Analysis of Innovative Leadership and Sustainability of SMEs in the Western Cape Province, South Africa

by

WILSON RENDANI MALADZHI

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Doctor of Technology: Mechanical Engineering

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Supervisor: Dr B Yan

Senior Lecturer
Department of Industrial & Systems Engineering
Faculty of Engineering

Co-supervisor: Prof. OD Makinde,

Senior Professor & Director
Institute for Advanced Research in Mathematical Modelling & Computations
Secretary General: African Mathematical Union

Bellville
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DECLARATION

I, Rendani Wilson Maladzhi, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

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Signed **Date**

ABSTRACT

Over the years, many organisations are constantly under extreme pressure for their survival and sustainability due to globalization, rapid pace of technological innovation and growing knowledge of their customers. Leaders within the Small and Medium Enterprises (SMEs) struggle in dealing with these pressures due to lack of management skills, market know-how, education and training, entrepreneurial drive, technological orientation, product distribution and networking, particularly when compared with large companies. Innovative culture becomes a major problem among these SMEs. This forces leaders to establish a sound environment where employees can be creative and innovative. However, innovative culture is relatively at a slow pace in South Africa compared with other countries. In an attempt to create an innovative environment for employees, many leaders introduced international based policies such as organisational restructuring and reengineering. Instead of these policies to ease the prevailing conditions, the stress levels within the workplaces elevated and crushed the little creativity left in them. Therefore, this study is undertaken to investigate the appropriate leadership style capable to spearhead the SMEs in instilling local based innovation culture for sustainability in the Western Cape, South Africa.

A group of participants including both employees (n_1=336) and leaders (n_2=130) took part in the research survey within 50 SMEs in the Western Cape. Nevertheless, different sample sizes were utilised in various stages through different case studies. This study has adopted the survey research method for its reliability and being quantitative in nature originated from positivism paradigm. An innovative leadership model covered the key characteristics of leadership was developed to achieve the research objectives. All the characteristics as variables were formulated into propositions and hypotheses to determine the state of innovative culture in these SMEs. Cronbach's-Alpha coefficient was used for reliability test of all the characteristics. In addition, descriptive statistical results such as means, standard deviations, correlations, and Chi-Square were generated.

The study results revealed that all leadership characteristics variables were found to have *p* values below (0.01) which suggested on the rejection of null hypotheses. From employees' point of view, the results showed that the leaders lack inspirational and motivational and high gain risk-taking characters. Thus, employees were not satisfied with their management styles toward innovation. However, leaders rated themselves highly based on the responses. In essence, a mathematical model was also used to analyse the impact of innovative leadership on productivity and profitability. The research findings have confirmed that leadership has the ability to stimulate both productivity and profitability. The study results further indicated that innovative leadership contributed to low production costs that resulted in the increase of productivity and profitability.

This study concluded that innovative leadership was vital to the innovative culture within SMEs. The proposed leadership model can be used as a guideline for SMEs to create innovative culture. Moreover, the mathematical model can be utilised for any SMEs to predict their productivity and profitability.

The rest of the thesis is organized as follows:

Chapter one emphasises on the research problems pointing out factors that affected leadership in South African SMEs. The importance of the SMEs in the economy of the country as well as their descriptions and definition of SMEs were discussed. The problem statement, research objectives, leadership definitions, research propositions were highlighted. A description of the proposed model was detailed, and finally, the significance of the study and ethical issues were addressed.

Chapter two focused on improving new product development (NPD) through innovative leadership qualities. In this regard, the key factors bearing the impact on NPD such as lack of understanding customer needs, business skills and understanding of innovation in NPD.

Chapter three discussed the impact of innovative leadership on organisational culture within SMEs in the Western Cape, South Africa. It outlined the key leadership characters such as visionary, passionate, charismatic, inspirational and motivational, immersed in progressive change, high gain risk taking, ability to network and fast and action oriented leadership, and how these characteristics influence leadership to create an innovative culture within SMEs.

Chapter four highlighted how passionate and charismatic leadership impacted creativity and innovation within the SMEs. The leaders in these SMEs were passionate and charismatic. However, it is not sufficient to instill an innovative culture.

Chapter five presents an approach on how to create an innovation culture through visionary leadership in the SMEs. The results revealed that employees were very satisfied with their leaders. However, the leaders needed to make more efforts in making employees to embrace their organisational vision in order to be competitive.

Chapter six alluded on the developed mathematical model to analyse the impact of innovative leadership on organisational sustainability in terms of productivity and profitability. The mathematical model predicts how changes of innovative leaders influence the increase of profits while production costs decreasing.

Chapter seven concluded the importance of innovation culture within the SMEs. This chapter also indicated that there is a tremendous lack of innovation drive within the leaders in the SMEs; such that employees are not motivated enough to bring new ideas that can add organisational values. The further study areas were highlighted as well.

Keywords: Innovation, leadership, culture, new product development, sustainability and SMEs

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GLOSSARY OF TERMS AND DEFINITIONS

Terms	Definition / Explanation
BEE	Black Economic Empowerment (Grant, 2007)
DEDT	The Department of Economic Development and Tourism (2004)
GDP	Growth Domestic Production (Herrington *et al*., 2009)
GEM	The Global Entrepreneurship Monitor (Reynolds *et al*., 2005)
LRA	Labour Relations Act 66 of 1995 (Grant, 2007)
MLQ	Multifactor Leadership Questionnaire (Bass & Avolio, 2005)
NPD	New Product Development (Cooper, 1987)
R&D	Research and Development (OECD, 1994)
SMEs	Small and Medium Enterprises (OECD, 2002)
SMMEs	Small and Medium Manufacturing Enterprises (Goldstuck, 2009)
TEA	Total Early-stage Entrepreneurial Activity (Herrington *et al*., 2009)
Change	To alter, make different, move from one state to another (Sloane, 2006).
Clarifying Roles and Objectives	Assigning tasks, providing direction in how to do the work, and communicating a clear understanding of job responsibilities, task objectives, deadlines, and performance expectations (Yukl, 2002).
Creativity	The state or quality of being creative (Ahmed, 1998).
Collaboration	The extent to which the organisation encourages the sharing of ideas, teamwork, and collaboration on projects and tasks (Zigarmi *et al*., 2011).
Collectivism	The degree to which organisational and societal institutional practices encourage and reward collective distribution of resources and collective action (Hofstede, 1980; Schwartz, 1994; Smith, 1995; Inglehart, 1997).
Consulting	Checking with people before making changes that affect them, encouraging suggestions for improvement, inviting participation in decision making, and incorporating the ideas and suggestions of others in decisions (Yukl, 2002).
Corporate sustainability	Is defined as satisfying the needs of customers, employees, shareholders and the communities (Elkington, 1997).
Culture	The accumulated shared learning of a given community, covering behavioural, emotional, and cognitive elements of the group members' total psychological functioning (Schein, 1992, p. 10).

Curiosity	The desire to know, see, or experience that which is motivated by novel, complex situations and information that leads to the acquisition of new information (Litman, 2005: 793).
Delegating	Allowing subordinates to have substantial responsibility and discretion in carrying out work activities, handling problems, and making important decisions (Yukl, 2002).
Developing and Mentoring	Providing coaching and helpful career advice, and doing things to facilitate a person's skill acquisition, professional development, and career advancement (Yukl, 2002).
Entrepreneurship	Is the act of innovation that involves endowing existing resources with new wealth capacity (Drucker, 1985).
Feedback	The extent to which individuals receive adequate feedback on performance and are recognized for improvements and ideas (Zigarmi *et al*., 2011).
Future Orientation	The extent to which individuals engage in future-oriented behaviours such as delaying gratification, planning, and investing in the future(Hofstede, 1980).
Idea Generation	The starting point for both incremental and radical forms of innovation (Leifer *et al*., 2000, p. 5).
Incremental Innovation	Emphasises cost or features improvements in existing products or services and is dependent on exploitation rather than exploration competencies (Leifer *et al*., 2000, p. 5).
Innovation	The act of introducing something new, a thing that is introduced as a novelty (OECD, 1994).
Innovation Culture	An environment in which creative energies effect lasting changes in organisational arraignments (Ahmed, 1998).
Intrapreneurship	Intrapreneurs are employees who behave like entrepreneurs on behalf of the company (Cabra, 1996).
Leadership	A two-way relationship in which leaders and followers together achieve success by motivating one another to set and accomplish both personal goals and a group vision (O'Brian, 1990, p. 4).
Managing Conflict and Team Building	Facilitating the constructive resolution of conflict, and encouraging cooperation, teamwork, and identification with the work unit (Yukl, 2002).
Monitoring	Gathering information about work activities and external conditions affecting the work, checking on the progress and quality of the work, evaluating the performance of individuals and the organisational unit, analyzing trends, and forecasting external events (Yukl, 2002).
Motivating and Inspiring	Using influence techniques that appeal to emotion or logic to generate enthusiasm for the work, commitment to task objectives, and compliance with requests for cooperation, assistance, support, or resources, and setting an example of appropriate behaviour (Yukl, 2002).
Networking	Socializing informally, developing contacts with people who are a source of information and support, and maintaining contacts through periodic interaction, including visits, correspondence, telephone calls, attendance at meetings and social events (Yukl, 2002).

Novel Ideas	Containing one or more distinctive characteristics and some form of utility-usefulness, appropriateness or social value (Sternberg, 1999:450).
Organisational culture	The pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and integral integration (Schein, 1992).
Organisational Transformation	Learning and thinking that creates the multidisciplinary capacity for incremental or discontinuous change that helps produce organisational metamorphosis, strategies, and structures built upon inner shifts in peoples beliefs, values, aspirations and patterns of behaviour (Nadler, Shaw, & Walton, 1995).
Performance Expectations	The extent to which individuals feels that their work is Compared to an agreed-upon standard and understand what is expected of them (Zigarmi *et al*., 2011).
Planning and Organizing	Determining long-term objectives and strategies, allocating resources according to priorities, determining how to use personnel and resources to accomplish a task efficiently, and determining how to improve coordination, productivity, and the effectiveness of the organisational unit (Yukl, 2002).
Process Innovation	A sequence of steps designed to achieve a goal, creating something unique and observable such as a novel idea (OECD, 1994).
Problem Solving	Identifying work-related problems, analyzing problems in a timely but systematic manner to identify causes and find solutions, and acting decisively to implement solutions to resolve important problems or crises (Yukl, 2002).
Productivity	Is the relationship between the results and the time taken to accomplish them (Prokopenk, 1987:3).
Radical Innovation	Concerns the development of new businesses or product lines, based on new ideas or technologies or substantial cost reductions that transform the economics of a business (Leifer *et al*., 2000, p. 5).
Risk taker	Someone who pursues opportunities without considering the available resources (Stevenson, 2002).
The performance-oriented style	Stresses high standards, decisiveness, and innovation; seeks to inspire people around a vision; creates a passion among them to perform; and does so by firmly holding on to core values (House, 2004).
The team-oriented style	Instils pride, loyalty, and collaboration among organisational members; and highly values team cohesiveness and a common purpose or goals (House, 2004).
The participative Style	Encourages input from others in decision-making and implementation; and emphasises delegation and equality (House, 2004).
Uncertainty Avoidance	The extent to which a society, organisation, or group relies on social norms, rules, and procedures to alleviate unpredictability of future events (Hofstede, 1980).

RESEARCH PUBLICATIONS

This section covers published papers and papers accepted for publications.

Maladzhi, W.R., Yan, B., and Makinde, O.D. (2012). The impact of innovative leadership on organisational culture within South African small and medium enterprises in the Western Cape, South Africa, African Journal of Business Management, 6(39):10438-10444.

Maladzhi W.R., Yan, B, and Makinde, O.D. (2012). Improving productivity and profitability through innovative leadership in the engineering environment. The South African Institution of Mechnical Engineering (SAIMechE) Conference Proceedings. On 20 and 21 June, 2012, Bellville Campus, CPUT, pp.62-63.

Maladzhi, W.R., Yan, B., and Makinde, O.D. (2012). Impact of passionate and charismatic leadership on creativity and innovation within SMEs, Industrial Engineering and Engineering Management (IEEM) conference Proceedings on 10th to 14th December, Hong Kong, 978-1-4673-2945-3/12, pp. 1132-1136.

Yan, B., Maladzhi, W.R., and Makinde, O.D. Visionary Leadership as a Catalyst for Innovative Culture in SMEs. Industrial Engineering and Engineering Management (IEEM) conference Proceedings on 10th to 14th December, Hong Kong, 978-1-4673-2945-3/12, pp. 1170-1174.

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CHAPTER ONE: RESEARCH STUDY INTRODUCTION

CHAPTER SUMMARY

This chapter highlights problems that are faced by the leaders in the Small and Medium Enterprises (SMEs) to manage innovation activities. Therefore, in order to effectively eradicate these problems, this section covers the importance of SMEs in the economy of the country, description of the SMEs and scope and coverage of manufacturing sector, research objectives, propositions of leadership characteristics and the discussion of the proposed model. In addition, research method and the significance of the study are discussed.

1.1 INTRODUCTION AND MOTIVATION

Recent years, the South African workplace is dominated by transformation process as a transitional element for change since the inceptions of democracy in 1994. Numerous studies were undertaken in the area of leadership and innovation, which revealed the domination of autocratic and traditional leadership styles in the South African workplace. As results employees were left devastated and unenthusiastic. The South African workplace was then infringed with strike actions and uprisings in different sectors as well as in the communities around the country which negatively impacted the economy. In this regard, many companies adopted innovation as a driving force to deal with those uncertainties, particularly Small and Medium Enterprises (SMEs). However, lack appropriate leadership styles and management skills amongst many SMEs surfaced. In addition, innovation as a complex process required sound leadership styles as well as management skills. Therefore, this study is undertaken to analyse the leadership style in order to create an innovative culture for the SMEs.

1.2 STUDY BACKGROUND AND RESEARCH PROBLEM

Over the decades, there has been a dramatic increase of globalisation, rapid pace of technological innovation, a growing knowledge workforce, and shifting social and demographic trends that require organisational change leadership (Smit & Carstens, 2003; Dekok & Slabert, 2003; Mosia & Veldsman, 2004). According to van Rhijn *et al*. (2003), manufacturing companies are faced with increasing pressure to improve productivity in order to survive within the global competition. This requires companies to reduce production costs while maintaining product quality. Zink (1999) stated that sustainable productivity improvement calls for improvement processes whereby

increased productivity as well as the betterment of the well-being for employees is taken into consideration. Bosch *et al*. (2007) indicated that strategies for raising productivity include improving the layout, adjusting the work stations or recuperating the work-rest schedules, must be done under the guidance of experienced leadership equipped with both management and technical mindset. Therefore, transformation in the workplace in order to accommodate all these diverse and dynamic changes has become a necessity particularly in the South African SMEs (Maladzhi *et al*., 2012c). However, leaders in these SMEs in their effort to transform the workplace preferred transactional leadership style than transformational style. Consequently, they managed organisational change on their own without the consensus of their employees (Smit & Carstens, 2003; Dekok & Slabert, 2003; Mosia & Veldsman, 2004 and Maladzhi *et al*., 2010). A safe workplace where innovation culture exists is required so that employees and employers can work together in partnership (Maladzhi *et al*., 2012c).

Many of these organisations over the years succeeded in managing change and transformation through systematic approach whereby leadership focused on variety of critical factors to implement change effectively (Austin, 1997). According to Austin (1997), transformation does not happen by accident, but it requires an environment in where people are free to explore alternative directions with additional supportive resources and mechanisms. Transformation essentially involves learning and change, nevertheless is often disruptive, risky and costly (Isaksen & Tidd, 2006:55). It then requires energy to overcome this inactivity, and the determination to change the order of things in the SMEs. In order to drive transformational change and innovation, a determined and committed leadership is necessary (Isaksen & Tidd, 2006:56). Transformational leadership is more concerned with the values, beliefs and behaviours of the followers (Stone *et al*., 2003). Alternatively, innovation in its nature embraces novelty of ideas that are transformed into diverse products (Langdon, 2007; 2004; Streets & Boundary, 2004; Azman *et al*., 2007).

Leadership accomplishes transformation through empowerment process (Liukkonen, 2011). Hence, empowerment process allows the leadership to train and equip employees in order to handle any new developments in the organisation while working together (Maladzhi *et al*., 2010). Honold (1997) defined empowerment as giving power to people who were previously disadvantaged by trying to balance the continuum of power in the workplace. In essence, empowerment process boosts employee's self-esteem and gives them strength to do more for the organisation. As a result empowerment and transformation process requires leadership that is innovative

minded to create an organisational culture as an enabling environment (Ahmed, 1998; Sloane, 2006; Maladzhi *et al*., 2010 and Maladzhi *et al*., 2012c).

Various studies conducted in the manufacturing sector in South Africa emphasised a tremendous shortage of innovation culture due to poor leadership associated with the following factors; understanding leadership transition (Grobler, 1996; Prinsloo *et al*., 2000), business management skill (Olawale & Garwe, 2010), market know-how (Cooper & Dreher, 2010), education and training (Erasmus & Van Dyk 2003; Smith & Perks, 2006), entrepreneurial drive (Kunene, 2008), technological orientation (Blankley & Moses, 2007), product distribution and networking (Nieman & Nieuwenhuizen, 2011:192; GEM, 2009). Additionally, McCarthy (2005) further says that both South African society and the economy are in transition managing the current developments back into the world economy. Nevertheless, leadership has proven to be an area that changes over time alongside organisations and individuals, therefore continual assessment is of necessity (Zaidatol *et al*., 2011, Langdon, 2007). In addition, Liukkonen (2011) is of the view that perseverance remains the centre of change to maintain communication and participation in order to stay focussed on the target as an advantage for new opportunities. Furthermore, effective leadership coordinates the entire process of invention, R&D and commercialization of products and services as strategy for decision making while creating new ways with improvements to build on their core business. Conversely, Urhuogo and Williams (2011) say that innovative ideas are normally rejected by employees or by leadership as a way of resisting changes in the organisations. Therefore, a localised innovation culture is required whereby all international concepts of innovation will be integrated within the South African environment (Maladzhi *et al*., 2012c). Dekock and Slabert (2003) confirmed that numerous innovation activities and policies adopted from other countries have been implemented but the workplace remains the same struggling to cope with globalisation.

1.3 FACTORS AFFECTING LEADERSHIP IN THE SMES

The inception of democracy in South Africa since 1994, not only brought liberation into the political arena, but also in the business world. The government over the years continued to invest enormously in the SMEs in order to boost the country's economic growth (Kunene, 2009). After a number of studies conducted in both innovation and entrepreneurship, leadership remained the area of concern in the South African SMEs as highlighted by Smit and Carsterns (2003); Kunene (2009); and Govindsamy (2006). Researchers such as Prinsloo *et al*. (2000); Dekock and Slabert (2003) and Grobler (1996) indicated that leaders in the SMEs lacked understanding of leadership

transition, business management skills, market know-how, education and training, entrepreneurial drive, technological orientation, product distribution and networking skills shown in figure 1.1. This figure highlights different factors that affect leaders in these SMEs to instil innovation culture.

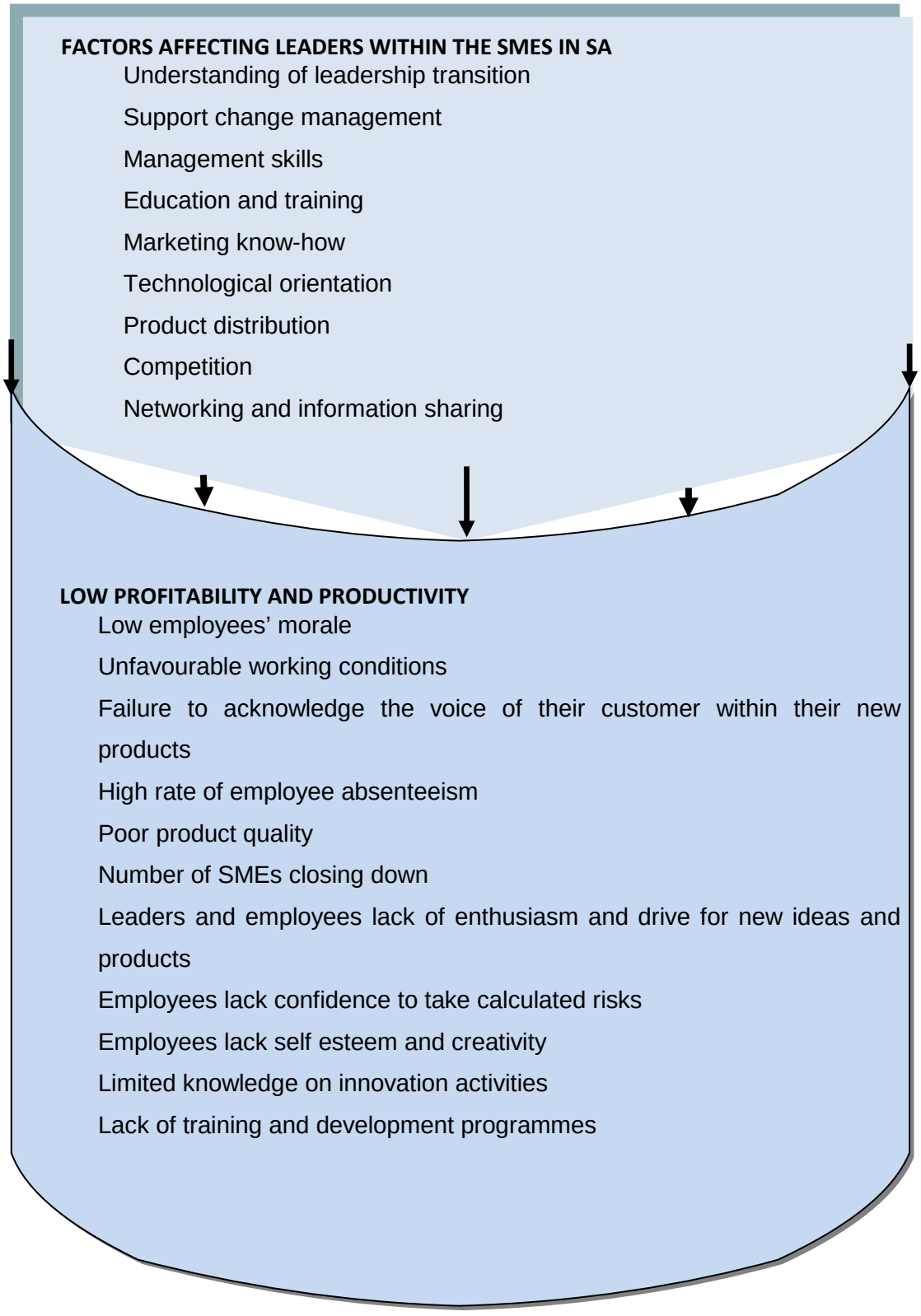

Figure 1.1: Factors that affect leaders in SMEs to instil innovation culture

1.3.1 Lack of understanding leadership transition in South Africa

In the study conducted by Prinsloo *et al*. (2000) indicated that the chances of South African companies to become globally competitive were still gloomy due to the lack of leadership competitiveness. In the separate incidence, the South African leaders were criticized for failing to attain economic growth levels and made the country to be marginalized in the global economy (Wray, 2001). Grobler (1996) argued that for the South African companies to become globally competitive, leadership should be able to embrace both transactional and transformational role. Grobler (1996) continued to say that the current leadership practice by South African leaders in the business world was far from satisfactory. Viljoen (1987) in his South African survey found the following dominant management styles: 46 per cent autocratic; 33 per cent democratic; and 12 percent participative. Management styles in SA were often seen as rigid, bureaucratic, directive and task-oriented. In addition, Dekock and Slabert (2003) commented that, given the dramatic change in the South African society, strong transformational leadership to be specific in (SMEs) is a requirement. Smit and Carstens (2003) added that South Africa lacked competent and talented leadership that could successfully pioneer companies undergoing transformational phases in this technological era.

The need for competent leadership in the South African SMEs continued to rise (Maladzhi *et al*., 2012a). Mosia and Veldsman (2004) added and said that leaders in South Africa should know their areas of development relative to the expected outputs. The political transitions in South Africa continue to embrace the culture of uprisings as a way of finding solutions in the workplace (Maladzhi *et al*., 2012a). Grobler (1996) is of the opinion that South Africa requires leadership with new leadership styles focused more on employees' needs. According to Tannenbaum and Schimdt (1973), leadership style is a continuum, such that the appropriate style depends on the characteristics of the leader, subordinates and the situation. The continuum-based theory suggests a range of styles varying from autocratic to democratic leadership. This demonstrate the responsibility of the leadership to continuously access the existing situation, environment and culture in order to employ the right fit and appropriate leadership style (Tannenbaum & Schmidt, 1973). Horner (1997) largely eluded that organisations have changed over the past several decades with regard to structuring of work methods and processes. The organisational shift includes the evolution from traditional hierarchical design to flatter and leaner structures that support a more empowered, team based work force (Maladzhi *et al*., 2010). In

addition, the focus of leadership nature has drastically transformed from task oriented to employees and tasks (Schermerhorn, 2010: 439).

According to Olawale and Garwe (2010), Darwin's theory of evolution simplified that leadership with the mind to cope and adapt to the fast-paced and mercurial environment are able to take their organisations into a different and better level to survive while other diminishing like the dinosaurs. Olawale and Garwe (2010) further emphasised that for organisations to effectively deal with change and transformation, pro-activity in the development and the retention of leadership talent must become the culture. Additionally, Yan *et al*. (2012) continued to emphasise that the success of any organisations rest on the shoulders of effective leadership.

1.3.2 Lack of business management skills

Managerial competencies are comprised of knowledge, skills, behaviours and attitudes that contribute to personal effectiveness to the survival and growth of new SMEs (Olawale & Garwe, 2010). Due to lack of management skills, leadership failed to encourage employees with the potential to embrace their creativity in SMEs (Jackson, 2004; Maladzhi *et al*., 2012a). Management within the SMEs find it difficult to empower their employees because they fear for their positions (Ligthelm & Cant 2002:3; Brink *et al*., 2003). Olawale and Garwe (2010) point out that lack of education and training has reduced management capacity within the SMEs in South Africa. They further conclude that all these reasons contribute to the low level of entrepreneurship and the high failure rate of new ventures.

