

The influence of selected process-related factors on business success

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ABSTRACT

Successful entrepreneurship can be a major contributor to the alleviation of poverty and creation of employment opportunities. This study, through literary research and a mixed method, qualitative and quantitative empirical research, focussed on the identification of process-related factors impacting on *Perceived business success* and measuring the effect thereof on the *Perceived business success* of the participating businesses. Factors measuring *Perceived business success* were identified in order to develop a measure of business success.

Independent variables impacting on *Perceived business success* were classified into four different categories. The categories are *Entrepreneurial abilities* as measured through *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability*, the *Macro environment* as measured through *Political stability* and *Competitive landscape* and the *Micro environment* consisting of *Business management processes* measured through *Human resource management*, *Supply chain management*, *Quality management* and *Financial management*. The *Micro environment* also includes *Support received* by the entrepreneur and *Market interaction* which is measured through *Marketing* and *Customer relationship management*. The fourth category is *Business process management* which comprises of two factors, *Business process infrastructure* as measured through *Business location*, *Facility layout* and *Technology utilisation*. *Business process management* is measured through *Human resource management processes*, *Supply chain management processes*, *Quality management processes*, *Financial management processes* and *Production processes*.

The measures for the dependent variable, *Perceived business success* are *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. The effect of each of the independent variables on each of the measures of *Perceived business success* as the dependent variable were measured through 20 linear regression coefficients after the dependent variable was proven reliable and valid through drawing of a pattern matrix of Oblimin rotated-principal component factor analysis. Reliability and validity of the independent variables were established through Chronbach alpa coefficients, Kaiser-Meyer-Olkin measures of sampling adequacy and Bartlett's test of sphericity.

The measurement instrument utilised in this study was proven to be reliable and valid.

The study was based on a sample of 308 respondents that completed a structured questionnaire and 20 interviews with owner-managers for qualitative research. The majority of the respondents were between the ages of 40 and 59 and 76.8% of the respondents were male. Respondents were mostly educated, with 23.4% having post-matric qualifications. Most of the businesses had between 11 and 25 employees, but the sizes of businesses ranged between five and 200 employees. The ages of businesses ranged from start up to businesses that have been in existence for more than 30 years. Most businesses were private or closed corporations and turnovers ranged from under R2 000 000 (two million rand) to R1 000 000 000 (one hundred million rand).

Through the qualitative research it was found that there is no universal component of *Perceived business success* identified in the market, but that most entrepreneurs believe that human resources and a cohesive team are major contributors to *Perceived business success*. It was also found that the correct *Utilisation of technology* is a significant contributor to *Perceived business success*.

During the empirical research it was found that significant relationships exist between *Leadership abilities*, the *Competitive landscape* and *Perceived business success*. It was also found that *Political stability* does not have a significant impact on *Perceived business success*. With regards to business management, *Human resource management* and *Quality control* will enhance *Perceived business success*. Surprisingly, *Support received* does not have a major impact, but *Marketing* and *Customer relationship management* are important factors. When researching *Business process management* it is found that *Facility layout*, *Technology utilisation*, *Human resources*, *Quality management* and *Financial management processes* are the most significant.

Both primary and secondary objectives were met and all research questions were answered. All criteria were met to ensure the research was conducted according to research principles. Through the research, entrepreneurs in South Africa can gain insight into the creation of entrepreneurial success as well as the measurements of *Perceived business success* in order to predict outcomes accurately.

It is recommended that future research should include how the significant variables can be applied in order to enhance business success and entrepreneurship in general.

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CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Successful entrepreneurship can be a major contributor to the alleviation of poverty and creation of employment opportunities (Carree & Thurika, 2002: 3). Kiss, Danis and Cavusgil (2012: 266) believe that in emerging countries internationally entrepreneurship has a growing influence, while Glaeser, Rosenthal and Strange (2010: 1) contend that while the environment influences entrepreneurial decision, entrepreneurs have a direct impact on the local economy. Economists believe that entrepreneurship has a positive impact on the growth of the Gross Domestic Product (GDP) and employment. According to Naude (2010: 33), disparities in incomes and wealth remain pronounced, but entrepreneurship is the answer.

In the White Paper on the National Strategy for the Development and Promotion of Small Business in South Africa (1995), it is stated that small, medium and micro-enterprises (SMMEs) assist greatly in addressing the challenges of job creation and economic growth in South Africa. SMMEs also play a vital role in absorbing labour, penetrating new markets and generally expanding economies. Authors such as Audretsch, Keilbach, and Lehmann (2006: 38), Baumol, Litan and Schramm (2007: 221) and Powell (2008: 68) are all convinced that entrepreneurship drives growth and development, while creating jobs.

Sha (2006: 1), in his masters thesis at the University of Rhodes, quotes Nieman, Hough and Nieuwenhuizen (2006: 80) by stating that “within the developed and developing countries of the world, it is now generally accepted by policy-makers at local, regional and national level, that small, micro and medium-sized enterprises (SMME) are becoming increasingly important in terms of employment, wealth creation and the development of innovation”. Praag and Versloot (2007: 351) state that SMMEs have an impact on employment creation, productivity and growth as well as innovation. They also contend that entrepreneurship can have a negative effect on income per capita as the mean income of entrepreneurs are lower than what it could have been in the corporate world.

According to the Global Entrepreneurship Monitor (GEM) report of 2007, entrepreneurship in low and middle income countries is mostly need driven, thus people are starting businesses

despite having little or no business experience. Only 3.6% of entrepreneurial businesses in South Africa show growth potential and most do not become employers, indicating that a low entrepreneurial success rate is a problem (Bosma & Harding, 2007: 7). In the 2010 GEM report South Africa fared slightly better being listed as 27th out of 59 countries. The South African TEA score is 8.9%, a significant improvement over the 5.9 in 2009. The entrepreneurial activity is still considered below average however (Herrington, Kew & Kew, 2011: 4).

According to Churchill and Lewis (2000: 296), the tendency of entrepreneurs to focus on their own skill and core service or product, often ignoring the “science” of business and operational management, is the main reason for the low entrepreneurial success rate. Systems development is neglected and the owner-manager remains the main survival factor of the enterprise. During the life cycle of an entrepreneurial enterprise, the rapid growth phase is often followed by chaos, especially where there are no processes in place. The need for sound processes increases as the enterprise progresses to a rapid growth phase. Hall, Daneke and Lenox (2010: 439) argue that without processes and an awareness of sustainability entrepreneurship will remain uncertain. Hung and Whittington (2011: 526) believe that process and system theory will institutionalise entrepreneurship. They contend that entrepreneurs should use systems and technology to build legitimacy and mobilise resources.

For the purpose of this study, business processes are defined as a continuous series of tasks undertaken for the purpose of creating output. Sheer (1999: 3-6), as one of the classic authors on business processes, hold that there are many reasons why business processes can contribute towards entrepreneurial success, such as, optimising efficiency, knowledge sharing, process documentation for certification and standardisation. Smith and Fingar (2003: 18) defined a business process as the systematic discovery of what is necessary to get a job done. It also includes the mapping of steps and the management thereof, while continuously improving the methodologies, the outcome being the development of best practices and the sharing of such knowledge across the company to ensure maximum efficiency. According to Pesic and Van der Aalst (2006: 169), business processes are necessary to find the optimal manner to produce a product. Management of dynamic processes is an important issue in rapidly changing organizations. They define business processes as systems that are used to drive how the business works and determines its ability to change according to requirements. For many years the advantages of business processes have been researched.

As early as 1952 Chenery (1952: 4) said that the presence of processes enables the entrepreneur to make accurate forecasts of demand versus production output, capacity requirements and industrial technology requirements. Chenery (1952: 4) further declares that processes will lead to optimum production facility layout and ensure maximum cost efficiency and productivity. Harrington (1991: 22) shows that the biggest breakthrough in quality management during the nineteen eighties was the realisation by management that business processes, and not people, are the key to error-free performance. In 2009 Johannessen and Olsen (2009: 559) confirmed that it is through processes that innovation and competitiveness can be optimised.

For the purpose of this study it is hypothesised that *Perceived business success* is affected by a number of independent variables. These variables are classified in four groups: *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment*, consisting of various areas of *Business management*, such as *Human resources management*, *Quality management*, *Supply chain management* and *Financial management*, *Market interaction* and *Support* and lastly *Business process management*. The correlation between the independent variables and *Perceived business success* will be determined to identify the measure of impact of each on business success.

Perceived business success, for the purpose of this study, will be measured by *Sustainability*, *Business growth*, *Profitability*, and *Customer satisfaction*. Holtz-Eakin, Joulfaian and Rosen (1989: 334) and Fielden, Davidson, and Makin (2000: 295) hold that growth in annual turnover can be used as a measure of business success, while Unger, Rauch, Frese and Rosenbusch (2009: 563), Hienerth and Kessler (2006: 115) as well as Schiller and Crewson (1997: 523) use growth in employee count as a measure of business success. Kaplan and Norton (1992: 71), Schiller and Crewson (1997: 523) as well as Peña (2002: 180) agree that when new employees are appointed year-on-year to keep up with demand the business can be considered successful. Davidson, Steffens and Fitzsimmons (2009: 373) and Johnson and Soenen (2003: 367) use gross profit as a measure, but Somchai (1992: 18), Kaplan and Norton (1992: 71), Nelson and Wilson (2003: 105), Brush (2008: 21) and Keegan, Eiler and Jones (1989: 45), amongst others warn that net profit should be used as the measure. Other scholars, such as De Brentani (2003: 169), Fabling and Grimes (2007: 383), Brush, Ceru and Blackburn (2009: 481), Urban *et al.* (2008: 59) and Timmons and Spinelli (2009: 249) measure business success according the customer satisfaction, while Johnson and Soenen

(2003: 85), Kakati (2003: 447), Jensen (2001: 16) and Hon (2005: 142) look at the market position of the business.

The study will be conducted through literary research and a mixed method of empirical testing of the hypothesis that different independent variables will impact positively on *Perceived business success*. As Gauteng is considered the hub of business in South Africa, the study will be conducted in Gauteng only and subjects will be limited to entrepreneurs and managers in owner managed businesses in the small and medium-sized enterprise (SME) sector.

It is hoped that, through showing which independent variables impact on *Perceived business success* and proving the various hypothesis a new focus will develop on management of certain elements in business and that process implementation amongst entrepreneurs will increase and thereby positively affect success rates amongst entrepreneurs. Through the study a guideline will be developed to enhance business success.

Ray, Barney and Muhanna (2004: 24) felt that businesses that fail to efficiently and effectively translate their resources and capabilities into business processes cannot expect to realize the competitive advantage potential of these resources. Business potential can only be realized when business processes are implemented.

In this chapter the background to the study will be explained and the problem will be stated. Various objectives of the study will be explained and the terms to be used in the study will be defined. The scope and limitations of the study as well as the methodology will be explained.

1.2 BACKGROUND TO THE STUDY

According to Rogerson (2000: 689), the majority of entrepreneurial enterprises in Africa are started out of a need rather than opportunities. Many entrepreneurs founded enterprises but remain one-person businesses that are not very remunerative. Enterprises are often started in low-return activities and are more likely to be driven by the search for new livelihoods. Mather (2005: 607) argued that micro, small and medium-sized enterprises have a vital role to play in the South African economic growth with 54.5% of working South Africans employed by small businesses and 35% of the South African GDP (Gross Domestic Product) generated by small businesses. The informal economy is absorbing approximately 25% of the

country's labour-force. Karpak and Topcu (2010: 60) hold that the major growth in the global economy is expected to come from the SME sector.

Enterprises defined as very small, with between five and ten employees, as small, with between 11 and 50 employees, as well as medium-sized enterprises, with between 50 and 200 employees, will be included in the research. According to the National Small Business Act 102 of 1996, the classification for small businesses differs from industry to industry. The Act provides the criteria for micro, small and medium-sized businesses according to number of employees, annual turnover and total gross asset value. In general, a very small business has a headcount of five employees, small has 50 and medium has 200. A very small business has a turnover of at least R1 000 000, small has R15 000 000 and medium has between R30 000 000 and R100 000 000.

The Act defines a small enterprise as follows: "A separate and distinct business entity, together with its branches or subsidiaries, if any, including cooperative enterprises, managed by one owner or more predominantly carried on in any sector or sub-sector of the economy (National Small Business Act 102 of 1996).

According to the Amended National Small Business Act 102 of 2004, small and medium-sized businesses constitute the bulk of the established businesses. "The enterprises will usually be owner-managed or directly controlled by the owner-community. Small businesses are likely to operate from business or industrial premises, be tax-registered and meet other formal registration requirements". Classification of small or medium-sized enterprises are done in terms of assets, turnover and headcount, but differs from industry to industry and business sectors like retailing, manufacturing, professional services and construction.

SMMEs falling into the small and medium-sized business sector, according to the classification of the Amended National Small Business Act 102 of 1996, will be randomly selected from a database of entrepreneurial businesses in Gauteng and will be approached for participation in the study. The survey will include enterprises from various industries. The study will strive to determine which variables positively impact on business success, with a special focus on business process management. The relationship between independent variables and *Perceived business success* will be determined. Criteria for running a successful business will be developed to assist entrepreneurs to implement business processes and, by doing so, assist entrepreneurs in achieving a higher level of success.

1.3 PROBLEM STATEMENT

There is a need to increase entrepreneurial success rates in South Africa. South Africa has a 28.4% unemployment rate and, therefore, there is pressure on existing businesses to provide employment for a growing number of potential employees (Statistics SA, 2004). If the TEA activity (percentage of the population involved in entrepreneurial activity) does not improve, the danger exists that existing businesses will not be able to cope with the pressure. According to the 2011 GEM report (Herrington *et al.*, 2011), the TEA activity in South Africa improved to 8.9 in 2010, but is still under the average global score. The South African Government has identified small businesses in the formal sector as the solution to job creation and economic stimulation (GCIS, 2002: 41). According to Kongolo (2010: 2288), SMEs play an important role in contributing to economic development globally. In South Africa, SMEs account for about 91% of the formal business entities, contributing to between 51 and 57% of GDP and providing almost 60% of employment.

In the Herrington *et al.* (2011: 4) report, the TEA score for South Africa is cited as 8.9%, while the global average is 11.9%. When compared with countries of equal per capita income, South Africa's 8.9% against an average global score of 11.7% is still below average. When compared with other developing countries and regions within continents such as Asia and Africa, South Africa was listed as 27th out of 59 countries.

Scholars such as Kerzner (2006: 27) put the reason for the low conversion rate from start-up to established businesses down to a lack of process management and project management training. Professionals and entrepreneurs are trained and experienced in their field, but a lack of knowledge in business management and process management is found in the market, contributing to low conversion rates of start-ups to small businesses. During an empirical study by Wright (2007: 36-37) it was ascertained that 43% of entrepreneurs do not make use of developed processes in their businesses. Only 23% of chief operating officers, operations directors or operations managers have formal production management qualifications.

There is therefore a need to research the effect of independent variables and business process management on business success. It is clear that sustainability in the SMME market is necessary for job creation and economic growth. A framework for increased business success should be developed.

1.4 DEFINITIONS

These definitions are merely a short summary of the concepts. All of these concepts will be unpacked in much more depth in the literary research.

1.4.1 Entrepreneurship

Drucker (1996: 22) affirmed that “entrepreneurship” was derived from the French verb “entreprendre” and the German word “untemehmen”, both of which mean “to undertake”. Nieuwenhuizen (2004: 34) conveyed that entrepreneurship is about change, and therefore entrepreneurs are agents of change. Entrepreneurship is a way of thinking and acting that is opportunity obsessed, holistic in approach, and leadership balanced. Nieuwenhuizen (2004: 34) defined entrepreneurship as creating and building something of value, from practically nothing or creating or seizing an opportunity and pursuing it, regardless of resources currently available. Hisrich, Langan-Fox and Grant (2007: 575) expressed that entrepreneurship is a major source of employment, economic growth, and innovation, promoting product and service quality, competition, and economic flexibility. It is also a mechanism by which many people enter the society's economic and social mainstream, aiding culture formation, population integration, and social mobility.

1.4.2 Entrepreneur

Van den Berg (2007: 12) resolved that the word “entrepreneur” refers to those individuals who take risks in order to provide a product or a service to the community. An entrepreneur is the owner of an enterprise and is thus an independent business owner who takes full responsibility for the management of the enterprise. Visser (2006: 12) alleged that an entrepreneur is often the founder of the organisation and is often a person who had a unique business idea or a special skill to offer the market. Entrepreneurs have strong beliefs about a market opportunity, apply their resources, personally invest in the venture and are also responsible for the creation of wealth as they are creating employment. According to Dollinger (1999: 4), the entrepreneur has to have certain characteristics such as: tenacity, creativity, innovation and the ability to endure stress and take risks in order to make a success. Krueger (2002: 179) defines an entrepreneur as somebody who organises and manages a business and takes risks in order to make profit, but acknowledges that scholars continue to disagree on the definition of an entrepreneur.

An entrepreneur, for the *purpose of this study*, is thus defined as an owner of a small or medium-sized business, invests in the business and manages and leads the business in order to make profit.

1.4.3 Small and medium-sized enterprises

The Amended National Small Business Act 102 of 2004 divides SMMEs into various categories. Very small enterprises have a headcount of a minimum of five employees while small businesses have a minimum of 50 employees, they are more established than micro enterprises, registered and have fixed business premises. Medium-enterprises have up to 200 employees, they are still owner managed, but have more managers.

A further criterion used to distinguish between very small, small and medium-sized enterprises is annual turnover. Very small businesses have an annual turnover of at least R1 000 000 (one million rand), while small businesses have an annual turnover of at least R15 000 000 (fifteen million rand) and medium-sized businesses between R50 000 000 (fifty million rand) and R100 000 000 (one hundred million rand) (Amended National Small Business Act 102 of 2004).

For the purpose of this study SMMEs will be defined based on the number of permanent employees. The South African National Small Business Act (1996) and National Small Business Amendment Act (2004: 2) classify micro, very small, small and medium-sized businesses as businesses that employ less than 200 full-time equivalent of paid employees. The focus of this study was thus small and medium-sized businesses, as defined by this Act.

1.4.4 Business process management

Janke (2006: 12) held that business process management is an approach to management in which the focus is on the processes through which it operates and, in particular, the streamlining and optimising of these processes. Ray *et al.* (2004: 24) defined business processes as the way that the competitive advantage of a business can be realized while Lindsay, Downs and Lunn (2003: 1015) held that business processes are a series of activities that are to be followed in order to transform an input into an output. In other words, it is taking raw materials and transforming them into a product or service that can be sold to customers in a standardised form and level of quality

Ericksson and Penker (2000: 5) defined business processes as the documentation of how tasks are performed rather than describing products or services. Processes are thus a structured set of activities designed to produce an output, showing how work is done rather than what is done. In other words, processes are the specific ordering of tasks with a beginning and an end and a structure for action.

