 3 4 5 |
| A40 | Our leaders lead by example and people are eager to voluntarily follow them. | 1 2 3 4 5 |
| A41 | The creation of innovative ideas is a regular occurrence in our organisation. | 1 2 3 4 5 |
| A42 | Our organisation’s managers have the skills, commitment and courage to be effective champions of intrapreneurial initiatives. | 1 2 3 4 5 |
| A43 | This organisation supports many small and experimental projects realising that some will undoubtedly fail. | 1 2 3 4 5 |
| A44 | Training is provided to ensure that innovative new processes are implemented effectively. | 1 2 3 4 5 |
| A45 | In this organisation effective intrapreneurs are generally rewarded. | 1 2 3 4 5 |
| A46 | The vision and strategies of the organisation often help me in setting priorities in my work. | 1 2 3 4 5 |
| A47 | I am allowed time at work to explore new ideas I believe have potential. | 1 2 3 4 5 |
| A48 | Project teams have choices in recruiting and selecting new team members. | 1 2 3 4 5 |
| A49 | The process for accessing and acquiring resources to pursue new opportunities is streamlined so that approval is quickly granted. | 1 2 3 4 5 |
| A50 | Employees are encouraged to stay abreast of developments in their functional fields and to share their knowledge with others. | 1 2 3 4 5 |
| A51 | We regularly ask our customers to give their opinions of our service and product offerings. | 1 2 3 4 5 |
| A52 | The degree of hierarchical control is relatively low in our organisation. | 1 2 3 4 5 |
| A53 | Our leaders seek to maximise value from opportunities. | 1 2 3 4 5 |
| A54 | Senior managers allow innovators to bend rules and rigid procedures in order to keep promising ideas on track. | 1 2 3 4 5 |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>A55</strong></td>
<td>In this organisation it is easy to build coalitions of sponsors to help projects succeed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A56</strong></td>
<td>If you make a mistake in this organisation you will be forgiven.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A57</strong></td>
<td>Employees are inspired to push their boundaries and to think &quot;out-of-the-box.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A58</strong></td>
<td>Employees are rewarded in relation to their job performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A59</strong></td>
<td>There is considerable buy-in from employees into the value system of the Organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A60</strong></td>
<td>Our organisation provides ample opportunities for learning and growth.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A61</strong></td>
<td>Cross-functional teams are characterised by diversity based on the skills required by the project.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A62</strong></td>
<td>Attracting resource commitment for entrepreneurial ventures in this organisation is relatively easy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A63</strong></td>
<td>Employees are willing to assist others and share knowledge and skills even if it is not required from them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A64</strong></td>
<td>Customers are treated as very important stakeholders.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>A65</strong></td>
<td>Employees determine their key performance areas in co-operation with their supervisors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
## SECTION B: SUCCESS OF THE ORGANISATION

This section consists of 17 statements. Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B01</strong></td>
<td>Our organisation develops product/services with customers’ needs in mind.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B02</strong></td>
<td>The competitive position of our organisation has improved over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B03</strong></td>
<td>Our organisation has experienced growth in market share over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B04</strong></td>
<td>Our employees are highly committed to our organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B05</strong></td>
<td>During difficult economic periods, investments in research and development/ innovative projects continue and no significant financial cuts are made.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B06</strong></td>
<td>Our organisation has a high customer retention rate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B07</strong></td>
<td>Our customers are loyal to our organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B08</strong></td>
<td>In our organisation, employees are viewed as the most valuable asset of the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B09</strong></td>
<td>Taking care of customers is our organisation’ top priority.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B10</strong></td>
<td>The morale (job satisfaction) of our employees has improved over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B11</strong></td>
<td>Our customers are satisfied with our organisation’s product/service offerings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B12</strong></td>
<td>The image (stature) of our organisation, relative to our competitors, has grown over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B13</strong></td>
<td>Our organisation has experienced growth in turnover over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B14</strong></td>
<td>The effectiveness (doing the right things) of our organisation has improved over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B15</strong></td>
<td>Employees in our organisation understand the needs of our customers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B16</strong></td>
<td>Our organisation has experienced growth in profits over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>B17</strong></td>
<td>The efficiency (doing things right) of our organisation has improved over the past few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
SECTION C: BACKGROUND INFORMATION

The following information is needed to help with the statistical analysis of data for comparisons among different interest groups. All your responses will be treated confidentially. Your assistance in providing this important information is appreciated.

Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>C01</th>
<th>Indicate your age group</th>
<th>≤ 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>C02</td>
<td>Indicate your gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C03</td>
<td>Indicate your race</td>
<td>Black</td>
<td>White</td>
<td>Coloured</td>
<td>Indian</td>
<td></td>
</tr>
<tr>
<td>C04</td>
<td>Indicate your highest academic qualification</td>
<td>Lower than Grade 12</td>
<td>Grade 12</td>
<td>National certificate</td>
<td>National diploma</td>
<td>3-year degree</td>
</tr>
<tr>
<td>C05</td>
<td>Indicate your management level</td>
<td>Top management</td>
<td>Middle management</td>
<td>Lower management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Other: (Specify):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C06</td>
<td>Indicate your service organisation</td>
<td>Human Resource</td>
<td>Finance</td>
<td>Marketing &amp; Sales</td>
<td>Corporate Communications</td>
<td>Service Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Procurement</td>
<td>Project Management</td>
<td>CFL</td>
<td>NIP</td>
<td>Other</td>
</tr>
</tbody>
</table>

THANK YOU VERY MUCH FOR YOUR VALUED INPUT.