According to Baron (2000) and Brink *et al*. (2003), the failure rate of SMEs is estimated to be between 70 per cent and 80 per cent, which amount to millions of Rands due to avoidable mistakes and problems on business ventures owing to lack of business management skills. In addition, entrepreneurs have very good and competent ideas; nevertheless they lack business management skills (Barron, 2000 and Brink, 1997:364). Furthermore, Miller *et al*. (2003) mentioned that skilled management is able to recruit and hire people based on the right motives for organisational growth, whereas unskilled management hire people without considering future organisational plans. The leader must be able to recruit people that can help the organisation to grow, meet profit targets, increase sales and internal skills (Yan *et al*., 2012). It is obvious that hiring wrong people will sooner or later lead to lower morale and increased frustration amongst current employees which results in customer dissatisfaction.

Leonidou (2004) indicated that competition overseas constituted from different resource base such as low cost, product differentiation and government protection. Some firms fail to compete on price because of different cost structures, unfavourable exchange rates, more especially in the case of South Africa with international markets where the Rand is not performing very well (Leonidou, 2004). Therefore, management know-how is of necessity to give strategic direction and for the organisation to remain viable.

1.3.3 Management resisting changes

In 2007, Grant conducted an interview with Steyn who is the director of Intercultural and Diversity Studies (INCUDISA) in trying to establish how far South Africa has emerged since 1994 (Grant, 2007). Steyn indicated that since 1994, policies such as the Labour Relations Act 66 of 1995 (LRA), Employment Equity Act 55 of 1998, The Basic Conditions of Employment Act 75 of 1997, coupled affirmative action and Black Economic Empowerment (BEE) were introduced to accelerate redress for more than ten years with no success. The failure of these policies was linked to the resistance of change by white minority managers with economic power. Grant (2007) also indicated that some companies even put money aside to pay for their fines for not complying with BEE policy as they were compelled by the Department of Labour. It becomes difficult for employees who are looking forward to a transformed working environment to find themselves working for a manager who resists change. A leadership that comprehends what happened in the past and eager to transit into the future is required in the South African workplace.

Management of these SMEs struggles to find suitable strategies when their existing environment becomes unstable. They then lose focus and control of their businesses and as results their employees also become disturbed and production suffers (Rwigema & Venter, 2004:55). Kunene (2009) mention that an intolerant response to change can lead to denial, risk-averting behaviour and imposing arbitrary constraints and structures that stifle the management‘s ability to adapt. Management’s failure to comprehend a situation in the workplace normally affects employees. Therefore, employees in the South African workplace require an environment that is diverse, yet appreciative to dynamic skills base that leads to economic freedom for all (Maladzhi *et al*., 2012a).

1.3.4 Marketing know-how

The high failure rate by SMEs is directly linked to failure of understanding customer needs by leadership that leads to the production of unwanted products (Afuah, 2000). The shortage of research skills within the SMEs in South Africa tends to be a common problem and it is always linked to the legacy of apartheid (Chandra, 2001). Ogawa and Piller (2006) say that most of the firms are still stuck in the traditional way of market research of focus groups. In addition, they mentioned that focus groups are not reliable indicators of the reaction of the broader population. According to Cooper and Dreher (2010), successful businesses put into consideration the voice of their customers in their product developments, due to a thorough customer needs survey. Most SMEs use the general feelings of their customers in the idea generation process to decide which products to pursue. Many of the leadership in these SMEs do not even understand the requirements of the new products, but they are actively involved (Cooper & Dreher, 2010). Therefore, the impact of external factors to these SMEs has made the market to become highly competitive and they continually struggle (Garengo *et al*., 2005).

1.3.5 Lack of entrepreneurial activity and job creation within SMEs

The finding of the study conducted by Rogerson (2004) indicated that both Gauteng and Western Cape Province showed that the South African population has been socialized into entering labour market as employees than to become entrepreneurs. Visser (1997) further indicated that the South Africans feel much better to receive a salary after studying for so many years than starting their own businesses. Their creativity is hidden behind the qualifications they possess (Maladzhi *et al*., 2010).

GEM South African Report (2009) indicated that whites have a greater capability of growing their businesses from start until establishment as compared to other races such as African blacks, Coloureds and Indians as seen in the Table 1.1. This shows the need for entrepreneurial drive in South Africa.

Table 1.1: Stage of entrepreneurial activity, by population group

Population group	Start-up	New firm	Established business	Total
Black African	47%	35%	18%	100%
Coloured	64%	23%	13%	100%
Indian/Asian	30%	35%	35%	100%
White	31%	33%	36%	100%

(Source: Mid-year population estimates 2008, Statistical release P0302)

Herrington *et al*. (2009) echoed their views on South Africa's high levels of unemployment, and mentioned that the potential of SMEs to create job opportunities is a crucial factor.

Table 1.2: Job-creation aspirations in early-stage

Job aspirations	2004	2005	2006	2008
Yes	4.6%	4.3%	4.8%	7.2%
No	95.4%	95.7%	95.2%	92.8%

(Source: Mid-year population estimates 2008, Statistical release P0302)

Table 1.2, indicates the percentage of early-stage entrepreneurs reporting any current jobs, or expecting to create any jobs within the next 5 years. The vast majority of early-stage entrepreneurs have no job-creation aspirations as seen on the Table 1.2. Acs *et al*. (2008), indicated that even South Africa's most entrepreneurial cities have a relatively low prevalence of job-growth oriented businesses in both Cape Town and Johannesburg with only about 15 per cent of start-ups expect to employ at least ten people within the next five years.

1.3.6 Lack of technology due to slow innovation culture

The first innovation survey was conducted in the manufacturing sector between the period of 1992-1994 by Blankley and Kaplan (1997). It was recorded that out of 2 732 questionnaires distributed; only 244 questionnaires were received. This indicates that few enterprises showed interest in the innovation survey (Blankley & Moses, 2007). Therefore, the attitude displayed by these SMEs resembles lack of innovation culture. The separate innovation survey was conducted by Blankley and Moses (2007) within small and large firms in both services and manufacturing sectors covering Gauteng, Eastern Cape and Western Cape provinces as shown. Table 1.3 depicts the following findings:

Table 1.3: Innovation activities in South Africa

Activity	**Western cape province**			**Gauteng province**		
	Large firms	SMEs	Overall	Large firms	SMEs	Overall
Acquisition of external knowledge	25%	3%	7%	9%	4%	6%
R&D expenditure	13%	2%		25%	18%	
Occurrence on innovations: organisational/marketing	68%	76%		71%	37%	
Impact on innovation: innovation turnover	68%	32%		89%	11%	
Products new to the firm	13%	17%		10%	23%	
New to the market	13%	8%		9%	14%	

(Source: adapted from Blankley & Moses, 2007)

The in-house R&D in both Western Cape and Gauteng provinces is gradually increasing; while the acquisition of external knowledge is still low (Western Cape is at 3% while Gauteng is at 4%); Innovation turnover is at 32 percent in the Western Cape, while at 11 percent in Gauteng Province; Products new to the firm is at 17 percent in the Western Cape, while is at 23 percent in Gauteng Province; Products new to the market, Western Cape Province is at 8 percent, while Gauteng Province is at 14 percent.

The overall results of the study indicate that innovation activities in the country are gradually improving, requiring more tremendous work to be done. The core of innovation is mainly in the production of goods, both new to the firm as well as into the market. The slow growth in the production of new products calls for culture that enhances creativity and innovation so that many products can be produced.

Lack of technology can restrict any organisation to produce a specific standard product required by their customers of both local and international markets. According to Tesfom and Lutz (2006), SMEs with superior technology would always have an advantage over companies that are technologically behind, and most of international SMEs are technologically oriented as compared to local based SMEs.

The 2005 GEM Report noted a significant decline in the number of entrepreneurial businesses offering products that were new to none of their customers – from 71 per cent in 2003 to 59 per cent in 2005. The data in Table 1.4 confirms this trend towards a higher degree of innovation in terms of customer-orientation (Herrington *et al*., 2009).

Table 1.4: Degree of novelty of product/service

Degree of novelty of product/service	Total Early-stage Enterprises Activity businesses	Established businesses
New to all customers	25.5%	21.7%
New to some customers	30.8%	25.7%
New to none of the customers	43.7%	52.6%

(Source: Mid-year population estimates 2008, Statistical release P0302)

1.3.7 Lack of education and training

In the 1980s, economic growth slowed down in South Africa's SMMEs and it was coupled with a drop in labour production due to skills shortage and low education level of both entrepreneurs and their employees (Erasmus & Van Dyk, 2003; Smith & Perks 2006). To curb the problems faced by those SMMEs, Ngubane (2002) suggested a need for adequate training for employees in order for them to add value

to manufacturing and innovative process. Many studies have proved that most successful, adaptive and innovative SMEs are those owned by entrepreneurs with high levels of education, technical/managerial skills and training (Rogerson, 2000; Chandra, 2001; Ligthelm & Cant, 2002). There are significant skills that any management in the SMEs must possess to effectively manage their ventures and are as follows, personal skills, technical skills, business operation skills and management skills (Perks, 2006).

According to Herrington *et al*. (2009), many entrepreneurs have a tendency to assign staff to different projects and put less emphasis on training and development, simply because they do not want to spend money in the area of innovation activities. They said that in the Global Competitiveness Report (GCR), 2008 – 2009, South Africa's inadequately educated workforce is cited as the most problematic factor in the country. Therefore, South Africa is ranked 45th out of 134 countries overall by the GCR; however, this ranking dropped to 104th in terms of the quality of primary education, 110th for quality of higher education and training (secondary and tertiary level), and a dismal 132nd in terms of the quality of maths and science education (Herrington *et al*., 2009). In support other authors on the issue of education and training, Horner (1997) highlighted that academic management education has been criticised of producing mere preservers of status quo than producing leaders that the industry so desperately needed. He further explains that in the United States, there has been a growing feeling that firms and organisations tend to be over managed and under-led. In South Africa however, the larger organisations are aligning with educational institutions to bridge the gap between the two. Although SA is moving in the right direction towards globalisation, there is still substantial ground to cover in terms of effective leadership (Yan *et al*., 2012; Maladzhi *et al*., 2012a).

1.3.8 Networking and information sharing skills

According to Nieman and Nieuwenhuizen (2011:192), networking is a process of meeting people, building relationships that can benefit all those involved, sharing information and ideas and getting one's business on the map. They highlighted the following as functions of networking in the business venture:

It ensures that goals for growth and the vision of the entrepreneur are realistic,

It increases the entrepreneur's level of aspiration,

It helps to identify opportunities,

It provides practical assistance,

It provides emotional support.

In the opinion of Tesfom and Lutz (2006), it becomes even more difficult to transport products overseas because of the cost of transport and insurance. They also indicated that the determining factor that goes along with transport is overseas distance. Transport costs were heavily increased where large inter-boarder distance, poor infrastructural facilities and limited transportation means, since transport played a vital role in transporting products safely and punctually and reliability (Tesfom & Lutz, 2006). Thus, innovative minded leadership need to think of collaborating with other SMEs through different strategies such global sourcing materials, exporting, importing, licensing, franchise, joint venture, global strategic alliances (Schermerhorn, 2010:123 -124).

A responsible leadership with the business know-how is needed to spearhead the networking venture within the organisations. Networking is a platform that initiates enterprise cluster. Schmitz (1992) defined enterprise cluster as a group of producers located within certain proximity, where there is effective communication. The main important factor of enterprise cluster is when these enterprises could disseminate their technological know-how to compete with their competitors, but in most cases they compete against each other, instead of empowering each other (Rabellotti, 1997; Knorringa, 1998). McCormick (1998:2) pointed out that enterprise cluster should take advantage by establishing well developed networks of suppliers and buyers and facilitates potential gains through joint venture. If they work together they could face any external uncertainty to advance in the markets. Dawson (1992: 34) further argued that in Africa, most firms that belong to a cluster are doing well as compared to those not in a cluster.

Olawale and Garwe (2010) pointed out that in the absence of effective market institutions; networks play an important role in spreading knowledge about a firm's existence and its practices. They further said that networks also assist firms to appropriately position themselves to gain the support from key stakeholders and the general public, and networking positively impact on the growth of new SMEs.

1.4 DEFINITIONS OF LEADERSHIP

A number of leadership definitions by various experts are listed and discussed chronologically to show wide views of leadership as a base for human relationships:

Leadership is more than a title or a position other than a state of being. It is about motivating, inspiring, directing and developing people to outperform themselves in

order to satisfy their customers (Bernard, 1926; Blake *et al*., 1964; Fiedler, 1967; House & Mitchell, 1974; Drath & Palus, 1994;).

According to Drucker (1954), leadership is a reciprocal relationship between those who choose to lead and those who decide to follow.

Bennis and Nanus (1985) described leaders as people who know what they want and why they want it, and have the skills to communicate that to others in a way that gains their support.

Kouzes and Posner (1987) define leadership by its very nature of interdisciplinary.

Gardner (1990: 38) holds that "leadership is the accomplishment of group purpose, which is furthered not only by effective leaders but also by innovators, entrepreneurs, and thinkers; by the availability of resources; by questions of value and social cohesion.

Cohen (1990), leadership is the art of influencing others to their maximum performance to accomplish any task, objective, or project.

Manz and Sims (1991) offered a revised integrative leadership perspective by using the term "Super Leadership," indicating the paradigm shift from traditional. They maintain the view that leaders' role in the system is still required. Leaders become great by unleashing the potential and abilities of followers, consequently having the knowledge of many people instead of relying solely on their own skills and abilities.

Cronin (1993) feels that leadership can be exercised in the service of noble, liberating, enriching ends, but it can also serve to manipulate, mislead and repress.

Rost (1994) defines leadership as the capacity to translate vision into reality.

Lappas (1996:14), states that "the leadership focus of knowing what you want and when you want it distinguishes exceptional from average leaders."

Leadership is the ability to influence individuals or groups to think, feel and take positive action to achieve goals (Capezio & Morehouse, 1997).

Leadership is not something you do to people. It's something you do with people (Blanchard, 1999).

1.5 DEFINITIONS AND DESCRIPTION OF SMES

The Department of Labour uses the acronym SMME for Small, Micro and Medium Enterprises and SME for Small, Medium Enterprises. The other category of small business showed that small business employs less than 50 people, while medium business employs between 50 people and 249 people (The Department of Economic Development and Tourism (DEDT), 2004). The further definition of SMMEs was depicted from the Department of Trade and Industry (DTI) (1996) which developed the National Small Business Act (Act 102 of 1996) that provided various SMME categories as detailed on table 1.1.

The National Small Business Act of South Africa of 1996, as amended in 2003, describes an SME as "a separate and distinct entity including cooperative enterprises and non-governmental organisations managed by one owner or more, including its branches or subsidiaries if any is predominantly carried out in any sector or sub-sector of the economy mentioned in the schedule of size standards and can be classified as a SME by satisfying the criteria mentioned in the schedule of size standards" (Government Gazette of the Republic of South Africa, 2003) as shown in table 1.2.

Table 1.5: The description of the SMEs

Type of a firm	Employees	Turnover	Balance sheet
Small	1 - 49	Maximum R13m	Maximum R5m
Medium	50 - 200	Maximum R51m	Maximum R19m

(Source: Government Gazette of the Republic of South Africa, 2003)

The Government Gazette of the Republic of South Africa (2003) gave the detailed description of SMME in South Africa as defined by the National Small Business Act in the following five categories:

Survivalist enterprises: The income generated is less than the minimum income standard or the poverty line. This category is considered pre-entrepreneurial, and it includes hawkers, vendors and subsistence farmers (In practice, survivalist enterprises are often categorized as part of the micro-enterprise sector.)

Micro enterprises: The turnover is less than the VAT registration limit (that is, R150, 000 per year). These enterprises usually lack formality in terms of registration. They include, for example, spaza shops, minibus taxis and household industries. They employ no more than five people.

Very small enterprises: These are enterprises employing fewer than 10 paid employees, except mining, electricity, manufacturing and construction sectors, in which the figure is 20 employees. These enterprises operate in the formal market and have access to technology.

Small enterprises: The upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices.

Medium enterprises: The maximum number of employees is 100, or 200 for the mining, electricity, manufacturing and construction sectors. These enterprises are often characterized by the decentralization of power to an additional management layer.

1.6 THE IMPORTANCE OF SMES IN THE ECONOMY

Worldwide, Small and medium enterprises (SMEs) are more progressively alleged as significant accomplice to the economic growth and development (Reddy, 2007). Their significant participation is more visible towards job creation and the provision of low cost goods and services. SMEs continue to dominate the world market particularly where technology, capital and other resource restrict the advancements of big business. However, these SMEs continue to face tremendous challenges of entering the business world and those that manage to enter, they either struggle to survive until to the end. Their important roles in the economies over the years compelled the governments of the world to financially support the establishments of Small Business in Small Economies (Burns & Dewhurst 1996). However, in South Africa SMEs contribute to between 30–60 percent towards GDP and 61 percent towards employment (Gumede, 2000; Berry *et al*., 2002; Abor & Quartey, 2010).

According to Leonidou (2004:279-302), Morrison and Ali (2003:417-425), SMEs remains the central nerve of economic activities even during the changing times of liberalization of trade, expansion of regional economic integrations and advances in information communications.

In the view of Kunene (2009)'s observations, SMEs globally play a critical role in penetrating new markets and generally expanding economies in creative ways besides absorbing labour. Similarly, in Ghana, SMEs contributes an alarming 85 percent of manufacturing employment (Abor & Quartey, 2010). Furthermore, Abor and Quartey (2010) continue to say that SMEs in Ghana are believed to contribute about 70 percent to Ghana's GDP and account for about 92 percent of businesses. In

accordance to a survey by the Organisation for Economic Corporation and Development (OECD, 2004), there is 90 percent visibility of SMEs world-wide. Moreover, Newberry (2006) announces that one-half of the SMEs in the Asian organisations expect to grow significantly in future as they respond and innovate more quickly and have closer customer relationships. Newberry (2006) also confirmed that SMEs continues to play a vital role in China, Korea, Singapore and other industrialized economies. On the other hand, Shipton *et al*. (2006) is of the understanding that in the European Union (EU), SME sector employs two thirds of total labour force. In addition, Bhattacharya (2008) believes that EU countries provide training opportunities and skills development programs to gain loyalty and motivation to SMEs. Reddy (2007) adds that many SMEs adopted sophisticated Human Resource Development (HRD) strategies for better performance in the medium to long term.

Moreover, Kunene (2009) in her study singled out various factors showing SMEs' contribution into the economies of the world:

The GDP: SMEs comprise a high percentage of businesses and account for between 30 percent and 60 percent of the GDP of many countries (OECD, 2002:8 and Praag & Versloot, 2007; 351).

Economic development: SMEs are seen to be the engine that drives economic progress because they develop new markets (including exports); they ensure continuous renewal of stagnating industries, they are a source of economic diversity and they develop vibrant commercial culture (Santrelli & Vivarelli, 2007:2; Pretorius & van Vuuren, 2003:514).

Wealth creation: SMEs create wealth by stimulating demand for investment, capital goods and trading (GEM, 2006:10).

Job creation: SMEs are labour intensive and account for over half of the employment in the private sector (Ligthelm & Cant, 2003:3 and GEM, 2002:7).

Economic flexibility: SME's ability to quickly manufacture smaller quantities puts competitive pressure on larger firms to boost productivity, thus enhancing economic flexibility (Gibbon, 2004:156).

Innovation and technology transfer: SMEs provide a nursery and ground for product differentiation, market innovation, technological change and entrepreneurship (Rwigema & Venter, 2004:315; OECD, 2002:10).

Local resources: Most SME products tend to originate from indigenous crafts that reflect local technologies, local raw materials and the local knowledge base (Romijn, 2001: 58).

Development of skills: SMEs provide opportunities for individuals to upgrading their human capital and realize their full potential (Gbadamosi, 2002:95 and Nieman, 2001: 445).

Socio-economic transformation: SME promotion has become a political necessity, as they are a means for bringing social change; equitable distribution of employment and income generating opportunities; exploring the entrepreneurial talents of natives; the empowering of marginalized segments of the population; improving communities' standard of living: creating conditions for sustainable livelihoods and eliminating conditions of extreme poverty (Ladzani & van Vuuren, 2002:154; Mogale, 2005:135; Tustin, 2001:24).

Crisis or hardship: SMEs are said to be particularly important during times of crisis or hardship related to conflict, depression, recession and natural disasters, as SMEs are likely to be more resilient and people turn to SMEs to seek new means of generating income to cope with these shocks (Gurol & Atsan, 2006:26).

It is the responsibility of any government of the world to set out policies and mechanisms that support the development of SMEs to give them stability to persevere. These factors become a reality when evidences like SMEs' contribution to GDP and SMEs' and employment as discussed below. It shows that the most dominating sectors in 2010 in South Africa, were as follows from high to low: financial institutions (21.2%), general government (16.1%), manufacturing (14.6% and wholesale and retailing (13.9%) and etc. This composition varies enormously every year depending on the current economic conditions of that particular time (Industrial Developmental Corporation, 2011).

The ultimate purpose of the current study is to analyse the current leadership within the South African SMEs in the Western Cape Province if ever they have what it takes to establish innovation culture and also to propose and test a dynamic model that can be utilised as a solution.

1.7 SCOPE AND COVERAGE OF MANUFACTURING SECTOR

Enterprises are categorised according to their sectors. The current study covers enterprises mainly in manufacturing and these enterprises are categorised by the following divisions of scope (OECD, 2005:69):

Manufacture of food products and beverages (SIC30)

Manufacture of textiles, clothing, leather and footwear (SIC31)

Manufacture of wood and wood products, paper, publishing and printing (SIC32)

Manufacture of coke, petroleum, chemical products, rubber and plastic (SIC33)
Manufacture of glass and other non-metallic mineral products (SIC34)
Manufacture of metal products, machinery and equipment (SIC35)
Manufacture of electrical machinery and equipment (SIC36)
Manufacture of telecommunication and professional equipment (SIC37)
Manufacture of transport equipment (SIC38)
Manufacture of furniture and other manufacturing (including tobacco and recycling) (SIC39)

1.8 STATEMENT OF THE RESEARCH PROBLEM

Against the research background, the research problem of this study is read as: due to lack of management skills and innovative leadership within SMEs resulted in poor innovation culture and consequently affected organisational performance and sustainability.

1.9 RESEARCH OBJECTIVES

In order to deal with the research problem, this study attempts to achieve the following research objectives:
Identify the key leadership characteristics that contribute to the creation of innovative culture and the sustainability of SMEs,
Analyse how leaders possess innovative leadership characteristics in SMEs,
Evaluate the influence of innovative leadership on innovation culture in SMEs,
Assess how the innovation culture is embraced within the SMEs and how it impacts on the sustainability of these enterprises,
Validate the innovative leadership model through mathematical modelling.

1.10 PROPOSITIONS

The propositions of the study were formulated through a proposed leadership model on key leadership characteristics as various variables which include visionary leadership (VIS), passionate leadership (PAS), charismatic leadership (CHA), inspirational and motivational leadership (INS), immersed in progressive change (IMM), high gain risk-taker leadership (HIG), external oriented leadership (ABI) and fast and action oriented leadership (FAS). The details of leadership characteristics and measurements of leadership characteristics, questionnaire for leadership, and questionnaire for employees are listed as below and the details are shown in Appendix A, B, C and D respectively:

Visionary Leadership [VIS1 – VIS1.6]

$P_{1.1.}$ Visionary leaders have the capability to define and clear strategic vision for their organisations.

$P_{1.2.}$ Visionary leader has the ability to set goals for innovation that inspires employees to be innovative.

$P_{1.3.}$ Visionary leader has the ability of making employees to become future oriented.

$P_{1.4.}$ Visionary leader is actively involved in innovation and enables employees to also participate.

$P_{1.5.}$ Visionary leader always seeks new ideas and recognise opportunities for innovation.

$P_{1.6.}$ Visionary leader stimulates enthusiasm and commitment to employees.

Passionate Leadership [PAS2.1 – PAS2.6]

P2.1. Passionate leader has the ability to create a safe working environment for employees to freely innovate.

$P_{2.2.}$ Passionate leader has the capability to build a team and encourage people to work as a team.

$P_{2.3.}$ Passionate leader always avails facilities and equipments for innovation work.

$P_{2.4.}$ Passionate leader personally get involved and work with employees in order for them see and learn on how things are done.

$P_{2.5.}$ Passionate leader makes a point of involving employees in the decision making of the organisation.

$P_{2.6.}$ Passionate leader shows commitment when performing any task within in the organisation.

Charismatic Leadership [CHAR3.1 – CHAR3.8]

$P_{3.1.}$ Charismatic leader creates a feeling of trust among the employees.

$P_{3.2.}$ Charismatic leader encourages employees to integrate and share their knowledge and information with each other.

$P_{3.3.}$ Charismatic leader treats employees equally and with respect.

$P_{3.4.}$ Charismatic leader goes all out in the interest of employees and leads by example.

$P_{3.5.}$ Charismatic leader makes sure that all employees are accounted to similar privileges based on their level of responsibilities

$P_{3.6.}$ Charismatic leader creates a culture that makes employees to be at ease as far as creativity is concerned.

$P_{3.7.}$ Charismatic leader is able to entice employees to put their differences aside and focus on the organisational value adding activities.

$P_{3.8.}$ Charismatic leader has the ability to motivate employees to always seek opportunities

to do things different

Inspirational and Motivational Leadership [INS4.1 – INS4.10]

$P_{4.1.}$ Inspirational and motivational leader channels employees through training programmes for skills development.

$P_{4.2.}$ Inspirational and motivational leader freely interact with employees in different levels of the organisation.

$P_{4.3.}$ Inspirational and motivational leader creates an environment where all creative ideas are welcomed and rewarded.

$P_{4.4.}$ Inspirational and motivational leader gives attention to employees and communicate with them at all times.

$P_{4.5.}$ Inspirational and motivational leader have the capability to invest time to develop and mentor employees.

$P_{4.6.}$ Inspirational and motivational leader provides learning opportunities to spark new ideas.

$P_{4.7.}$ Inspirational and motivational leader provides induction programme to welcome new employees in order to easily fit within the organisational operations.

$P_{4.8.}$ Inspirational and motivational leadership creates an environment that enhances employees' morale at all times.

$P_{4.9.}$ Inspirational and motivational leader encourages openness amongst management and employees.

$P_{4.10.}$ Inspirational and motivational leader puts more emphasises on the culture of knowledge transfer.

Immersed in Progressive change Leadership [IMM5.1 – IMM5.6]

$P_{5.1.}$ Immersed in progressive change leader has the ability to inspire employees to search, develop and apply new knowledge through questioning culture.

$P_{5.2.}$ Immersed in progressive change leader strongly sees R&D oriented as idea generation techniques.