1.4.5 Business success

Rogoff, Lee and Suh (2004: 364) warned that a true definition of business success has still to be written. A starting point would be to examine success factors and issues contributing to success. According to Watson, Hogarth-Scott and Wilson (1998: 223), business success is attributable to a complex set of interrelated factors that increase the probability of success. Jemison (1987: 1093) through his research showed that success is not based on a specific set of attributes but on a variety of different factors implemented in the correct combination. Scholars from various disciplines researched the complex relationship between strategy, processes and business performance.

Gronholt and Martensen (2009: 47) identified profit and growth as the main factors for business success for most businesses. There are five other factors identified. These factors are: the ability to do business regardless of the market conditions, a culture that inspires employees to be productive, a well-developed set of company values, being a preferred employer, attracting top talent and top management who are remunerated according to company performance.

Joyce, Nohria and Roberson (2003: 69) identified eight practices contributing towards business success:

- Having a clear strategy
- Operational excellence
- Performance orientated culture
- Fast and flexible organisation
- Retaining talented employees
- Innovativeness
- Committed leadership
- Growth focus

Rauch and Frese (2000: 101) held that the Giessen-Amsterdam model of entrepreneurial success is an interdisciplinary model that assumes that there is no success without action. It recognizes that influences such as personality, human capital and environment have an effect on success. Manion and Cherian (2009: 476) asserted that business success is ultimately: sustainability, growth, profitability and delivery of whatever enticed the lead entrepreneur to enter into entrepreneurship in the first place. Entrepreneurial rewards include profits, growth, return on investment, self-actualisation and validation.

Fielden *et al.* (2000: 295) cited growth in annual turnover as a measure of business success, while Unger *et al.* (2009: 563) use growth in employee count as a measure of business success. Peña (2002: 180) agrees with Unger *et al.* (2009: 563) that when new employees are appointed to keep up with demand the business can be considered successful. Davidson *et al.* (2009: 373) use gross profit as a measure. Nelson and Wilson (2003: 105) and Brush (2008: 21) define a successful business as a business with high net profit. According to Timmons and Spinelli (2009: 249) a successful business has happy customers and Hon (2005: 142) believes that a good market position is a sign of success. *Perceived business success*, for the purpose of this study, will be measured by *Sustainability* of the business, *Business growth*, *Profitability*, *Customer satisfaction* and *Market position*.

1.5 OBJECTIVES OF THE STUDY

Objectives will be split into primary and secondary objectives.

1.5.1 Primary objectives

The primary objective of this study is twofold: firstly to identify the independent variables with regards to *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management* that could impact on the dependent variable *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability*, *Customer satisfaction* and *Market position* in small and medium-sized businesses in Gauteng province in South Africa, and secondly to measure the effect of the independent variables on the dependent variables measuring *Perceived business success* and make practical recommendations to ensure the successful management and ultimately sustainability of small and medium-sized businesses.

1.5.2 Secondary objectives

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

- To define various business terms.
- To understand the classification of small and medium-sized enterprises in the South African context.
- To gain insight into the measurement of *Perceived business success* through literary research.
- To identify independent variables that could impact on *Perceived business success* through literary research.
- To research business processes and its importance in the achievement of *Perceived business success*.
- To extract measurement criteria (items) used by various scholars to measure the dependent variable *Perceived business success* and the independent variables and construct a questionnaire.
- To collect relevant data to test the impact of independent variables on *Perceived business success*.
- To assess the validity and reliability of the measuring questionnaire used in this study.
- To assess the influence of the independent variables on the dependent variable, *Perceived business success* by means of linear multiple regression analysis.
- To provide recommendations and solutions to entrepreneurs to ensure the successful management and ultimately sustainability of small and medium-sized businesses.

1.6 SCOPE OF THE STUDY

1.6.1 Field of the study

The empirical study will focus on variables impacting on business success, with a special focus on the use of process management and the effect thereof on business success. Success measurement criteria will be developed according to the literary study, taking the measurements as developed by Elbashir, Collier and Davern (2008: 143) into consideration.

Literary research will focus on extraneous variables impacting on business success, defining and measuring business success as well as the criteria thereof and the extraction of process development principles and creating criteria towards successful process implementation.

1.6.2 Geographical demarcation

The study will be conducted on small and medium-sized enterprises in the Gauteng region of South Africa. Although the land size of Gauteng only constitutes 1.4% of the country's total area, the population comprises of 20% of the country's total population. According to information provided by the National Development Agency of Gauteng, the province is considered to be the economic engine of the country. The Gauteng economy was originally built on the mining industry, and has grown into a multi-industry economic hub. The total population of Gauteng is 9.6 million (Stats SA, 2009).

According to Gauteng tourism, Gauteng is South Africa's business capital as well as Africa's business hub. Johannesburg hosts the centre of many of the prominent industries in South Africa. It is an accessible province, setting the pace for business in South Africa (Gauteng Tourism, 2011). Gauteng is an ideal area for empirical research as it has a high population in a contained area with good infrastructure and a big market for entrepreneurs.

Figure 1.1: Geographical map of study region



Source: maps.google.co.za

1.7 RESEARCH METHODOLOGY

The research question is whether a linear relationship exists between various independent variables and *Perceived business success* as the dependent variable. The study will be done through literary research and a mixed method - qualitative and quantitative - empirical study. The literature study will seek to determine what other researchers have found about entrepreneurial success and the measurement thereof, variables impacting *Perceived business success* as identified in four categories, *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*. Variables impacting on *Perceived business success* with regards to the *Entrepreneur*, the *Macro environment* and the *Micro environment* in different managerial fields, such as Human resource management, *Supply chain management*, *Quality management*, *Financial management* and *Production processes* will be researched. Variables impacting in *Perceived business success* with regards to *Business process management* as defined in *Business process infrastructure* and *Business process management* will also be researched. The literary study will be used to identify the various factors contributing towards *Perceived business success*.

Research will be done to develop a measurement of *Perceived business success* through identification of different measurement criteria used by other scholars.

The empirical study will strive to determine the correlation between the different independent variables and *Perceived business success* as the dependent variable, with a special focus on *Business process management*. The empirical study will only involve voluntary participants, active in the SMME market. No school or university students will be involved in the study and all participants will be aware of their participation in the study. The study will not involve any sensitive questions and no identification of participants will be necessary. Full confidentiality will be ensured. No financial inducements of any kind will be offered to participants.

The stages of the empirical study will be to: specify the construct, operationalise the construct, collect the data, purify and test the data, assess reliability and validity and analyse the data through drawing different correlations.

1.7.1 Research design

According to Creswell (2009: 3), research seeks to develop relevant true statements that can explain a relationship between two variables. Research can therefore be designed through inductive or deductive strategy. Due to the fact that the conceptual framework for this research will be determined through literature research, an inductive strategy will be followed.

The research will be done through a mixed method design, using qualitative and quantitative data. Viadero (2005: 17) contends that pure quantitative research will not necessarily explain all disparities. While quantitative research is necessary, it has to be mixed with qualitative research in order to reach more complete answers. Creswell (2009: 8) agrees by saying that to include only quantitative or only qualitative research will fall short of the major approaches to research being used today. The qualitative study will be an interpretive description, based on grounded theory and will be done to validate data collected through questionnaires. While there are three qualitative methods that could be used, namely observation, interviews and focus groups, it was decided to do interviews only, due to the complexity of getting more than one entrepreneur together and the sensitivity of observing somebody at work. A sample of twenty participants will be interviewed.

Due to the fact that the participants in this study will only be measured once and the relationship between the independent and dependent variable will be determined, a descriptive quantitative design will be used (Field, 2009: 35). The survey will focus on different variables that could impact on *Perceived business success*. The variables will be in relation to *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*.

The null hypotheses, that there is no relationship between the independent variables and *Perceived business success*, will be tested. Relevant data will be collected through the means of a questionnaire and interviews. The statistical model will be fitted to the data and assessed. The probability that results occurred by change (the *p*-value) will be calculated to test whether there is a genuine effect on the dependent variable. The research will be done at a significance level of 0.05 (5%). The questionnaire and data will be tested for validity and reliability through calculating Cronbach alpha coefficients, Bartlett's test of Sphericity and

Kaiser-Meyer-Olkin measure of sampling adequacy test. Thereafter correlations will be drawn between the various independent variables and the dependent variable *Perceived business success*.

1.7.2 Literary research

The literary study will be done to direct the empirical study. The various variables impacting on business success and concepts such as process development and implementation will be researched through the use of academically acclaimed journals, articles and books.

Terms with regards to entrepreneurial success and variables will be defined. The ultimate objective of the study is to determine the effect on, and correlation between the variables and entrepreneurial success. Variables to be examined through the literary research will be *Entrepreneurial abilities*, including issues such as *Entrepreneurial attributes*, *Leadership ability* and *Strategic abilities*. The impact of the entrepreneur's locus of control and other psychological aspects, possibly impacting on business success will also be investigated. *Leadership abilities* and *Strategic ability* will be researched, as well as the components of strategy such as vision, mission and objectives.

The effect of the *Macro environment* on *Perceived business success* will be researched, including issues such as *Political stability* and *Competitive landscape*, openness of trade, governmental policies and market receptiveness and how they might impact on *Perceived business success*. Lastly the *Micro environment* will be researched in *Business management*, *Market interaction* and *Support* received. Areas such as *Human resource management*, *Supply chain management*, *Quality management*, *Financial management*, *Marketing*, *Customer relationships management*, *Business process management* and *Technology* and its impact on *Perceived business success* will be researched. One variable that will be investigated in-depth is *Business process management* due to its huge impact on all areas of business.

Sources to be included in the literary study with regards to variables impacting on business success include: Driessen and Swart (2006: 442), Van der Sluis, Van Praag and Vijverberg (2005: 5), Cassar (2006: 610), Grewal and Slotegraaf (2007: 451), De Swardt (2006: 106), McVea (2009: 491-504) and Certo, Conelly and Tihanyi (2008: 113). Care will be taken to

use the most recent sources, except where an unfolding of a concept is explained or classic sources are used.

Lastly the concept of business success will be defined and the criteria for the measurement of business success will be researched. Various measurements for business success will be researched in order to develop the best method.

Perren (2000: 58) defined success in terms of enterprise growth, sustainability and turnover. Curran and Blackburn (2001: 48) carried out much research on the subject of small business success. There has, however, not been any significant progress made. Researchers have not been taking into account the variety of factors determining success. Beaver (2002: 235) warns that it is important to note that a common measure of success in business is still to be defined. Simpson, Tuck and Bellamy (2004: 481) found that more factors impact on small business success, such as industry structure, competition, leadership and entrepreneurial skill, relationships, culture, knowledge, education and experience.

Feng, Terziovski and Samson (2006: 22) contend that the measurement of business success is ill defined and separated the concepts of business success and operational success. For the purpose of this study the presence of well-developed and implemented business processes, and the effect thereof on business success, will be researched. However, all other variables affecting business success should also be researched in order to fully comprehend the contribution processes will make towards business success. Other sources used to research business success will include: Vos, Yeh, Carter and Tagg (2007: 2648), Hienerth and Kessler (2006: 115), Simpson and Ashworth (2009: 4697), Quesada and Gaza (2007: 5) and Walker and Brown (2004: 593).

1.7.3 Empirical study

The main purpose of the empirical study will be to investigate the impact of selected independent variables on the dependent variable *Perceived business success* by means of linear multiple regression analysis. Quantitative data will be collected through a questionnaire and qualitative data through face-to-face interviews.

While the dependent variable will be *Perceived business success*, as measured through various criteria, the independent variable will be the various variables impacting on business

success as extracted through the literature research. The questionnaire will be developed in accordance with the literary research.

The empirical study will be done over a short period to minimize the effect of maturation that can occur during the study. Each entrepreneur in the sample will only fill in the questionnaire once to avoid testing carryover.

1.7.3.1 Study population

The study population will be owners or managers of SME's in Gauteng. The study population will be randomly chosen from a well-established database.

Matrix Marketing was founded in 1989. The company provides a web-based database service to businesses. The database lists approximately 80,000 businesses across all industries in South Africa. It contains approximately 165,000 names of executives and decision makers. The database consists of various fields. It is therefore possible to draw a list of all the operations managers and lead entrepreneurs at SME businesses in Gauteng.

Sampling will be done through random sampling of 5000 entrepreneurial businesses in Gauteng, as drawn from the Matrix Marketing database. It is hoped that 300 responses will be received. As the focus of the study will be on the SME market, only businesses with a staff complement of between five and 200 employees, and turnover of between R1 000 000 (one million rand) and R100 000 000 (one hundred million rand) will be chosen.

Random sampling will be used to ensure that data is not skewed. The database will include businesses with various turnover levels, and employee count to ensure that sampling will be as unbiased as possible. When analysing the data, personal characteristics of the entrepreneurs such as age and gender will also have to be taken into account. Each record will have a uniform inclusion probability. The sample will be drawn without replacement.

1.7.3.2 Construction of questions

Literary research will be done to determine the correct questions to ask in order to gather the correct data for analysis. Variables shall be identified and used in the construction of the questionnaire and interview template to protect the internal validity of the empirical study. Questions will be constructed to determine the existence of all variables impacting on

business success and the level of process management, the extent to which entrepreneurial businesses in Gauteng have mapped and implemented processes and the effect thereof on business success. The questions will also strive to determine the presence of extraneous variables present and affecting business success.

The questionnaire shall be using five-point Likert scales for quantitative research, as well as open text questions for qualitative research. The Likert scale is used opposed to the Guttman or Thurstone or Semantic Differential scale as according to Field (2009: 64), it is simple to construct, it is likely to produce a reliable scale and it is easy to read. Huysamen (2001: 133) warns that Likert-type statements must include information about the current situation and the ideal situation.

The Likert scale are to be used in a multiple linear regression model. An ANOVA test will be done to test the difference between the numerous variables. Observed variances are partitioned into components to explain different variables. The linear regression model will be based on the R^2 measure, the t-value and p -level.

The questionnaire is divided into four sections:

Section A: Information with regards to the business itself and the participant (demographics)

Section B: Questions with regards to independent variables impacting on *Perceived business success*

Section C: Questions with regards to *Perceived business success* and the measurement thereof

Section D: *Business process management* and the level of implementation thereof

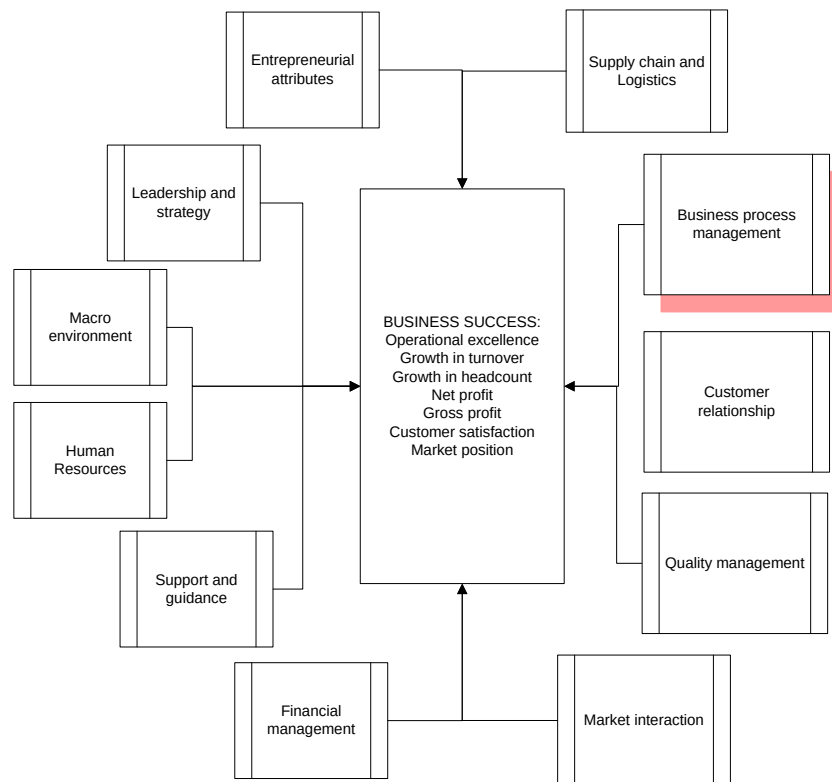
Qualitative research will determine the sample's perception of processes, and the effect thereof on the business. It will also determine the level of awareness regarding the need for systems and processes.

The ultimate objective of the questionnaire is to collect the correct data to determine the linear relationship between business process implementation, and business success. In order to come to a conclusion with regards to questions posed, the following assumptions are made:

- The questionnaire is reliable and valid
- There is a correlation between the constructs

The structure of the questionnaire is graphically depicted in figure 1.2.

Figure 1.2: Structure of questionnaire



Source: Researcher's own construction

1.7.3.3 Construct validity

Once entrepreneurs from the sample group have filled in the questionnaire, a factor analysis will be done to test the validity of the questionnaire. According to Kim and Mueller (1978: 134), factor analysis is based on the fundamental assumption that some factors are responsible for the covariation between variables and can therefore be used to test the validity and reliability of data received through a questionnaire. Gregorich (2006: 78) believes that factor analysis provides a means to test the construct validity and as such determine whether questions asked are direct measures of the correlation between independent and dependent variables. Factor analysis can also test whether evidence of construct validity is invariant across two population groups, such as female and male entrepreneurs. The results of these tests help to determine which types of quantitative group comparisons are defensible.

The reliability of the questionnaire shall be investigated by calculating Cronbach alpha coefficients on each construct. Field (2009: 134) describes the Cronbach alpha a coefficient of reliability used to measure the internal consistency or reliability of a research tool, but

warns that it is not robust against missing data. Santos (1999: 37) declared that reliability is the first priority when variables are used as predictor components in objective models and warns that it is very important to know whether a set of items would elicit the same responses if the same questions are recast and re-administered to the same respondents. Variables derived from test instruments are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the test. Golafshani (2003: 597) held that the use of reliability and validity are common in quantitative research and are providing a springboard to establish the truth about measurement tools and suggest that a correlation matrix should be done to determine which questions would make a contribution to the measurement as well as to see how big the effect would be. Adcock and Collier (2001: 529) agree that no quantitative or qualitative research can be without factor analysis and warn that measurement validity is concerned with whether operationalization and the scoring of cases adequately reflect the concept the researcher seeks to measure.

Certain assumptions will be made, such as: that a normal distribution exists, that the same variances will exist throughout the sample and that business process management is an independent variable and not affected by any other variable. Descriptive statistics will be done to determine the distribution in data and to determine the normality. This will also be used to identify problems with the data. Scatter plots will be drawn to graphically depict the relationship between business process implementation and business success.

1.7.3.4 Gathering of data

A web-based survey tool, Stellar Survey, are to be used to gather data from the sample. Printed questionnaires will also be handed out to entrepreneurs who prefer to complete the questionnaire on hard copy. Through the Stellar Survey tool each participant in the sample will be sent a hyperlink to the questionnaire. The subject will be able to fill in and submit the questionnaire on the internet, which will take approximately 20 minutes.

An introductory e-mail shall be sent to the sample group. A telephone call will be made by field workers to ensure that the e-mail has been delivered and to answer any questions asked about the study and confidentiality of the answers. All participants will then receive a follow-up mail as a reminder. Once the questionnaire has been filled in and submitted on the web the system will alert the researcher, who will download and print the form. Any forms not relevant to the study will be deleted off the system. This could include forms from corporate

or micro organisations, forms that are not completely filled in, or forms filled in from entrepreneurs outside of Gauteng.

Face-to-face interviews will be held with twenty entrepreneurs forming part of the sample group to collect further qualitative information and validate the data received from the online questionnaire responses. In the gathering of data from participants, it will be ensured that the participants are active in the businesses they are representing. These participants will be asked to be as open and honest as possible. Responses to the electronic questionnaire will be submitted anonymously and participants will be assured of confidentiality during face-to-face interviews. Data received will be recorded in Microsoft Excel spread sheets and analysed.

1.7.3.5 Statistical analysis

The results of the survey will be statistically analysed by means of descriptive statistics, after summarising the data on an Excel spread sheet, calculating the data and drawing tables to find means, frequencies, standard deviations and draw correlations. The statistical processing of the data will be done with the help of the Statistical Consultation Service of North-West University, by means of a software program Statistica.

The objective of statistical analysis is to draw information from data. Raw data will be collected according to the literary research and determine the choice of procedures. Data will be prepared to check for missing or repeated values and errors (Zikmund & Babin, 2007: 608). Brantmeier (2004: 54) added that the selection of statistical procedures is an integral part of the research process. Descriptive statistics, such as: means and standard deviations will be used for analysis. The variables will be analysed using ANOVA in order to assess the effect the independent variable will have on the dependent variables.

For the purpose of this study, a factor analysis will be done through the Bartlett's test of sphericity to test the significance of each question and relationship. A Kaiser-Meyer-Olkin Measure of sampling adequacy (KMO) test will be done to determine the appropriateness of the data. Field (2005: 640) explains that the KMO test shows whether the sample is adequate and the Bartlett's test of sphericity indicates whether the patterns of correlations will yield reliable factors. A reliability test will be done through a Cronbach alpha test to test whether the instrument produces consistent results if the test is repeated. The Cronbach alpha test calculates the mean of all reliability coefficients. Cronbach alpha coefficient ranges in value

from 0 to 1. The higher the score, the more reliable the generated scale is. A score of 0.7 is seen to be an acceptable reliability coefficient. Trochim and Donnelly (2008: 84) declare that reliability in research means that the data is repeatable and consistent. In other words if the same test is done twice the outcome would be the same. Reliability is expressed as a ratio of true level on the measure/ the entire measure or the variance of the true score/ the variance of the measure. Certain assumptions were made, such as: that a normal distribution exists, that the same variances will exist throughout the sample and that independent variables are not affected by any other variable. Descriptive statistics will be done to determine the distribution in data and to determine the normality. This will be used to identify problems with the data.

As suggested by Van der Merwe (2009a: 55), the relationship between the constructs, the independent variables and *Perceived business success* as the dependent variable will be examined. According to Zikmund and Babin (2007: 577), a correlation coefficient is a statistical measure of covariance, or association between two variables. The correlation coefficient, r can test from -1 to +1. +1 will represent a perfect positive correlation. If r is 0 there is no correlation -1 will represent a perfect negative relationship. A five-point scale will be used, where the participant could absolutely agree with a statement (5), agree with a statement (4), have a neutral view (3), disagree with a statement (2) or absolutely disagree with a statement (1). In order to determine the significance of the correlation the t -value and p -level will be used. The significance of the correlation will be considered statistically significant if $p < 0.05$ and acceptable if $p < 0.10$. Once the correlations have been drawn the statistical data will be analysed, conclusions drawn and recommendations will be made.

1.8 LIMITATIONS

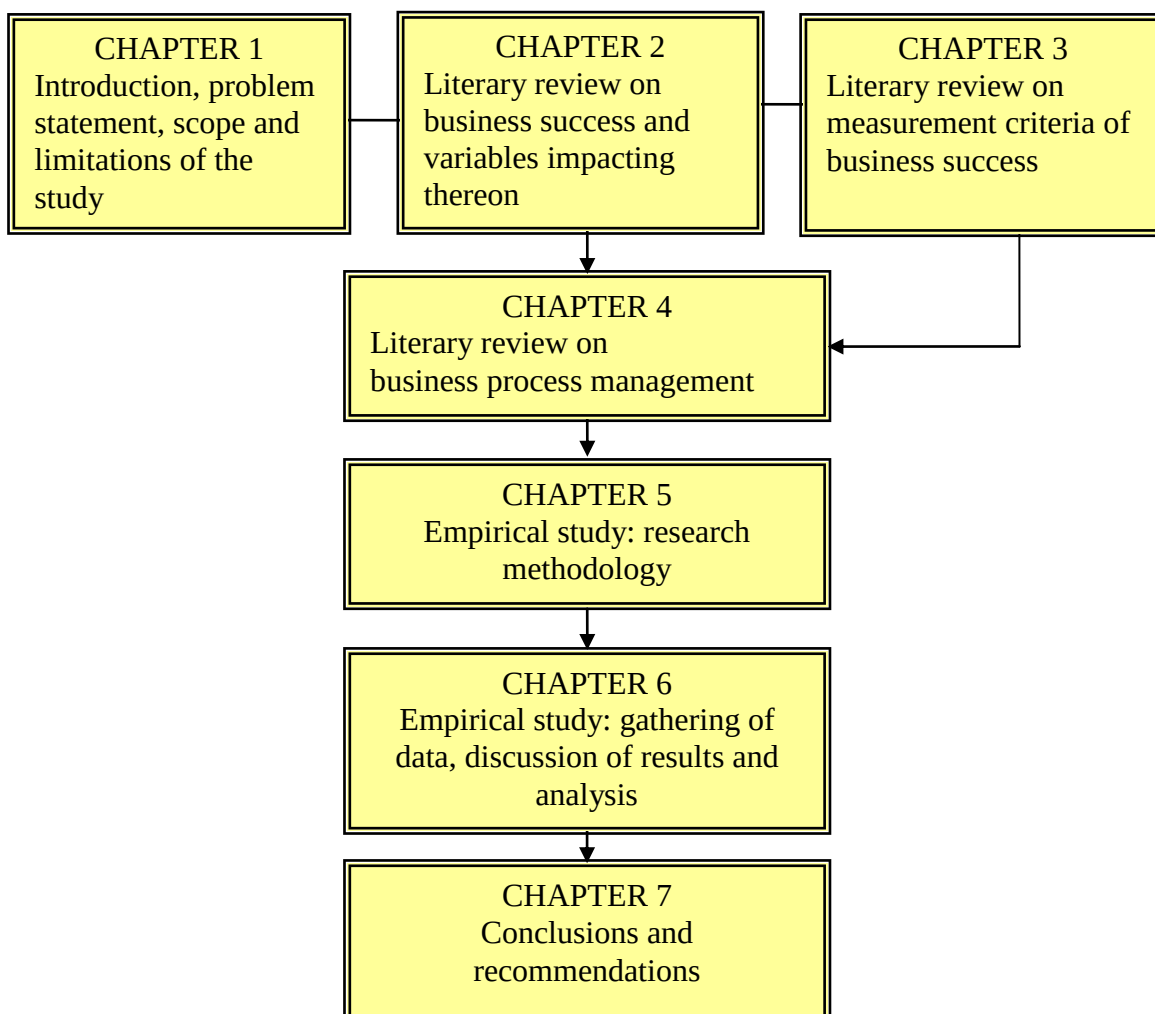
Due to the vastness of the topic, the study was limited to four factors of *Perceived business success* and three groups of independent variables, being *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment*, with a special focus of *Business process management*. The study will be limited to entrepreneurial organisations in the Gauteng region, with a staff complement of between five and 200 employees and a turnover of between R1 000 000 and R 100 000 000. The study will focus on variables impacting on SME businesses. Demographic information will include age, gender, marital status and qualifications. Information about the business will include amount of employees, years in business, legal status and turnover as well as the industry it operates in. Research shall be limited to businesses that fall within the description of small and medium-sized business according to the National Small Business

Act (1996). The result of the study is therefore not national but limited to Gauteng. It will not be a measurement of entrepreneurship throughout South Africa. Other regions in South Africa might differ substantially from the business environment within Gauteng. The study shall also be limited to a sample group of 3000 entrepreneurs that will receive the questionnaire.

1.9 LAYOUT OF THE STUDY

The study is done in seven chapters and will include the nature and scope of the study, literary research about the independent variables, the dependent variable and a special focus on business processes as one of the independent variables. The study also includes empirical research resulting in an analysis of data collected and finally recommendations. The layout of the study is graphically explained in figure 1.3 and thereafter explained chapter by chapter.

Figure 1.3: Layout of the study



Source: Researcher's own construct

Chapter 1:

Chapter 1 will provide the background to the study, a problem statement, definitions about various terms used in the study, such as business success, entrepreneurship and business processes. Chapter 1 also provides the objectives of the study as well as the scope. The methodology followed to execute the research is described and the limitations of the study are explained. Finally a layout of the study is herewith given.

Chapter 2:

Chapter 2 is a literature study on variables impacting on business success. The objective of this chapter is to understand what entrepreneurs in Gauteng have to contend with and what can be managed differently in order to impact on business success. The literary research defines business success and determines variables impacting thereon. Variables impacting on business success include entrepreneurial abilities and business management issues.

The macro environment and its impact on business success is also discussed, including physical infrastructure, political and economic stability, governmental policies, openness of trade, market receptiveness and competitiveness in the market will be investigated. Issues in the micro environment described are human resources, including recruitment and selection, team cohesiveness, role definitions, performance management, internal communications and managing diversity and supply chain and logistics as well as quality management. The requirement for and impact of support is researched. Financial support includes financiers and venture capitalists. Financial management, marketing and customer relationships are also researched as variables impacting on business success. Finally the impact of and need for technology is also discussed.

Chapter 3:

In chapter 3 the criteria and components of business success are discussed. Business and entrepreneurial success are defined and the criteria for business success are classified in financial criteria and non-financial. Various existing measurement tools are investigated such as the Du Pont pyramid of financial ratios, the balance scorecard and the macro process model. A measurement model is developed in order to form a dependent variable as measured through sustainability, customer satisfaction, profitability, market position and business growth.

Chapter 4:

Chapter 4 places a special focus on one of the variables impacting on business success, namely business processes. A literature research is conducted focussing on the development of processes and the mapping and implementation thereof. The history of business process management is researched, business processes as well as business process management are defined and elements of business processes are identified. Components of business process management discussed are production, and the development and implementation thereof, facility layout, quality control, financial processes, human resources, supply chain and logistics and technology. Different stages of business process management such the extraction of activities, development of processes, critical path analysis, and implementation of processes, maintenance and continuous improvement are discussed. Advantages of business process management and critical success factors are researched

Chapter 5:

Chapter 5 is a description of the research design and methodology, including sampling methods, testing criteria and testing tools. The conceptual model and the various hypotheses are described. The research model and methodology is described, including the quantitative research and qualitative research. The population and the sample are explained, as well as data collection methods. The research design is described in detail as well as the design of the questionnaire and interview template. The method of conducting interviews as well as the reliability and validity testing are described with a description of statistical analysis.

Chapter 6:

Chapter 6 will be the analysis of the data acquired. The demographics of the respondents are explained, as well as the business classifications and information. The outcome of the factor analysis is described and finally the data will be analysed through a multiple linear regression. The findings of the statistical analysis are described in chapter 6.

Chapter 7:

Chapter 7 will be the last chapter and will include a conclusion and recommendations. The outcome of the study will be used to make recommendations and contribute towards the defining and measurement of business success, the variables impacting on business success and the successful management thereof in order to enhance entrepreneurial success in Gauteng.

CHAPTER 2

AN OVERVIEW OF THE VARIABLES IMPACTING ON BUSINESS SUCCESS

2.1 INTRODUCTION

It is important to identify and employ the success factors of small and medium-sized enterprises (Asri & Baker, 2000: 17). SMMEs create substantial job opportunities as they normally use labour intensive technologies, thus employing more people in relation to investment than larger organisations. Other policy makers, such as Thurik and Wennekers (2004: 140) believed that issues such as job creation, economic growth and globalisation would be positively affected by a strong entrepreneurial culture.

Scholars, such as Shane and Venkataraman (2000: 217-226) have researched factors of business success. The traditional use of financial measurements and ratios to determine the level of success for a business is insufficient to show the complexity of business. Entrepreneurship is a complex phenomenon with many variables impacting on the success thereof. Such factors include societal, strategic and entrepreneurial capabilities and the interaction of all the variables with each other. De Klerk and Kroon (2007: 89) added to that by listing characteristics of successful entrepreneurs as: alertness, vision, risk taking propensity, knowledge, creativity, innovation, ambition, decisiveness, determination, dedication, strong values and adaptability. Such entrepreneurs also have sufficient capital and resources. According to Lin, Li and Chen (2006: 168-181), there is no simple recipe for entrepreneurial success. Successful entrepreneurs are able to adjust strategies according to their capabilities, the human capital available and the macro environment.

Low and Abrahamson (1997: 139) asserted that efforts to identify factors that would lead to entrepreneurial success have failed due to the fact that what works in one context will not necessarily work in another. Variables that could impact on business success are growth, orientation, a positive entrepreneurial culture, and sound strategies (Low & Abrahamson, 1997: 142). A sound competitive strategy is of utmost importance and the effect of marketing and networking cannot be ignored (Gunasekarana, Laib & Cheng, 2008: 549). Low and

Abrahamson (1997: 142) argued that what may lead to success in one context may lead to failure in another. El-Namaki (1990: 78) looked at business success from the opposite side, to see what causes business failure and attributes failure to a lack of professional management skills and the entrepreneur's lack of competence in the entrepreneurial process, lack of strategic planning and lack of innovation. Lin *et al.* (2006: 168) stressed that entrepreneurship is complex and that variables will have a different impact on business success in different industries, as well as in different geographical areas. In high-tech industries, management capability might stifle innovation and research and development capabilities.

According to Brush *et al.* (2009: 481), there are three factors affecting business success, management, marketing and money. Other factors affecting business success in the form of growth include: quality of human resources, consciously managing growth and sound customer relationship management (Brush *et al.*, 2009: 481). Low and Abrahamson (1997: 435) said that the process of entrepreneurship is considered to be a success when the existence of the organisation is no longer at risk.

The variables are researched in more depth in an attempt to identify and define the most likely sources of business success. In order to do that business success has to be defined and the variables have to be researched. Variables are researched in four categories: *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*. *Entrepreneurial abilities* include *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability*. *Entrepreneurial attributes* include education, managerial skill, experience, motivation, innovation, an internal locus of control, and various psychological aspects such as an ability to handle a crisis and risk taking propensity. *Leadership* and *Strategic ability* include vision, goal setting, planning, change management, growth strategies and an exit strategy.

The *Macro environment* includes *physical infrastructure*, *Political stability*, *economic stability* and *Competitive landscape*. The *Micro environment* includes *Human resource management*, *Supply chain management*, *Support received*, *Financial management* and the various aspects of *Marketing*, such as communications, advertising, sales, networking and customer relationships.

2.2 DEFINING BUSINESS SUCCESS

Brockner, Higgins and Low (2004: 203) defined entrepreneurial success as the extent to which the needs of the stakeholders are met. Success can be sustainable or short-lived. Sustainability is achieved when the resources of the organisation are not depleted in the quest to satisfy the needs of the stakeholders. Rogoff *et al.* (2004: 365) disagreed by saying that a true definition of business success has not been written. Watson *et al.* (1998: 223) attributed business success to a complex set of interrelated factors that increase the probability of success and hold that when those factors are aligned and implemented business success will be achieved. Scholars such as Jemison (1987: 1093) said that business success is when the complex relationship between strategy, processes and business performance is aligned and all work together to the benefit of stakeholders.

The factors mostly used as a measure of business success by scholars such as Gronholt and Martensen (2009: 47) are *Profitability* and *Business growth* in turnover as well as employees. Other factors used are the ability to navigate around market conditions, the ability to increase productivity, well-executed vision and goals and being a preferred employer. Joyce *et al.* (2003: 69) believed that a clear strategy, operational excellence, excellence in performance, flexibility, employee retention, innovativeness, commitment and growth defines business success.

Rauch and Frese (2000: 101) used the Giessen-Amsterdam model of entrepreneurial success to measure business success. It is an interdisciplinary model which assumes that there is no success without action. Manion and Cherian (2009: 476) insisted that *Perceived business success* is measured by *Sustainability*, *Business growth*, *Profitability*, *Customer satisfaction* and *Market position*, in other words, delivery of whatever enticed the lead entrepreneur to enter into entrepreneurship in the first place and that entrepreneurial rewards include profits, growth, return on investment, self-actualisation and validation.

For the purpose of this study, *Perceived business success* will be defined as the achievement of sustainability through growth in turnover and headcount, favourable profit margins, a good market position and customer satisfaction as discussed by Fielden *et al.* (2000: 295), Unger, *et al.* (2009: 563), Peña (2002: 180) and Davidson *et al.* (2009: 373) who measure business

success by growth and gross profit margins. Nelson and Wilson (2003: 105) and Brush (2008: 21) used net profit as a business success measure.

2.3 VARIABLES IMPACTING ON BUSINESS SUCCESS

For the purpose of this study, the variables impacting on *Perceived business success* will be divided into four categories, namely the *Entrepreneur abilities*, the *Macro environment*, *Micro environment* and *Business process management*.

2.3.1 Entrepreneurial talent

Entrepreneurial talent and personality are considered one of the most important variables impacting on business success (Schmitt-Rodermund, 2004: 498). It is not just one kind of person who can be an entrepreneur. Entrepreneurship can therefore be open to more individuals than just one personality type. In a study conducted by Milner (1997: 56) it was found that there are various personality types that would make successful entrepreneurs. Milner (1997: 57) continued to say that the personal achiever who enjoys the aspect of personal causation in business success and enjoys positive feedback believes that he can make a difference. The successful entrepreneur is a self-starter, can tolerate stress and is self-reliant. Schaper (2005: 112) declares that the successful entrepreneur knows to cut costs, increase sales, establish efficiencies and implement strategies. Another personality type is the sales person. He is a good listener, highly social and warm and persuades people through social skill. Casson (2005: 35) also found that it is often necessary for a good manager entrepreneur to take over from the founder entrepreneur for the business to be successful. A successful entrepreneur is by nature quite competitive, is highly motivated and assertive. Another personality type is the idea generator. It is important for the idea generator to establish whether the idea is indeed an opportunity before investing in the idea.

Deakins and Freel (2003: 206) however argued that there is some dispute in relevant literature regarding whether entrepreneurial characteristics can be identified. The age-old question is whether entrepreneurs are born or made. Forbes (2005: 623) agrees that if inherent traits can affect business success, it suggests that the success or failure of the business is pre-determined and nullifies the role of learning, preparation and destiny. Gupta,

MacMillan and Surie (2004: 241) said that successful entrepreneurs are inclined to take business risks and are comfortable with change. They are innovative and will compete aggressively to achieve success. According to Anokhin and Schulze (2011: 116), balance is important for effective entrepreneurship. Proactive behaviour will enhance competitiveness and continuous learning should be a way of life. One of the key criteria is the ability to transform an innovative idea into a commercial opportunity.