$P_{5.3.}$ Immersed in progressive change leader has the capability to create an atmosphere for building relationships that encourages new ideas.

$P_{5.4.}$ Immersed in progressive change leader has the ability to pioneer and penetrate the market.

$P_{5.5.}$ Immersed in progressive change leader has no limitations of creative ideas for innovation activities.

$P_{5.6.}$ Immersed in progressive change sees innovation as a "vehicle" for change in the workplace.

High gain risk-taker leadership [HIG6.1 – HIG6.5]

$P_{6.1.}$ High gain risk-taker leader encourages employees to solve problems creatively and progressively.

$P_{6.2.}$ High gain risk-taker is not bound by organisational protocols, but values any ideas that add value to the organisation.

$P_{6.3.}$ High gain risk-taker always encourages employees to take calculated risk for the advancements of the organisations.

$P_{6.4.}$ High gain risk-taker is able to account for anything that happens in the organisation as long is for innovation.

$P_{6.5.}$ High gain risk-taker takes into considerations all ideas put forward by customers and integrate them during product innovation process.

External oriented Leadership [ABI7.1 – ABI7.6]

$P_{7.1.}$ External oriented leader creates an effective communication channel for information flow within the organisation.

$P_{7.2.}$ External oriented leader arranges jobs and tasks in accordance to individuals' skills and strengths.

$P_{7.3.}$ External oriented leader makes available funding for community development projects to encourage idea generation.

$P_{7.4.}$ External oriented leader creates a platform for students to do their in-service training.

$P_{7.5.}$ External oriented leader considers other institutions including universities as sources of innovation.

$P_{7.6.}$ External oriented leader encourages employees to attend formalised external cross-industry seminars for them to be informed of what is happening around them.

Fast and Action oriented Leadership [FAS8.1– FAS8.6]

$P_{8.1.}$ Fast and action oriented leader makes an effort to make sure that all organisational developments are customer based.

$P_{8.2.}$ Fast and action oriented leader makes sure that the selection of new product effort is based on clear criteria developed and agreed on in advance.

$P_{8.3.}$ Fast and action oriented leader assures that product uniqueness is searched for so that it becomes difficult for competitors to copy.

$P_{8.4.}$ Fast and action oriented leader selects suitable ideas and prototypes in stages.

$P_{8.5.}$ Fast and action oriented leader makes sure that all new products developed are patented to avoid other companies taking ownership of their products.

$P_{8.6.}$ Fast and action oriented leader has the potential to invest in new products persistently without fear.

1.11 DESCRIPTION OF THE PROPOSED MODEL

Visionary (future obsessed) leadership paints an inspiring vision

The visionary element of the leader ignites the capability to paint the vision for the future for every employee to believe in and see themselves as part of it. Employees will then embrace each other and strive for organisational common goal.

Charismatic nature easily empowers people for creativity and innovation

The charismatic character allows a leader to create an environment where smart risk-taking, aggressive initiatives are encouraged and rewarded. Employees in this culture will embrace trust and honesty as a way of doing business. The empowered workforce continues to share ideas and resources.

Inspiration and motivation empowers people at all levels

Leaders are able to a tap into secret chambers of the minds, hearts, and souls of people and know which “buttons to push” to activate their staff’s pride, faith, hope, drive, and perseverance. Empowered workforce takes ownership of their environment for innovation.

Passionate leader uses creativity techniques to generate a large number of ideas.

The passion within the innovative leaders makes them to be incredible driven and employees will be overwhelmed by creative culture and ideas then flow nonstop.

High-gain risk-taking propels opportunistic, reviewing, combining, filtering and selecting ideas.

Innovative leaders as high-gain risk-takers always dream big. All creative ideas with growth potential are then selected and developed into prototypes without fearing of the unknown. As results employees under such environment are confident that their value adding ideas.

Immersed in progressive change builds an open, receptive, and questioning culture

A progressive change character in a leaders build organisations and foster a culture of on-going, never-ending change. They ensure that their organisations continually learn, adapt, evolve, and improve. The behaviour of employees will allow them to strive for greatness and product uniqueness.

External oriented character is suited for selecting the promising proposals for prototyping

The extreme organisational and external knowledge allows the leadership to profoundly select and develop a sole department that deals with prototyping to ensure competitiveness. All the products due for prototyping will contain all the features that customers expect and quality will not be compromised.

Fast and action oriented character creates goal setting, deadlines and measurements for innovation

Innovative leaders are quick to respond and act decisively to the needs of customers. Employees on the other hand are encouraged to cease any opportunity to add organisational value and to keep their customers satisfied.

Successful innovative culture will results in successful projects roll out

The empowered employees in the innovative organisation will effectively and efficiently do their best in analysing and rolling out their successful projects. Successful projects results in the production of competitive new products that will reflect profitability and productivity.

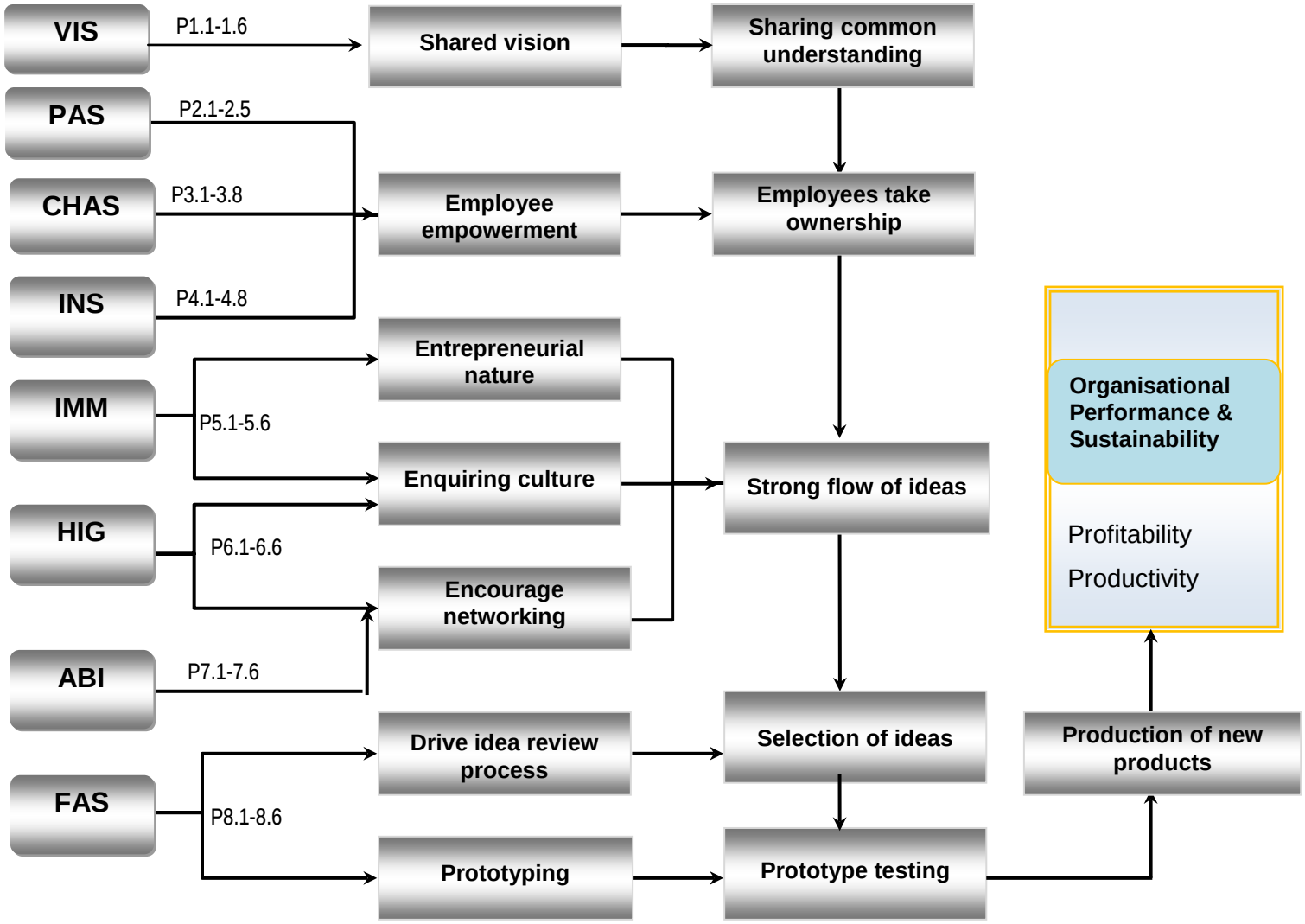

Figure 1.2: proposed innovative model

1.12 RESEARCH METHOD

A group of participants including both employees (n_1=336) and leaders (n_2=130) took part in the research survey with in 50 SMEs in the Western Cape. In particular, different sample sizes were utilised in various stages through different case studies. Random sampling was found to be relevant due to the nature of statistical analysis. This study adopted the survey research method for its relevancy of being quantitative in nature, which originated from positivism paradigm (Pinsonneault & Kraemer, 1993; Salant & Dillman, 1994:2). In order to meet the objectives highlighted above propositions and hypotheses were used to develop and test the model, to determine the state of innovative culture in these SMEs. All the characteristics and variables were tested for reliability and validity using Cronbach's Alpha as well as other statistical tools; see personal leadership characteristics and measurements for innovative leadership in Appendix A and B respectively.

1.12.1 Research paradigm

Kuhn (1970) defines research paradigm as the dominating knowledge of a specific course associated with phenomena in a specific period. It is more of a theoretical framework that guides the direction of the study process. It provides the guidelines of the structure and parameters of tools that the researcher can utilise in striving to find the anticipated solution. Therefore, it results in the nature of knowledge (ontology) and the means of generating it (epistemology). Research is always about discovering something new in the hope of improving lives of people in the world. In Kuhn (1963)'s opinion, one's paradigmatic view of the world might be related to the way one went about researching the world. According to Borrego *et al*. (2009), quantitative techniques are found to be appropriate for deductive approaches, whereby hypothesis justifies the variables, and the direction of the identified research statements and questions. Thus, the way in which these research questions and the hypotheses are outlined that determine the approach usable in collecting data. Borrego *et al*. (2009) further mention that quantitative studies allow the researcher to project the findings within the larger population through an objective process. Borrego *et al*. (2009) increasingly cite researchers such as Dorato and Abdallah (1993); Hodge and Steele (2002) and Todd *et al*. (1995) who emphasised the use of descriptive statistics such as percentages, means and standard deviations to analyse quantitative studies. Based on the nature of the current study, survey research method appears to be appropriate.

1.12.2 Survey research method

Survey research is defined as way of collecting information about characteristics, actions, or opinions of a large group (Pinsonneault & Kraemer, 1993). Salant and Dillman (1994:2) believe that survey can also be used to assess the needs, evaluate demand, and examine impact. According to Isaac and Michael (1997:136), survey research is used:

> *"to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met, to establish baselines against which future comparisons can be made, to analyze trends across time, and generally, to describe what exists, in what amount, and in what context."*

Furthermore, Kraemer (1991) adds that the following are three distinguishing characteristics of survey research:

- Survey research is used to quantitatively describe specific aspects of a given population, and these aspects often involve examining the relationships among variables.
- The data required for survey research are collected from people and therefore, subjective.
- Survey research uses a selected portion of the population from which the findings can later be generalized back to the population.

In the current study, a survey research methodology as a norm for most innovation surveys conducted over the years. Survey research is known of its ability to collect original data for describing a population too large to observe directly (Mouton & Prozesky, 2001). Questionnaires are mostly preferred due to their nature of being easily administered and as well as cost effectiveness. Their chances of error are very limited. They also give the respondents comfort of participating without any pressure (Salant & Dillman, 1994:18). A comprehensive questionnaire that has been divided into personal data and decision making sections was used for data collection. In the decision making section, partial (MLQ) Multifactor Leadership Questionnaire (Bass & Avolio, 2005) and innovation climate questionnaire (Cabra, 1996) with five point Likert scale questions, (strongly agree, agree, uncertain, disagree and strongly disagree) were used as seen in Appendix C and D.

Buber (2004) stated that coding of data was undertaken in order to facilitate an understanding and the retrieval of information in almost any approach to the analysis. Depending on the

preferences of the researcher they can be called variables, theme, concept, categories or values, responses are “coded” (Buber, 2004). Therefore, codes are the means of transferring data are from one format into another. In the current study, all the leadership characteristics were further categorised into coded variables, see Appendix B. The variables are coded depicting each character, for example, all the variables falling under visionary character are coded as (VIS) and variables under passionate leadership are coded as (PAS) and etc. Each variable is further described into a statement, as it is also confirmed by Buber (2004). According to Sivesind (1999), codes are the only medium for communicating information in a quantitative data set. Thus, they are essentially precise in conveying single-dimensional and directional.

1.12.3 Research Population and Sample

The current study is focused on the SMEs within the manufacturing sector, situated in the Western Cape Province. According to Buber (2004), quantitative research relies on a large, randomly drawn sample. The nature of this study requires larger samples in order to cover as many companies as possible. The results must be able to give a true reflection of what is actually happening within the SMEs in the Western Cape concerning innovation and sustainability. Therefore, the sample simple size must give a clear picture for in case there is a need for the follow up study. Nickel *et al*. (1995) confirmed that cases for detailed study can be identified from within larger samples. Stratified random sampling or quota sampling replaces purposive sampling so as to meet expectations for generalisation of results as understood in statistical terms (Buber, 2004). Therefore, the current study adopts random sampling as a method for data collection.

1.12.4 Sample size selection

According to Salant and Dillman (1994:54), the sample selection considers the following, the population size, homogeneity, and the sample media including the cost of use as well as the degree of precision required. Therefore the people who form part of the survey are then selected randomly since they all have equal opportunities of being selected (Salant & Dillman, 1994:13). The experience taught Salant and Dillian (1994:58) that the prerequisite to sample selection is to define the target population as narrowly as possible. Out of 1000 SMEs on the list, about 600 accepted the proposition to be part of the study. Consent letters were then sent to these companies for their commitment on the study and only 300 responded positively and became part. The questionnaires for data collection were sent and collected soon after completion for data capturing. 50 SMEs of the 300 which received the questionnaires retuned the questionnaires though in stages but satisfactory filled and the rest of the companies failed

due to time constraint. Effectively, about 466 participants participated in the study including both leaders and employees.

1.12.5 Data analysis

In the view of Buber (2004), inferential statistics are normally based on the assumption of random selection of cases, and error rates are derived estimates of population characteristics proportional to sample size. Thus sample selection and sample sizes therefore limit the kind of statistical procedures that might legitimately be used and the capacity to generalise to a larger population. Buber, continued to say that individual statistical technique hold a certain assumptions which must be met for appropriate use of that specific technique. For data derived from qualitative coding, most measures (including scaled measures) will be nominal or ordinal rather than interval, distributions may be unknown and normality cannot be assumed. Lack of independence in observations for some types of data can create a problem of multi-nonlinearity (Roberts, 2000). Similarly, chi-square analysis carries an assumption that categories on the same axis are mutually exclusive. Following the advice of the various researchers, this study uses SPSS (Statistical Package for Social Sciences) version 19 to capture and analyse data. The following statistical descriptive reporting, mean, range, standard deviation, correlations, factor analysis, chi-square analysis and fourth order Runge-Kutta integration method were used to analyse various aspects of the study including the mathematical model. According to Pollak (2003), mathematical models are used to connect mathematics with the real life situations. In this case, the mathematical model is used to evaluate the relationship between innovative leadership and productivity as well as profitability.

1.12.6 Data validity and reliability

The modified model was then tested within the highly rated SMEs for its originality, validity and reliability. Key variables on issues such as problems faced by leadership within the SMEs, for innovative leadership, innovation culture and sustainability were utilised to validate the collected data using Cronbach's alpha. According to Patten (2002) and Wallen and Fraenkel (2001), an instrument is only an instrument that measures but must be used accurately. They further said that validation process must be done appropriately. The reason behind having so many instruments for testing shows that no test instrument is perfectly legitimate and it must be done countless times for assurance (Patten, 2002). Wallen and Fraenkel (2001) repeatedly mention that evidence gives assurance about the accuracy of the instrument. Thus, various methods to validate the reliability of the results are obligatory.

This study mainly focused on the SMEs in the Western Cape. The number of employees of these SMEs was under 500 and all of them were restricted in the scope of engineering manufacturing sector.

1.13 SIGNIFICANCE OF THIS RESEARCH STUDY

This research study highlights the importance of innovative leadership in order to create an innovation culture within the SMEs in the Western Cape since the workplace is continuing to deteriorate. Creativity and innovative behaviour remained threatened since the South African workplace is currently dominated by strike actions. This highlights the lack of leadership to create a safe place for employees to work in. Thus, the study anticipates awakening a culture within the leadership that will make them put the needs of their employees first, knowing that these employees in return will do their best to satisfy the needs of their customers.

The use of innovative leadership model by SMEs will bring awareness to other broader community members of the country that innovation is the way out to competitive freedom. Innovation culture therefore become the base for entrepreneurship countrywide so that even school kids will grow up knowing that they should create their own businesses to make it in life. Leaders will also be aware that creativity does not only come from within the organisation but from different institutions like research centers, institutions of higher learning, suppliers, customers and even their competitors. The dominance of innovative leadership in the workplace will spill over to the political arenas in order to reduce mismanagement cases in the government departments including the municipalities, particularly in South Africa. The institutions of higher learning will also adopt innovation culture and make sure that their courses of study are entrepreneurial focused and address the needs faced by the business sectors. Engineering and Science students as creativity based fields in particular require innovative environment for their creative genes to continuously flow.

1.14 ETHICAL ISSUES

According to McNamara (1994), there are five ethical concerns to be considered when conducting a survey research. They actually deal with the voluntary participation, no harm to respondents, anonymity and confidentiality, identifying purpose and sponsor, and analysis and reporting. In the first place, researchers need to make sure that participation is completely voluntary. McNamara further said that voluntary participation at most times cause conflict with the need to have a high response rate. overall, low return rates can introduce bias response

(McNamara, 1994). In order to encourage a high response rate, Dillman (2000) suggests multiple contacts. For this study, up to five contacts were made per potential participant. A consent letter to propose participation to various companies, particularly management was sent for the permission. The willing companies were involved in the study with the assurance that the information given is to remain confidential. The aim of the study was made clear as to enhance the relationship between leadership and their employees so that they could better serve their customers as well as actively involve their suppliers. The information from these companies is of vital importance, therefore participants needed to be willing without any pressure imposed on them as suggested by McNamara (1994). All the questions asked in the questionnaires were user friendly to avoid any problems as seen in Appendix C and D. Therefore, participated companies signed the consent letters before the entire questionnaires were distributed to all the employees who took part as seen in Appendix C and D.

1.15 RESEARCH STRUCTURE

Chapter one emphasises on the research problems pointing out factors that affected leadership in South African SMEs. The importance of the SMEs in the economy of the country as well as their descriptions and definition of SMEs were discussed. The problem statement, research objectives, leadership definitions, research propositions were highlighted. A description of the proposed model was detailed, and finally, the significance of the study and ethical issues were addressed.

Chapter two focused on improving new product development (NPD) through innovative leadership qualities. In this regard, the key factors bearing the impact on NPD such as lack of understanding customer needs, business skills and understanding of innovation in NPD.

Chapter three discussed the impact of innovative leadership on organisational culture within SMEs in the Western Cape, South Africa. It outlined the key leadership characters such as visionary, passionate, charismatic, inspirational and motivational, immersed in progressive change, high gain risk taking, ability to network and fast and action oriented leadership, and how these characteristics influence leadership to create a innovative culture within SMEs.

Chapter four highlighted how passionate and charismatic leadership impacted creativity and innovation within the SMEs. The leaders in these SMEs were passionate and charismatic. However, it is not sufficient to instill an innovative culture.

Chapter five presents an approach on how to create an innovation culture through visionary leadership in the SMEs. The results revealed that employees were very satisfied with their leaders. However, the leaders needed to make more efforts in making employees to embrace their organisational vision in order to be competitive.

Chapter six developed a mathematical model to analyse the impact of innovative leadership on organisational sustainability in terms of productivity and profitability. The mathematical model predicts how changes of innovative leaders influence the increase of profits while production costs decreasing.

Chapter seven concluded the importance of innovation culture within the SMEs. This chapter also indicated that there is a tremendous lack of innovation drive within the leaders in the SMEs; such that employees are not motivated enough to bring new ideas that can add organisational values. The further study areas were highlighted as well.

1.16 CONCLUSION

This chapter provides an overview on the structure of the thesis. It introduced the background and rationale of the current study hoping to add valuable knowledge to assist SMEs in managing innovation efficiently and effectively. This will enable SMEs to create an entrepreneurial culture. Factors affecting leaders in the SMEs are also discussed in detail. A brief background on the description and the definition of the SMEs and the scope of the manufacturing sector covered were discussed. Various leadership definitions to show the diverseness of leadership styles were also discussed. The research objectives linking to the proposition of different variables of the innovative leadership characteristics along with the proposed leadership model were also highlighted. This section clearly highlighted problems that are faced by leaders in the SMEs and something needs to be done to improve the condition of the South African workplace.

CHAPTER TWO: IMPROVING NEW PRODUCT DEVELOPMENT THROUGH INNOVATIVE LEADERSHIP QUALITIES WITHIN SMES

CHAPTER SUMMARY

New Product Development (NPD) is crucial for Small and Medium Enterprises (SMEs). Innovative leadership qualities play a significant role in achieving competitive edge and successful NPD within SMEs. However, the emerging environmental uncertainties in global markets urge management to be innovative in order for them to effectively deal with these dynamic challenges. This study aims to evaluate if managers of SMEs in the Western Cape possess innovative leadership qualities to deal with the environmental uncertainties in order for them to produce new products to boost their companies' competitiveness. The findings indicate that these companies were competitive because their managers demonstrated innovative qualities. This survey was conducted at nine SMEs in the Western Cape, South Africa.

2.1 INTRODUCTION

The importance of New Product Development (NPD) has grown dramatically in the last decades, and is now the dominant driver of competition in many industries world-wide. New product introduction in today's technology-driven markets carries significant accomplishments and risks. New product failure rates were found to be as low as one out of every three products in certain companies and as high as 90 percent new products, which are withdrawn within a year of their introduction (Antil, 1988). In addition, Booz (1992) stated that between 33 percent and 60 percent of all new products that reach the market place fail to generate an economic return. According to Rosenau (1988), factors like new technology, improved communications, increased profit demands and shorter product life cycles have added to the inherent risk of non sustainability of NPD. It is evident that managers who do not have innovative leadership qualities and who understands an innovative culture, Small and Medium Enterprises (SMEs) will continue to struggle in today's dynamic environment.

World-widely, SMEs are playing a critical role in absorbing labour, penetrating new markets and generally expanding economies in creative and economic ways. In South Africa, SMEs contributes nearly 50 per cent of the national GDP and employment. However, in recent years, many SMEs have failed due to lack of innovative leadership qualities at their companies. The failure rate can be attributed to a lack of preparedness and failure to accurately estimate the cost of starting and running one's own enterprise (Macleod, 1995). Moreover, SMEs fail because of an ignorance of the importance of the development of new products in SMEs.

The deterioration of a firm's market position is inevitable without the introduction of new products. Initial or early entry of new products, can result in new market development, long-term market dominance (Crawford, 1988). It is vital for every organisation in the market to introduce new products that will anticipate and meet the needs of their customers. It means that organisations must make an effort to enquire what their customers' needs and provide feedback immediately. This type of action by a manager characterises innovative leadership qualities.

2.2 FACTORS BEARING IMPACT ON NPD

NPD should be a way of life in these days, yet many organisations are not involved in NPD activities and are therefore failing to enjoy the benefits. These organisations struggle to produce good products in order to meet their customers' expectations. This is largely due to their management not having the required knowledge of their customer's needs, business skills and an understanding of innovation.

2.2.1 Lack of understanding customer needs in NPD

Gupta and Wilemon (1990) with the backing from Roesnau (1988) says that uncertainty concerning customer requirements may result in a poor product definition, resulting in most SMEs filling their store rooms with unwanted products. These products are produced hoping to meet the needs of their customers, but to their amazement it is not what their customers wanted. Customers are in the meantime stranded and looking for SMEs that will provide for their needs. Khurana and Rosenthal (1997; 1998) also agreed that unresolved technical uncertainties and inadequate customer needs assessment are responsible for the failure of many new product development projects. Therefore for NPD to succeed, management should put forward a thoughtful strategy to deal with the identified environmental uncertainties.

2.2.2 Lack of business skills and understanding of innovation in NPD

Business management skill is one of the main problems within the SMEs (Jackson, 2004). Barczak and Wilemon (1989) supported that a manager should have the following traits: communicator, climate setter, and planner. It appears that most of the SMEs managers possess technical skills without management know-how. Craig and Hart (1992) supports this and state that NPD requires management that have both technical and management skills. A technical and management skill together enables a business leader to plan properly, taking into consideration the availability of the resources and the capabilities of his/her organisation. Lack of management skills could result in improper control amongst the employees and frequently leads into conflict and misunderstanding.

Most SMEs fail because they lack innovative leadership qualities to support its NPD. Theoretically, innovation is divided into radical and incremental (Von Stamm, 2004). The majority of business managers cannot distinguish the difference between radical and incremental innovation, and they only follow what they think is right for them. It is crucial for the SMEs to know which innovation type to implement based on their organisational capabilities. Any management without this fundamental information is likely to be ineffective.

2.3 SIGNIFICANCE OF THE RESEARCH

Due to the rapid growth of SMEs in South Africa, it is vital for SMEs to have innovative leadership qualities, so that they can manage NPD effectively. Based on the critical parameters from the literature, this study attempts to establish a framework to assist SMEs to be successful in managing NPD process.

2.4 THEORETICAL BACKGROUND AND LITERATURE REVIEW

A number of researchers have developed key NPD success factors in order to manage NPD effectively. Both academia and practitioners acknowledge that NPD is a crucial activity for most companies so that they are able to secure long term survival and growth (Brown & Eisenhardt, 1995; Clark & Fujimoto, 1991; Craig & Hart, 1992). In order for them to be competitive, SMEs must grow and produce new products to meet the needs of customers.

2.4.1 Innovative leadership

McCauley and Van Velsor (2004) defined innovative leadership as the collective activities of organisational members to accomplish the tasks of setting direction, building commitment, trust and creating an alignment of the organisation. This definition highlights teamwork as the main component to achieve a common goal of the entire organisation. The definition also shows that for people to work together, the leadership must be there to lead the way and foster commitment.

According to Anthony (1998), innovative leadership has the ability to get followers deeply committed to fulfilling the vision, objective and course of action that they believe is achievable and worthwhile. It is important to note that NPD requires organisational leadership to be innovative-minded and motivate employees to feel that they belong to the organisation. The kind of leadership required in the NPD, must possess the following qualities: fast and action oriented, immersed in progressive change, future-obsessed, masters of motivation and being passionate.

2.4.2 Qualities of Innovative leadership within NPD

Fast and action oriented

Speed, responsiveness, and agility are a key to innovative leaders who analyze situations, make decisions and act on opportunities (Deming, 1986). Innovative leadership often finds shortcuts to cut red tape to benefit the organisation. They would rather make a wrong decision than drive away a potential opportunity by just sitting and hoping that something will happen. All this is important because NPD requires quick responses to market opportunities to stay ahead of competition.

Immersed in progressive change

Innovative leaders build organisations and foster a culture of on-going, never-ending change (Deming, 1986). It is also the mission of the leader to ensure that the organisation continually learns, adapts, evolves and improves. This trait is important since the NPD environment is unstable and customer needs change alongside technology. Deming (1986) said that the main objective of the innovative leader is to deal with turbulent change, and then become the master of that change. In the adaptation of progressive change, a culture of inquiry becomes second nature. Customers within the NPD environment are sure of what they want and if they do not get it, they simply switch their suppliers. To win in this competitive environment, leadership must always anticipate what their customers expect and know all the changes that are likely to happen. If the management is always aware of what is happening in the market, employees will be motivated to do their part and to follow their leadership.

Visionarism

Innovative leadership has the ability to bring the future to where they are and start reaping the benefits. The beckoning horizon ahead brings excitement that makes them work even harder (Deming, 1986). Management that is inspired by innovative leadership qualities should be able to bring out the best in their employees for the sake of their company and themselves.

Masters of motivation and inspiration

Innovative leaders first get people excited, then committed, and finally moving swiftly. Mc Dough and Leifer (1986) said that innovative leaders are able to tap into secret chambers of the minds, hearts, and souls of people and know which “buttons to push” to activate their staff’s pride, faith, hope, drive, and perseverance. Innovative leaders make their followers feel special as if they were an elite exclusive team fulfilling some noble destiny (Barczak & Wilemon, 1989). They help their employees fulfil a deep longing for creativity and innovation by imparting a

sense of invincibility, power and control over their situations. These leaders accomplish two overwhelmingly important things: they make people feel good about themselves and they make them feel good about what they are accomplishing. The employees end up having a sense of ownership and become responsible.

Passionate

Innovative leaders are incredibly driven and this rubs off onto their followers, and they express emotions freely and showcase their excitement about new ideas and change. The spirit within them makes everyone in the organisation excited with what they do, inspiring them to do more (McCauley & Velsor, 2004). The employees demonstrate their excitement by producing quality products for their customers. A passionate leader will always drive employees to work hard so that they can be recognized. A passionate leader does not have time to think and talk about many things, but only to be a pillar of strength to the employees. If the leadership appear to understand and love what they do, employees will develop a passion for their work too.

2.5 THE QUALITIES AND KEY PERFORMANCE OF INNOVATIVE LEADERSHIP

The information gathered from the literature review and other sources during the study allowed the researcher to develop a short summary of the qualities needed for innovative leadership. This summary will be used to assess the managers of the companies considered in this study to see if they possess these qualities.

The table 2.1: Qualities of innovative leadership

Key performance factors	Description of performance	Coding
1. Visionarism	Capability to make strategic choices	MAN 1
2. Goal orientation	Objectives and roles of new products have been defined in terms of business goals	MAN 2
3. Fast and action oriented	Ability to invest in new products persistently	MAN 3
4. Communication	Meaning and importance of new products have been made clear to everyone	MAN 4
5. Commitment	Top management supports new product innovation	MAN 5
6. Culture	Search for new ideas and trials is encouraged	MAN 6
7. Immersed in progressive change	Top management ensures continuous learning and improvement	MAN 7

Table 2.1 and Figure 2.1 demonstrate how different key performances of innovative leadership qualities influences success in NPD. Culture plays a vital role as it acts as cement, bringing different aspects together to create a strong and unbreakable bond in the organisation. A visionary leadership immersed in an innovative culture will strive to communicate common goals so that every member gets committed into the objectives of the organisation. These qualities allow the leadership to make sure that their objectives are well defined to motivate employees to be on top of their game. When people are in the same level of understanding any positive changes within the organisation is likely to be welcomed. Furthermore when all these qualities are within an innovative leader, an organisation is likely to produce good quality products to meet the needs of their customers.

Figure 2.1: Key performances within the innovative leadership to a successful NPD

2.6 RESEARCH METHOD: A CASE STUDY

In order to collect and analyse data, the case study methodology was found to be relevant. Social scientists, in particular, have made wide use of this qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods (Stake, 1995). This research study aims to evaluate if managers of the SMEs in the Western Cape, Republic of South Africa possess innovative leadership qualities to manage NPD successfully. The criteria for selecting companies for the current work include:

engineering companies involved in manufacturing; companies that have between 20 and 100 employees; companies that are in the Western Cape. The selected companies were the first nine companies in the list provided by South African Department of Trade and Industry (DTI) matching the above criteria and showed interest in the study.

Questionnaires, interviews and observations were used in the collection of data alongside the likert scale. These data sources are found to have both advantages and disadvantages, but when they are used together, fair results are expected because they complement each other (Yin, 1994). According to William (2006), interviews are a far more personal form of research than questionnaires. Likert scaling gives the respondents many options to choose from without limitations. The respondent is guided in answering the questions of the questionnaire. The respondents were advised to choose the preferred answer based on their opinion. In addition, in this study the SPSS 14.0 was utilised in order to generate frequencies, tables, and in particular graphs, as the researcher believes that graphs are helpful and assist in making the analysis more understandable.

2.7 DATA ANALYSIS

The questionnaire was structured in such a way that the respondent chose only one option from the five available. All nine companies that formed part of the case study had to use the same questionnaire. To analyse this kind of quantitative data, cross tabulations and frequencies were used to demonstrate the differences and similarities of responses from these companies. Reynolds (1977) indicated that cross tabulation has the capability to show the strength of a relationship between different responses. The cross tabulation in this case clearly indicated how many companies strongly agreed, agreed, did not know, strongly disagreed or disagreed to the various statements characterizing management as one of the key NPD success factors.

2.8 RESULTS AND DISCUSSION

Regarding the key factor management, the results of the study indicated that the level of managers ranged from junior management to top management. Out of the nine companies, two had a junior manager and a senior manager respectively while the remaining companies had top managers. Their educational background ranged from Grade Twelve to University degrees. All of these managers had more than five years working experience with their companies. Out of nine companies which took part in the study, two companies were not directly involved in NPD. As results some of the questions were not applicable to them and for this reason these companies are left out in the discussion.

Regarding management in general, the overwhelming responses satisfy the model as it can be seen in the theory by Anthony (1998) which stresses that the leadership has the ability to make employees deeply committed to fulfilling the vision of the organisation. The results showed that management in general agree with the theory and were able to see the difference that they are able to bring about within their organisations (Figure 2.2). They knew more or less what their organisations were all about and they also understood the environment that they operated in.

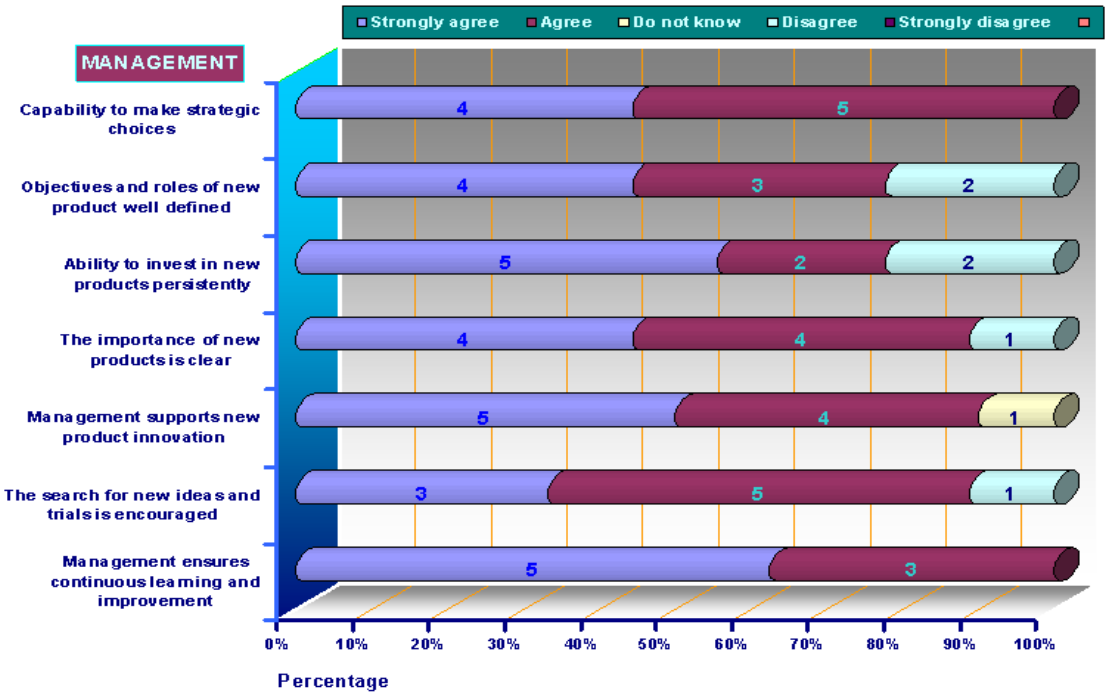

Figure 2.2: Response from management

The different attributes for the aspects regarding management are represented by different colours as can be seen in Figure 2.2. The dominant colour in the graph is for companies which strongly agreed, followed by companies which agreed to aspects showing characteristics of management. The remaining colours represented companies that disagreed. The positive response of this study indicated that those engineering managers had some qualities of innovative leadership.

Out of all eight attributes of management all companies responded positively. Regarding capability to make strategic choices, four companies strongly agreed and 5 companies agreed. On the aspect of the "objectives and roles of new product", four companies strongly agreed while three companies agreed. The ability to invest in new products persistently should that five

companies strongly agreed and two companies agreed. The aspect on the importance of new products showed that four strongly disagreed, four agreed and only one company disagreed. Concerning the aspect if management supports new product innovation or showed that all nine companies responded positively. The results on the search for new ideas indicated that three companies strongly disagreed, five agreed and only disagreed. The result management ensures continuous learning and improvement, showed that five companies strongly disagreed and three companies agreed, three one company did not respond.

The majority agreed that since customers' needs change; organisations should invest in new technologies so that they could match them. It is a fact that technology has taken control of the markets and whoever wants to stay ahead of competition should be technology driven. Most of the companies are focusing on improving their processes whereas others are interested in getting new equipment. In all these changes they are also required to train their staff so that they can operate and handle new changes.

In the business environment customers are interested in doing business with an organisation that put their needs first. A manager from company E, said, "It is our pleasure to sit down with our customers so we can understand what they really want". Meeting the needs of customers depends on the understanding of what the customer requires. Most companies lose business because they do not give their customers an opportunity to explain what they expect. The manager from Company F said that they do not just accept anything from the customers, they first check if they have the resources to produce what their customers need. They are also able to advise their customers to go elsewhere if they feel that they cannot give them what they want. It is quite interesting to find that there are companies prepared to let go of customers because they could not give them what they wanted. Most companies opted for technological advancement because it allows them to save time and money and most of all maintain product quality.

2.9 CONCLUDING REMARKS

In general, the results of the study indicate that innovative leadership quality of management is vital in managing NPD within an organisation. The managers were always willing to discuss with their customers to satisfy their needs as they are vision oriented, passionate, persistence; curios, self confidence, creative, committed. Therefore, they were not afraid to take calculated risks for the benefit of the company. On the other hand, the customers received their goods on time and their communication was great.

Most of these companies enjoyed to the privilege of gaining new customers and praises from their existing customers. The employees became more open as they took ownership of their organisations. These companies grew from strength to strength as they employed more people. The findings also confirmed that it is a positive move for any company to know the needs their customers very well.

Summarizing the main findings from the study, it can be concluded that some of these organisations started like any other business but their success showed that their management had a vision. Employees were encouraged to use everything they have got to see their organisations getting somewhere. The management also got it right by instilling the spirit of continuous learning within their employees. The results simply show that managers of these companies demonstrated the qualities of innovation. It is clear that the role of management within any organisation involved in NPD must be visible. The personality of every manager should be reflected by their employees' behaviour, for example, the way they think and apply their knowledge. The success of any organisation rests in the hands of its employees and strong leadership which is vision oriented.

It can be concluded that companies led by managers who possess innovative qualities are recognized by their competitiveness and the positive culture within their employees. Companies that are not effectively involved in NPD are seen by their poor results and by loosing customers from time to time. For future research, it may focus on an investigation of the innovative leadership qualities of those new and growing SMEs, so that they can be evaluated by the critical parameters of innovative qualities to enhance their leadership qualities.

CHAPTER THREE: THE IMPACT OF INNOVATIVE LEADERSHIP ON ORGANISATIONAL CULTURE WITHIN SMALL AND MEDIUM ENTERPRISES IN THE WESTERN CAPE, SOUTH AFRICA

CHAPTER SUMMARY

Numerous studies indicated a tremendous need of a competent leadership to lead transformation process within the South African small and medium enterprises (SMEs), especially after 1994. Over the past years, a number of SMEs failed in innovation due to lack of innovative culture. Leadership has been proven as a critical factor to create an innovative culture within organisations. Thus, this paper proposes a theoretical model to emphasise the impact of innovative leadership on organisational culture. Data were collected through a semi-structured questionnaire from a group of SMEs (n = 15) within the manufacturing sector from the Western Cape. A descriptive analysis was carried out through the SPSS 19 program. Both alternative (H1) and null (H0) hypothesis were used to test the relationship between leadership characteristics and organisational culture. The results revealed that the key factors such as lack of business management skills, knowledge of leadership transition, education and training, market and technological know-how, entrepreneurial drive, and resistance of changes remained the primary determinants for leaders to manage innovation successfully in SMEs. The model provided a guideline for leaders to influence employees to be creative and innovative to ensure the success of innovation within their organisations.

3.1 INTRODUCTION

Small and medium enterprises (SMEs) contribute to the world economy significantly (Reddy, 2007). However, there are considerable factors that affect the creation of innovation in the SMEs, both internally and externally. These factors were identified by a number of researchers such as McMullen and Adobor (2011), Olawale and Garwe (2010), Lindegaard (2009) and Mosia and Veldsman (2004) in the respective areas of new product development, creativity and innovation, and leadership in both SMEs and large enterprises. Rosing *et al*. (2011) reveal that there are positive relationships between leadership and innovation. Indeed, leaders with a strong influence on innovation processes in organisations have substantial leadership competence (Bossink, 2004). SMEs require an innovative leadership to spearhead new developments and change to remain competitive. According to Sloane (2006), innovative leadership first get people excited, then committed, and finally move swiftly to foresee to the organisational goals in order to maintain customer's satisfaction.

McDonough and Leifer (1986) added that innovative leaders establish and use goals and measures for the innovative organisational systems and processes. These leaders are able to tap into secret chambers of the minds, hearts, and souls of people and know which "buttons to push" to activate their staff's pride, faith, hope, drive, and perseverance. However, Mosia and Veldsman (2004) believe that South African SMEs lack competent and transformation focused leadership when dealing with organisational changes in this dynamic and diverse environment. In addition, numerous studies conducted in South Africa and abroad, highlighted further that leaders fail to manage these SMEs due to the following factors: lack of business management skills (Olawale & Garwe, 2010), resistance to changes (Grant, 2007), lack of marketing know-how (Cooper, 1999), lack of entrepreneurial drive (Herrington *et al*., 2009); low technological know-how (Tesfom & Lutz, 2006), lack of education and training (Herrington *et al*., 2009). Based on the above studies, there is no doubt that leadership contributes significantly to the success of innovation within organisations. However, the results of these studies indicate positive results where competent leaders are in control. The negative results on the other hand show the incompetency of the leadership (Martins and Terblanche, 2003; Alves *et al*., 2007; Craig & Hart, 1992; Anderson & Gerbing, 1988).

This shows how important it is for any organisation to have the right leadership with the capability to lead the organisation in order to reach all the anticipated goals ahead. As a result, in order to ensure the success of innovation, SMEs need a framework guiding them to achieve success innovation in their organisations. In this regard, this paper aims to indentify the impact of leadership on innovative culture within the SMEs in the Western Cape, South Africa.

3.2 THEORETICAL BACKGROUND OF THE PROPOSED MODEL

Culture defines the core values, assumptions, interpretations and approaches that characterize an organisation (Cameron, 2004). Culture is also considered as glue that holds things together and as a base for risk taking and ideas generation within the organisation (Hatch, 2004). In fact, innovation culture is not just an organisational culture, because it puts expression of employees' past their current beliefs, ideas, and behaviours (Langdon, 2007). Azman *et al*. (2007) concluded that innovation management involves the creation of a culture where new ideas are generated, valued, and supported. However, the phenomenon of innovation cannot be easily achieved, but requires hard work and commitment (Gundling, 2000).

It is the task of leaders to provide the culture and climate that nurtures and acknowledges innovation at every level in the organisation (Ahmed, 1998). Thus, it is vital for leaders to have

the ability to direct all resources including employees toward the strategic objectives of the organisation and ensure that organisational functions are aligned with the external environment (Zaccaro & Klimoski, 2001). In essence, the effective leaders are able to predict the future probabilities and design strategic choice to satisfy uncertainties (Riaz & Haider, 2010).

Sloane (2006) developed the building blocks of success as an essential foundation on which to build an entrepreneurial enterprise. In these blocks of success, an atmosphere where ideas are criticized will crush creativity spirit and deter people from coming forward with good ideas. The building blocks clearly indicate how organisations achieve successful innovation through the innovation engine. However, the building blocks of success did not include leadership characteristics and its influence in innovation. Since leadership characteristics impact on capabilities to create innovation culture within organisations, innovative minded leadership becomes critical to the success of innovation. Therefore, this study proposes a leadership model (Figure 3.1) by involving innovative leadership characteristics to influence on innovation engine that derived from Sloane's building blocks to achieve better outputs of innovation.

According to Sloane (2006), innovation engine includes organisation for prototyping (as innovation incubator), idea review process through innovation panel, ideas generation techniques, a questioning culture, a culture of welcome, encourages new ideas, empowerment of employees, shared vision to be consistently, communicated and reinforced. Through the innovation engine, prototypes will be tested; most promising ideas will be selected, strong flow of ideas, people take ownership of challenges and projects through cross functional teams, and finally, a common understanding of the corporate purpose and culture will be formed. The functionality of the model emphasises the impact of leadership on innovation engine, and achieve a better result within organisations. An innovative leader is perceived as an innovative minded person always looks for opportunities to create a culture where employees become creative (Sloane, 2006). The model depicts that employees working under an innovation culture are empowered by the innovative minded leader to strive for common organisational purpose.

3.3 LEADERSHIP CHARACTERISTICS

Based on the proposed model, leadership characteristics include ability to ascertain external factors, fast action orientated, high gain risk taker, immersed in progressive change, inspirational and motivation, charismatic, passionate, and visionary leaders.

3.3.1 Ability to ascertain external factors

Agbor (2008) inserted that the leadership must have the ability to convince the employees to participate in organisational activities and take ownership of what they do as long as is about innovation. This will ascertain external factors. Meurling (2004) said that leadership themselves must be committed, passionate and enthusiastic about new developments that resemble creativity and innovation. Ahmed (1998) after a numerous experiences suggested that in order to build a successful and sustainable innovation culture, leadership needs to accomplish two broad tasks:

First leaders need to be intensely sensitive to their environment and extremely aware of the impact that they themselves have on those around them. The second factor is the ability of leaders to accept and deal with uncertainty. Both Ahmed (1998) and Sloane (2006) concluded that tolerance of uncertainty allows space for risk taking, and exploration of alternative solution spaces which do not always produce business results.

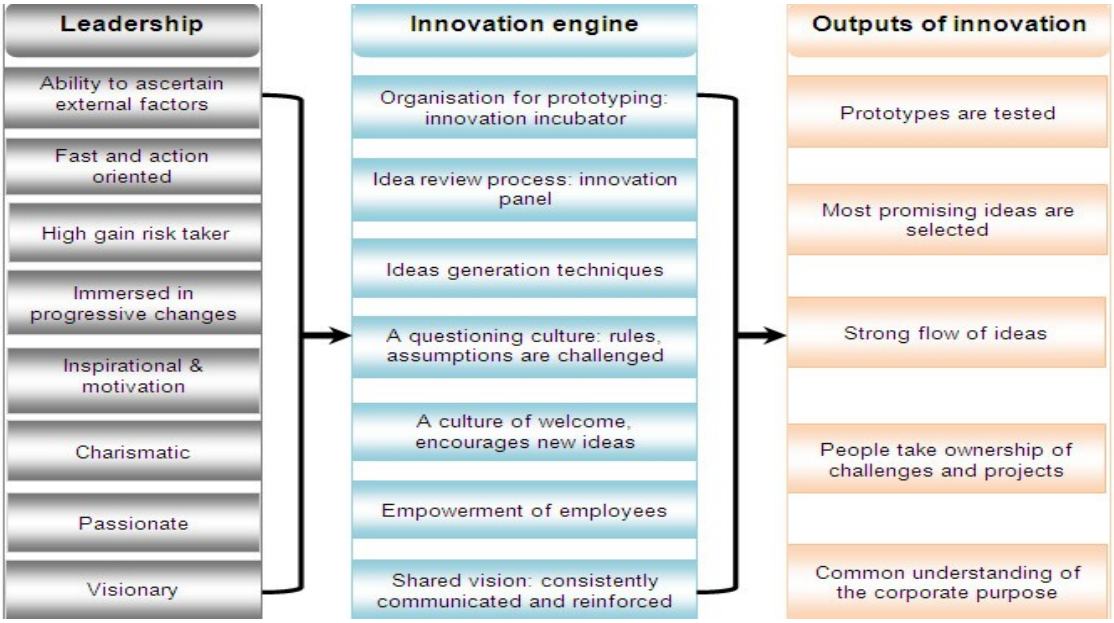

Figure 3.1: Proposed leadership model

3.3.2 Fast action orientated leadership

Speed, responsiveness, and agility are everything to innovative leaders who analyze situations, make decisions and act on opportunities (Anthony, 1998). It is in the blood of an innovative leader to want to use the available resources to bring positive changes and would rather make a wrong decision than 'blow' a potential opportunity by just sitting and hoping that something will

happen (Barczak & Wilemon, 1989). Furthermore, a knowledgeable industrial leader must be able to respond to any given situation with the bravery to solve problem of the day (Blanchard *et al*., 1985).

3.3.3 High gain risk taker

Innovation culture does not just happen, but it requires traits such as pro-activeness, openness to ideas, openness to actions, and risk-taking propensity (Amabile *et al*., 2004). Indeed, innovation is risky. This requires an innovative leader to be brave in facing various challenges within organisations. Sloane (2003) aptly describes the conducive environment for innovations: "If you give people freedom to innovate, the freedom to experiment, the freedom to succeed, then you must also give them the freedom to fail". Thus, failures that arise from risk-taking should not be criticized, but the effort should be recognized and acknowledged.

3.3.4 Immersed in progressive change

Anthony (1998) believes that innovative leaders build organisations and foster a culture of on-going, never-ending change. Deming (1986) also mentions that the main objective of the innovative leader is to deal with turbulent change within the organisation mainly that has to do with innovation activities, and then become master of that change. In the adaptation of progressive change an inquiry culture becomes second nature to everyone involved within the innovation activities (Rogers, 2003). Sloane (2006) highlights that innovative leader is also capable effortlessly unleashing hidden potentials within the followers by thoroughly observing them and giving them opportunities to bring new ideas. It has become a norm and the responsibility of leaders to stimulate their followers to be innovative by questioning assumptions, reframing problems, and approaching old situations in new ways (Avolio & Bass, 2002).

3.3.5 Inspirational and motivational leadership

Sloane (2006), McDonough and Leifer (1986) believe that innovation minded leaders have the capability tap into the secret chambers of the minds, hearts, and souls of people and know which "buttons to push" to activate their staff's pride, faith, hope, drive, and perseverance to commit into organisational activities to boost organisational performance. Leaders must be able inspire others with a purpose and a greater sense of mission (Agbor, 2008). These leaders inspire and motivate others by "providing meaning and challenge to their followers' work" (Bass, 1998). In return, workers take ownership and work without constant supervision since they are inspired by leaders. This enables leaders to build relationships with employees through interactive communication (Stone *et al*., 2003).

3.3.6 Charismatic leadership

Charismatic leaders are perceived as trustworthy, highly competent and respectful to others, which enable employees to be equally open and contribute more to their organisations (Avolio & Bass, 2002). Subsequently, management is normally perceived to have the ability to create order in the unruly environment for employees to become productive (Collins, 2001). Therefore, Leavy (2005) supported that to turn ideas into commercial viability, much persistence and discipline is expected from top management.

Table 3.1: Coding of Innovative leadership categories

Innovative leadership qualities	Code
1. Visionary leader	VIS (1.1-1.6)
2. Passionate leader	PAS (2.1-2.5)
3. Charismatic leader	CHA (3.1-3.5)
4. Inspirational and Motivation	INS (4.1-4.7)
5. Immersed in progressive change	IMM (5.1-5.6)
6. High gain risk taker	HIG (6.1-6.8)
7. Fast and action oriented	FAS (7.1-7.7)
8. Ability to ascertain external factors	ABI (8.1-8.5)

Charismatic leadership quality is characterized by honesty and integrity, therefore without these qualities, leadership is undermined and seen as incompetent (Sloane, 2006). Since employees are inspired and motivated, they will be able to take high risk and generate more ideas in innovation. On the other hand, innovative leaders should have the ability to ascertain external factors, fast and action orientated in order to deal with various challenges.

3.3.7 Passionate leadership

According to Lindegaard (2009), passionate leaders have the tendency of expressing their emotions freely and showcase their excitement about new ideas and change. Consequently the spirit within them enthusiast everyone in the organisation and get inspired to do more (McCauley & Velsor, 2004; Agbor, 2008). Once the passion within these leaders, it will enforce them to become role models who are admired, respected, and emulated by followers. Furthermore, leaders should be able to inspire and motive employees take ownership within organisations.