Entrepreneurs tend to be more tolerant of ambiguous situations, prefer autonomy, resist conformity, are interpersonally aloof, enjoy risk-taking and are flexible and willing to change (Sexton & Bowman, 2002: 129). They have a low need for support, but these personality traits can lead to an inability to delegate and communicate. Schmitt-Rodermund (2004: 498) further explained that in general, successful entrepreneurs have a high need for achievement, are creative and innovative. Dvir, Sadeh and Malach-Pines (2010: 43) showed that entrepreneurs are risk takers and are confident whilst they have an internal locus of control. Tyszka, Cieřlik, Domurat and Macko (2011: 124) found that entrepreneurs have a need for independence and autonomy and have lots of energy. They are committed and persistent. Driessen and Zwart (2006: 442) maintained that there are more characteristics that enhance the chance of business success, a need for achievement, risk-taking propensity, a need for autonomy and a tolerance for ambiguity and endurance. Driessen and Zwart (2006: 443) highlighted the need for an internal locus of control.

Entrepreneurial talent will affect business success and work satisfaction. The relevant characteristics are the ability to set goals, emotional resilience, being a good salesman, internal locus of control and networking abilities (Owens, 2004: 470). Owens (2004: 470) further listed adaptability, competitiveness, being positive, risk and insecurity tolerance and seeking autonomy as characteristics that will positively affect business success. Helfat and Peteraf (2003: 997) defined entrepreneurial talent as complex bundles of skills and knowledge embedded in organisational processes. Wu (2007: 549) adds that entrepreneurial capabilities are the main source of competitive advantage and superior performance.

The entrepreneur is what binds the business together and ensures that resources will be used to the maximum benefit of the business (Parker, 2006: 1). Business knowledge and work experience are positively associated with entrepreneurial success (Urban *et al.*, 2008: 59). Accumulation of knowledgeable human resources and social capital has a high impact of

business success and previous experience provides unique knowledge and will become an asset to the business (Urban *et al.*, 2008: 59). Ucbasaran, Westhead, Wright and Flores (2009: 102) agree that entrepreneurial experience results in improved skills and abilities to acquire needed resources. Kuckertz and Wagner (2010: 428) add that industry experience will contribute towards creating the correct networks, drawing customers and generating sales. Research conducted by Mueller and Thomas (2001: 51) found that personality traits influence an individual's intention to become an entrepreneur and that entrepreneurial traits include a high propensity for risk taking, tolerance for ambiguity and an internal locus of control.

2.3.1.1 Education

Zacharakis and Meyer (2000: 323) maintained that management and entrepreneurial skill and experience are the most frequently used selection criteria of venture capitalists. De Groot, Nijkamp and Stough (2004: 352) agreed that entrepreneurial skill is a factor in achieving business success but found that invention and innovation are two of the most important skills entrepreneurs should have. Successful entrepreneurs have detailed knowledge of their industries and the physical stamina to build the business. This is normally because they have a better than average education and significant work experience in the industry they operate in. Studies conducted by Hayton and Zahra (2002: 33) found that the manner in which people were educated and the transferable skills they developed play a significant role in business success and entrepreneurial behaviour. Praag *et al.* (2005: 5) considered entrepreneurial education as one of the most important variables impacting on business success. Lin (2006: 207) warns that 2 areas of education are to be considered, being managerial training and entrepreneurial training, which will both influence the propensity to become self-employed and that entrepreneurial ability without managerial ability would not be sustainable.

Entrepreneurs who invested in education are more likely to have a growth strategy and run profitable businesses (Cassar, 2006: 610). This suggests that human capital investment leads to entrepreneurial success. Grewal and Slotegraaf (2007: 451) concurred and add to Cassar's (2006: 610) theory by saying that developing capabilities through training and education creates barriers to being intimidated by competitors. Superior education will enable an entrepreneurial organisation to enjoy sustainable competitive advantage. This proved the theory of Lau and Busenitz (2001: 7) that held that a lack of entrepreneurial education and organisational knowledge, as well as a lack of preparedness limit entrepreneurial success. A

lack of financial knowledge will lead to failure to accurately estimate the cost of starting and running the business and a lack of technical knowledge will lead to the entrepreneur not gaining the competitive advantage provided by technology (Audretsch & Keilbach, 2008: 1697).

According to Malcomson, Maw and McCormick (2003: 198), education is not just gained academically, but can also be acquired in the workplace and through on-the-job-training. Many scholars, such as Markman and Baron (2003: 281) consider this type of training as crucial to ensure efficiency and productivity. Bills and Hodson (2007: 261) expanded on their theory by maintaining that the level of education will play an important role in achieving business success. Several education-related factors were identified to contribute towards success and profitability. Bills and Hodson (2007: 263) found that businesses couldn't compete in a global market without sound training programmes for employees. There is evidence that employees consistently benefit from training and that workplace performance is improved through training. Employers have to make the decision to recruit highly skilled employees or train less skilled employees. The investment in training is less than the investment required to recruit and retain already skilled employees.

Kealy, Protheroe, MacDonald and Vulpe (2005: 300) stated that within a global economy, cross cultural training is also required and feel that cross cultural training has failed to meet the needs of integrating different cultures and address the organisational and environmental factors that impact on success and that it is necessary to develop interpersonal and cross-cultural skills. Patton, Marlow and Hannon (2000: 12), held that there are critical factors that form barriers to small firms engaging in education and training, such as a lack of finances.

2.3.1.2 Managerial skill

Managerial skill is an important factor influencing business success (Todtling & Wanzenbock, 2003: 367). It will determine entrepreneurial activity and the lack thereof will negatively affect entrepreneurial success. Managerial skills include: strategic management, planning, marketing, financial management, project management, time management, leadership, motivation, delegation, communication and negotiation (Kickul, Griffiths, Jayaram & Wagner, 2011: 78). Shane, Kolvereid and Westhead (1991: 432) held that

successful entrepreneurs consistently build a solid base of management skills and work in different functional areas such as production, sales, marketing and finance.

As early as 1981 Umni (1981: 54) determined that the basis of effective management of an entrepreneurial firm is planning and argue that there is a growing perception that good strategy and planning increases the likelihood of success. Several empirical studies such as Zahra, Filatotchev and Wright (2009: 248) and Rezaei, Ortt and Scholten (2012: 4063) show that firms that plan their strategies are more effective. In a study conducted by Umni (1981: 56) 120 small businesses were surveyed. It was found that small businesses go through phases of failing, starting again and learning to cope in the struggle for survival. Judgment, experience and intuition play a role in the achievement of success. Successful entrepreneurs were found to be ‘growth maniacs’, since growth is seen as the most common measurement of success. The study concludes that planning knowledge should be improved in the SMME sector.

The management of a small business differs from management in a corporate environment (LeBrasseur, Zanibbi & Zinger, 2003: 315). In smaller firms the entrepreneurial management style will be more reactive and focused on reacting to the macro environmental pressures as well as internal issues, such as cash flow problems. Kuratko and Welsch (2004: 135) as well as Watson, Cooper, Pavur and Torres (2011: 604) believed that the overriding reason for business failure lies in the lack of managerial skill. Hunger and Wheelen (2003: 10) identified various areas of management such as marketing, finance, research and development, operations and human resources. Knowledge of these areas will enhance the chances of an entrepreneur to ensure business success. Rwigema and Venter (2004: 63) expanded on Hunger and Wheelen (2003: 10) by adding that the manner in which management can contribute towards the chances of business success includes the allocation of scarce resources in the most effective way.

2.3.1.3 Ability to recognise and analyse an opportunity

Hisrich and Peters (2007: 485) insisted that the first step of entrepreneurship is to identify entrepreneurial opportunities. Such opportunities have to be sought and commercialised by entrepreneurs in order to create a business. Lesonsky (2004: 633) suggested that once the entrepreneur identified an opportunity, it has to be determined whether there is a need for the

product or service, whether it will be financially viable and whether it is operationally possible to produce the product. Timmons and Spinelli (2009: 249) built upon the theory by saying that in order to recognise opportunity, it is necessary for entrepreneurs to have intimate knowledge of customers' needs and to be market driven. The entrepreneur has to be obsessed with creating value for customers and service customers according to their requirements.

2.3.1.4 Work experience

Research done by Shane *et al.* (1991: 432) showed that the ratio of business success increases as entrepreneurs acquire experience in performing various tasks. Entrepreneurs become more efficient by focusing on the key dimensions and ignoring extraneous variables. Corman and Lussier (2001: 134) believed that, although entrepreneurs are born with entrepreneurial ability, true entrepreneurship is developed through experience over a period of years and is enhanced by personal development. Vecchio (2003: 307) agreed and expanded on the theory by saying that entrepreneurial specific work experience includes having started a business and having dealt with all the problems associated with it. It also includes having to deal with every aspect of the business, such as generating sales, developing new markets and finding ways to open channels to such markets. Li (2008: 1013) concurs by saying that entrepreneurs have to raise finance for the enterprise, deal with cash flow problems and other internal and external financial management issues and that entrepreneurial experience also includes having to break into business networks and build lasting relations with customers, suppliers, competitors and authorities.

Entrepreneurial experience however, is not enough to be a successful entrepreneur (De Swardt, 2006: 106). Entrepreneurs need experience in the industry in which the business operates. They need technical knowledge of the business operation and should be able to integrate the various operational requirements of the business, while also having experience in managing and motivating people (Zolin, Kuckertz & Kautonen, 2011: 1097). A lack of experience will lead to weak management of the business, insufficient planning and control and, ultimately, to low net profits (DeSwardt, 2006: 108). Baron and Henry (2006: 4) argued that the ability to find and recognise opportunities is necessary in conjunction with the appropriate experience entrepreneurs need. Entrepreneurial experience also brings about

expertise in evaluating new venture opportunities, building networks, acquiring resources and effective decision making to ensure entrepreneurial success (Parker & Van Praag, 2012: 31). Entrepreneurs with higher levels of education and more business experience are more likely to gain the support of venture capitalists at a lower cost (Hsu, 2007: 722). According to Hartog, Van Praag and Van der Sluis (2010: 947), experienced entrepreneurs will receive higher valuations as they are seen as a lower risk and are seen as more likely to be sensitive to protecting their own reputation and therefore more risk averse. Silva (2007: 118) contends that experienced entrepreneurs have probably already developed contacts in the labour and capital markets and have also already formed strategic alliances in order to gain financial and consulting support. Baumeister, Vohs and Tice (2007: 351) agreed and add that experienced entrepreneurs will be more self-regulated and aware of the limitations in their own knowledge. They are more adept in regulating their own behaviour. Ucbasaran *et al.* (2009: 9) found that business experience will also enable entrepreneurs to temper optimism and be more adaptable. During their study in Britain it was proven that experienced entrepreneurs with less comparative optimism would be less likely to fail. The role of realism, rather than optimism in business success is clearly defined. Over-optimism will expose the entrepreneur to more risk. It was also shown that having experienced failure would not necessarily lessen entrepreneurial optimism (Ucbasaran *et al.*, 2009: 9).

On the other hand Kuckerts and Wagner (2009: 483) proved that a negative correlation exists between sustainable entrepreneurship and business experience. They declare that experience destroys the positive relationship between sustainability and entrepreneurial intention. Kuckerts and Wagner (2009: 484) further argued that more experienced business people would have lower ethical concerns and less optimism. Experienced business people will be more aware of the possible challenge in pursuing entrepreneurial opportunities.

2.3.1.5 Motivation

According to Reiss and Cruikshank (2000: 68–69), the first step of entrepreneurship is to motivate a team of people to cohesively move towards achieving set goals. They believe that entrepreneurs that provide employees with autonomy, allowing them to use initiative without interference, will heighten motivation and allow people to feel fulfilled and have fun in the workplace. Covington and Mueller (2001: 157) identified two types of motivation, intrinsic and extrinsic motivation and hold that both types of motivation could, and probably would,

operate in synergy to positively affect business success. Barron and Harackiewicz (2001: 706) believed that intrinsic motivation is also the source of self-efficacy and an expectation of success. Tyszka *et al.* (2011: 128) agree by adding that setting extrinsic rewards before intrinsically motivated entrepreneurs or employees will do little to motivate them. It is possible to be intrinsically and extrinsically motivated which would bring about a mix of effects, further enhancing the drive towards business success. Entrepreneurs not intrinsically or extrinsically motivated stand a low chance of achieving entrepreneurial success. (Reiss & Cruikshank, 2000: 69). These results are in line with Walker, Greene and Mansell's (2006: 6) literary study showing that intrinsically motivated individuals enjoy intellectual stimulation and are likely to regulate their own behaviour.

Lambing and Kuehl (2003: 331) showed that motivation normally stems from desire and passion. A successful entrepreneur must have a passion for entrepreneurship. If there is not an overriding desire to be an entrepreneur, it will be difficult to develop the staying power to make of a success of the business. Petri and Govern (2004: 16) also found that motivation is the force that initiates and directs behaviour and insist that it is what gives entrepreneurs the ability to continue and grow the business in a committed manner to the best of their abilities. Without motivation an entrepreneur will lack the self-discipline to run the business efficiently (Chandra & Coviello, 2010: 228).

Timmons and Spinelli (2009: 264) stated that a motivated entrepreneur is goal-and-results orientated. High but realistic goals are set with a drive to achieve and grow. Such entrepreneurs have a low need for status and power, and a high passion for the product or service they offer to the market (Tang, Kacmar & Busenitz, 2012: 77). Such an entrepreneur will be aware of weaknesses and strengths of both the organisation and themselves personally. They have a good perspective of where the organisation is and where they want to take it. They have a clear perspective and a sense of humour (Patzelt & Shepherd, 2011: 226). Story, Hart, Stasson and Mahoney (2009: 391) expressed that in business motivations is a multidimensional concept. It involves expectancy for success and a need for self-reinforcement. Many researchers, such as Brandstätter (2011: 222), and Fairlie and Holleran (2012: 366) investigated the relationship between motivation, personality and behaviour. It is necessary to distinguish between intrinsic and extrinsic motivation.

Motivation is applicable for the entrepreneur himself as well as to how the entrepreneur chooses potential employees. It is also suggested that managers motivate employees according to whether they are intrinsically or extrinsically motivated (Minbaeva, 2008: 703). Story *et al.* (2009: 391) researched the Herzberg, Mausner and Snyderman theory (1959: 176) and found that intrinsic related motivational factors are often responsible for satisfaction and extrinsic related reasons were reported as a source of dissatisfaction. Motivation is a function of three factors: expectancy, instrumentality and outcome valence. It involves a tendency to work towards professional and personal goals and contains seven factors: work ethic, need for money and material wealth, a need to exert influence on others, a pursuit for excellence, competitiveness and status. The research findings of the Story *et al.* (2009: 391) study is that both intrinsic and extrinsic motivation is necessary to achieve entrepreneurial success.

In another study by Guay, Ratelle and Chanal (2008: 239) it was found that autonomous and controlled motivation is necessary to achieve success.

2.3.1.6 Innovation

According to Lienhard (2006: 271), major inventions do not just happen. Revolutionary thinkers of the past achieved innovation through being informed and knowledgeable on a wide range of topics and researching works done by predecessors. Entrepreneurs also need to prepare for creativity. In their study, Ko and Butler (2007: 365) interviewed entrepreneurs and found that they built their work on experience and education, used family, friends and acquaintances to get information about trends and remained alert while actively searching for new opportunities.

Nieman, Hough and Nieuwenhuizen (2006: 235) stated that innovation is a unique way of doing things and should be linked with strategic planning. The entrepreneur should develop a roadmap to achieve certain goals. Entrepreneurship is about making profit and growing the business, which are the measures for business success. Innovation is the beginning of a process of value creation (Tang, Kacmar & Busenitz, 2012: 77). Depending on the market conditions it may result in an improvement in the efficiency, productivity and economic viability of the organisation. The increased knowledge gained from innovation may lead to improvement in financial performance of the firm (Beugelsdijck & Cornet, 2001: 2023). Roper, Du and Love (2008: 961) said that innovation in firms has to remain a focus in order

to remain globally competitive. It is a recursive process of gaining the knowledge to undertake innovation and then to transform this knowledge into new products, services, processes or technologies. This process is termed the innovation value chain, a process of which the various steps are bound together with knowledge (Tang *et al.*, 2012: 79).

Roper, Du and Love (2006: 961) found that in order to achieve business success, it is necessary to rely on internal research and development in combination with external knowledge sources. Other scholars, such as Anselin, Varga and Acs (2000: 435) suggested that external knowledge sources of innovation would not be homogenous with the organisation. Once the knowledge has been gained the next step is the transformation of such knowledge into product and process. Earlier Martin (1996: 63) found that sources of information contributing towards innovation are input through customer contact, personnel, senior management and customers. Direct customer involvement in new innovations has been proven to be beneficial to the organisation and new product development (Anokhin & Schulze, 2009: 465). Management involvement in innovation further enhances the organisation's probability of success. This is in contrast with the traditional manner of conducting research where scientists and innovators are working in isolation (Goodale, Kuratko, Hornsby & Covin, 2011: 116).

Innovation is a key element in achieving ongoing revenue growth opportunities (Goodale *et al.*, 2011: 118). Determining the effects of innovation is a challenging aspect of management. The consequences of incorrect decisions can be costly in terms of financial investment, time and opportunity. Patterson (1998: 390) identified three factors of revenue growth through innovation and depicts the relationship between the business and its customers as a closed-loop system of input, transformation and output. The three factors are financial investment in research and development, new product revenue gain and the behaviour of revenue over time. Financial investment in new product development is costly, but will more than set off the drop in revenues from products at the end of the lifecycle (Goodale *et al.*, 2011: 118).

Timmons and Spinelli (2009: 264) said that to show true innovation, an entrepreneur has to be a non-conventional, open minded and a lateral thinker. There has to be a certain measure of restlessness with the status quo and a desire to change the way things are. (Nasution, Mavondo, Matanda & Ndubisi, 2011: 336). With innovation the entrepreneur has to have an ability to adapt and change to create solutions to problems. There is no place for fear of

failure in entrepreneurship, especially when an innovative business concept is embarked upon. The innovative entrepreneur will have a bird's eye view of how the innovation will be taken to market and how the business will be established and grown into a successful enterprise (Timmons & Spinelli, 2009: 264).

Scholars such as Prajogo and Ahmed (2006: 446) agreed that innovation is a key source of competitive advantage. Research has shown that there is a wide range of benefits to businesses that are able to implement superior innovation strategies, such as increased profits and market share. Technology research and development plays a major role in innovation (Prajogo & Sohal, 2006: 296). According to Ireland and Webb (2007: 49), correct leadership can successfully harness innovation for the organisation. Top management support and commitment is the most crucial factor towards success. When innovation brings radical change the role of leadership in innovation will increase.