3.3.8 Visionary leadership

Organisational vision enables both the leaders and employees speak the same as language as they continue to work as a unit than to work as individuals (Brown & Gioia, 2002). Leaders must

communicate this vision to followers through inspirational speeches and written messages that appeals to shared values (Bennis & Nanus, 1985). Van Knippenberg and Hogg (2003) commented that when leaders communicated their ideas in a vision, their vision tend to be rooted into a perspective that became appealing to the whole organisation. In addressing why a leader's visionary behaviour, House and Shamir (1993) theorised that the vision has positive effects on followers' self concepts; followers become motivated to achieve the vision because they find it meaning-full, identify with it, and believe in the vision and their ability to achieve it. Visionary leadership is said to have positive effects on follower outcomes, resulting in high trust in the leader, high commitment to the leader, high levels of performance among followers, and high overall organisational performance (Kirkpatrick, 2004). Thus, leaders should have the ability to create a clear vision for their organisations.

3.4 RESEARCH DESIGN AND METHODS

A semi-structured questionnaire based on Likert scale was designed for the data collection. Random sampling as a method was utilized for choosing samples. The questionnaires were distributed to 15 SMEs in the Western Cape, South Africa. The population of all these SMEs was from 20 to 200. According to the National Small Business Act of South Africa of 1996, as amended in 2003, the number of employees of a small enterprise is generally from 1 to 49, where medium enterprises is from 50 to 200. The annual turnover of small enterprises is from R2 million to R25 million; and the medium enterprises stand from R4 million to R50 million (DTI, 1996). Thus, the size and the annual turnover of these samples meet with the SMEs categories.

In total, 224 participants answered the questionnaire. SPSS statistical software was employed to processing the data. All the innovative leadership quality categories as variables were coded (Table 3.1). These variables were measured by analyzing the responses from participated employees based on their perceptions and honest opinions toward their leaders. This will determine how innovative leadership impact on organisational culture within these SMEs. Furthermore, Cronbach's Alpha was utilized to test the internal consistency amongst these variables of innovative leadership quality. This study follows an exploratory research approach. Both alternative (H_1) and null (H_0) hypothesis of the study were formulated as:

H_1: Innovative leadership has positive impact on the creation of innovative culture within the SMEs.

H_0: Innovative leadership has no positive impact on the creation of innovative culture within the SMEs.

3.5 RESULTS AND DISCUSSION

The demographical data showed that nearly 70% participants were male, where 30% were female. Most participants were chosen from small and medium manufacturing companies. In South Africa, male employees are basically the dominate gender group in manufacturing sector.

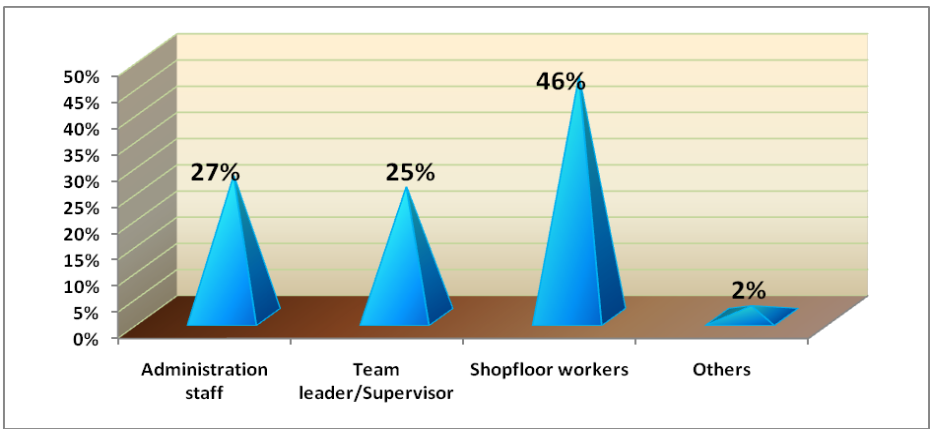

Figure 3.2: Participants job title

Figure 3.2 showed that nearly half (46%) shop floor employees participated in the study. Others include administrative staff and team leaders.

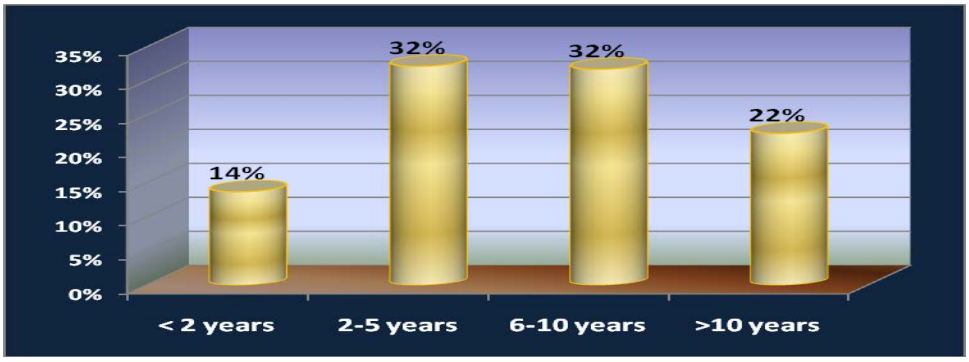

Figure 3.3: Participants years of working experience

Figure 3.3 showed that only 14% participants had less two years working experience where rest of others have at least two years and more years working experience.

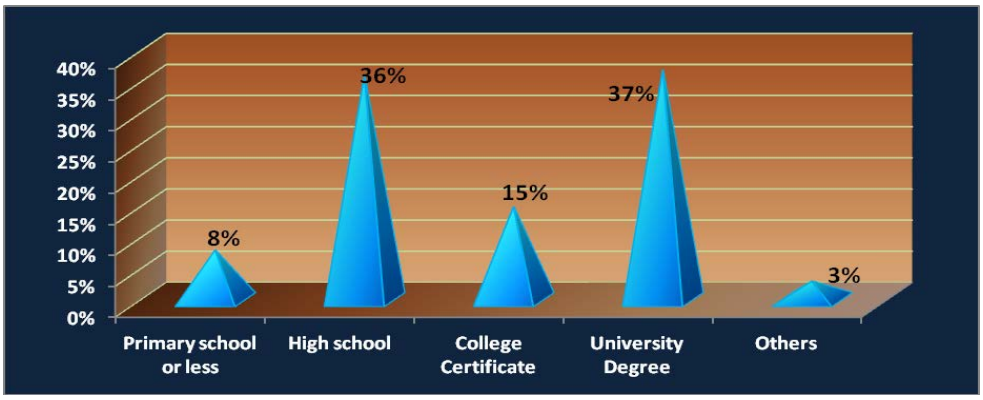

Figure 3.4: Participants' educational level

According to Figure 3.4, educational level of participants was generally high, only 8% were at the level of primary or less. This indicates that most participants will be able to understand the questionnaire and provide appropriate opinions on innovative leadership style within the SMEs.

Leaders within these SMEs shared organisational vision (VIS) and communicate with their followers. This enables both the leadership and employees have a common understanding of cooperate purpose and culture. Indeed, once leaders have positive impact on an organisational vision, this will enable employees to have higher trust in the leader, high commitment to the leader, and ultimately higher levels of performance within the organisation. Innovative leaders drive themselves to be incredibly determined and it eventually rubs off onto their followers (Lindegaard, 2009). Passionate leadership characteristics (PAS) within these SMEs generally empowered employees to take ownership challenges and work together as a team.

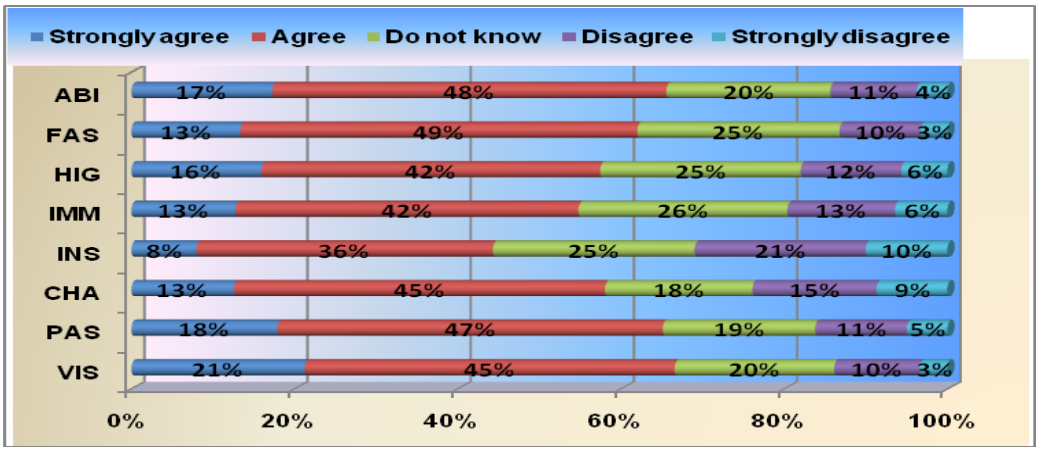

Figure 3.5: Statistical results from the respondents of all the variables

Figure 3.5 showed the statistical results of all the variables from the respondents are positive.

Based on the results, it indicates that visionary leader (VIS=66%), passionate leader (PAS=65%), fast and action oriented (FAS=62%), and ability to ascertain external factors (ABI=65%) is relatively strong.

This encourages employees to contribute their ideas toward innovation, and further involved in innovation actively. Ultimately, the organisational performance will be improved. The fast and action orientated (FAS) leadership style plays a vital role which leads employees to perform effectively and efficiently in SMEs. Employees feel at ease as any problems that they raised to leaders will be solved properly and in time. Due to lack of sufficient resources and financial support, SMEs often face various challenges outside of the organisation. It is extremely important to show employees that their leaders have the ability to ascertain these external factors.

The results showed that the leaders have the ability to ascertain external factors within these SMEs. These external factors often can be converted as ideas for new developments and innovation. In order to build up the ability, leaders themselves must be committed, passionate and enthusiastic about new developments that resemble creativity and innovation. This will generate more techniques for innovation within their organisations. Although the above results were relatively strong, however, inspirational and motivational to employees (INS=44%), immersed in progressive change (IMM=55%), high gain risk taker (HIG=58%), and charismatic (CHA=58%) leadership characteristics were not strongly visible and recognised by employees toward their leaders. Sloane (2006) stated that these leaders are as clear communicators and besides the ability to persuade and inspire employees who are reluctant to change. These communication abilities and skills allow inspirational and motivational leaders (INS) to embrace innovation culture and boost employees' confidence to be innovative within their organisations.

Employees always perform extremely well when their ideas are acceptable. When employees are comfortable within the environment, they tend to show their creative true colours by bringing new ideas (Agbor, 2008). This encourages employees to be immersed in progressive change (IMM) and become high gain risk takers (HIG). Charismatic leadership (CHA) quality is characterized by honesty and integrity, therefore without these qualities, leadership is undermined and seen as incompetent (Sloane, 2006). Once leaders are open to their followers, this will inspire employees elevates them to a heightened level of motivation and performance in support of their organisational goals. Based on the statistical results, the score range for each variable was 1 to 5. The mean scores were varied from 1.72 to 2.69. The average score of all

the means was 2.05. Based on Ch-square scores, the p-values were generally lower than .001 (P<.001) which indicates that all the tested variables were statistically significant. Thus, it is suggested that the null (H_0) hypothesis should be rejected. Cronbach's Alpha based on standardized items was tested at 0.942, which meant that all the variables that derived from the leadership model are reliable. Kendall's coefficient of concordance W = 0.045. Tukey's estimate of power to which observations must be raised to achieve additivity = 0.178. This indicated that all the tested variables were highly internal consistent

3.6 CONCLUSION

Based on the results, innovative leadership characteristics such as visionary, passionate, fast and action oriented, and ability to ascertain external factors have a positive impact on organisational culture. However, other leadership characteristics such as inspirational and motivational to employees, immersed in progressive change, high gain risk taker, and charismatic leadership were relatively low, which need to draw attention to management of these SMEs. These areas are vital in motivating employees to take ownership of what they do and stay focused on the organisational goals as suggested by the literature. Innovation implementation requires a leader that understands every stage of innovation process must be followed right through from idea generation (Rogers, 2003). However, leaders in these SMEs constantly failed to manage effectively due to lack of business management skills, knowledge of leadership transition, education and training, market and technological know-how, entrepreneurial drive, and resistance of changes.

Therefore, in order for a leader to be innovative, we strongly suggest that these leaders should take serious consideration in participating necessary training programmes to improve their abilities for innovation. The results positively indicated that the innovative leader possessed the power to generate innovation culture for the SMEs to remain sustainable. The proposed model can be a useful guide for those leaders who are struggling in creating innovative culture within their organisation. For further study, we recommend that an in-depth study can be done by testing the theoretical model with in the SMEs by looking into a large scope within the country to identify whether the same problems exist in other provinces. The success of this model will assist many SMEs to ensure the success of their innovation and subsequently their sustainability.

CHAPTER FOUR: IMPACT OF PASSIONATE AND CHARISMATIC LEADERSHIP ON CREATIVITY AND INNOVATION WITHIN SMES

CHAPTER SUMMARY

Since South Africa's political transition in 1994, the business community was overwhelmed due to dynamic customer demands, organisational changes, increasing globalization and competition. Additionally, traditional leadership approaches still dominant in the current transformational dispensation. Lack of innovative leadership resulted in deprived employees an opportunity to be creative and innovative. This study analysed the impact of passionate and charismatic leadership on creativity and innovation culture within the Small Medium Enterprises (SMEs). A structured questionnaire was employed for data collection. A group of employees (n=367) from 50 SMEs in the Western Cape were involved. The findings indicated that some key leadership characteristics did not impact on creativity and innovation culture positively in these SMEs. Both passionate and charismatic leaders lacked innovative nature. We suggested that leaders should enforce the spirit of teamwork and build up trust and loyalty among employees, make efforts in R&D while maintaining transformational style. This will foster creativity and innovation culture for long term sustainability.

4.1 INTRODUCTION

Technological advancements, dynamic customer demands, increasing globalization, the blurring of organisational boundaries, and increasing competition all resulted in unstable and volatile organisational environment than ever before (Parry and Proctor-Thompson, 2003). The evolving global markets that require vibrant technologies are increasingly adding pressure to organisational leaders. The South African business community had additional challenge of its major political transitions in 1994 (Govindsamy, 2006), authoritarian and traditional leadership approaches are still dominant (Govindsamy, 2006, Grobler, 1996; Hayward, 2005). Leaders in many organisations opted to adopt international policies such as restructuring and re-engineering with the hope to reduce reporting layers to cope with globalization (Denton and Vloeberghs, 2001). Yet, instead of enhancing trust and information sharing within the workplace, employees were left devastated, stressful and filled with distrust. Under these factors, employees were deprived an opportunity to be creative and innovative.

Consequently, many companies look for competitive edge in the industry, which can genuinely embrace radical innovation (Bessant *et al*., 2004). However, created innovation culture encourages creativity and risk taking (Langdon, 2007) and this even more difficult to those

Small Medium Enterprises (SMEs). A number of studies showed that innovative leadership possesses a number of characteristics that play a fundamental role in leadership behaviour for the creation innovation culture (Anthony, 1998; Maladzhi *et al*., 2010). These characteristics include visionary, passionate, charismatic, inspiration and motivation, immense in progressive change, fast and action oriented, risk taking and networking. Based on the historical background of apartheid in South Africa, passionate and charismatic leadership can be a major concern to many organisations. Thus, this study only looks into the impact of passionate and charismatic leadership on creativity and innovation within SMEs.

Passion within innovative leaders drives them to be incredibly determined and it eventually rubs off onto their followers (Anthony, 1998; Lindegaard, 2010). Passionate leaders have the tendency of expressing their emotions freely and showcase their excitement about new ideas and supplier / customer involvement (Maladzhi *et al*., 2010). As a result, the spirit within them enthusiast everyone in the organisation and get inspired to do more (McCauley & Van Veslor, 2004; Agbor, 2010). Moreover, the passion within these leaders enforces them to become role models that are admired, respected, and emulated by followers (Avolio & Bass, 2002; Stone *et al*., 2004). These leaders committed to their tasks compel their followers to eventually develop high degree of trust towards them (Bass, 1996). Thus, leaders should not treat employees as machines, but rather as living beings who work in organisations that are living systems (Wheatley, 2001). Indeed, well treated employees loosen up and focus their energies and creativity on organisational goals (Agbor, 2010). Charismatic leadership quality is characterised by honesty and integrity. Without these qualities, leadership is undermined and recognised as incompetent (Sloane, 2006). Successful leaders are open with their followers, but also discreet and do not violate confidences or carelessly divulge potentially harmful information (Sloane, 2006).

Charismatic leaders also typically have an animated, confident and dramatic communication style (Kirkpatrick, 2004). The openness of followers elevates them to a heightened level of motivation and performance in support of their organisational goals (Sloane, 2006). Management is normally perceived to have the ability to create order in the disorganised environment for employees to become productive (Collins, 2001). Hence, to turn ideas into commercial viability, much persistence and discipline is expected from top management (Leavy, 2005).

Based on the literature, a conceptual model of passionate and charismatic leadership influences

creativity and innovation culture was developed below (Figure 4.1):

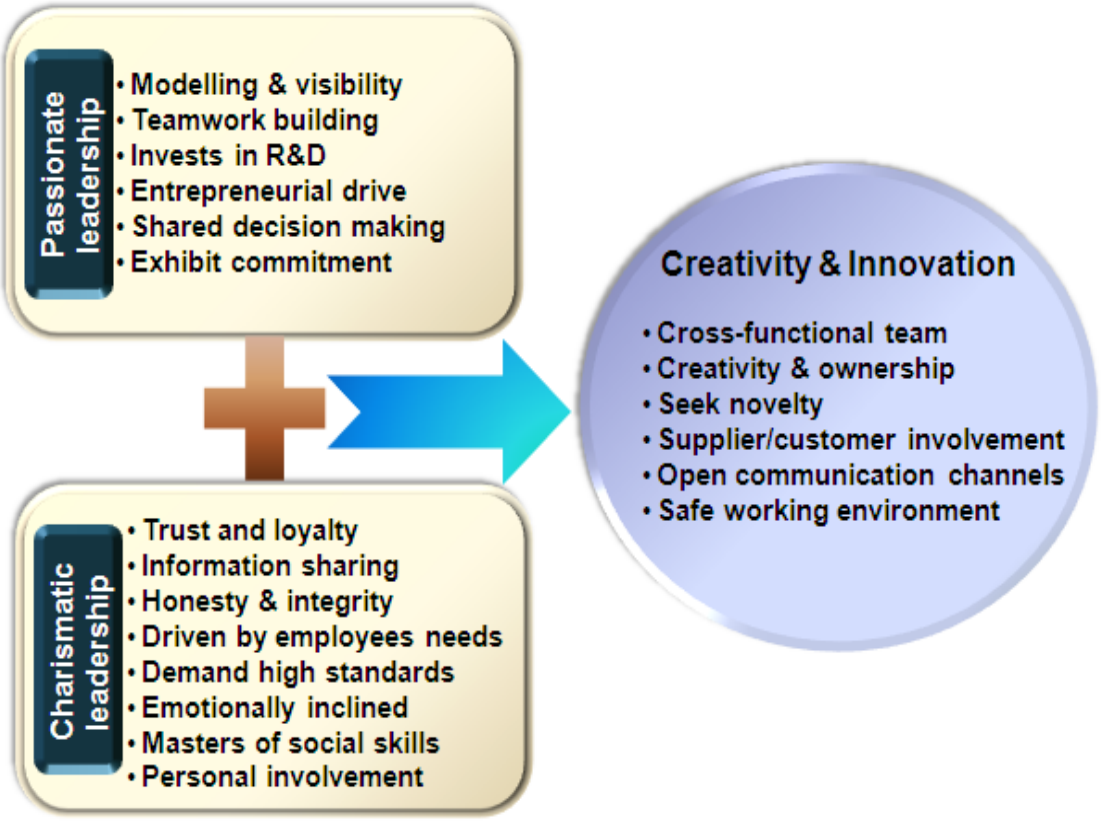

Figure 4.1: A conceptual model of passionate and charismatic leadership influences creativity and innovation culture

4.2 METHODS AND PROCEDURES

This study was conducted in Western Cape Province, whereby a total of 58 and 367 employees of 50 companies participated in the study. Innovation climate survey (OECD & Eurostat, 2005) was adopted to develop the questionnaire and interview questions as it is standardized and recommended to all innovation studies. The questionnaire was designed for employees to rate their opinions on leadership. The statements on the questionnaire were organised which covered the measures of creativity and innovation culture. A 5 point Likert scale questionnaires (1, strongly agree; 2, agree; 3, uncertain; 4, disagree; and 5, strongly disagree) were used for data collection. The passionate and charismatic characteristics were subdivided into a number of different attributes in Table 4.1, and coded accordingly for the analysis purpose.

4.3 RESULTS

Descriptive statistics consisting of means, standard deviations, and scale reliabilities were generated through spss statistical tool as shown in table 4.2 below. Based on the results, the means, standard deviations, correlations, and scale reliabilities (in diagonals) were generally positive. All the p values were less than .001, which indicated that all the responses were significantly reflected towards the leadership characteristics. As a reliability coefficient of .70 or higher is considered as “acceptable” in most situations of social science research. Table 4.3 showed that Cronbach's Alpha to all the variables is .946, and Cronbach's Alpha based on standardised items was .951, which indicates that these characteristics from both passionate and charismatic leadership have relatively high internal consistency.

Table 4.1: Measurements of innovative characteristics

Leadership characteristics	Description	Code
Passionate leadership		
1. Modelling & visibility	Ability to create a environment that allows employees to be	PAS1
2. Teamwork building	Different cross-functional groups encouraged to work together	PAS2
3. Invests in R&D	The availability of facilities for development work	PAS3
4. Entrepreneurial drive	When management take interest in seeking novelty (new	PAS4
5. Shared decision making	Employees are consulted when changes are made in the	PAS5
6. Exhibit commitment	Commitment is exhibited in every activity at hand	PAS6
Charismatic leadership		
7. Trust and loyalty	When there is a feeling of trust among the people	CHA1
8. Information sharing	Employees are encouraged to integrate and share their	CHA2
9. Honesty and integrity	People are treated equally and with respect	CHA3
10. Driven by employees	When a leaders go all out to show interest in their employees	CHA4
11. Demand high	All employees are accounted to similar privileges based on	CHA5
12. Emotionally inclined	Creates a culture that makes employees to be creative easily	CHA6
13. Masters of social skills	Skilled to entice employees to focus on the organisational	CHA7
14. Personal involvement	Ability to motivate employees to always seek opportunities to	CHA8

Table 4.2: Means, Standard Deviations, Correlations, and Scale Reliabilities (In Diagonals)

Variables	Mean	Std.Dev	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PAS1	2.228	1.0754													
2. PAS2	2.578	1.1751	.471*												
3. PAS3	3.092	1.1510	.315*	.370*											
4. PAS4	2.720	1.1444	.337*	.388*	.385*										
5. PAS5	2.592	1.1985	.336*	.479*	.378*	.343*									
6. PAS6	2.908	1.1383	.425*	.495*	.542*	.478*	.450*								
7. CHA1	2.705	1.1671	.347*	.376*	.456*	.428*	.361*	.392*							
8. CHA2	2.540	1.2086	.373*	.510*	.406*	.462*	.393*	.489*	.438*						
9. CHA3	2.292	1.0377	.509*	.522*	.339*	.433*	.425*	.425*	.492*	.482*					
10. CHA4	2.601	1.1382	.387*	.483*	.382*	.357*	.346*	.408*	.439*	.494*	.541*				
11. CHA5	2.656	1.1598	.298*	.361*	.347*	.464*	.308*	.481*	.302*	.466*	.332*	.267*			
12. CHA6	1.913	.9622	.339*	.375*	.172*	.215*	.216*	.196*	.287*	.332*	.365*	.434*	.210*		
13. CHA7	2.772	1.1709	.398*	.393*	.543*	.458*	.320*	.573*	.519*	.458*	.484*	.414*	.386*	.191*	
14. CHA8	2.329	1.0362	.388*	.398*	.276*	.330*	.267*	.363*	.330*	.341*	.328*	.289*	.304*	.308*	.299*

*P<.001

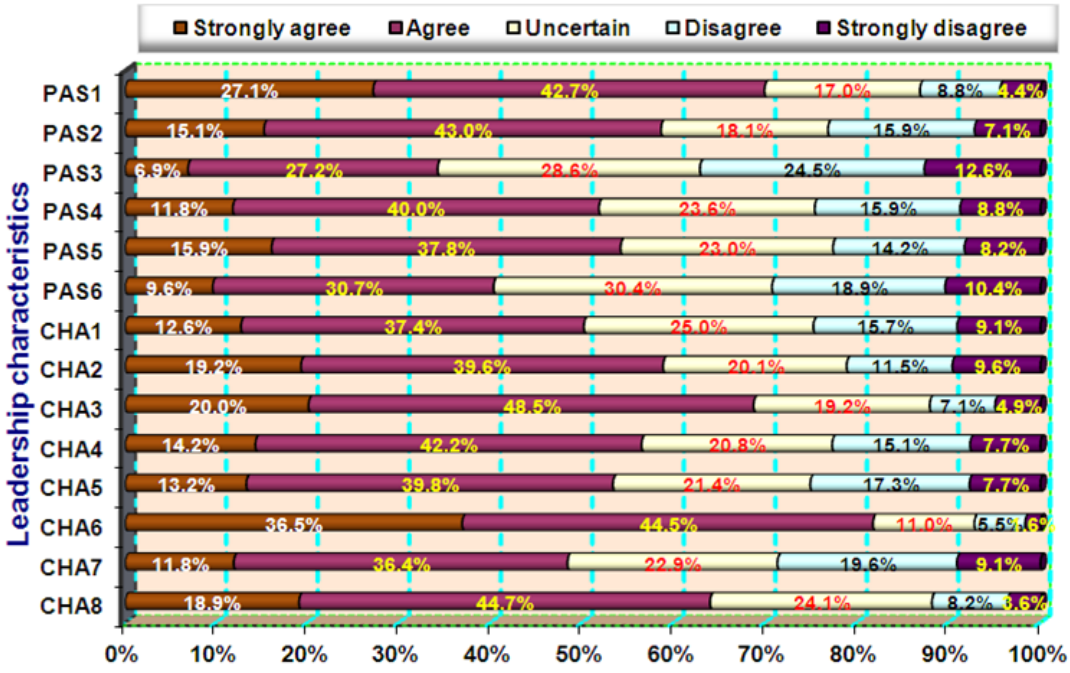

Figure 4.2: Responses from employees regarding leadership characteristics

Table 4.3: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.946	.951	14

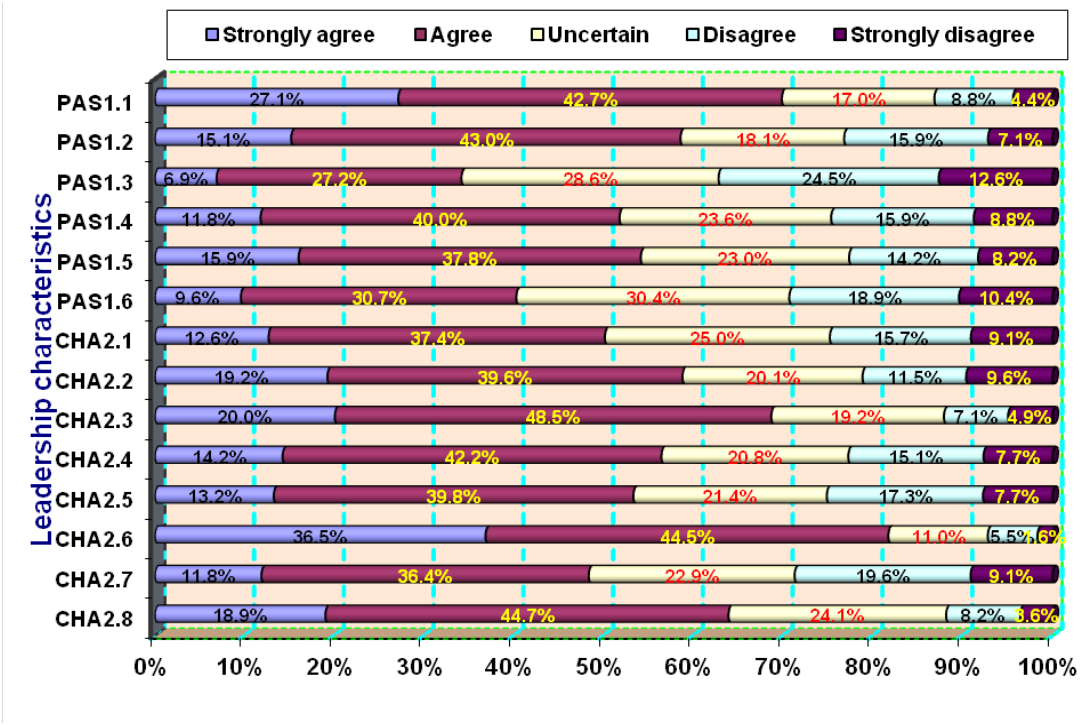

Figure 4.3: Responses from employees regarding leadership characteristics

4.4.1 Passionate leader

The results showed that nearly 80% leaders were visibly and actively involved in innovation activities within their companies (PAS1.1). 60% of leaders support cross-functional team building (PAS1.2). However, more than half of these leaders did not drive entrepreneurial initiative for innovation (PAS1.4) and share decision making (PAS1.5). The investments in R&D (PAS1.3) and leader's exhibition of commitment (PAS1.6) from these SMEs only count 34.1% and 40.3% respectively.

4.4.2 Charismatic leader

The results on charismatic leadership indicated that nearly 70% employees agreed that they were personally involved in innovation (CHA2.8), 59% employees agreed that their leaders willing to share information (CHA2.2); almost 70% employees agreed that leaders treat them with honesty and integrity (CHA2.3) and driven by their needs (CHA2.4). More than a half employees strive to achieve high standards set by the leaders (CHA2.5). 81% employees agreed that the leaders support them emotionally (CHA2.6). However, only a half of the employees believed that they can trust their leaders and they were loyal to their companies (CHA2.1); and 52% employees did not agree that their leaders have necessary social skills (CHA2.7).

4.4 DISCUSSION

The results showed that leaders were strongly visible and actively involved in all innovation activities (PAS1.1). Certainly, passion within innovative leaders drives them to be incredibly determined and eventually rubs off onto their followers (Anthony, 1998 and Lindegaard, 2009). In order to motivate employees to be creative and innovative, leaders should set themselves as good examples. This will enable leaders to promote innovation culture within their organisations. The leaders also were passionate in cross-functional team building (PAS1.2), which encouraged employees to work together instead of competing against each other.

Establishing the appropriate climate and fostering team communication, setting the climate within the team that supports innovation as crucial roles of an effective leader within an organisation (Barczak & Wilemon, 1989). Passionate personality within the leadership permits them to easily build relationships amongst the organisational members (Deardorff, 2005). It is in the nature of passionate leaders to build relationships so that cross-functional teamwork can be evident. However, there was a lack of entrepreneurial drive for innovation (PAS1.4) and employees' involvement in decision making (PAS1.5) in these SMEs, which was suggested as a

critical element of innovation culture (Sloane, 2006). Investments in R&D (PAS1.3) and leader's exhibition of commitment (PAS1.6) were relatively low in SMEs, which leaders should take a serious consideration as it is commonly recommended (Lussier, 2006).

Based on the results, charismatic leadership supported employees emotionally, and make sure that resources and technology for innovation were always available (CHA2.6). Charismatic leaders have the ability to direct all resources including employees toward the strategic objectives of the organisation and ensure that organisational functions are aligned with the external environment (Zaccaro *et al*., 2001). The leaders successfully instilled a culture of information sharing amongst their employees and as a result they advice each other on ideas worth value adding to the organisation. On the other hand, customers / suppliers were encouraged to be involved in idea generation. The charismatic nature allowed the leaders in the SMEs to get personally involved in arranging jobs and tasks of their employees in accordance to their individual skills (CHA2.8). The employees perceived that their leaders were honest and supportive for innovation with integrity (CHA2.3) as supported by another study (Sloane, 2006) that charismatic leadership quality is characterised by honesty and integrity.

However, the leaders did not fully utilise their social skills to create a safe environment for employees to be participated in decision making (CHA2.7). Although the literature indicates that charismatic leaders are perceived as trustworthy, highly competent and worthy of respect (Sloane, 2006) there was a lack of trust and loyalty (CHA2.1) among employees toward their leaders, which cultivates burdens to leaders for creating innovation culture. Shared the same sentiment, charismatic leaders would be perceived as trustworthy, highly competent and worthy of respect (Avolio & Bass, 2002).

The leaders endeavoured to meet employees' needs and motivated them to adopt changes in their organisations (CHA2.4). The employees also stressed that their leaders set high standards (CHA 2.5), but did not instil strong team spirit among employees. It is important that any innovation activities in organisation require an innovative minded leader to instil innovation culture (Langdon, 2007; Sloane, 2006; Barczak, 1989). Innovation culture does not just happen, but require traits such as pro-activeness, openness to ideas, openness to actions, and risk-taking propensity (Zaccaro *et al*., 2001).

4.5 CONCLUSION

In conclusion, more than half employees depict that leaders have the passion to enforce creativity and promote innovation culture. Passionate leadership characteristics were visible and actively involved in all innovation activities. Furthermore, customers and suppliers were also encouraged to participate in organisational innovation activities. Charismatic leaders created a culture that makes employees to be creative easily. However, both passionate and charismatic leadership in these SMEs lacked innovative nature. Employees were not fully involved in organisational decision making and that made them not to completely take organisational ownership. Passionate leaders lack entrepreneurial drive for innovation. Charismatic leaders did not enforce employee involvement in decision making effectively. Investments in R&D and leader's exhibition of commitment were relatively low in SMEs. The leaders should continuously spend more time socialising with employees to motivate them to be creative and innovative.

Leaders did not enforce the spirit of cross-functional teamwork sufficiently within the SMEs. Therefore, innovation culture is imperative to build up an effective cross-functional teamwork. Moreover, a safe environment of trust and loyalty should be established from the leadership. It should be taken into consideration for changes to be visible in the workplace. This will enable leader to foster creativity and innovation culture in their organisations for long term sustainability.

CHAPTER FIVE: CREATING INNOVATION CULTURE THROUGH VISIONARY LEADERSHIP IN SMALL MEDIUM ENTERPRISES

CHAPTER SUMMARY

Innovation culture is relatively at a slow pace in South Africa compared to other countries. Leadership plays a critical role in creating an innovation culture within organisations. Due to globalization, uncertainties, technology, lack of management skills and innovative leadership style, many organisations lost their directions of survival. This study was aimed to develop a basic model by applying the key characteristics of visionary leadership to create an innovation culture in Small Medium Enterprises (SMEs). A comparative analysis covered samples of both employees (n_1=366) and leaders (n_2=56) from a number of SMEs in the Western Cape, South Africa. A Likert scale questionnaire was designed for data collection. The relationship between employees and leaders regarding the visionary leadership characteristics were tested. The results showed positive and significant impact of leadership on innovation within SMEs. The employees were generally satisfied with their leaders. However, the results further revealed that leaders should enhance their leadership styles by bringing employees to become future orientated towards innovation.

5.1 INTRODUCTION

After the apartheid era in South Africa from 1994, the increasingly market competition and globalisation brought considerable challenges to the leaders of companies, particularly to those Small Medium Enterprises (SMEs). Challenges such as lack of business management skills (Kaplan, 2011; Olawale & Garwe, 2010; Jackson, 2004) and entrepreneurial drive (Kansikas *et al*., 2012); resistance of changes within the organisation (Perrin *et al*., 2012), low technological know-how (Tesfom & Lutz, 2006). Lack of education and training (Justo, 2010) and leadership style also evolved overtime (Minja, 2010). All of these resulted in huge financial losses and low employee morale, ultimately in poor work performance and decreased productivity. In dealing with this situation, the leaders endeavoured to adopt various changes in order to be sustainable. However, these changes related to shifting of technology, globalization, uncertainty, unpredictability and turbulence that affect work processes (Agbor, 2008). Moreover, Agbor (2008) mentioned that many organisations conducted their affairs same way year after year, as a result, their methods are no longer adequate and useful in the 21st century organisational environment.

In spite of these changes, innovative methods remained as an effective solution for leaders in any organisation that are competitive inclined. The competitive environment of the 21st century requires companies to be creative and innovative. Hence, leadership is needed in these organisations to harness creativity and innovation in order to remain on top of their game (Agbor, 2008; Tidd & Bessant, 2009). Therefore, this study aims to develop a basic model by applying the key characteristics of visionary leadership to foster innovation culture in South African SMEs.

Innovation culture is at a slow pace in South Africa compared to other countries as it ranked 45th out of 134 countries (Justo, 2010). The emergence of creative and effective organisations has become the responsibilities of the leaders who drive and control purposeful changes in structure, culture, and process in order to transform them into creative and productive ones. Over the years, various studies discovered that leaders behave differently because of their leadership styles, qualities as well as their personalities (Avolio & Bass, 2002; Maladzhi *et al*., 2010; Lindegaard, 2009). Some of them indicated that the main characteristics of innovative leadership include visionary, passionate, inspirational and motivational, immense in progressive change, risk-taker, mountain climber, fast and action oriented, futuristic, and charismatic (Maladzhi *et al*., 2010; Lindegaard, 2009), beside these studies, other studies used the similar terms of these characteristics to suit different leadership styles, such as servant leadership (Stone *et al*., 2003), transformational and transactional leadership (Avolio & Bass, 2002; Yukl, 2002). Based on the literature, the key characteristics of visionary leadership were identified as realistic visions, enthusiastic goals driver, future oriented, active involvement, recognise opportunities, optimistic and confidence.

5.2 PROPOSED LEADERSHIP MODEL AND HYPOTHESES DEVELOPMENT

Due to lack management skills amongst leaders, many SMEs endeavoured to stay innovative in dealing with organisational changes and global uncertainties. A visionary leadership model was proposed as showed in Figure 5.1. The key characteristics of visionary leadership were applied through leaders' behaviour (enthusiastic and reinforced communication) to create innovation culture within orgainsations.

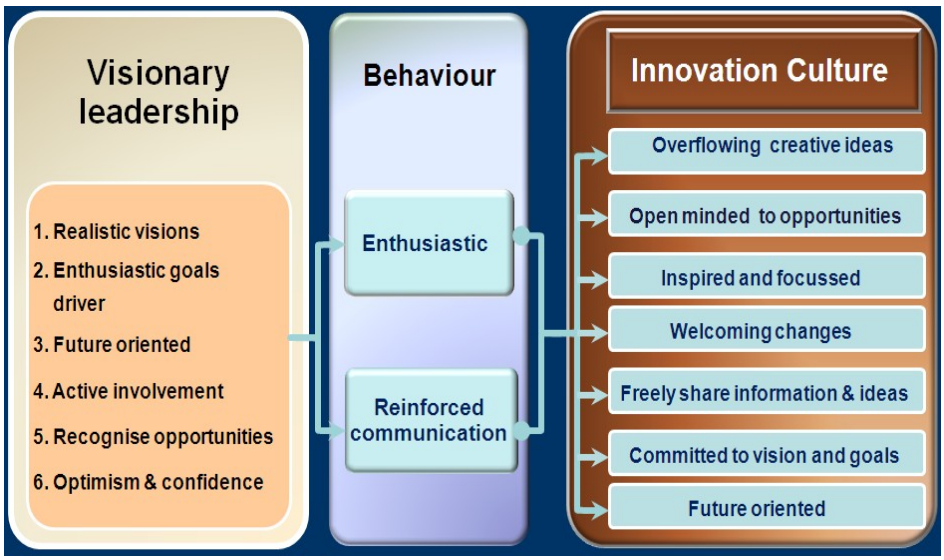

Figure 5.1: A model of creating innovation culture through visionary leadership

These characteristics include realistic visions, enthusiastic goals driver, and future oriented, active involvement; recognise opportunities, optimistic and confidence. Once leaders are enthusiastic to innovation and reinforce communication throughout the whole organisation, this will motivate employees' creativity and create innovation culture within the organisations.

We proposed the hypotheses based on the proposed visionary leadership model as showed in Figure 5.2. All the hypotheses were formulated in accordance to the key characteristics of visionary leadership. Any organisational success depends upon leaders who give direction, vision, and impetus to the followers (Agbor, 2008). In essence, a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists (Bennis & Nanus, 1985). In addition, further recons that the leader must communicate this vision to followers through inspirational speeches and written messages that appeals to shared values (Bennis & Nanus, 1985). Vision not only inspires individuals to commit to new ideas, but also provide opportunities (Conger & Kanungo, 1988). Leaders are therefore to create an environment where employees become inspired and committed to achieve organisational goals and vision. An organisational vision must be exciting in order for employees to be stimulated to pursue organisational common goals (Agbor, 2008). Leaders have the capabilities to successfully lead organisations by paying more attention to environmental changes, which in turn helps them set proper goals and objectives (Zaidatol *et al*., 2011). An organisational vision must be exciting in order for employees to be stimulated to pursue organisational common goals (Agbor, 2008). As a result the leader must be able to enthusiast employees to get motivated and

become creative through a shared vision. Therefore, the hypotheses regarding organisational vision (H_1) and goals (H_2) were formulated as:

H_1: Visionary leaders have the capability to define a clear strategic vision for their organisations

H_2: Visionary leaders have the ability to set goals for innovation that inspires employees to be innovative

Innovative leadership has the ability to bring the future to where they are and start reaping the benefits (Maladzhi, 2010; Sloane, 2006). Leaders have the ability to facilitate work environment to make employees to become future oriented (Sloane, 2006; House & Shamir, 1993). Indeed, innovation requires people who are intellectually oriented with the ability to withstand multiple ideas at once. An effective leader should be able to predict the future probabilities and design choice strategies to satisfy uncertainties (Riaz, 2010). Therefore, the hypothesis of future orientated (H_3) was formulated as:

H_3: Visionary leaders have the ability of bringing employees to become future oriented

The leadership must have the ability to convince the employees to participate in organisational activities and take ownership of what they do as long as is about innovation (Sloane, 2006). Vision not only inspires individuals to commit to new ideas, but also provide opportunities (Conger & Kanungo, 1988). Based on this, the hypothesis innovation involvement (H4) was formulated as:

H_4: Visionary leaders actively involved in innovation enables employees to be participated.

Innovation culture cannot be absolute if the leadership does not value, respect and harness the worth of the ideas of their employees. When employees realize that their ideas are valued and appreciated, they will continue to bring more value adding ideas. Embracing the process of creativity and innovation in our everyday organisational practice will unlock a vast number of new opportunities for Extension (Argabright *et al*., 2012). Leaders should foster and inhibit creativity and innovation in work environment (Politis & Politis, 2010). Hence, leaders must be committed, passionate and enthusiastic about new developments that resemble creativity and innovation. Therefore, the hypothesis of recognise opportunities (H_5) was proposed as:

H_5: Visionary leaders always seek new ideas and recognise opportunities for innovation.

Figure 5.2: Hypothetical measurement of visionary leadership

Leaders are as clear communicators and besides the ability to persuade and inspire employees who are reluctant to change (Sloane, 2006; Lindegaard, 2009). Their communication abilities and skills allow inspirational and motivational leaders to remain open to employees and boost their confidence to do things differently for the benefit of the organisation (Avolio & Bass, 2002). In addition, the leader must be able inspire others with a purpose and a greater sense of mission (Agbor, 2008). The created work environment must be conducive to creativity such it causes changes in followers that eventually convert them into effective and creative leaders (Agbor, 2008). Therefore, we proposed the hypothesis of optimism and confidence (H_6) as:

H_6: Visionary leaders stimulate enthusiasm and commitment to employees.

The above six hypotheses were designed for the purpose of determining the significance of the key characteristics of visionary leadership.

5.3 METHODS

There were 366 employees and 56 leaders from 50 SMEs participated in the study. These SMEs have more than 20 but less than 500 employees from the Western Cape, South Africa, and their annual sales are less than 5 million Rand. This group of employees includes administration staff, team leader / supervisor, and shop floor

employee. It counted 67% male and 33% female employees in the group. The majority employees held secondary school and college certificate (82%), where 15% has university degree and 3% were at primary school educational level. Most leaders were male, and their educational levels were relatively high. More than 93% held college certificate and university degree. The year of working experience was similar between employees and leaders. Nearly 60% of them had more than 5 years working experiences. Data were collected through a semi-structured questionnaire following a Likert scale "5-points" format.

The responses were rated as "1-5" from "Strongly agree" to "Strongly disagree". The characteristics of leadership were coded as EVIS1-6 for employees and LVIS1-6 for leaders that were showed in Figure 5.2. A comparative analysis was designed in order to test the developed hypothesis. The data analysis was carried out through SPSS statistical package. For instance, the value of means, standard deviation, *Chi-Square*, and inter-item correlations were generated. The reliability test was conducted by using *Cronbach's alpha*. T test and correlation where used to test the hypotheses for decision making. We attempted to verify if the leaders of these SMEs possess vision oriented characteristics to create an innovation culture.

5.4 RESULTS

Table 5.1 presented the means, standard deviation, Chi-Square, and inter-item correlations. Mean scores varied from 1.6 to 2.67, with an average score of 2.13 for both employees and leaders. The score range for each category was 1 to 5. Standard deviation scores showed that employees have more categories were greater than 1.000 comparing to leaders. Based on Chi-square scores, all p values were lower than .05, and the majority was lower than .001. Thus, the value approaches statistically significant. The null hypothesis should be rejected. In terms of reliability testing, generally, *Cronbach's alpha* reliability coefficient ranges between 0 and 1, the closer *Cronbach's alpha* coefficient is to 1.0 the greater the internal consistency of the items in the scale. The results of reliability statistics showed the value of *Cronbach's Alpha* of employees (EVIS) was .758, suggesting that all the items have relatively high internal consistency. Figure 5.3 presented a comparative analysis on the results of both leadership (LVIS1-6) and employees (EVIS1-6). These six main characteristics were linked to various questions common to both employees and leaders. According to the results, more than 90% leaders (LVIS1) believed that they are capable of making strategic choices, where 63% employees (EVIS1) moderately agreed.

Table 5.1: Mean, standard deviation, chi-square, and inter-item correlations

Items	Mean	Std. Dev	Chi-Sq.	1	2	3	4	5
1.EVIS1	1.95	1.000	276.240[a]					
2.EVIS2	2.28	1.020	177.525[a]	.285*				
3.EVIS3	2.11	.992	251.322[a]	.340*	.436*			
4.EVIS4	2.67	1.118	91.814[a]	.233*	.335*	.303*		
5.EVIS5	2.65	1.214	101.596[a]	.182*	.476*	.405*	.315*	
6.EVIS6	2.41	1.128	133.071[a]	.258*	.359*	.512*	.412*	.330*
1.LVIS1	1.60	.728	38.930[b]					
2.LVIS2	1.63	.723	36.965[b]	.081*				
3.LVIS3	2.54	1.283	12.912[c]	.263**	.257**			
4.LVIS4	1.75	.892	51.333[c]	.009*	.160*	.437*		
5.LVIS5	2.09	1.138	34.842[c]	.001*	.103*	.007*	.022*	
6.LVIS6	1.95	.811	19.281[b]	.141*	.000*	.093*	.044*	.052*

0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequencies are: *a*= 73.2; *b*=14.3*; and c*=11.4.
**P<.001; **P<0.05*

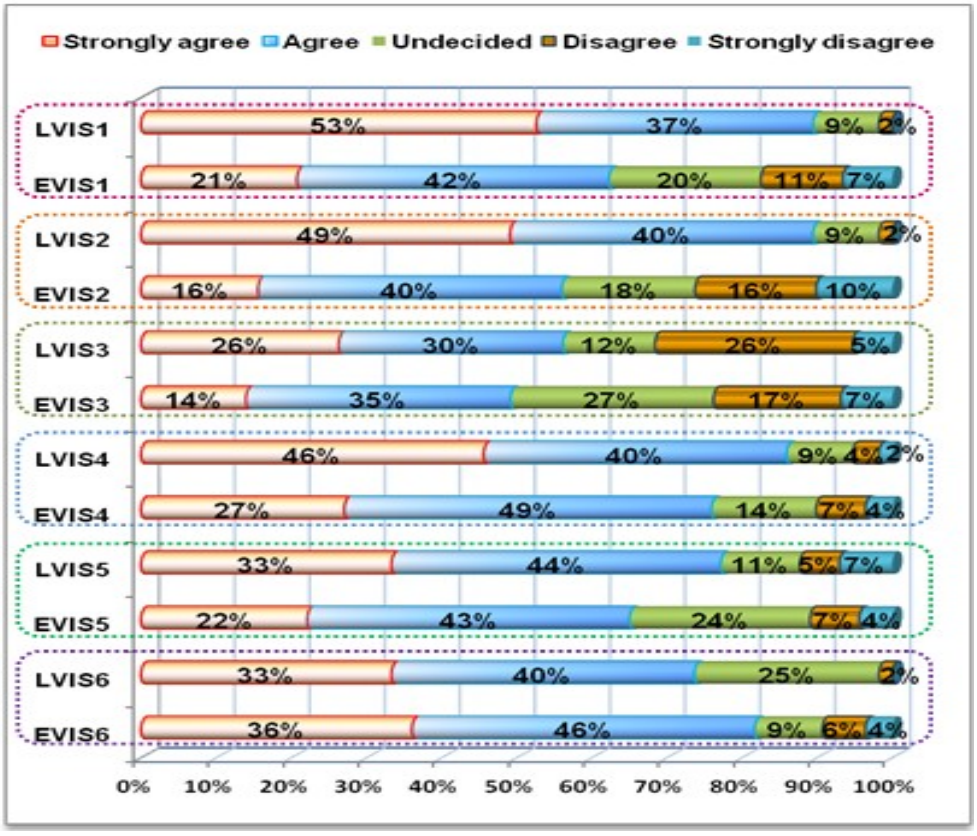

Figure 5.3: The results of both leadership and employees

Nearly 90% leaders responded that they are goals driven (LVIS2), where their employees (EVIS2) partially agreed (56%). More than half leaders believed that they have the ability to commit to organisational shared vision and proven to be confident (LVIS3), whereas employees (49%) also agreed (EVIS3). 86% leaders (LVIS4) believed that they were actively involved in innovation activities, where

76% employees (EVIS4) agreed. 77% leaders (LVIS5) agreed that the involvement of the top management in scouting new opportunities proven positive impact on innovation, where 65% employees (EVIS5) were agreed. 73% leaders (LVIS6) believed that they concerned of clarifying the importance of innovation in their organisations, where 82% employees (EVIS6) were supported.

5.5 DISCUSSION

In general, the results showed that the responses from employees were relatively lower than leaders. This also matched with the value of reliability test. The leaders have higher confidence than expected by employees. The employees were comparatively pleased with the leadership styles. The results also showed that leaders were able to recognise opportunities that allowed them to inspire their employees to overflow with creative ideas as supported by previous literature (Conger & Kanungo, 1998). In addition, many leaders were goals driven, and they continuously communicate their vision and goals to employees. The leadership also successfully communicated their vision with the employees and as a result employees became committed to organisational activities. Since employees witness their leaders' involvement in the innovation activities, they began to identify and allow the vision to change them by sharing information and ideas (McMullen & Adobor, 2011).

In essence, both leaders and employees were overwhelmed with the importance of innovation within the organisations that was made clear. However, many leaders lack the ability of actively involved in innovation, which caused them struggling to source for commercially viable ideas. The results showed that leaders lacked ability to bring employees to be future orientated. This was also confirmed by the responses from employees. Indeed, employees became future oriented when leaders committed to facilitate the work environment (Sloane, 2006). Once innovative leadership brings the future to employees, then they will be able to reap benefits to the organisation. Although the results indicated that leaders of these SMEs were intellectually accustomed to introduce new products to meet the needs of their customers, however, employees' wellbeing should not be ignored. It is important for employees to enjoy the working environment, so that they can be committed to the When everyone in the organisation is innovative minded, they will be able to work together as a team to enhance organisational productivity (Agbor, 2008). Hence, the leaders should work closely with their employees to encourage them to be committed for innovation.

5.6 CONCLUSION

This study makes a significant contribution to the leaders of SMEs in the Western Cape. The leaders and employees could recognise the importance of innovation and gain a better understanding of innovative leadership. This enables leaders to enhance their management skills and leadership style in order to create an innovation culture within their organisations. The present study also pointed out the weakness of leadership within SMEs, although the employees were generally satisfied with their leaders, which will facilitate leaders to improve their management skills.