Salavou (2002: 164) insisted that innovation is a significant factor in ensuring business success. According to Salovou (2002: 165), it includes the generation of new product, new processes to produce such products, the development of new markets and new relationships with suppliers. It often requires the restructuring of the company, but Coulter (2003: 384) said that, in an entrepreneurial environment, the entrepreneur is responsible for making everything happen. In order to be innovative, the entrepreneur has to take initiative. The entrepreneur has to be action orientated and be innovating on a continuous basis. Ireland and Webb (2007: 49) warns that a lack of action is a threat to business success. A successful entrepreneur is somebody who takes action, makes quick and efficient decisions and handles crises in an assertive manner.

2.3.1.7 Locus of control

Self-regulation and an internal locus of control can present itself in two different forms, a promotion focus or a prevention focus (Akça & Yaman, 2010: 3976). According to Brockner *et al.* (2004: 203), promotion focused entrepreneurs' needs motivate them and prevention focused entrepreneurs' need for security and safety motivates them. In other words, the promotion focused entrepreneur will achieve in order to fulfil needs of achievement, self-actualisation or financial gain, while the prevention focused entrepreneur will achieve to

avoid failure or lack of security. Akça and Yaman, (2010: 3976) agree by saying that both focuses are necessary during different stages of the entrepreneurial process.

Hansemark (2003: 301) found that an internal locus of control has the most significant impact on business success. This includes a need for achievement, to do everything better and faster than anybody else or better than the entrepreneur's own previous achievements (Brockner *et al.*, 2004: 203). Such an achievement motivation will be a process of planning and striving for excellence. Entrepreneurs with an internal locus of control will attribute the reason for an occurrence to themselves rather than an external factor, thus impacting business success by taking control of, and responsibility for, events. It was found that locus of control can be learned and developed (Hansemark, 2003: 301). An internal locus of control and the need for achievement is considered to be a prerequisite for entrepreneurial success. Joo, Joung and Sim (2011: 714) held that anecdotal evidence shows that a time study done with entrepreneurs after three years from start-up shows that an internal locus of control does predict entrepreneurial success.

2.3.1.8 Psychological aspects

According to Idson, Lieberman and Higgins (2000: 252), entrepreneurial success requires boundless energy. Entrepreneurs that are motivated by the need for self-actualisation or achievement are energised by success. In contrast entrepreneurs motivated by a fear of failure are energized by the possibility of failure. During the entrepreneurial process there will be areas of failure and areas of success. Zhao and Seibert (2006: 259) agree that the presence of both types of entrepreneurs in the organisation or both motivational triggers in one entrepreneur will ensure a high level of energy at all times.

Zhao and Seibert (2006: 259) categorised entrepreneurial personalities into a five-factor model and found that there are significant differences between entrepreneurs and managers. Entrepreneurs score higher on conscientiousness and openness to experience and lower on neuroticism and agreeableness. Various scholars such as Mitchell, Busenitz, Lant, McDougall, Morse and Brock Smith (2002: 93) investigated the psychology to understand the behaviour and thought processes of entrepreneurs. The term entrepreneurial cognition is being used to describe the knowledge structures, decision making processes, judgments and evaluations entrepreneurs would use. It has been found by Koellinger, Minniti and Schade

(2007: 502) that an unwarranted belief in abilities, a tendency to only regard positive events and a willingness to generalise from a small sample of observations is necessary to enable entrepreneurs to take the risk. Evidence has been found that entrepreneurial success is more likely when associated with overconfidence (Gries & Naudé, 2011: 216).

Scarborough and Zimmerer (2003: 13) acknowledged that entrepreneurship is a stressful environment, with little security and lots of pressure. There are no more pay cheques, but rather the responsibility to pay salaries. Gries and Naude (2011: 217) agreed that failure could lead to financial ruin. High levels of stress and anxiety therefore develop. De Swardt (2006: 76) found that entrepreneurship will bring about high levels of stress. With low entrepreneurial success rates, an entrepreneur has to show the psychological ability to recover from failure and start again. The danger exists that the entrepreneur will see the failure of the business as personal failure leading to a lack of confidence and discouragement.

The ability to handle stress is therefore of utmost importance (De Swardt 2006: 76). Wincent, Örtqvist and Drnovsek (2008: 232) concur that stress is the main reason why entrepreneurs decide to withdraw from entrepreneurship and the organisations they founded. Patzelt and Shephard (2011: 226) stresses that high levels of stress, combined with exhaustion and lowered compensation, are experienced by most entrepreneurs. The stresses are mainly caused by role conflict, role ambiguity and role overload. De Swardt (2006: 76) warned that another cause of stress is when stakeholder expectations become too challenging or when different stakeholders demand varying results, leading to role conflict.

Wincent, Örtqvist and Drnovsek (2008: 233) further found that it is a general occurrence that, while the entrepreneur is dealing with role conflict, ambiguity and overload he or she is also coping with a lack of tangible and intangible resources. Patzelt and Shephard, (2011: 231) held that when an entrepreneur can become flexible in handling of stress and focus on increased freedom, the propensity for withdrawal will diminish. Ürü, Çalışkan, Atan and AksuIt (2011: 538) found that stress is not the real reason for withdrawal, but that the results of stress (such as exhaustion) are. Exhaustion can be counter balanced with entrepreneurial rewards such as self-actualisation and job satisfaction (Wincent *et al.*, 2008: 233).

Entrepreneurs have specific personality traits that enable them to handle the stress of entrepreneurship (Ürü *et al.*, 2011: 538). According to Sexton and Bowman (2002: 134), it is

often these personality traits and abilities that cause the stress and loneliness for the entrepreneur. Traits such as an ability to adapt to a situation will help the entrepreneur to respond to problems and challenges. The general reluctance to delegate is another source of stress as it normally brings about work overload and anxiety. The successful entrepreneur will develop coping mechanisms such as communication skills and an induced tolerance of ambiguity (Philpott, Dooley, O'Reilly & Lupton, 2011: 161).

Entrepreneurs have to continuously make decisions. McVea (2009: 491) sympathise by saying that these decisions are made in uncharted territory and in unstable conditions. In order for an entrepreneur to have any sort of guideline as to how these decisions are to be made the entrepreneur will have to have developed an ethical position according to which decisions can be made (Perks & Hughes, 2008: 310). Often, when having to make quick decisions, ethics are being tested. Moral imagination is a system that has been developed as a methodology through which entrepreneurs can remain creative while sticking to ethical rigor (McVea, 2009: 491-504).

Sound decision making will significantly increase the chances of success (Tasa & Whyte, 2005: 119). To consistently make sound business decisions, a decision making procedure has to be implemented. According to Perks and Hughes (2008: 310), effective decision making is also more likely to achieve intended outcomes. Haphazard procedures carry the risk of ineffective or uninformed decision making. Research done by Tasa and Whyte (2005: 119) showed that higher decision making efficiency leads to higher levels of performance. Hall and Davis (2005: 1588) noted the importance of decision making and expand by saying that during a crisis situation, or when a new set of circumstances are encountered, decision making is enforced, often with limited information and time. With unplanned decision making personal biases and values will play a role in the decision.

Tasa and Whyte (2005: 120) further found that decisions are often made in groups in organisations. In order to make effective collective decisions objectives have to be identified and the requirements of a successful choice have to be determined. Kefan, Gang, Wu, Luo and Qian (2011: 79) list possible alternatives that will generate relevant data that has to be available. Such data has to be evaluated in an unbiased manner and pros and cons of the various scenarios will assist in avoiding incorrect decisions. Once the decisions are made, implementation plans are developed and results monitored (Tasa and Whyte, 2005: 122).

In order to make sound decisions and positively affect business success various alternatives are examined during decision making in order to determine the best course of action. (Kefan *et al.*, 2011: 79). Various arguments to support a point of action are developed and careful appraisals of alternatives are made. According to Certo *et al.* (2008: 113), decision making is the most critical factor in business management, impacting directly on success or failure. Dew, Read, Sarasvathy and Wiltbank (2009: 287) add that managers will make decisions through two different processes, on “gut feel” and upon analysis of the relevant data available.

Garvin and Roberto (2001: 108) warned that entrepreneurs have to develop the ability to generate many alternatives as part of the problem solving and decision making process. Many managers approach decision making through not putting enough options on the table and not evaluating each option efficiently. Bazerman (2006: 112) developed a rational decision making process, defining the problem, identifying criteria, weighting criteria, generating alternatives and deciding on the optimal scenario that will best affect business success. Sandage (2005: 245) stressed the fact that tenacity cannot be overrated. Most experienced entrepreneurs have failed a couple of times. The ability to start again after failure is what distinguishes successful entrepreneurs from the rest (Dew *et al.*, 2009: 289).

Chapman (2003: 321) established that there is a high failure rate amongst entrepreneurs. Businesses open and close and those entrepreneurs with tenacity are the only ones who will eventually achieve success. Brown (2006: 161) agreed by saying that looking back over the history of entrepreneurship it is clear that businesses can never fully claim success as the risk of failure is never completely gone. The maturity phase will always be followed by a threatening decline phase. The successful entrepreneurs are those who stave off decline the longest (Lin, 2006: 207).

Research done by Gundry and Welsch (2001: 453) showed that entrepreneurial tenacity is in line with business growth. Commitment in the face of adversity and a clear planned direction is often tested through various challenges. Lin (2006: 208) argued that tenacity is tested by the sacrifices an entrepreneur is willing to undergo to achieve set goals and objectives. Entrepreneurs often suffer from a lack of resources and pay opportunity cost in the sacrifice of a corporate career. It is only through sheer tenacity that an entrepreneur can weather the challenges and make the sacrifices. Tan (2001: 195) found that risk tolerance of the new

generation is higher than in previous years. Younger generation entrepreneurs have a stronger motivation to be innovative. Years later Tan (2005: 689) expanded on his theory by saying that willingness to take risks and to forgo short-term gain for future growth is characteristics vital for entrepreneurial success. Clemens (2006: 68) held that the general confidence in the macro environment affects entrepreneurs' propensity towards risk taking and believed that entrepreneurs that have confidence in the government of a country are more likely to take risks.

Timmons and Spinelli (2009: 253) were of the opinion that while it is necessary for the entrepreneur to be willing to take risks, risks have to be calculated and minimised. Risk has to be shared with people who can alleviate part of the risk and provide support. The entrepreneur willing to take risks will normally have a tolerance for uncertainty and the ability to work effectively in the absence of structure. Such an entrepreneur will also have a tolerance for stress and conflict and will have the ability to resolve problems and find solutions to challenges (Clemens, 2006: 72). Timmons and Spinelli (2009: 264) said that to be determined and committed, an entrepreneur has to show tenacity and decisiveness, be self-disciplined and persistent in solving problems. The entrepreneur also has to be willing to make personal sacrifices and be totally immersed in the business at hand and passionate about what they do. Memili, Lumpkin and Dess (2010: 200) warned that entrepreneurship is multidimensional, includes risk taking, the ability to handle autonomy, be innovative and proactive and to be competitive aggressive.

Entrepreneurship is known for creating ambiguous environments (Rerup, 2005: 451). The ability of the entrepreneur to interpret and respond to uncertainty is often what determines the success or failure of the enterprise (Shane & Eckhardt, 2003: 161). Caliendo and Kritikos (2008: 189) did much research on the personality characteristics that are fundamental to entrepreneurial success and identified further traits needed for achievement: a need for autonomy, cognitive skills, tolerance of ambiguity, risk-taking propensity as well as social skills, such as good interpersonal relationships and assertiveness.

Interpersonal reactivity (the ability to put yourself in the place of others) is another psychological aspect contributing towards business success (Hahn, 2000: 729). It entails the ability to approach other people and develop sustainable relationships. Entrepreneurs with high interpersonal reactivity will be better equipped to develop long-standing relationship

with clients and offer market-related products, as proved by Muller and Gappisch (2005: 737).

Entrepreneurs with social skills find it easier to interact with others. According to Baron and Markman (2003: 41), entrepreneurs depend on social skills to persuade clients and stakeholders to engage with the business. When customers and suppliers engage with a new venture, there are risks attached. They will only engage when they trust the lead entrepreneur. Bolton and Thompson (2003: 276) found that successful entrepreneurs have the ability to take responsibility for their lives as well as for their company and employees. In entrepreneurship, there is no next level. The responsibility for success or failure lies with the entrepreneur and every action will contribute positively or negatively thereto.

2.3.1.9 Ability to handle crisis

Crises, and the impromptu handling of unplanned crises, are often the cause of a lack of focus on business strategy and execution thereof Caponigro (2000: 136). Entrepreneurs turn their attention to the crisis at hand rather than servicing customers or selling (Thompson, 2004: 243). The best manner in which to insulate a business from the damaging effect of any crisis is to establish a crisis management culture and plan (Rerup, 2005: 451). Spillan and Hough (2003: 403) warned that in entrepreneurship it is certain that crisis will form part of the experience. In business, crises come in many forms.

The ability to identify areas of possible crisis and to plan solutions in advance is a factor that will contribute to business success. (Martin & Novicevic, 2010: 482). Campanella (2006: 141) warns that entrepreneurs have to have the ability to seek ways to minimise the impact of every possible crisis. Rerup (2005: 451) held that crisis management planning is the key to success, impacting on the sustainability of the business. Anticipating a crisis will lessen the impact on the business, but could also assist in turning adversity into an advantage. A crisis can bring a turning point in an organisation leading to overall improvement. Spillan and Hough (2003: 405) identified various categories of business crisis, including operational crises, technology failure, or loss of data. Fraudulent activities can also constitute crises, as can natural disasters such as a flood or an earthquake. Other crises that can develop are legal issues or publicity issues, but Dryer and Whetten (2006: 785) provide a solution by saying that a good reputation will carry an entrepreneur through a crisis.

2.3.1.10 Leadership and strategy

Wickham (2004: 153) believed that effective leadership, relationships and the correct attitude are abilities that are essential to entrepreneurial success. A good leader has the ability to delegate, direct, support and to provide employees with the autonomy to be effective and grow (Li, Arvey & Song, 2011: 520). Brush (2008: 21) expanded on Wickham's (2004: 153) theory and said that entrepreneurs are known to be leaders and innovators. They have been responsible for creating new products, new markets and new concepts. Throughout the ages, entrepreneurs have used three strategies: vision, cash flow management and sales (in that they persuade others to buy their product or invest in their ideas). Naumes, Naumes and Merenda (2007: 62) advised that maintaining the company's operational and marketing functions and controlling variances, stabilizing cash flow and achieving profitability speak of true leadership. These abilities are the keys to entrepreneurial success.

According to Eisenhardt and Martin (2000: 1105), it is an important strategy to form cooperative relationships to achieve business success. This strategy should be developed to include all industries and institutions. Dowling and Helm (2006: 483–488) acknowledged that managers should develop the capability to cultivate such cooperative relationships from early on in the firm's existence. In addition, managers have to develop the ability to create flexible strategies as well as the ability to coordinate and re-deploy resources effectively (Naumes *et al.*, 2007: 62).

Hunger and Wheelen (2003: 9) admitted that while most entrepreneurs are aware of the fact that they need to determine the strategy of the organisation, entrepreneurs often misunderstand the questions to be asked to determine strategy. Determining and executing strategy requires sound decision making on long term issues in a lot of detail and will include issues such as hours of operation, location, product lines, managerial style and marketing strategies (Spillan & Hough, 2003: 412). The entrepreneur has to develop the capability to communicate the strategy to all stakeholders and achieve buy-in from employees and managerial employees to implement strategy. Gupta *et al.* (2004: 241) argued that leadership conducive to entrepreneurial success creates visionary scenarios used to motivate teams to be committed to the vision and to commit to strategic value creation.

To be a good leader an entrepreneur should be a self-starter, have high standards, should be a team builder and make people believe in themselves. Judge, Piccolo and Kosalka (2009: 855) stated that a leader inspires others and brings the best out of them. They treat employees fairly and share the wealth that is created through the hard work of employees, but Judge, Bono, Ilies and Gerhardt (2002: 765) previously held that integrity, reliability, trust and being a team player are characteristics of a good leader. A leader must have a vision of transferring knowledge to employers and be a mentor to them with patience and urgency to teach them the skills they need to excel (Timmons & Spinelli, 2009: 261). Judge *et al.* (2002: 765) found that emergence and effectiveness: extraversion, conscientiousness, emotional stability, and openness to experience had no correlation to leadership.

Hitt, Ireland and Hoskinson (2003: 7) found that in order to execute strategic planning, entrepreneurs need strategic management skills to effectively search for opportunities. Strategic managerial skills include: commitment, sound decision making and leadership of the business to achieve a competitive advantage (Supic, Bjegovic, Marinkovic, Milicevic, & Vasic, 2010: 81). Skrt and Antoncic (2004: 107) agreed by saying that strategic planning has become of utmost importance for entrepreneurs. Strategic planning decisions are crucial for heterogeneity in business behaviour and to unlock value.

Rwigema and Venter (2004: 45) said that strategy includes the management of the long-term future of the business. It also involves being flexible, and having the ability to evolve and adapt to changes in the macro environment and navigate the business around challenges and threats. In executing strategy there are eight practices that contribute towards business success. Joyce *et al.* (2003: 65) identified the first two of these practices as to devise and maintain a clear strategy and to develop a good operational plan to achieve the strategic objectives. The third business practice is to develop a performance-orientated culture and build a fast, flexible, organisation. It is important to hold onto talented employees and to keep vigil continuously to find talent in the market (Supic *et al.*, 2010: 81).

A focus on creating industry transforming innovations and developing leadership capabilities as well as being committed to the business and its people are practices contributing towards business success. The last of the eight practices is to grow the organisation through mergers and partnerships. Specific areas requiring strategic focus are areas such as the ability to develop a vision, to set achievable goals, business planning, effectively manage change and

starting with an exit strategy in mind (Brody, 2005: 384). According to Headd (2003: 51), having and executing an exit strategy alleviates the perception that exiting is business failure.

2.3.1.10.1 Vision

Bird and Brush (2003: 258) announced that a visionary roadmap has elements of time and scope. It is value driven and has an end goal. Such end goal can be communicated to all involved to obtain buy-in and can be achieved through aligned commitment. Having a well-developed vision will create a shared purpose and will set the culture of the business. It will also determine the principles and policies and will contribute towards motivating the employees and the entire supply chain (Brody, 2005: 412). It will serve to align all stakeholders with customer requirements. The vision will influence strategy and growth.

Brush (2008: 21) later emphasised that entrepreneurial success is often an unachievable dream without a vision. The ability to see the new enterprise in five years or further into the future is essential. Successful entrepreneurs think big and decide how they want their enterprises to grow. They also have the ability to plot a roadmap of how to achieve the said vision. The vision has to be on a business and personal level (Markman & Baron, 2003: 281).

2.3.1.10.2 Goal setting

Short- and long-term goals and targets will move the enterprise in one direction, with purpose (Markman & Baron, 2003: 281). Diercks (2006: 206) cautioned that it is necessary for the business to focus on the core elements contributing towards its success. The process of setting goals includes the identification of steps to achieve the goals and allocating resources and revenue towards such steps. Trends in the industry have to be followed and goals will be adjusted to avoid unnecessary challenges along the way (Diercks, 2006: 206). Entrepreneurs have to avoid setting unreasonable goals and basing goals on incorrect or false information. Gröpel and Steel (2008: 406) advised that setting goals involves forecasts and every forecast has to include certain assumptions. Assumptions have to be kept “real” and possible. Lack of goal setting will result in a lack of sales and profits, increasing the probability of failure.