CHAPTER SIX: MODELLING THE IMPACT OF INNOVATIVE LEADERSHIP ON PRODUCTIVITY AND PROFITABILITY

CHAPTER SUMMARY

Improvements in company's productivity and profitability require designing, and successfully implementing, sound programs. Such programs may call for radical changes in managerial attitudes toward key business practices to overcome competitive challenges. In this study, we propose a deterministic mathematical model for the impact of innovative leadership on company's productivity and profitability. A numerical simulation of the model differential equations reveal how innovation leadership enables a company to change and adapt to its external environment and by implication enhance its performance.

6.1 INTRODUCTION

Productivity enhancement is a process to achieve higher levels of output while consuming same or lesser amounts of input resources. Moreover, if the same output level is reached in a shorter time period, it indicates improved productivity as well. It is in this respect; projects designed to improve company productivity and profitability need innovative leadership and must also consider time as a key resource. Innovation is the successful implementation of creative ideas within a company (Amabile *et al*., 2004). Innovation is an important factor in the success and competitive advantage of industries (Woodman *et al*., 1993) as well as for a strong economy (Drucker, 1985). Global competitiveness has forced businesses to examine their operations for the purpose of making process improvements. These improvements generally involve better utilization of resources in order to enhance productivity and meet or beat the competition on relevant cost, quality, time, and flexibility issues.

Today, company managers need to be more creative and innovative than before in order to compete and survive (Jung *et al*., 2003; Tierney *et al*., 1999). Research shows that innovative leadership promotes and supports an exploratory orientation by cultivating a context for change and adaptation (Christensen, 1997; Hammer and Champy, 1994) among organisational members (Van de Ven & Chu, 1989). Innovative leadership shapes a context that promotes a capacity to learn, change and adapt in high-velocity environments (Beer *et al*. 2005). For a company to adapt its structure, policies, resources, and activities to environmental conditions, it must be attentive and sensitive to changes in its competitive landscape (Weick, 1976).

Research indicates that an organisational climate which fosters trust among its employees and creates ways of resolving conflicts is a key determinant of company performance (Burton *et al*., 2004). Through information exchange and collaborative behaviours companies are able to increase their capacity to notice external signs of change, thus increasing the likelihood that the organisation will respond effectively to complex and uncertain events in the external environment. Since productivity and profitability are critical to the survival of any company or organisation, our main objective in this present study is to propose a deterministic mathematical model that demonstrates the significant role played by innovative leadership in achieving this goal. The model equations are tackled numerically and pertinent results are displayed graphically and discussed quantitatively.

6.2 MODEL BUILDING

We consider a company known for the production of a product *y*. It is assumed that the production term is of the form

$$\textit{Production term} = qEy \tag{6.2.1}$$

where *q* is the production rate coefficient. The production effort is denoted by *E* which represents the amount of time the workers spend in producing *y*. This production effort also depends on the leadership innovation and the available equipments. The rate of production of *y* is then given as

$$\frac{dy}{dt} = qEy\,. \tag{6.2.2}$$

It is also assumed that the company has agreed on an average market price *P* per unit product. Thus, the total revenue of the company per unit time is:

$$\text{Total revenue} = PqEy. \tag{6.2.3}$$

The total cost of producing *y* is assumed to be proportional to the production effort, that is

$$\text{Total cost} = cE, \tag{6.2.4}$$

where *c* is the real unit cost of effort for producing *y*. As a result, the profit of the company for producing *y* is given by

$$\text{Profit} = PqEy - cE. \tag{6.2.5}$$

From economic analysis point of view, innovative leadership by the company managers can invariably lead to a change in production effort in order respond to the profit. Therefore, the production effort adjustment due to innovative leadership is defined by

$$\frac{dE}{dt} = \phi(PqyE - cE), \tag{6.2.6}$$

where $0 \le \phi \le 1$ is the innovative leadership parameter. Equation (6.2.6) can be easily solved to obtain

$$E(t) = E_0 e^{-\phi ct} e^{\phi pq \int y dt}, \tag{6.2.7}$$

where E_0=E(0). The expression in equation (6.2.7) revealed that the production effort is higher at the initial stage, however, as time goes by, it decreases as leadership innovative ability improves. It is important to note that ϕ = 0 corresponds to a scenario where the production effort remains constant due to lack of innovation and ϕ = 1 is the parameter limit at which the firm experiences a continuous improvement in the production effort due to innovative leadership.

6.3 NUMERICAL RESULTS

In this section, we solved equations (6.2.2) and (6.2.6) numerically using the fourth order Runge-Kutta integration scheme and was implemented with MAPLE 14 on computer. The following parameter values were used: *P* = 10, *q* = 0.05, *c* = 1, ϕ = 0.1. At *t* = 0, we suppose the quantity of the product *y* and the production effort *E* are given as equations 6.2.2 and 6.2.1 respectively. From figure 6.1, it is interesting to note that the firm productivity increases with time in the presence of innovative leadership as expected. Since an innovative leader managing the firm will stimulate workers creativity and commitment to work as well as made available the modern equipment that will enhance the firm production activities. Moreover, we observed that a decrease in the cost of production will also enhance productivity as illustrated in figure 6.2. As the cost of production decreases, the company through innovative managers will be able to increase the production efforts and consequently augment the firm productivity.

In figure 6.3, we observe that the production effort increases over the years under the administration of innovative leaderships. This is expected, since an innovative manager encourages workers initiatives, making workers responsibility and performance evaluation system clear and explicit, emphasising production task fulfilment, creating an environment in which quality relationships are valued and fostering trust. Figure 6.4, demonstrates the impact of innovative leadership on firm profitability. It is noteworthy that innovative leadership is the driving force behind firm increase profitability. As the innovative leader responds effectively to complex technological advancement and events in the external environment, the production efforts changes to adapt the situation leading to an increase in the firm net revenue

and profitability. Meanwhile, it is interesting to note that the firm profitability also increases with a decrease in the production cost as illustrated in figure 6.5. This is expected, since a decrease in the production cost with automatically increases the firm net revenue.

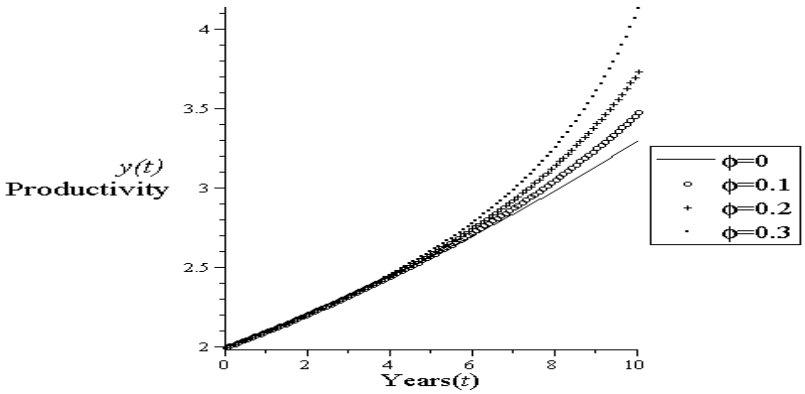

Figure 6.1: Effect of innovative leadership on firm productivity

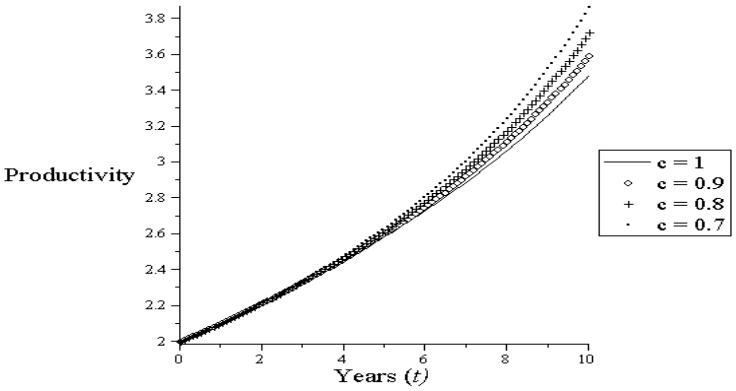

Figure 6.2: Effect of a decrease in production cost on firm productivity

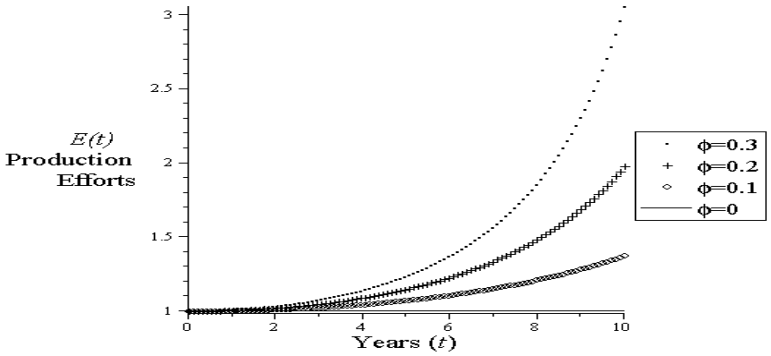

Figure 6.3: Effect of innovative leadership on production efforts

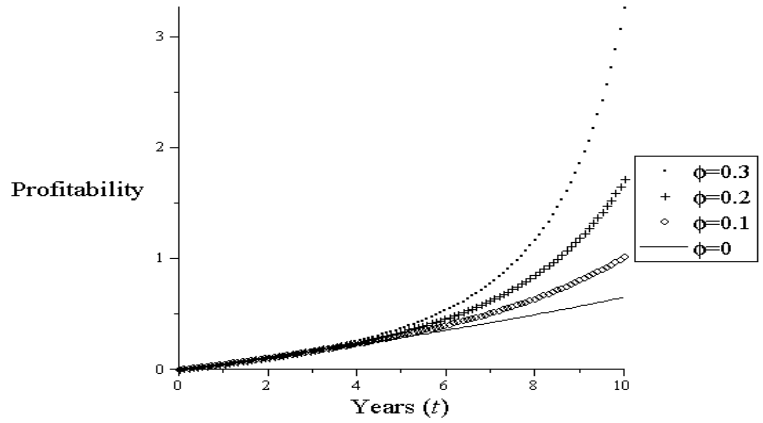

Figure 6.4: Effect of innovative leadership on profitability

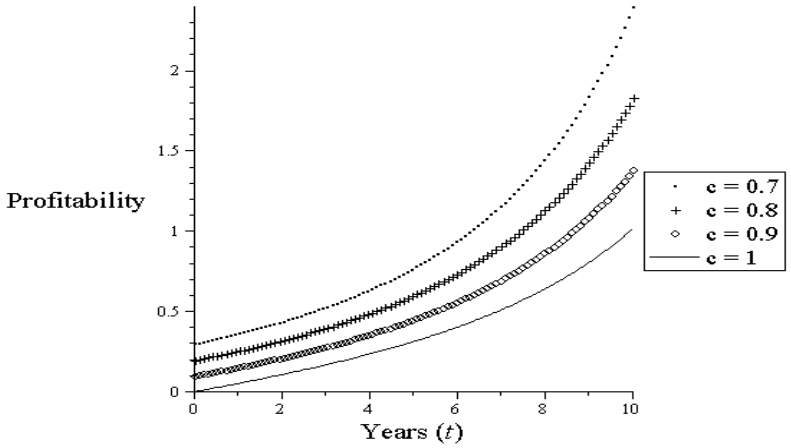

Figure 6.5: Effect of a decrease in production cost on profitability

6.4 CONCLUSIONS

A mathematical model for the impact of innovative leadership on firm productivity and profitability is proposed and tackled numerically using fourth order Runge-Kutta integration method. Our results revealed that without innovative leadership, the production efforts remain stagnant with low productivity and profitability. Moreover, an increase in the level of company productivity and profitability is observed in the presence of innovative leadership due to a change in the production efforts introduced by innovative leadership to adapt to the competitive business landscape.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

CHAPTER SUMMARY

The origin of the study was due to problems experienced by various leaders within the SMEs sector in failing to create an innovation culture. Therefore, the formulated objectives along with the relevant research methodologies resulted in comprehensive results that show leaders' incompetence as far as creating an innovation culture for employees to freely innovate. The employees also indicated not to have confidence in their leaders as shown in their responses. Leaders of these SMEs proved to fall short of innovative leadership characteristics such as inspiration and motivation (INS) as well as high gain risk-taking (HIG). However, it was also proven by both literature and the survey that innovative leadership has the ability to stimulate profitability and productivity within the organisations. The developed innovative leadership model was validated and proved to be a valuable tool to be used by leaders as a guide in creating safe environment for employees. The recommendations of the further study pointed on the larger scope of the samples nationwide.

7.1 INTRODUCTION

This study is mainly focussed on the problems faced by leaders in the SMEs to create an environment where employees could freely innovate. The current study covered different case studies conducted separately though covering common subject of innovative leadership model within the SMEs in the Western Cape to stabilize the workplace so that an innovative culture can be created. All different case studies focussed on problems faced by leaders who struggled to protect their employees from stresses caused by the external factors such as globalisation, which brings along high level of competitiveness and diverse customers' needs. The literature extracted from various studies evidently indicated that these SMEs were under the incompetent leadership with low level of educational background and also lacked management skills (Kunene, 2009; Grobler, 1996).

The literature further revealed that due to the uncontrollable conditions, the South African workplace became intolerable, filled with rage, confusion, low morale, low self-esteem and distrust amongst employees and their leaders (Smit & Carsterns, 2003; Govindsamy, 2006). In an attempt to cope with the situation these leaders introduced policies such as organisational restructuring and reengineering amongst other things (Prinsloo *et al*., 2000; Dekock & Slabert, 2003). However, the stress levels within the South African workforces elevated and crashed the little creativity

which was left amongst them. This chapter also covers the outcome of the anticipated objectives of the current study and its contribution to the theory, limitation to the research, and direction for further research.

7.2 CONTRIBUTIONS TO THE THEORY

The primary purpose of the current study was to develop an innovative leadership model that can be used by leaders within the SMEs to create an innovation culture where creativity and innovativeness become eminent. The outcome of the anticipated objectives is discussed as follows:

to identify which leadership contributes to the creation of innovation culture and the sustainability of SMEs,

to assess if leaders possess innovative leadership characteristics in SMEs,

to evaluate the influence of innovative leadership on innovation culture in SMEs,

to assess how the innovation culture is embraced within the SMEs and how it impacts on the sustainability of these enterprises,

to validate the innovative leadership model through mathematical modelling.

7.2.1 Leadership's contribution towards innovation culture and sustainability

In order to adequately cover this section, a thorough literature review on different leadership styles and their theoretical background was conducted. However, the literature review revealed innovative minded leadership as a by-product of both transformational and servant leadership styles. The common leadership variables which form part of innovative leadership are shown on Appendix A. For many centuries, leadership authors tried countless times to create an environment whereby employees would willingly use their God given scientific gifts to produce new products in order to improve their lives and that of their employees (Bernard, 1926; Bennis & Chin, 1961; Blake *et al*., 1964; Drath & Palus, 1994; House & Mitchell, 1974; Burns, 1978; Bass, 1988; Yukl, 1998; Drucker, 1985; Hersey & Blanchard, 1988; Manz & Sims, 2001).

Along the way, leadership theories were also developed by the likes of Fiedler (1967), Stogdill (1948), Vroom and Yetton (1973), Herzberg (1964), and Murray (1938) in order to create bearable working conditions. These theorists believed that a good and safe working environment was imperative where both leadership and their followers could work well together without any bickering and interference. They strongly acknowledged and emphasised the fact that every person has some element of

creativity within them; therefore to spark it out, an enabling environment was essential.

The difference within these different leadership styles was their beliefs in handling the relationship between leaders and their followers. With transactional leadership style, Judge and Piccolo (2004), feel that active leaders check followers' behaviour, then predict problems, and take corrective actions before making severe decisions. Transformational leadership on the other hand, transforms the personal values of followers to support the vision and goals of the organisation by fostering an environment where relationship can be formed due to establishing a climate of trust which enforces shared vision (Bass, 1985). Whereas Stone *et al*. (2004) preferred servant leadership because it valued relationship and people over task and products. While, innovative leadership professed to first get people excited, then committed, and finally move swiftly to foresee to the organisational goals to keep customers happy (Sloane, 2006). These four different leadership styles demonstrated how each view the relationship between employees and their followers. The most effective leadership style is the one that allows employees to do more for the organisation with self fulfilment. Therefore, innovative leadership style since it transpired from transformational and servant leadership was found to have innovative qualities to develop an environment whereby employees could freely innovate (Yan *et al*., 2012; Maladzhi *et al*., 2010; Maladzhi *et al*., 2012a&c).

Collins (2001) also added that though managers have the ability to create a "safe haven" for their employees, they are also capable to destroy an entrepreneurial spirit within their employees. It is therefore clear that not every leader has what it takes to encourage and empower employees to stay positive. Kefela (2010) argue that it will be very difficult for any leader to give instructions from the office and see change. Therefore, leaders must be hands on and communicate with employees face to face. According to Leavy (2005), leaders should learn how to communicate the need for change and how to make it interesting to employees. The involvement of the leadership within the organisational activities convinces employees to see change as a better option than to see it as a threat. Leavy (2005) believe that employees alone cannot bring about creative and innovative ideas for change without the involvement of leadership.

7.2.2 Leaders' possession of innovative leadership characteristics in SMEs

After a comprehensive study of different leadership styles and their characters, the following leadership characters encompassed the common variables of different leadership styles mentioned earlier: visionary leadership (VIS), passionate leadership (PAS), charismatic leadership (CHA), inspirational and motivational leadership (INS), immersed in progressive change leadership (IMM), high gain risk-taking leadership (HIG), external oriented leadership (ABI) and fast and action oriented leadership (FAS) (Maladzhi *et al*., 20012a). Each of these characters has a number of variables as shown in Appendix B. The findings of the current study depicted that these leaders positively reflected to have visionary leadership (VIS), passionate leadership (PAS), charismatic leadership (CHA), immersed in progressive change leadership (IMM) external oriented leadership (ABI) and fast and action oriented leadership (FAS) characters (Maladzhi *et al*., 2012a). However, these leaders were found to be incompetent on inspirational and motivational leadership (INS) and on high gain risk-taker leadership (HIG) characters (Maladzhi *et al*., 2012a).

In overall, the responses from the side of the employees evaluating their leaders were not satisfactory though positive, because most of these employees partially agreed with their leaders (Maladzhi, *et al*., 2012c; Yan *et al*., 2012). The findings on Maladzhi *et al*. (2012a) indicated that leaders rated themselves very high in most of these variables and the gap between their responses and that of their employees was huge (75%).

According to Sloane (2006) and Agbor (2008), leadership's role has to do with creating an environment where imagination, smart risk-taking, aggressive initiatives, and bold tactics are encouraged and rewarded. However, it is a concern that these leaders seem to have a problem in establishing an innovative mindset within these SMEs. Employees will only do what they see from their leaders (Yan *et al*., 2012, and Maladzhi *et al*., 2012a&c). In addition Elkins and Keller (2003), mention that an empowerment process allows managers to coach employees in decision making and in turn give employees an opportunity to participate on a day to day organisational activities. Therefore, if these leaders do not have the capability to empower and encourage these employees in order to ascertain if ever they will add value to their employees.

As has already indicated several times that the South African workplace has been badly damaged and requires leaders that to transform the minds of their employees in order to see things differently. Therefore, this study also highlight that these leaders lack inspirational and motivational leadership characteristic (Maladzhi *et al*., 2012a). It

is indeed a challenge that needs to be rectified so that this workplace can become a safe place for employees to work under. Furthermore, the leaders' commitment to their tasks compels followers to eventually develop high degree of trust and commitment (Bass, 1990; Jung & Avolio, 2000). It is in the open that the current workplaces in South Africa require competent leadership to instil a culture of risk taking in order for these organisations to meet their customers' needs. An empowered mindset is of necessity to the South African workforce in order to be bold and take ownership of their activities as they cross-functionally work together while sharing knowledge and information (Maladzhi *et al*., 2010). Argyris (1999), Meister (1998) and Senge (1990) add that managers should introduce their employees to continuous learning, so that they may understand that learning does not cease at any stage in a person's life time. Therefore employees will also learn that arriving at an unexpected answer is an opportunity to discover something new (an inquiring culture).

Amabile *et al*. (1996) also add that employees should form part of the decision making process which would make them feel part of the organisation and they will automatically show commitment and responsibility. Cummings and Oldman (1997) cemented by saying that job satisfaction for employees makes them feel at ease and at the same time more productive and to keep on finding better ways of bringing improvements. These leaders help their employees to fulfil a deep desire for creativity and innovation (Sloane, 2006).

7.2.3 The innovative leadership's influence on innovation culture

The findings of the study show that though some of the characteristics and their variable were positive but not satisfactory from the employees' point of view. In general, employees were not very happy with their leaders. Therefore, it can be concluded that there is much more still needs to be done as far as innovation culture (Maladzhi *et al*., 2012c; Yan *et al*., 2012). According to Pfeffer (2005), the created innovation culture must be able to make the employees to feel safe, respected and accepted for them to freely share their ideas. Looking on the responses from the employees, it shows that more intense training is of necessity on the side of the leaders so that they can make the workplace bearable for their employees to be productive. In Krauss (2005)'s view, culture is considered as a glue that holds things together and as a base for risk taking within the organisation. Consequently, leaders in these SMEs should be able to create a culture that will make employees stand together as a unit with confidence.

From the literature's point of view, a strong organisational culture is a pre-requisite for innovation culture. Hence, it requires an innovative minded leadership to create an innovation culture in order for the entire organisation to benefit from it (Maladzhi *et al*., 2012c; Yan *et al*., 2012). Therefore, leaders are compelled to create an environment that will make sure that employees feel trusted in their organisations. The results of the study show without doubt that there is a lack of innovation culture within these SMEs. In accordance to Pfeffer (2005), innovation culture is the base of risk taking, however, the results show that these leaders lack risk taking character. Martins and Terblanche (2003) with the consensus of Mumford and Gustafson (1988) stressed that culture has an influence on the degree to which creativity and innovation are stimulated in an organisation. For this reason, it can be concluded that SMEs in the Western Cape lack organisational and innovative cultures.

7.2.4 The impact of innovation culture on the sustainability of SMEs

According to Urhuogo (2011), Isaksen and Tidd (2006), the creation of innovation culture requires personality traits such as pro-activeness, openness to ideas, openness to actions, and risk-taking tendency. Therefore, it takes us back to the emphasis of the results that if leaders lack such characters, nothing good can be achieved from these SMEs. Evidently, dissatisfied employees are not in the position to produce good quality products to satisfy the needs of their customers. This tradition compelled Kelleher of Northwest airlines to implement a new perspective that elevates employees than the traditional norm of elevating customers (Hall, 2007).

Similarly, Deardof (2005) strongly believe that the phenomenon of innovation is not easily achieved, but requires hard work and commitment. In that case, hard work and commitment for employees is normally initiated by top management. It is therefore the responsibilities of management in these SMEs to encourage their employees to do things differently for innovation culture to be visible (Maladzhi *et al*., 2012c). Managing innovation is all about creating a culture of generating new ideas, where employees feel valued and supported (Streets & Boundary, 2004; Azman *et al*., 2007)**.** Therefore, it remains a task of the organisational leaders to provide the culture and climate that nurtures and acknowledges innovation at every level (Ahmed 1998). Many authors (Van de Ven, 1986, Amabile, 1995; ÜRÜ & Yozat, 2009) found that individual innovation assists in the attainment of organisational success. Based on the findings of the study and the comparison with the discoveries of other researchers, it clearly shows the lack innovation culture in these SMEs (Maladzhi *et al*., 2012a).

Furthermore, employees' innovative behaviour depends immensely on their interaction with others in the workplace as a result of innovation culture (Anderson *et al*., 2004; Zhou & Shalley, 2003). It goes without saying that so much still need to be done to instil a culture that will embrace creativity and innovation. Amabile (2004) uses creativeness, innovativeness, productivity, efficiency, effectiveness, competitiveness and profitability to access organisational performance. This means that the absence of all these elements in the organisation pursuing innovation will results in innovation doom.

7.2.5 Validation of the innovative leadership model

The innovative leadership model was introduced in Chapter One. The model was developed from the innovative engine created by Sloane (2006). Thus, all the leadership characteristics were then imbedded into this model. These characteristics as variables were tested to determine the reliabilities and validities through Cronbach's Alpha, means, standard deviations, scale reliabilities, reliability coefficient, correlations, and Chi-Square. All the hypotheses were tested and their *p* values were found to be below (0.01) (Maladzhi *et al*., 2002a; Yan *et al*., 2012).

The developed innovative leadership model was found reliable to be used to improve the state of innovation in the SMEs (Maladzhi *et al*., 2012a). The findings also highlighted the model to be user friendly for any leader possessing these characteristics capable to create an innovative culture for organisational sustainability (Maladzhi *et al*, 2012a).

The results of the mathematical model revealed the importance of innovative leadership as far as profitability and productivity were concerned within these companies. In addition, the findings emphasises that firm productivity increases with time under the innovative leadership (Maladzhi *et al*., 2012d). Maladzhi *et al*. (2012b) further shows that the decrease in production cost stimulates productivity. Consequently, low production cost also enhances firm profitability. These results are evidence that innovative leadership positively influences companies' performance (Maladzhi *et al*., 2012d). Therefore any organisation that aspire and thrive to remain competitive in this globalised era should resort to innovative leadership.

According to Stevenson (2002), firms that have high levels of productivity earn a competitive advantage over those with low productivity. The passion demonstrated by leaders make them to become role models who are admired, respected, and

emulated by their followers (Avolio & Bass, 2002). Employees under the leadership of leaders who are passionate and aspire to do things different at all times, they eventually change their minds and join in (Yan *et al*., 2012). In this global village, there are so many reasons that compel companies to innovate, but they require an innovative minded leadership.

A study conducted in Canada revealed that customer demands calls for possible new invention and its commercialisation to meet such need (Astebro & Dahlin, 2005). It is for this reason why companies should continuously work closely with customers in order to make appropriate investment in R&D (Guerzoni, 2007). Astebro and Dahlin (2005) 'study also revealed that when market demand is high, companies get the opportunity to invest in technological methods to cater for their customer demands. Thus, numerous companies seem to invest more in innovations. On the study conducted by Baldwin and Sabourin (2000), organized R&D activities are more important for product innovations. The chances of companies introducing product innovations are 59 percent compared to 37 percent of process innovations. This shows that companies are becoming cautious about innovation as a way to the hearts of their customers. It is also stated that innovation strongly happens when different people participate in the process itself as the organisational culture. The success of these companies also depends on their knowledge of the international standards. Therefore, the leadership drive in innovation activities become more important whereby cross-functional become part of the organisational culture.