2.3.1.10.3 Business planning

Business planning is the basis of goal setting and a necessary element in business management (Brinckmann, Grichnik & Kapsa, 2010: 24) According to Smit and Cronje (2001: 130), there are various tools to assist entrepreneurs in sound decision making. All options have to be taken into account and scenario planning can be used to ascertain whether the correct decision has been taken, but Egelhoff and Frese (2009: 77) warn that there are some obstacles that will hamper sound business planning, such as a lack of knowledge, the absence of goals, resistance to change and a lack of process thinking.

In business planning, the entrepreneur has to make decisions through considering alternatives and determining which strategy the business will follow (Chwolka & Raith, 2012: 385). Cronje, Le Roux, Reed, Van Helden and Van Schoor (2002: 64) insisted that it involves identifying target markets, allocation of resources and developing a road map to determine the way to achieve the set goals. Past research, by scholars such as Chwolka and Raith (2012: 385), Brinckman *et al.* (2010: 24) and Gruber (2007: 782) showed a strong correlation between business planning and business success.

In order to achieve business success, entrepreneurs have to gain the skill to plan efficiently. For effective planning, effective forecasting is necessary (Cronje, Du Toit, Marais & Motlatla, 2004: 52). Rwigema and Venter (2004: 46) argued scenario planning is necessary in order to develop plans for different circumstances and that planning should include the extraction of customer requirements and solutions to fulfil on such needs. Krasnikov and Jayachandran (2008: 3) found that business planning includes research and development to ensure that the firm continuously develops and applies new technologies according to customer requirements. Research and development is used to develop new products and services and form a core function to develop strategy, resulting in business success.

2.3.1.10.4 Change management

Diefenbach (2007: 137) asserts that change management is not easy. Most people resist change, any change. There is a strong need for stability. Change represents moving out of a comfort zone for most people (Choi, Holmberg, Löwstedt & Brommels, 2011: 11). There is also the fear of the unknown. People only change when there are pull- and push-forces at

work, or when there is no other solution. Seth, Song, and Pettit (2002: 921) warn about overconfidence and say the success of change depends on how it is introduced, communicated and discussed. It is also important to obtain input from employees with regards to change.

According to Kirkpatrick and Ackroyd (2000: 516), the need for change management is a given. Many people are of the opinion that an organisation should be much more than a profit-generating, efficiency-improving machine. In order to improve, change is necessary. The entrepreneur that can successfully lead the organisation through change will be able to take the organisation to higher heights. Harrison (2004: 778) found that many researchers link organisational change with organisational learning. They consider building an entrepreneurial culture in which members are central to decisions and actions is of critical importance to efficiency in the organisation and leads to learning, problem solving and achievement of organisational goals.

2.3.1.10.5 Growth strategies

The probability of business success increases as the business grows in turnover and head count and shows sustainability and longevity. Growth strategy of small organisations is often due to the industry structure and performance as well as entrepreneurial motivation and attitude (Majumdar, 2010: 274). Burns (2001: 94) found that a 1% change in firm size will translate to a 7% increase in probability of success. A 1% change in age will lead to a 13% increase in success probability. An entrepreneur has to change with the business and increase in knowledge and skill in order to lead the organisation through the rapid growth phase. The survival of the firm is dependent on the entrepreneurial skill and core competencies, although resource limitation could counteract competencies (Hamel & Prahalad, 2002: 223).

Sha (2006: 441) detected that there are different challenges in each stage of an organisation. The external environment could provide barriers to growth. Growth strategies should take such factors into consideration to enable the entrepreneur to manage the business through the obstacles. By the time the organisation has reached the growth phase, many of the obstacles have been overcome, but Patel, Pieper and Hair (2012: 99) warn that new challenges will be encountered during every different stage of the business growth. Business growth creates an

upward spiral of profit, growth, increase in assets, talent and more investment opportunities (Abdellatif, Amann & Jaussaud, 2010: 108).

2.3.1.10.6 Exit strategy

One of the success factors of successful entrepreneurs is to start with an exit strategy (Wennberg, Wiklund, DeTienne & Cardon, 2010: 361). De Tienne (2010: 203) noticed that entrepreneurial exit is the process by which the founder leaves the firm they created. In some way or another, whether by death, retirement or selling, every entrepreneur will leave the firm. It is part of the entrepreneurial process (De Tienne, 2010: 203). King (2002: 23) felt that the process is not complete without an exit strategy. If the entrepreneur exits the business, even when on a high, and he or she has not developed a strategy to ensure sustainability without his or her presence, the business cannot be considered a success.

The majority of entrepreneurs start a company without an exit strategy in place (Isaksson, 2007: 143). Haverman and Khaire (2004: 438) said that the exit of the entrepreneur could have positive effects for the business. It might infuse the firm with cash, fresh ideas and management skills. The exit could also have negative effects on the firm. It could disrupt work routines and affect employee security. A business can only be considered a success if it can operate independently of the founder.

2.3.1.11 Summary

The literature shows that the entrepreneur plays a major role in the success in the business. Table 2.1 shows a summary of authors addressing the various components. The components refer to questions asked in the empirical study.

Table 2.1: Entrepreneurial characteristics and skill

B5	Characteristics	Motivated to make a success	Reiss & Cruikshank (2000: 68) Covington & Mueller (2001: 157) Barron & Harackiewicz (2001: 706) Walker, Greene & Mansell (2006: 6) Lambing & Kuehl (2003: 331) Petri & Govern (2004: 16) Casson (2005: 35) Schmitt-Rodermund (2004: 498) Tyszka, Cieřlik, Domurat & Macko (2011: 128) Chandra & Coviello (2010: 228) Tang, Kacmar & Busenitz (2012: 77) Patzelt & Shepherd (2011: 226) Story, Hart, Stasson and Mahoney (2009: 391) Brandsttter (2011: 222) Fairlie & Holleran (2012: 366) Guay, Ratelle & Chanal (2008: 239)
B7	Characteristics	I am a risk taker and often take risks	Gupta, MacMillan & Surie (2004: 241) Sexton & Bowman (2002: 129) Schmitt-Rodermund (2004: 498) Driessen & Swart (2006: 442) Dvir, Sadeh & Malach-Pines (2010: 43)
A4	Education	Highest qualification	Van der Sluis, Van Praag & Vijverberg (2005: 5) Cassar (2006: 610) Grewal & Slotegraaf (2007: 451) Bills & Hodson (2007: 261) Kealy, Protheroe, MacDonald & Vulpe (2005: 300)
B1	Education	Has entrepreneurial training	Owens (2004: 470) Helfat & Peteraf (2003: 997) De Groot, Nijkamp & Stough (2004: 352) Bills & Hodson (2007: 261) Lin (2006: 207) Grewal & Slotegraaf (2007: 451)
B2	Education	Have done managerial training	Urban, Van Vuuren & Barreira (2008: 59) Hayton & Zahra (2002: 33) Todtling & Wanzenbock (2003: 367) Todtling & Wanzenbock (2003: 367) Shane, Kolvereid & Westhead (1991: 432) Kuratko & Welsch, (2004: 135) Watson, Cooper, Pavur & Torres (2011: 604)

B18	Education	Have done operational training	Lau & Busenitz (2001: 7)
B3	Abilities	I find it easy to find new opportunities	Hisrich and Peters (2002: 575) Lesonsky (2004: 633) Tyszka, Cieřlik, Domurat & Macko (2011: 124)
B4	Abilities	Years of experience	Mueller & Thomas (2001: 51) Zacharakis & Meyer (2000: 232) Malcomson, Maw & McCormick (2003: 198) Milner (1997: 56) Ucbasaran, Westhead, Wright & Flores (2009: 102) Kuckertz v Wagner (2010: 524) Li (2008: 1013) Zolin, Kuckertz & Kautonen (2011: 1097). Parker & Van Praag (2012: 31)
A7	Abilities	How many years in business?	Shane, Kolvereid & Westhead (1991: 432) Corman & Lussier (2001: 134) Vecchio (2003: 307) De Swardt (2006: 106)
B6	Abilities	I have the ability to delegate	Rwigema & Venter (2004: 63) Kickul, Griffiths, Jayaram & Wagner (2011: 78)
B8	Abilities	I have the ability to handle stressful situations	Scarborough & Zimmerer (2003: 13) De Swardt (2006: 76) Wincent, Örtqvist & Drnovsek (2008: 232) Sexton & Bowman (2002: 134)
B9	Abilities	I have the ability to make sound decisions	McVea (2009: 491-504) Tasa & Whyte (2005: 119) Certo, Conelly & Tihanyi (2008: 113) Garvin & Roberto (2001: 108) Bazerman (2006: 112)
Leadership and strategy			
B10	Leadership	I find it easy to lead others to share my vision	Wickham (2004: 153) Brush (2008: 21–27) Gupta, Mac Millan & Surie (2004: 241) Rwigema & Venter (2004: 45) Nohria & Roberson (2003: 65) Brush (2008: 21) Naumes, Naumes & Merenda (2007: 62)
B12	Leadership	My team form a cohesive team	Beal, Cohen, Burke & McLendon (2003: 989) Naquin & Tynan (2003: 332) Watson, Cooper, Torres & Boyd (2008: 524) Supic, Bjegovic, Marinkovic, Milicevic & Vasic (2010: 81)

B14	Leadership	Employees have bought into my objectives	Bird & Brush (2003: 258) Diercks (2006: 206) Li, Arvey & Song (2011: 520). Chwolka & Raith (2012: 385).
B15	Leadership	I can easily lead my employees through change	Diefenbach (2007: 137) Kirkpatrick & Ackroyd (2000: 516) Harrison (2004: 778) Gröpel & Steel (2008: 406) Choi, Holmberg, Löwstedt & Brommels (2011: 11).
B11	Strategy	Strategic management comes easy to me	Umni (1981: 54) Hitt, Ireland & Hoskinson (2003: 7) Egelhoff & Fese (2009: 77)
B13	Strategy	I have the ability to execute strategy	Skr & Antoncic (2004: 107) Schaper (2005: 112) Zahra, Filatotchev & Wright (2009: 248) Rezaei, Ortt & Scholten (2012: 4063)
B16	Strategy	I have a growth plan and employees have bought into it	Burns (2001: 94) Sha (2006: 441) Brinckmann, Grichnik & Kapsa (2010: 24) Majumdar (2010: 274). Patel, Pieper & Hair (2012: 99) Abdellatif, Amann & Jaussaud (2010: 108).
B17	Strategy	In have an exit strategy for when I want to retire	Headd (2003: 15) De Tienne (2010: 203) King (2002: 23) Wennberg, Wiklund, DeTienne & Cardon (2010: 361).

2.3.2 Macro environment

According to Lin *et al.* (2006: 169), there are several macro environmental factors impacting on business success. These factors include environmental hostility, political stability, and complexity of corporate governance. Dimitratos, Lioukas and Carter (2004: 19) show factors such as the availability of qualified labour, customers, suppliers and an environment conducive to entrepreneurship that will affect the entrepreneur's chances to make a success. Industrial infrastructure to sustain entrepreneurial activities is necessary and a social environment conducive to business will have an impact. An entrepreneur operating under a government encouraging new venture creation will have a bigger probability of business success (Kiss, Danis & Cavusgil, 2012: 266).

Hunger and Wheelen (2003: 9) believes that it is not possible for entrepreneurs to control the macro environment, yet they can control the micro or internal environment. It is important, however that entrepreneurs stay abreast of the changes in the macro environment and respond to changes. Issues in the macro environment that could contribute to business failure have to be identified at an early stage. Kiss *et al.* (2012: 266) also said that, while the internal environment can be controlled by the entrepreneur, the macro environment cannot be controlled. Entrepreneurs can control how they respond to the macro environment. Reuber and Fischer (2011: 660) warn that this interaction will largely determine whether the business will succeed or fail, especially when operating internationally. All variables impacting on business success are classified in internal or external environments. Further factors contained in the macro environment include government policies, community activities and availability of suppliers, creditors, market size, labour availability, union activity, interest groups and trade organisations (Hunger & Wheelen, 2003: 9).

Zott (2003: 97) expanded on Hunger and Wheelen's (2003: 9) work by saying that changes in the macro environment will affect organisational performance and change the competitive landscape. Some firms are better equipped to deal with environmental turbulence. The reasons for this are subjects of research in themselves, but they are influenced by external and internal factors. Dynamic capabilities are needed in order to steer an organisation through macro environmental turbulence. Combe and Greenley (2004: 1456) added that dynamic capabilities include having resources such as superior quality of product and service and organisational capabilities. Skills transfer and knowledge in deploying resources will be sources of competitive advantage. Dynamic capabilities are necessary to steer businesses through transformation according to macro environmental changes and challenges.

Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece and Winter (2007: 19) enhanced the theory by saying that entrepreneurs are also faced with environmental turbulence stemming from technological advances, changes in consumer demand, and new regulations.

Various aspects of the macro environment have to be considered and navigated around. Entrepreneurs have to be aware of changes in the macro environment and realise that it cannot be controlled.

2.3.2.1 Physical infrastructure

SMMEs in urban areas have a bigger chance of survival due to the close proximity to infrastructure. Rogerson (2004: 768) identified that infrastructure such as access to water, electricity, roads, telecommunications, public transport, postal services and police protection positively affect the business. Cronje *et al.* (2004: 117) also identified resources required by entrepreneurs as roads, water, communication, offices, etc., and say that governments are required to provide access to such infrastructure. The absence thereof will seriously inhibit an entrepreneur's ability to perform at optimal levels. At the same time, it is the entrepreneur's responsibility to apply the resources in a responsible and efficient manner.

Rooney (2009: 283) concurred that solid infrastructure is critical to sustained growth. Smart businesses will focus on building and applying infrastructure in the best way possible. In order to run an organisation in the most efficient manner, physical infrastructure as well as technical infrastructure is required. Reuber and Fischer (2011: 660) hold that where infrastructure is lacking due to a lack of supply of technology, bandwidth, or other resources the entrepreneur will be faced with challenges. A lack of infrastructure will increase operational cost, for example where electricity supply is intermittent, and the business will have to invest in backup power supply. Cronje *et al.* (2004: 117) warn that successful organisations, seeking to grow will want to expand into new markets, merge or acquire new businesses. If infrastructure fails to grow in line with the business growth, a vicious cycle can begin. The company will struggle to supply the necessary tools and resources to new employees, who will then be rendered ineffective.

2.3.2.2 Political stability

Kholdy and Sohrabian (2007: 495) believed that where there is political stability, foreign investment would be attracted. Much research has been done in the field of foreign investment and the effect thereof on entrepreneurial stability in developing countries. Researchers argue that crucial obstacles against business success include the lack of confidence through corruption by financial and political elites. Government officials of unstable developing countries often consider financial contributors a threat to their power and thus curb opportunities for entrepreneurs. Research by Hofstede (2001: 308) showed that political stability and national culture will affect managers' strategic thoughts and actions.

Political stability will also affect the patterns of managerial thinking, feeling and acting and entrepreneurs will respond to strategic choices in different ways depending on the political situations in the country.

It is not only country politics that will have an effect on business success. According to Hillman, Keim and Schuler (2004: 837), internal corporate political activity will also affect the sustainability of the organisation. Corporate politics is multi-faceted. It includes issues such as policies, strategic timeframes, negotiation tactics and decision making. Issues that will influence the political situation include business specific characteristics, industry characteristics and institutional conditions. Barron's (2010: 101) research showed that managers wouldn't abandon their own political mentalities when engaging in business activities. Country and corporate political activities cover multiple activities that differ across different cultures. Firms are becoming increasingly politically active. The result is that politically active managers will make allowances for political instability and thus lose focus on business objectives (Hofstede, 2001: 308).

2.3.2.3 Economic situation

Glaeser, Laporta, Lopez-de-Silanes and Shleifer (2004: 271) highlighted the economic situation, including inflation, recession, interest rates, exchange rates, changes in market size, spending power in the market, availability of resources and competitive activity in the market as issues that will positively or negatively affect a small business. During a study undertaken in 2001 by Suzette, Van Eeden and Venter (2001: 93) respondents listed the presence of crime and violence in a community or target market as one of the main factors influencing economic stability. Financial assistance and support from government and government policies are further factors to be considered (Getz & Petersen, 2005: 219).

Glaeser *et al.* (2004: 271) concurred and added that well developed financial markets will facilitate growth potential through increasing funds available and thus reducing risk. In a strong economy, investors are more able and willing to invest in entrepreneurial enterprises. Williams and Lee (2009: 287) warn that democracy and constraints on government do not necessarily contribute towards business success, as proven in China. Good policies will positively affect business success, even within a dictatorial government.

2.3.2.4 Openness of trade

Openness of trade is the ability of the business to trade comfortably in its environment. It will increase opportunities and thus present a positive influence on business success (Meintjies, 2006: 84). Yanikkaya (2003: 57) states that openness of trade will ensure that businesses can freely import and export and will affect the exchange rates and whether there are different exchange rates for imports and exports, but openness of trade will not necessarily ensure economic growth. Sakbani (2005: 11) however believed that openness of trade will enable entrepreneurs to increase their supply of materials and product as well as globally expand their markets. It also enables them to learn from multinational organisations through benchmarking and reverse engineering. Openness of trade will enable entrepreneurs to expand trade to the maximum potential at minimum cost, thus affecting the chances of business success (Benarroch & Pandey, 2008: 157).

Agatiello (2007: 1252) warned that business facilitation is required to open markets and reduce the cost of imports and exports. The complexity of regulatory and administrative processes will affect the ease of trade and thus affect business success. Benarroch and Pandey (2008: 157) express that access to trade information and policy alignment with business strategies will assist in liberating trade and helping businesses grow. A focus by government on customs rules and procedures and entrepreneurial support in import and exports will assist in entrepreneurial growth. Improvement measures such as human resource development, information access, knowledge about and access to technology, access to finance and assistance with mergers and joint ventures will provide a path for entrepreneurial success and may pave the way for enticing more entrepreneurs to enter the import/export market (Agatiello, 2007: 1252).

2.3.2.5 Government regulations and policies

Tucker (2000: 594) puts the focus on governmental fiscal policies. Policies will seriously affect entrepreneurial success rates and will influence inflation, interest rates, exchange rates, prices and the effect of a recession on the market. Similarly, monetary policies will affect changes in discount rates and the availability of money. Helfat *et al.* (2007: 19) warn that the change in the availability of money will affect interest rates and thus the available cash flow. Fiscal policies will also affect the confidence investors will have in a specific country or area.

The amount of investment funds available to entrepreneurs will directly affect the survival ratios of entrepreneurs. Mok (2005: 537) argues that non-intervention by government can advance entrepreneurship.

Meintjies (2006: 84) believed that policies could contribute positively or negatively to business success through creating an environment conducive to business success. Heavy administrative workloads such as tax, corporate governance and other legislative requirements can work towards distracting the entrepreneur from the business at hand. Such legislative requirements often require additional budget, presenting cash flow problems. Pearce and Robinson (2005: 94) cautioned that government policies could also hinder certain industries through license requirements, limits on access to raw materials, price fixing and anti-monopoly laws. It is conducive towards entrepreneurial success when government policies provide incentives regarding entrepreneurial activity.

2.3.2.6 Market receptiveness

Entrepreneurs need to respond according to changes in the macro environment and constantly measure the appropriateness of the product or service offering. Dreyer and Gronhaug (2004: 484) appealed that new product development has to be based on market research and capabilities within the organisation have to be adjusted accordingly. Lukas and Ferrell (2000: 239) identified that when a product or a service has been developed in compliance with market requirements, the receptiveness of the market should increase and with it the demand for the product, which in turn will affect the price. Dreyer and Gronhaug (2004: 484) contend that entrepreneurs embarking on a new business should focus on research and development to ensure market receptiveness.

The timing of the launch of a company or new product depends on the receptiveness of the target market at the specific time. Dacko, Liu, Sudharshan and Furrer (2008: 441) argue that when the timing is wrong, or when the market is not receptive for the product, it will lead to significant losses. Guseo and Guidolin (2009: 806) agree that the correct window of opportunity has to be chosen to launch the product. Thus the product should be a solution to a specific current need in the market for the market to be receptive. Once the product has been launched, continuous rhythmic actions should maintain and increase market share.

In order to ensure market receptiveness in the macro environment the entrepreneur must consider the industry and the market. Ashley, Noble, Donthu and Lemon (2011: 749) insist that in certain instances the firm can determine the market receptiveness and in other industries the market receptiveness will dominate the actions of the firm. For instance, with software development the firm will determine when the market has to be receptive for the product. On the other hand the fashion industry has a seasonal rhythm, not determined or influenced by the entrepreneur (Vahaniitty, 2003: 375). Scholars such as Matsuno, Mentzer and Ozsomer (2002: 18) and Dreyer and Gronhaug (2004: 484) found that entrepreneurial proclivity and market orientation could cause tension. This suggests that market orientation could be detrimental to an entrepreneurial firm. Results of research show that entrepreneurial proclivity has a positive effect on business performance when mediated by market orientation, but negative or insignificant when not mediated by market orientation and that over awareness of the market will inhibit innovation within the business (Matsuno *et al.*, 2002: 18).

2.3.2.7 Competitive landscape

The influence of competitors in the market on business success is often underestimated. The more competitors there are the less likely it will be for an entrepreneur to charge prime prices for the product or service. Competition is about conflict and inter-competitor cooperation (Zott, 2003: 97). Contractor and Lorange (2002: 485) were able to recognise an increasing amount of cooperative arrangements between competitors. Combe and Greenley (2004: 1456) warn that it is often not easy for competitors to cooperate. Finding the balance between sharing knowledge and preserving competitive advantage and intellectual property remains a challenge.

Bergen and Peteraf (2002: 157) warned that for an entrepreneur to be successful in business it is important to be aware of the direct competition in the market, of the threat of new entrants in the market, of substitute products available and of the power a buyer or supplier can yield with regards to pricing and strategy. A lack of knowledge with regards to the competitor analysis will render an entrepreneur vulnerable to threats he or she is unaware of (Combe & Greenley, 2004: 1456). The literature shows that the entrepreneur cannot control the macro environment, but the entrepreneur should navigate around issues. Table 2.2 shows a list of

authors addressing the various components. The components refer to questions asked in the empirical study.

Table 2.2: Issues within the macro environment

Macro environment			
B19	Stability	My business environment is politically stable	LeBrasseur, Zanibbi & Zinger (2003: 315) Hunger & Wheelen (2003: 9) Kholdy & Sohrabian (2007: 495)
B20	Stability	The politics in the country impacts on my business	Hofstede (2001: 308) Hillman, Keim & Schuler (2004: 837) Barron (2010: 101)
B21	Stability	The business is affected by the economic situation in the country	Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece & Winter (2007: 19) Suzette, Van Eeden & Venter (2001: 93) Glaeser, Laporta, Lopez-de-Silanes & Shleifer (2004: 271) Reuber & Fischer (2011: 660)
B22	Stability	Governmental compliancy requirements impacts negatively on my ability to run my business	Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece & Winter (2007: 19) Meintjies (2006: 84) Agatiello (2007: 1252) Dimitratos, Lioukas & Carter (2004: 19) Getz & Petersen (2005: 219) Williams & Lee (2009: 287). Mok (2005: 537)
A10	Stability	Do you believe the following infrastructure is adequate for your business	Rogerson (2004: 768) Cronje, Du Toit, Marais & Motlatla (2004: 117) Rooney (2009: 283) Tucker (2000: 594) Meintjies (2006: 84) Pearce & Robinson (2005: 94) Kiss, Danis & Cavusgil (2012: 266) Yanikkaya (2003: 57)
A6	Landscape	Which industry does the company operate in?	Vahaniitty (2003: 375) Matsuno, Mentzer & Ozsomer (2002: 18)
B23	Landscape	The market is highly receptive towards my product or service	Dreyer and Gronhaug (2004: 484) Lukas & Ferrell (2000: 239) Dacko, Liu, Sudharshan & Furrer (2008: 441) Ashley, Noble, Donthu & Lemon (2011: 749) Guseo & Guidolin (2009: 806)
B24	Landscape	I fully understand the competitive landscape impacting on my business	Zott (2003: 97) Combe & Greenley (2004: 1456)
B25	Landscape	I compare favourably to my competitors and seldom loose	Lorange (2002: 485) Bergen & Peteraf (2002: 157)

		business to them	
B26	Landscape	The competitive position of our business has improved over the last couple of years	Lorange (2002: 485) Bergen & Peteraf (2002: 157) Contractor & Lorange (2002: 485)

2.3.3 Microenvironment

Proctor (2000: 47) was of the opinion that organisations operate within a three-tiered environment – internal, micro and macro. The macro environment is a powerful force to be navigated through while the micro environment depends upon the effectiveness of strategic decision making. Failure to take cognisance of the influence of the environmental factors will have a negative impact on the business.

2.3.3.1 Human capital

According to Florin, Lubatkin and Schulze (2003: 623), it is important to have the correct human capital, such as team members with the correct education, experience, knowledge and skills. Florin *et al.* (2003: 623) identified human capital as a critical resource for entrepreneurial success. Sonnentag and Frese (2002: 223) stated that the importance of human capital is increasing as information is becoming freely available and knowledge-intensive activities increase in most industries.

There are a number of theories such as that of Westhead, Ucbasaran and Wright (2005: 72) on how human capital will increase the chances of entrepreneurial success. It is said that human capital will enable the entrepreneur to explore different business opportunities that are not visible when the entrepreneur is operating in isolation. Secondly, Brush, Greene and Hart (2001: 64) found that having employees will enforce planning and strategy, and thirdly human capital will bring other areas of expertise, such as financial management knowledge, which is an area that is often lacking.

In a study done by Unger *et al.* (2009: 561) it was found that there is a 0.098 positive correlation between sound human capital investment and business success. Their advice to investors is to choose human capital carefully according to knowledge and task-relatedness. According to Baldry, Bain, Bunzel, Gall, Gilbert and Hyman (2007: 67), an entrepreneur has to consider the contextual requirements of the business when appointing employees. Human

capital is recognised as the key resource influencing competitive advantage and organisational vitality.

Pearce and Robinson (2005: 106) believed that entrepreneurial success is hugely influenced by the ability to attract and hold quality employees. The working environment will have an influence on whether the organisation is a preferred employer and will affect the recruitment and selection of talent. The chances of the business becoming a preferred employer will increase when the business plays a positive role in the community, pays market related salaries, and is concerned with the welfare of its employees (Unger *et al.*, 2009: 561).

During a study done by Jack, Hyman and Osborne (2006: 456) it was demonstrated that sound human resource management is important to entrepreneurship, not only in helping to shape strategies, but also to assist in the growth of the organisation. Human resource management is a function of the organisation requiring professional training and skill (Wall & Wood, 2005: 429). Entrepreneurs tend to focus on understanding the founding process of the business and not peripheral issues, such as human resource management. The challenge is for the entrepreneur to understand human resource management and the role it plays in the growth and sustainability of the organisation. There are various aspects of human resource management the need the attention and focus of entrepreneurs that do not necessarily have the necessary human resource training (Forin, Lubatkin & Schulze, 2003: 623).

2.3.3.1.1 Recruitment and selection

When recruiting potential employees for an entrepreneurial business, issues such as years of schooling and work experience should be the first criteria (Lazear, 2004: 208). Secondly, experience in leadership, entrepreneurial ventures and the specific industry, has to be taken into consideration. Zolin *et al.* (2011: 1097) found that sociological factors such as self-employed parents can also be considered and that flexibility in human resources is of utmost importance. In entrepreneurship it is important for the success of the business that all team members have a broader knowledge base rather than specialised knowledge of a certain topic. Taylor (2006: 478) warns that it is unusual for entrepreneurial business to increase turnover with increasing human resources.

Kotey and Slade (2005: 16) found that entrepreneurial recruitment practices are normally informal and staff is often recruited by word of mouth. This can lead to problems as the employee could lack the necessary skill to assist in business growth. Cardon and Stevens (2004: 295) argue that small organisations should give more attention to recruitment and selection.

2.3.3.1.2 Team cohesiveness

Teamwork and team cohesiveness have been considered the top priority by human resources personnel (Naquin & Tynan, 2003: 332). Beal, Cohen, Burke and McLendon (2003: 989) asked how to capitalise on team cohesiveness in order to positively affect business success and conclude that the way to achieve team cohesiveness is to work group applications throughout the organisation including production, management, finance and every other component of the business. The makeup of every team should be aligned with, and work towards, achieving organisational goals. It is important to identify the factors and processes that give rise to increased performance (Huang, 2009: 786).

Naquin and Tynan (2003: 332) agreed that achieving the business objectives can only be achieved through management of the team performance. By integrating the skills and characteristics of each team member, performance can be improved. In essence it is a situation where the sum of the team members should be better than each individual member of the team. Gupta *et al.* (2004: 244) further expanded on the theory that in order to achieve entrepreneurial success, effective communication and a unified vision is required. The vision should be communicated to all stakeholders and shared values and goals should be developed and highlighted (Huang, 2009: 786). Management's goals should be well entrenched and buy-in must be obtained from all. Everybody in the organisation has to move in the same direction, in line with company strategy (Gupta *et al.*, 2004: 244).

Watson, Cooper, Torres and Boyd (2008: 524) showed through research that diverse groups have more process problems than non-diverse groups. With frequent communication and processes, feedback difficulties will diminish. Supic *et al.* (2010: 81) found that mixed teams reported more creativity, on condition that all team members speak a common language. Enhanced synergies between team members will positively affect business success, especially when nationality differences are used to the advantage of the team.

2.3.3.1.3 Role definitions

Defining the various roles within the organisation through job descriptions can become a useful management tool. It will clarify work functions and reporting lines (Chow & Kleiner, 2002: 121). Lengnick-Hall, Lengnick-Hall, Andrade and Drak (2009: 64) add that it will also assist in helping employees to understand their positions and the relevant requirements as well as create organisational social capital. Managing employee performance is enhanced. Role definitions will make it possible to understand the contribution the position will make towards the business' goals and objectives and enhance overall competitiveness for the organisation (Buller & McEvoy, 2012: 43).

Luszez and Kleiner (2000: 19) asserted that without role definitions in place effective recruitment becomes impossible. Its value starts with the recruitment process and creates consistency. In a case study done of Kraft food division it was found that a manager that hired dynamic new employees through effective recruitment and role definitions, and prepared employees for changes in the team, provided autonomy to the team and communicated company goals and objectives throughout the organisation, positively affected net profits, improved morale throughout the division and improved the effectiveness of problem solving. Feuer (2001: 32) warned that role definitions and job descriptions are typically neglected areas of human resource management, yet the impact thereof on business success is substantial. Having role definitions is not a legal requirement, yet it is an essential document to avoid duplication of roles, and ensure that employees are aware of what is expected of them. According to Marlow (2006: 467), it helps to alleviate stress and politics in the organisation. The role definition should contain the objectives of the position, duties of the employee, key performance areas and key performance indicators.

Role definitions should be customised according to the organisation. Lack of role definitions will result in lower productivity, duplication of roles and efforts, gaps in organisational performance and politics (Feuer, 2001: 34). Way and Johnson (2005: 3) held that role definitions will ensure that management and employee expectations are aligned and that sound human resource management will enhance the reputation of the organisation. The organisation will move in one direction and all team members will align efforts to achieve organisational goals and growth.

2.3.3.1.4 Performance management

According to Dransfield (2000: 71), certain outcomes have to be achieved in the running of the business in order to achieve business success. Performance management will lead the entrepreneur to manage in a results orientated manner. To effectively manage employee or divisional performance, the focus should be on outputs rather than inputs and requires employees to be adaptive (Rosen, Bedwell, Wildman, Fritzsche, Salas & Burke, 2011: 107). The objective of performance management is to achieve more with less, leading to enhanced efficiencies and effectiveness and aligning the service offering with customer requirements. Performance management does not only measure performance, it is a new form of management. Chen (2008: 380) warns that traditional cost accounting no longer captures relevant performance issues.

Dransfield (2000: 74) showed that in order for a performance management system to be effective in driving business and employee performance, there are some requirements. Buy-in has to be obtained from all employees and management commitment has to be constant, with managers acknowledging the need for a performance management system. Performance must be measured throughout the organisation (Renton, 2000: 44). A management team with full knowledge of the system and the skill to implement effectively is necessary. Rewards have to be given in a constant manner and all processes and policies should be aligned with the performance management system. The system should be transparent and fair and each employee's job description should be incorporated into the performance management system (Mahler, 1975: 503).

Renton (2000: 44) held that each team must develop performance measurements for the division that will add value and contribute towards the achievement of strategic organisational objectives. Targets have to be achievable, but not too easy as not to induce growth and improvement throughout the organisation. The performance management system should be a working tool and managers should take appropriate corrective action where necessary. Vaccaro, Parente and Veloso (2010: 1076) warn that the system should eliminate biases or management by perception and that technology can be used to enhance efficiencies.

2.3.3.1.5 Internal communication

Employees are central to the brand and brand loyalty will spread a positive message about the business. In addition to superior service delivery, internal branding and communications has been identified as an enabler of business success and growth (West, 2008: 223). Research by Burmann and Zeplin (2005: 279) showed a positive correlation between internal communications and employees' brand commitment.

A study conducted by Punjaisrim, Evanschitzky and Wilson (2009: 209) provided empirical evidence that internal branding, coordinated with training and internal communications, will have a positive impact on brand identification, employee commitment and brand loyalty. Verčič, Verčič and Sriramesh (2012: 223) contend that internal communications impact on how much employees identify with, and are committed to, the company, which in turn will influence the extent to which employees will act in line with service standards and brand promise. Johansen, Aggerholm and Frandsen (2012: 270) found that internal communications will create organisational commitment and identification.

West (2008: 223) believed that internal communication is considered one of the most effective methods to brand an organisation internally. New employees should be informed of the organisational strategy and goals, values and ethics, performance expectations and be trained with regards to the products and services offered (Burmann & Zeplin, 2005: 279).

Employees that are well informed will feel part of the team and will be confident in their role within the organisation. Ideally, employees should be treated as a customer group. When marketing and human resources are integrated internal branding will be implemented effectively and have a sustaining influence on the organisation. By providing timely and relevant communications, managers can develop positive attitudes amongst employees, which in turn will have a positive influence on the success of the organisation (Burmann & Zeplin, 2005: 288).

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2.3.3.1.6 Managing diversity

Team diversity is an important factor in entrepreneurial success. Diversity, if well managed, will improve creativity and innovativeness (Sethi, Simith & Park, 2002: 16-17). It might also be the cause of conflict, resulting in poor productivity. Diverse teams are regarded as effective in problem solving. It provides a firm with a wider perspective on issues. Diversity is therefore linked with cognitive task performance. Diversity in a team includes people with different perspectives. It includes differences in personality traits, age, gender and functional background (Ng & Wyrick, 2011: 368). Chowdhury (2005: 727) suggested that demographics may not be important in predicting entrepreneurial team effectiveness or commitment.

Maxwell, Blair and McDougall (2001: 468) supposed that diversity factors include race, culture, ethnicity, gender, age, disability and work experience, but found that managers of organisations have to understand the different dynamics between different team members. Other scholars such as Pitts and Wise (2010: 44) and Shore, Chung-Herrera, Dean, Ehrhart, Jung and Randel, (2009: 117) agree that although earlier the focus has been on women and race, diversity management has extended to include age, disability, sexual orientation, religion, social class, education national origin, and language. These differences, if properly managed will become an asset to the organisation and will ensure that work will be done efficiently and effectively. Ely and Thomas (2001: 229) conveyed that in order to manage diversity effectively, a cultural transformation is required. It requires that the organisation and not the individuals should change. Jackson, Joshi and Erhardt (2003: 801) expressed that there are many benefits to effective diversity management and that businesses that manage diversity well enlarge the customer base. It ensures full utilisation of skills throughout the organisation and access to new markets. It also ensures a healthy return on investment from human capital. It enables the best talent to be recruited and retained and enhances creativity in the organisation. Softer benefits include increased morale and more job satisfaction will contribute towards a competitive edge.

Richard (2000: 164) found that many successful multinational organisations have implemented diversity programmes to try and improve relationships amongst employees. It is suggested that a planned approach is used to implement diversity management programmes in order to acknowledge and value diversity and to systemically manage and inculcate

diversity into the corporate culture. This will ensure that an organisation can use all its human capital as a strategic means towards a competitive advantage. Improved diversity management will lead to improved innovation and decision making in the organisation. Koonce (2001: 22) warned that when diversity is not well managed, it could lead to a breakdown in communications, politics in the organisation, low employee retention and interpersonal conflict in the workplace. Case studies suggest that effective diversity management will contribute to an improved net profit. Diversity should be aligned to long-term objectives and strategies of the organisation (Pitts & Wise, 2010: 44).

According to Friday and Friday (2002: 863), diversity is set to become more important in the achievement of business success and global competitiveness. It is necessary for an organisation to provide ongoing training and implementation of diversity policies and procedures. Recruitment, performance appraisals, training programmes and reward systems should be adjusted to align with the diversity strategy. A culture of managing diversity should be entrenched into the organisational culture and should be internationally applied (Jackson *et al.*, 2003: 801).

2.3.3.2 Supply chain and logistics

Supply chain management can contribute towards the quality of products or services, the reduction of costs and the reduction of risk in SMME businesses (Croom, Romano & Giannakis, 2000: 67). Tan (2001: 195) explained that it is a way of achieving vertical integration benefits without the entrepreneur having to own or produce all necessary resources.

Arend and Wisner (2005: 403) found that the supply chain management could contribute towards the integration of business processes among industry partners to eventually benefit the end user. The various elements of supply chain management are suppliers, subassembly manufacturers, distributors, wholesalers, retailers and eventually the end customer are linked together in order to enhance efficiencies and competitiveness (Dubois, Hulthén & Pedersen, 2004: 3).