Denning (2005) argues that innovation requires leadership to move beyond the command-and-control mode of managing, which ultimately maintains the status quo. Communication such as this creates a sense of urgency that motivates individuals to act. Specifically, leaders are advised to provide abundant information to employees about proposed changes and innovation, inform employees about the rationale for change, hold meetings to address employees' questions and concerns, and give those who feel the impact of the change opportunities to discuss how change might affect them (Rousseau & Tijoriwala, 1999). This approach enforces the relationship between leaders and their employees.

In most cases if the employees are not in a close relationship with their leaders they always do the opposite of what their leader expects. Employees feel that their leaders do not care about their well being as seen on the results of the study. Leaders on the other hand may also assume that their employees are very happy with their leadership style irrespective of the dropping productivity (Maladzhi *et al*., 2012b&d).

Lindegaard (2009) reported in a study conducted by Cross *et al*. (2006) where they discovered that companies which performed well was due to networking and as well as practicing behaviour that led to high quality relationships. The interaction between businesses, government and Universities in instrumentation industry resulted in about 44 percent of innovations and in the ring manufacturing front about 56 percent of innovations were realised. In reference to the study, the results show less interaction between companies and institution of higher learning which limits their chances of getting new ideas for innovation.

Cross *et al*. (2006) further mentions that networking helps organisations to shorten the distance so that resources and ideas can be shared effectively and efficiently depending on the relationship. Collaboration of some sought strengthens the bond between subordinates that share the same sentiments to enhance their organisational capabilities (Cross *et al*., 2006). The results show how important innovation culture is in the lives of the employees' creativity. The poor relationship between employees and their leaders in the current study was evidently due to leaders' ignorance.

The literature showed that productive companies are seen by their innovative nature. Therefore, the SMEs in South Africa lack competent leaders to create innovative culture for creativity to flourish. Employees seem to have lost hope in their leaders and are not motivated to effectively produce for their companies. These leaders do not have the necessary drive to instil innovation culture in their companies. It is also difficult for these leaders to motivate and encourage employees because they do not know how (Maladzhi *et al*, 2010; Maladzhi *et al*., 2012a). The results clearly indicate that there is no trust between employees and their leaders. The literature rightfully indicated that if there is no trust between employees and their leaders, creativity and innovation suffer in the end. Collaboration and partnership between employees and leaders set platforms for the organisations to easily network with their customers and their suppliers. The study revealed that principles of innovation culture are not visible in the South African workplace, thus people resorts to strike action in trying to solve their problems. It appears that strikes have become a language between leaders and employees for the leadership to listen to their employees' grievances. It is therefore recommended for leaders to develop innovation culture, where the needs of employees are on the forefront.

The South African leadership needs to be socialised into innovation culture so that they can acknowledge their employees' commitment by giving them benefits without

any demand. It is of vital importance that these SMEs should be led by innovative minded leaders who will have the interests of their employees at heart. Leaders continue to treat employees like machines instead of treating them as human beings who deserve appreciation of their hard work. An understanding of leadership paradigm shift is of utmost importance so that they can be sensitive towards their employees in relation to the existing times. The South African workplace is currently under transformation process. This means that people who used to be on the driving seat are now supposed to share power with people they used to lead. On the other hand, people who used to be on the receiving end are now leading yet not properly trained for these positions. The current workplace requires a different mindset that will let the past remain in the past and embrace the new era to make the workplace a safe place for creativity to blossom.

7.3 LIMITATIONS OF THE RESEARCH

This study could have reached many SMEs if the attitude of the top management was different. It was also mentioned in other studies that SMEs restrict themselves from participating in industrial surveys because of their attitudes. Many SMEs refused to give financial information, even after they were told that the focus of the study was not on the actual values but on the estimation. Most of these SMEs also delayed to return the questionnaires on time, complaining that they did not have time to fill them. It looks like there is no cooperation between these SMEs and the government. On the other hand, the government is trying to create an environment where these SMEs can survive, but they do not want to give information to the government that will help them in finding solutions to improve their environment.

7.4 DIRECTIONS FOR FURTHER RESEARCH

For further study, a national study on testing the innovative leadership model within the SMEs in the manufacturing sector can be carried out by involving large scope of samples. In addition, innovative minded leadership in the broader community of the South African workplace including government departments, schools and institution of higher learning are required to instil innovation culture.

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APPENDIX A: PERSONAL CHARACTERISTICS OF LEADERSHIP

Leadership characteristics	Authors
VISIONARY	
Realistic visions	Judge and Piccolo (2004), Bass and Avolio, (1994), Stone *et al*. (2003), Pierce and Newstorm (2008)
Enthusiastic goal setter	Saksen and Tidd (2006) and Urhuogo (2011) Stone *et al*.(2004); Sloane (2006)
Concerned about the future	Stone and Patterson (2005) and Harvey (2001); Sloane (2006)
Recognises new environmental opportunities	Redmond *et al*. (1993); Oldham & Cummings, 1996; Jung, Chow, and Wu (2003); Sloane (2006)
Open minded-thinkers	Amabile *et al*. (1995); Ford (1995); Oldham and Cummings (1996); Scott and Bruce (994); Zhou and Shalley (2003)
Optimism and confidence	Avolio & Bass, 2002; Bono and Judge (2003); Sloane (2006); Stone *et al*. (2005)
PASSIONATE	
2.1. Modelling and visibility	Lindegaard (2009). Mc Dough and Leifer (1986); Stone *et al*.(2004)
2.2. Team building	Avolio *et al*.(1999); Stone and Patterson (2005) and Block (1993)
2.3. Invests in R&D	Anthony (1998) and Sloane (2006)
2.4. Personal involvement	Ford (1995); Mumford *et al*., 2002; Zhou and Shalley (2003).
2.5. Shared decision making	Scott and Bruce (994); Zhou and Shalley (2003)
2.6. Exhibit commitment	Lussier (2006) and Ford (1995)
CHARISMATIC	
3.1. Trust and loyalty	Stone *et al*. (2005) and Avolio and Bass (2002)
3.2. Information sharing	Barron and Harrington (1981) and Denning (2005)
3.3. Honesty and integrity	Bennis and Nanus (1987); Csikszentmihalyi (1996).
3.4. Driven by employees needs	Sloane (2006) and Lindegaard (2009)
3.5. Demand high standards	Kirkpatrick (2011) and Sloane (2006)
3.6. Emotionally inclined	Hudson (1999), Barczak and Wilemon, (1989) and Bass (1990)
3.7. Masters of social skills.	Pfeffer (1998) and Denning (2005)
3.8. Entrepreneurial drive	Barron and Harrington (1981), Lindegaard (2009) and Sloane (2006)
INSPIRATION AND MOTIVATIONAL	
4.1. Empowerment	Elkins and Keller (2003), Avolio and Bass (2002)
4.2. Interpersonal skills	Anthony (1998); Sloane (2006) and Agbor(2008)
4.3. Rewards creativity	Barron and Harrington (1981) and Sloane (2003)
4.4.Listening and communication	Damanpour and Schneider (2006); Van Knippenberg and Hogg (2003)
4.5. Discover hidden talents	Doyle and Smith (2009); Bennis and Nanus (1985); Barron and Harrington (1981)
4.6.Create enthusiasm (couch)	Doyle and Smith (2009) and Sloane (2006)
4.7. Intuition	Cummings and Oldman (1997)

Leadership characteristics	Authors
4.8. supportive	Agbor (2008) and Bass (1990)
4.9. Openness	Judge *et al*.(2002); Tierney and Farmer (2002)
4.10. Knowledge transfer	Gardner (2000); Tierney and Farmer (2002)
IMMERSED IN PROGRESSIVE CHANGE	
5.1. Intellectually stimulating	Amabile *et al*.(2004) and Agbor (2008)
5.2. Adapting	House and Shamir (1993); Cummings and Oldman (1997)
5.3.Building relationships (being a good listener)	Barczak and Wilemon (1989); Cummings and Oldman (1997)
5.4. Challenging objectives	Doyle & Smith (2009); House and Shamir (1993)
5.5. Broad interests	Bennis and Nanus (1987) and Agbor, 2008)
5.6. Delights in transformational change	Deardorff, (2005) and Kirkpatrick (2011)
HIGH GAIN RISK TAKER	
6.1. Embrace continuous change	Van de Ven and Chu (1989) and Beer *et al*. (2005)
6.2. Encourages employees to think big always	West & Farr (1990) and Deardorff (2005); Ludeman and Erlandson (2003)
6.3. Takes calculated risks	Elkins and Keller (2003) and Leifer *et al*.(2000).
6.4. Always have a fallback plan	Kirkpatrick (2011); Agbor (2008) and Wheatley (2001)
6.5. Captures customers' voice	Pfeffer (1998); Lindegaard (2009) and Christensen (1997) and Northouse, P. G. (2007).
ABILITY TO ASCERTAIN EXTERNAL FACTORS	
7.1. Equipped with organisational fundamental knowledge	Meurling (2004); Agbor, 2008); Drath and Palus (1994) and Northouse, P. G. (2007)
7.2. Global thinking	Lindegaard, (2009); Avolio and Bass (2002)
7.3. Talent for networking	Jung and Avolio (2000); Deardorff (2005) and Wheatley (2001)
7.4. Ethical responsibility	Cross *et al* (2006); Lindegaard (2009); Ancona and Bresman (2007)
7.5. Values organisational culture	Anthony (1998); Ancona and Bresman (2007) and Antonakis *et al*. (2003
7.6. Socio-economic and political minded	Ancona and Bresman (2007); Sloane (2006)and Antonakis *et al*. (2003
FAST AND ACTION ORIENTED	
8.1. Customer driven	Hall (2007); Damanpour and Schneider (2006); Phillips (2007); Drucker (1985)
8.2. Competency	Ancona and Bresman (2007) and Lindegaard (2009); Litman, J.A. (2005)
8.3. Product differentiation	Hudson (1999) and Stone *et al*. (2003) and Northouse (2007)
8.4. Quick to respond	Meister (1998) and Senge (1990); Sloane (2006)
8.5. On the lookout for product positioning	Sloane (2006); Antonakis *et al*. (2003) and Agbor, 2008)
8.6. Curiosity	Rajah (2007); Agbor (2008) and Urhuogo (2011)

APPENDIX B: MEASUREMENTS OF INNOVATIVE LEADERSHIP CHARACTERISTICS

Leadership characteristics	Description of performance	Coding
1.Visionary		
Realistic visions	Capability to clearly define strategic vision	VIS1.1
Enthusiastic goal setter	Set goals focussed on new products that coincides and inspires employees	VIS1.2
Concerned about the future	Ability to make people to commit to organisational shared "vision" for the future	VIS1.3
Recognises new environmental opportunities	Top management 's involvement in new product innovation and scouts for new business opportunities	VIS1.4
Open minded-thinkers	Meaning and importance of new products have been made clear to everyone	VIS1.5
Optimism and confidence	Stimulate enthusiasm and commitment to employees	VIS1.6
2.Passionate leader		
2.1. Modelling and visibility	Ability to create the working environment that allows employees to be creative and take ownership	PAS2.1
2.2. Team building	Different functional groups encouraged to work together as a unit	PAS2.2
2.3. Invests in R&D	The availability of facilities for development work	PAS2.3
2.4. personal involvement	When management take interest in new ideas and new opportunities	PAS2.4
2.5. Shared decision making	Employees are consulted when changes are made in the business	PAS2.5
2.6. Exhibit commitment	Commitment is exhibited in every activity at hand	PAS2.5
3.Charismatic leader		
3.1. Trust and loyalty	When there is a feeling of trust among the people	CHA3.1
3.2. Information sharing	Employees are encouraged to integrate and share their knowledge and information	CHA3.2
3.3. Honesty and integrity	People are treated equally and with respect	CHA3.3
3.4. Driven by employees needs	When a leaders go all out to show interest in their employees and lead by example	CHA3.4
3.5. Demand high standards	All employees are accounted to similar privileges based on their level of responsibilities	CHA3.5
3.6. Emotionally inclined	Creates a culture that makes employees to be at ease to be creativity	CHA3.5
3.7. Masters of social skills.	Skilled to entice employees to put their differences aside and focus on the organisational value adding activities	CHA3.5
3.8. Entrepreneurial drive	Ability to motivate employees to always seek opportunities to do things different	CHA3.5
4.Inspirational and Motivation		
4.1. Empowerment	People being channeled through training programmes for skills development	INS4.1
4.2. Interpersonal skills	Ability to freely interact with people in different levels of the organisation	INS4.2
4.3. Rewards creativity	All creative ideas are welcomed and rewarded	INS4.3
4.4. Listening and communication	Ability to give attention and communicate with others	INS4.4
4.5. Discover hidden talents	When leaders invest their time to develop and mentor their employees	INS4.5

Leadership characteristics	Description of performance	Coding
4.6. Create enthusiasm (couch)	Learning opportunities being provided to spark new ideas	INS4.6
4.7. Intuition	Ability to provide induction programme to welcome new employees in order to easily fit in	INS4.7
4.8. supportive	Encouraging employees' morale at all times	INS4.8
4.9. Openness	Openness amongst management and employees for creativity	INS4.9
4.10. Knowledge transfer	Emphasises the culture of knowledge transfer	INS4.10
5.Immersed in progressive change		
5.1. intellectually stimulating	Ability to search, develop and apply new knowledge	IMM5.1
5.2. Adapting	When the company is strongly R&D oriented and searches actively for new technological knowledge	IMM5.2
5.3. Building relationships (being a good listener)	Capability of to create an open atmosphere for building relationships	IMM5.3
5.4. Challenging objectives	Ability to pioneer in the market	IMM 5.4
5.5. Broad interests	No limitations on creative ideas for innovation activities	IMM 5.5
5.6. Delights in transformational change	Sees innovation as a "vehicle" for change in the workplace	IMM 5.6
6. High gain risk taker		
6.1. Embrace continuous change	People are encouraged to solve problems creatively	HIG 6.1
6.2. Encourages employees to think big always	The work environment is conducive for creativity	HIG 6.2
6.3. Takes calculated risks	Does not always follow the protocols of the organisation but values any ideas that add value to the organisation	HIG 6.3
6.4. Always have a fallback plan	Ability to account for anything that happens in the organisation	HIG 6.4
6.5. Captures customers' voice	All ideas that put forward by customers are recognised during product innovation process	HIG 6.5
7. Ability to ascertain external factors		
7.1. Equipped with organisational fundamental knowledge	New product efforts is based on detailed and credible market knowledge	ABI 8.1
7.2. Global thinking	Products are planned from the very beginning for international markets	ABI 8.2
7.3. Talent for networking	Ability to team up with suppliers, customers, competitors and any institutions with sources of innovation	ABI 8.3
7.4. Ethical responsibility	Concerned about the morale of the employees to satisfy customers	ABI 8.4
7.5. Values organisational culture	Organisational culture can make the company to be recognised or disapproved worldwide	ABI 8.5
7.6. Socio-economic and political minded	Always concerned about the well being of communities surrounding the business and government regulations	ABI 8.6
8.Fast and action oriented		
8.1. Customer driven	All developments are customer based	FAS 8.1
8.2. Competency	Ability to search and find potential markets	FAS 8.2
8.3. Product differentiation	New product concept contains clear and visible product attributes which increase competitiveness	FAS 8.3
8.4. Quick to respond	Selection of new product efforts is based on clear criteria developed and agreed on in advance	FAS 8.4
8.5. On the lookout for product positioning	Product uniqueness is searched for	FAS 8.5
8.6. Curiosity	Ability to invest in new products persistently with no fear	FAS 8.6

APPENDIX C: LEADERSHIP QUESTIONNAIRE

Consent Form

Re: A survey on innovation culture in the workplace within the Western Cape Province

Dear Sir/Madam,

Cape Peninsula University of Technology (CPUT), Bellville Campus, is conducting a survey on innovation culture within the workplace in the Western Cape Province.

The study attempts to assess leadership style capable to foster the creation of innovation culture within the engineering and manufacturing companies in Western Cape Province.

The aim of this study is to assess if leadership can create an environment whereby employees are creative. We want to find ways of partnering with companies in making our workplace a better place to work in.

There are two questionnaires to be completed by the top management and employees. Leadership questionnaire allows the leadership to assess themselves and employees will therefore use their questionnaire to confirm. Table below gives a hint of how many employees can participate in this study, though not compulsory since companies are very busy. A minimum of one leadership can participate, equivalent to a number of employees.

No.	Numbers of employees in the company	Sample size
1	Less than 20	20
2	20 to 50	30
3	50 to 100	50
4	More than 100	60

NB: Part 3 in page 6, does not require actual values we need only estimations so that we can make reasonable analysis. We respect the participant's right to privacy. The names and identities of participants at this state can be reserved. Data will be only used for research purpose.

Kind regards,

Mr Maladzhi, R.W – Lecturer/researcher,
Department of Industrial and Engineering Systems
Contact details: 021 959 6897 or 0798864273
maladzhiw@cput.ac.za

PART 1: Individual and company's information

Gender

Male	**1**
Female	**2**

Position held in the organisation

Management	
Top manager (Director)	**1**
Senior manager (line manager)	**2**
Junior manager (Supervisor)	**3**

Number of years experience

Less than 2 years	**1**
2-5 years	**2**
5-10 years	**3**
More than 10 years	**4**

Your highest qualification

Primary school	**1**
Secondary school	**2**
College Certificate	**3**
University Degree	**4**
Others (Please indicate)	**5**

Number of employees in the company

Less than 20	**1**
20 – 50	**2**
50 – 100	**3**
101 – 200	**4**
201 – 300	**5**
301 – 400	**6**
401 – 500	**7**

1.6. Please indicate which statement best describes you as a leader (choose one option)

Your employees are important, but you prefer to make decisions without involving them.	**1**
You transform employees' personal values to motivate them supporting the organisational vision and goals.	**2**
Your focus is mainly on employees' needs rather than yourself, which encourage them to strive and flourish.	**3**
In your organisation, team members practice self-management in order to monitor and manage their own performance.	**4**
You always get employees excited first, then committed, and finally moving swiftly foresee the organisational goals in order to keep customers satisfaction.	**5**

PART 2: close-ended questions

Decision options	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Code	**1**	**2**	**3**	**4**	**5**

Statements	**Decision options**				
	1	**2**	**3**	**4**	**5**
The organisational strategic vision is clearly defined to everyone.					
I always inspire employees enthusiastically to gain confidence in what can be done.					
Management spends more time fixing organisational day to day problems rather than thinking about the future.					
We set goals for innovation including the introduction of new products and processes.					
Management communicates the benefits to the whole organisation of investing ininnovation.					
I stimulate enthusiasm and commitment of employees in the organisation.					
Management has the ability and knowledge to create an innovative culture.					
The organisation creates a good working condition for employees.					
I encourage employees to contribute ideas towards product innovation.					
Management creates a positive atmosphere in the organisation.					
Management provides training programmes for personal development.					
Management always takes responsibility in driving innovation.					
I have built a long-lasting trust relationship with my subordinates.					
I treat every individual equally in the organisation.					
I accept constructive criticism from employees and learn from it.					
In general, I solve problems effectively and efficiently.					
I always make stressful situations peacefully in the organisation.					
I make efforts to comfort employees while they are in an					

	emotional situation.					
	I discuss conflicts openly and resolve them collectively.					
	I always feel honoured when employees respect me as a good leader.					
	Every individual's contribution towards innovation is recognised by management.					
	There is strong team spirit in the organisation.					
	Employees have the liberty to participate in decision-making concerning their work situation.					
	Management recruits employees based on experience, creativity and potential talents.					
	I inspire entrepreneurial spirit to individuals in order for them to respond to the market needs.					
	There is an "open-door" policy for communication flow throughout the organisation.					
	I always try to enhance employees' morale.					
Statements		**Decision options**				
		1	**2**	**3**	**4**	**5**
	Management supports change and innovation.					
	Management helps employees to understand the importance of change.					
	Management sets up cross-functional teams with clear innovation objectives, and motivate them to be radical and take risks.					
	Management involves suppliers in business activities.					
	Management always considers the impact of global competition.					
	I encourage employees to take actions for organisational development even if there is a risk.					
	I accept failure as long as the ideas are for innovation.					
	I encourage knowledge transformation among colleagues as a natural practice.					
	Management creates an effective communication channel for information flow within the organisation.					
	Management arrange jobs and tasks in accordance to					

	individual's skills and strengths.					
	Our organisation always fund and support projects for community development.					
	Our organisation uses universities as sources of innovation.					
	Our organisation periodically takes students for in-service training.					
	Management always encourages employees to attend formalized external cross-industry body meetings and seminars for networking purposes.					
	I always consider the voice of customers.					
	Market research is always conducted thoroughly before a new product launch.					
	Other companies usually take our ideas to improve their products.					
	The national innovation policy encourages me to enforce innovation activities in the organisation.					
	Management makes sure that the resources and technology are available for innovation.					
	Management always takes initiative to patent all new ideas.					
	I use challenges as opportunities for organisational growth.					

PART 3: Open-ended Questions

Please indicate which of the following factors are the contributors to the SMEs failure?

Decision options	Most important	Important	Neutral	Less important	Not important
Code	**1**	**2**	**3**	**4**	**5**

	Decision options				
	1	**2**	**3**	**4**	**5**
Understanding the leadership transition (changing times)					
Managing change					
Management skills					
Education and training					
Marketing know-how					
Technological orientation					
Product distribution					
Competition					
Networking and information sharing					

Kindly provide the approximate data of productivity components in the following period

Year	Labour hours used	Outputs (units produced)	Profitability	Number of new products introduced
2010				
2009				
2008				
2007				
2006				
2005				
2004				
2003				
2002				
2001				
Total				

APPENDIX D: EMPLOYEES QUESTIONNAIRE

Dear Sir/Madam

Re : A survey on innovation culture in the workplace within the Western Cape Province

Cape Peninsula University of Technology (CPUT), Bellville Campus is conducting a research project on "Analysis of innovative leadership and SMEs' sustainability in the Western Cape Province"

Data will be collected from the willing participants (industry) in the form of answers to questionnaires and personal interviews. In order to make it easy for the participants, the questionnaires are divided into three sections. **Part One** is a close-ended question, where participants can choose the appropriate answer with a "**tick**". **Part Two** however is a close-ended question, where participants are requested to rate their opinions by making a cross in the appropriate box with the level of agreement in each of the questions by indicating whether; **Strongly agree, Agree, Uncertain, Disagree, and Strongly disagree.**

There are no "correct" or "wrong answers". All the answers are based on actual individual and company's information. Thank you very much for your cooperation. Your participation in this research project is highly appreciated.

Yours sincerely

Wilson Maladzhi:
Cell: 0798864273: E-mail: maladzhiw@cput.ac.za or wmaladzhi@cput.ac.za

PART 1: Individual and company's information

Gender

Male	**1**
Female	**2**

Your highest qualification

Primary school	**1**
Secondary school	**2**
College Certificate	**3**
University Degree	**4**
Others (Please indicate)	**5**

Position held in the organisation

Administration staff	**1**
Team leader / Supervisor	**2**
Shop floor employee	**3**
Others (Please indicate)	**4**

Number of years experience

Less than 2 years	**1**
2-5 years	**2**
5-10 years	**3**
More than 10 years	**4**

PART 2: close-ended questions

Decision options	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Code	**1**	**2**	**3**	**4**	**5**

Statement	**Decision options**				
	1	**2**	**3**	**4**	**5**
My tasks and responsibilities are well defined and I know exactly what is expected of me.					
I am always inspired by our organisational future plans.					
My manager is dedicated and committed to the work, which encouraged me to do more.					
We are always encouraged to look for opportunities to bring something new into the market.					
The organisation provided a learning opportunity to equip me for my future prospects.					
I am very satisfied with my manager.					
I am made to believe that my ideas and my work are important.					
I am very satisfied with the working conditions.					
Every person who comes with a new idea for new product development is praised in front of everyone.					
There is a good working atmosphere without any jealously or animosity in our group.					

Statement	Decision options				
	1	2	3	4	5
There is a training programme for personal development within the organisation.					
Management creates platforms for us to move laterally within the organisation from department to department to cross-fertilize ideas and cultures.					
There is a good working relationship among different departments such as financial, marketing, manufacturing, research and development etc.					
My manager respects and treats everyone equally within the organisation.					
In our team, we value each other's ideas and comments.					
When we are looking to solve a problem we generate a lot of ideas before choosing one or two to try.					
My manager always finds ways to calm me down when I stress due to my mistakes.					
My job allows me to take ownership and responsibility in what I do.					
We discuss conflicts openly and resolve them collectively.					
I am well fitted with the culture of the organisation.					
My ideas and contributions towards new product development are recognised and rewarded.					
There is a spirit of teamwork amongst employees.					
I can easily participate in decision-making concerning my work situation.					
There is an effective communication channel for information flow within the organisation.					
The organisation employs people based on experience, creativity and potential talents.					
Communication at the workplace is open and based on mutual trust.					
The employees' morale in this organisation is always high.					
I am satisfied with my salary as well as other benefits.					
Knowledge transformation among colleagues is a natural practice in the organisation.					
The training programme improved my skills.					

Statement	Decision options				
	1	2	3	4	5
Even new employees are made to feel free to participate in new product development process.					
I have everything that I need to do my job in the best possible manner at work.					
In our organisation, we closely work with our suppliers.					
All promising ideas are well evaluated for international standard by the project team.					
We identify current products and processes that are due for retirement and replacement.					
We always reach our targets for new product development and launch.					
We are encouraged to take actions for organisational development even if there is a risk.					
Leaders always take initiatives to register our new ideas so that other companies may not copy them.					
Failure is acceptable in this organisation, as long as the ideas are new and unique.					
We easily share information and technology, which often improve our skills and knowledge					
My job tasks correspond to my skills and strengths.					
Our organisation always fund and support projects for community development.					
We work closely with universities in the province.					
From time to time there are students who come for in-service training.					
Management values customers more than employees.					
The voice of customers is always considered by the organisation.					
Market research is always conducted thoroughly before a new product launch.					
We often build prototypes or pilots to test a new idea production version.					
We select suitable ideas and prototypes in stages.					
I am very creative at work.					

Statement	Decision options				
	1	2	3	4	5
I am always curious to come up with new ideas that lead to products that are unique and add value to the organisation.					