In a study done by Arend and Wisner (2005: 404) it was found that, in general, SMME businesses do not focus on supply chain management and therefore do not alleviate

weaknesses through alliances. SMME businesses also do not strategically focus on supply chain management. Watson (2001: 36) warned that the lesser power of a smaller business engaging in a supply chain with a listed company or corporate could become a threat to the smaller organisation. According to Baiman, Rajan and Kanodia (2002: 53), there is also a threat that bigger supply chain members will misappropriate smaller businesses' competencies or acquire the organisation at a reduced cost.

Slater (2004: 4) found that supply chain performance seriously impacts on business success. It is crucial in meeting end-customer requirements. The entire supply chain will only be as effective as the weakest point in the supply chain. Giannakis and Louis (2011: 23) stated that the trend towards customisation has made supply chain management complex, especially with regards to issues such as on-time delivery, inventory management, quality of raw materials, capacity, subassemblies and distribution. The ability of the entrepreneur to manage a network of interdependent relationships and strategic collaboration is a crucial skill, especially as increased complexity raises the level of uncertainty and risks throughout the supply chain (Manuj & Mentzer, 2008: 193).

2.3.3.3 Quality management focus

Historically quality management and the use of quality management systems and certifications such as ISO 9001 have been easily accepted at larger firms in the manufacturing sector. Aldowaisan and Youssef (2006: 231) found that the acceptance of the need for quality management has grown amongst non-manufacturing and smaller firms. Reasons why smaller firms resisted ISO certification and quality systems include the lack of sufficient personnel and cash flow, as well as a lack of time and skill. A framework was developed for implementation of quality management in a cost effective manner including four steps: do it yourself, appoint one of the top executives to manage quality, gain the necessary knowledge and skill to manage quality efficiently and develop the necessary quality focus without certification, unless absolutely necessary. In order to maximise the effects from sound quality management every component of the business have to be integrated and quality aware (Zu, Fredendall & Douglas, 2008: 630).

2.3.3.2.1 Total quality management

Prajogo and Sohal (2003: 901) cautioned that total quality management could have a negative effect on innovation, but concedes that it plays a substantial role in ensuring business success and reliability of product and service delivery. It will eliminate variance and have a strong positive effect on product quality as well as product and process innovation. Total quality management will play a role in supply chain management and ensure standardised quality throughout the value chain (Reed, Lemak & Mero, 2000: 5). In addition, total quality management will assist in establishing a global competitive advantage.

Sheehan (2007: 95) agreed that total quality management provides the necessary organisational platform to achieve business success. González-Benito, Martínez-Lorente and Dale (2003: 443) expressed that various structures of total quality management include top management leadership, a strong customer focus, good supplier relationships, sound employee relationships, effective communication systems and good management of processes and products. Sharma, Lawrence and Lowe (2010: 251) argued that the introduction of total quality management will add legitimacy to management control systems and empowers management.

2.3.3.3 Support and guidance

According to Hitt, Ireland, Camp and Sexton (2002: 129), entrepreneurs need a variety of sources of support. It is not possible to possess all the knowledge and resources needed to start and grow a business. It is therefore important for entrepreneurs to form various relationships and gain support from various sources. Goodale *et al.* (2011: 116) showed that support can be provided from sources such as capital investors, employees, the supply chain and financiers.

2.3.3.3.1 Financial support

Chell and Baines (2000: 195) believed that to establish and grow a business through operational income is difficult. A factor leading towards business success is external financial support through external networks. Their research has shown that external support will improve growth and success in entrepreneurial firms. Smith and Lohrke (2007: 315)

developed the “liability of newness” theory, stating that the task of starting and growing a company is a daunting task with many challenges, especially as there are many external factors that the entrepreneur does not control. In general there is little support for new ventures with a limited track record (Clarysse, Tartari & Salter, 2011: 1084).

Hytinen and Takalo (2008: 113) agreed with Chell and Baines (2000: 195) by saying that this liability creates difficulties in gaining support and much needed resources. Entrepreneurs often have to rely on personal relationships to secure necessary resources for the external finance required when starting a new firm (Glaeser, Kerr & Ponzetto, 2010: 150). Entrepreneurs can rarely afford to cover setup cost, or the cost of running and growing the business until it produces a net profit. Most scholars regard the lack of availability of funds as the main impediment on entrepreneurial success and small business growth. In countries where there is strong investor protection, business creation will be stimulated, but entrepreneurial freedom to run the business as the entrepreneur sees fit will also be inhibited (De Swardt, 2006: 118).

To secure financial support, a clear vision is required (Cesario & Higgins, 2001: 16). Presentations to investors have to be sophisticated and it will be necessary to show competence. The likelihood for gaining financial support is greater when the strategic objectives of the venture fit the strategy of the investor (Clarysse *et al.*, 2011: 1084).

The method of financing the business is the most important and one of the first strategic decisions the entrepreneur will have to take. Burkart, Panunzi and Shleifer (2003: 2167) said that financing could be done through raising debt capital or selling equity. It has been found that small businesses rely more on relationships with lenders than on the more traditional financing instruments used by bigger firms.

The involvement of family in the financing structure brings about certain complications, warned Corbetta and Salvato (2005: 355). The involvement of family may cause minority/majority stakeholder conflict, especially if the minority shareholders are not part of the family. Tappeiner, Howorth, Achleitner and Schraml (2012: 38) warn that when family finance stems from altruistic motives to help a family member, moral hazards could be worsened. This type of finance should always be a last resort. Leary and Roberts (2010: 332) agree that the first priority should be to seek finance from independent financiers. Family

members could feel the need to reciprocate, which could increase the tendency for family members to exhibit dysfunctional behaviour.

Financial markets can also be a source of funding. Investors will assess the risk associated with the investment. As start-ups are considered a bigger risk, this has a big influence on the availability of funds for the entrepreneur (Timmons & Spinelli, 2009: 455).

2.3.3.3.2 Financiers

While start-up businesses need capital, fast growing organisations also need capital to fund the growth. Van Tonder (2007: 23) found that commercial banks, however, are risk averse and profit seeking and will therefore only fund organisations that can prove financial stability. Entrepreneurs have to implement practices of planning to indicate a good risk profile. Much earlier Cassar (2006: 615) already found that small firms face greater difficulty in securing capital due to information asymmetries, lack of market access and the influences of the entrepreneur on the capital structure.

Carter, Brush, Greene, Hart and Gatewood (2006: 3) offered the solution to small firms through advising that small firms can finance themselves through bootstrapping. Bootstrapping is the process of raising funds through gaining support from customers and suppliers and raising capital through shorter collection days and longer payment days. Denis (2004: 301) holds that it also involves conservative financial management, raising angel investment and using customers and suppliers to finance research, development and operations. It often involves the entrepreneur investing personal funds or taking personal loans (sometimes from family and friends) to invest into the business to cover operational expenses, reducing inventory, bartering and using trade credit (Singh & Sedory, 2011: 1629). Van Auken (2005: 93) said that bootstrapping can also be done through minimizing the need for finance by using operational income, negotiating longer terms with suppliers and negotiating lower prices. Entrepreneurs therefore have to be creative and resourceful in financial management. This will not only save the business in interest charges, but will also gain favour with stakeholders. Earlier Ebben and Johnson (2006: 851) agreed that bootstrapping is the only way to secure funding for the organisation without security, especially when the business is young.

2.3.3.3 Venture capitalists

Research done by Clarysse and Moray (2004: 55) showed that venture capital funds use the business experience of the entrepreneur as a main criterion to consider investment. The result is that many start-ups do not receive funding. Incubators have tried to solve this problem by attracting experienced CEOs to join the start-up teams, but it has proven to increase management turnover. Egan and Song (2008: 351) suggest that it is more efficient to place a team of mentors and guides around the start-up team. Results of their study indicated increases in job satisfaction, organizational commitment and performance by participants in mentoring programs.

It has to be kept in mind that it takes time to build a business, and venture capitalists should not expect too much too soon from a start-up (Clarysse & Moray, 2004: 56). Getz and Petersen (2005: 219) suggest that growth should be contained and gradual investment is suggested rather than a large investment at the start. Entrepreneurs that purchased their businesses are more likely to be growth and profit driven. Clarysse and Maray (2004: 56) warned that investors should be wary of investing in management teams larger than seven people as the overheads will be high and there will be more tension.

Hsu (2007: 738) affirmed that venture capital is an important source of capital for entrepreneurs, especially in the service industry where intellectual property is intangible. Venture capital will ensure the commercialisation of the idea and have positive start-up performance as a result. De Swardt (2006: 118) agreed that limited resources, and therefore the lack of financial stability, are largely responsible for the low success rates in entrepreneurship.

2.3.3.4 Financial management

Performance of businesses is affected by a lack of financial record keeping and high investment in fixed assets, which results in growth capital being tied up in assets (Temtime & Pansiri, 2004: 22). Du, Qiu and Xu (2011: 1240) found that entrepreneurs often underestimate the capital required during the start-up phase and rapid growth phases of the business. Sound financial management is the backbone of the management of the enterprise. Temtime and Pansiri (2004: 24) stated that entrepreneurs mostly have an inability to

accurately read financial statements and misinterpret an increase in turnover as an increase in success. Underutilisation of company assets and low asset turnover ratios will also negatively affect the chances of success. Entrepreneurs do not normally invest in external advisors, which in turn will lead to a lack of investment analysis. Financial management skill was found to be contributory to entrepreneurial performance. Entrepreneurs are advised to gain financial management and accounting skill (Akande, 2011: 372).

According to research done by Megginson, Byrd and Megginson (2003: 144), lack of capital is the main cause of failure in small businesses. Without adequate cash flow the business will not be able to service its obligations or attract the right employees to grow the business. Lack of cash flow will also seriously impact the production capabilities of the organisation. Lussier and Pfeifer (2001: 64) believed that money is not important in creating entrepreneurial success. It is seen as paint and a brush to an artist. Profit is merely seen as an indication of the level of success achieved by the entrepreneur, as available capital will not contribute towards business success if there are no entrepreneurial opportunities to fund.

Van Tonder (2007: 14) argued that the financial management of the organisation has to be conducted in a manner which satisfies banks with regards to the financial stability of the organisation in order for the entrepreneur to be able to source funding. Management and financial procedures have to be acceptable for banks. Broyles (2003: 4) found that entrepreneurs have to have a focus on planning, fund raising, drawing investment and financial reporting. Assets have to be developed and acquired and inventory has to be managed to the maximum benefit of the business. Cornwall, Vang and Hartman (2004: 26) maintained that in order to achieve the above, entrepreneurs have to be able to analyse financial statements, including the income sheet, balance sheet and cash flow statement. It is crucial to be able to make business decisions based upon historical financial information.

During the early stages of the business lifecycle entrepreneurs are forced to use personal or internally generated funds (Smith, 2009: 119). It is necessary to control costs and manage cash flow carefully to survive, therefore bootstrapping is a necessary strategy to ensure that there is enough cash flow for a small firm. In other words, it is a manner in which to secure finance without selling equity or gearing the company (Gormley & Meade, 2007: 923).

2.3.3.4.1 Cash flow management

According to Temtime and Pansiri (2004: 18), cash flow management involves the process of planning and controlling current assets and liabilities. Problems can arise in the management of creditor accounts and other debt facilities, such as overdrafts. Inventory management will affect the cash flow management and ultimately the ability of the organisation to pay its creditors and thus remain liquid. Furthermore, debt collection procedures will seriously affect the availability of cash and the organisation's ability to service its own financial obligations (Gormley & Meade, 2007: 923).

During a quantitative study, Temtime and Pansiri (2004: 21) found that respondents listed that poor inventory management and unplanned withdrawals are the biggest causes of cash flow problems. Another threat that entrepreneurs experience to sound cash availability is when cash is tied up in accounts receivables (Hunger & Wheelen, 2003: 10). In order to generate more cash the operating cycle has to be shortened. When cash is invested in raw materials, the sooner the production process is completed the sooner the product can be sold and cash can be received and the better the cash flow will be. The rest of the cash flow management will be concerned with the allocation and retention of the gross profits. When production is inefficient cash flow is directly affected. It is necessary to distinguish between long and short term financing requirements and find financial support (Smith, 2009: 119).

Carter, Brush, Greene, Hart and Gatewood (2006: 8) found that in order to achieve success, entrepreneurs have to conserve financial resources and manage cash in a resourceful manner. During the start-up and rapid growth phase, cash is necessary to develop products and pay suppliers and employees, while still investing in the growth of the business.

2.3.3.5 Marketing

According to Brush *et al.* (2009: 485), no business will be sustainable or successful without customers and sales. All businesses face the challenge of finding and retaining customers. It is therefore important to communicate about the product or service to a target market and establishing effective distribution channels (Wilkinson, 2001: 23). Scholars such as Ivens, Pardo and Tunisini (2009: 851) and Harris and Ogbonna (2003: 484) show that entrepreneurs that are aware of the need for marketing show higher growth. Such entrepreneurs targeted

their markets carefully while employing direct selling, web-based strategies and increasing media presence as a manner of communicating their messages. There are two types of challenges: if a market need exists, there will be competitors and marketers will have to communicate a unique differentiator to the target market, if no market exists, the advantages of the product will have to be communicated in order to create a need in the market (McKenna, 1991: 66).

Goodstein (2000: 193) found that global competitiveness is forcing entrepreneurs to increase market awareness and marketing knowledge within the team. Marketing techniques used should be sophisticated and state-of-the-art. Marketing ideas should be customer driven and position the organisation strategically. Rwigema and Venter (2004: 150) contend that integrated marketing components are used to create sustainability and ensure business growth in the entrepreneurial firm. It is the backbone to achieving business success. Reputation management is no longer enough to create growth. Innovative thinking and strategic marketing is required (Baron & Shane, 2005: 295).

With limited resources it is important to prioritise marketing activities and ensure return on investment through choosing the activities that will contribute towards the company success. Vorhies and Morgan (2005: 80) warn that sales and marketing are critical success factors for small businesses. Activities should start with market research leading into promotion. As early as 1991, McKenna (1991: 66) acknowledged marketing activities as important factors affecting business success.

During a study done in Botswana by Temtime and Pansiri (2004: 22) marketing activity was cited as the main factor to influence business success. Vorhies and Morgan (2005: 80) identified that specific marketing activities contributing the most to business success include promotion, research and training. Although there is little empirical research on the effect of marketing on firm performance, marketing capability is considered a major contributor. Haas and Hansen (2005: 5) on the other hand found several studies reporting that marketing capability can inhibit creativity and have a negative impact on business success, but do concede that an increase in net profit as a result of reduction of cost, which is achieved through operational reengineering, is less sustainable than increase in revenue through marketing capabilities.

Evidence gained by Krasnikov and Jayachandran (2008: 2) showed that entrepreneurs are unsure of the value of the marketing function and is therefore less inclined to develop marketing strategies or invest in marketing. Marketing capability is about having knowledge of the target market, customer needs and requirements and providing a solution to those needs. Biemans, Brenčič and Malshe (2010: 183) show that marketing knowledge includes having knowledge of various target markets and involves the measurement of customer satisfaction.

Gruber (2007: 782) claimed that marketing activities should start with research and planning. Entrepreneurs should focus on the customer to enable him to react according to client requirements, adjust prices and deliver a quality product at the right time and place. The entrepreneur must have knowledge of every aspect of marketing and the ability to undertake the necessary research (Goodstein, 2000: 193).

From the research, the entrepreneur should be able to identify a market need and develop the product or service accordingly (Haas & Hansen, 2005: 5). This is the first and most important step towards entrepreneurial success. It is vital for entrepreneurial success to find a niche in the market, a protected place that will give a competitive advantage. Tai (2007: 40) showed that the failure of finding the niche could lead to business failure. The process of identifying the target market, and areas of marketing requirements, such as product marketability, will require the development of a strategic marketing plan in which potential customers should be identified and their needs documented (Flamholtz & Aksehirli, 2000: 488).

2.3.3.5.1 Product marketability

Flamholtz and Randle (2000: 488) explained that the second phase of marketing is to develop the product or service according to customer requirements. The product has to be productised in order to suit the target market perfectly. Smirnova, Henneberg, Ashnai, Naudé and Mouzas (2011: 54) warn that the entrepreneur has to ensure that the product can be delivered at a market related price, at the right time and place and according to market requirements. Clark (2006: 1183) and Wind (2008: 23) found that it must also be ensured that the product or service offering can be operationally executed. Customers are increasingly demanding and needs interaction. This stage of the marketing process involves the research and development and the manufacturing departments. This phase will only be successful if the first step has

been executed efficiently. Entrepreneurs have been known to invest huge sums of money into high quality product development and manufacturing that is misaligned with customer requirements, or at too high a price (Piercy, 2009: 857).

2.3.3.5.2 Communications

Fatt (1998: 4) described communications and warns that communication is not always verbal. Non-verbal communications can transmit messages as strong as verbal communication and can be used to portray the correct messages to customers and employees. Thorough knowledge of how to use non-verbal communications will help managers to enhance their power and achieve business success. It is believed by scholars that executive intuition has been fed by non-verbal communication. Non-verbal communication and the knowledge thereof is vitally important in sales, which in turn will affect business success. Non-verbal communication will warn the experienced sales person that the prospective client is not interested or wants more information (Smirnova *et al.*, 2011: 54).

Communications predominantly involve the ability to speak and write in order to provide relevant information to the market and influence buying decisions. According to Rwigema and Venter (2004: 150), communications must be clearly and efficiently targeted to internal and external target markets. The entrepreneur has to develop a clear message and speak to well defined target markets. Baron and Shane (2005: 295) expanded that communications includes holding meetings with employees, clients and the media. Entrepreneurs who have the skill to express their feelings have a bigger chance to achieve business success and instil confidence in customers. Harper (2008: 613) argues that the way employees communicate form part of the culture of the business.

2.3.3.5.3 Advertising

Goodstein (2000: 193) identified the main reason for business failure as the result of a failure to engage in marketing activities. Greater business value is derived when advertising is fully integrated with all other components of marketing, such as communications and direct marketing. For good results, the messaging and the formatting of the advertisements have to be consistent and aligned with company strategy (Rwigema & Venter, 2004: 150).

Advertising should span over print, radio and digital media (Fastoso & Whitelock, 2010: 32). The specific choice of medium is critical to the success of the advertising campaign. The advertising campaign has to positively affect public image and be backed up with a sales drive. It has been proven that relentless advertising campaigns can take a company to the next level and will positively affect business performance as long as the messaging and format is well executed. To achieve competitive advantage, all components have to be integrated and a careful blend of print and electronic media has to be achieved (Piercy, 2009: 857).

Fowler (2006: 26) remarked that for advertising to be effective a unique product has to be advertised. In a study conducted in China, advertising executives who reported success in their campaigns found that, without product uniqueness, a campaign is likely to fail. A correlation was found between brand loyalty, market share and advertising success. It was proven that organisations wishing to expand their market share should expand their advertising budgets and improve marketing efforts. In the same study, creativity was listed as the most significant reason for advertising success (Clarke, 2006: 1183).

In some instances entrepreneurs will spend funds on ineffective advertising campaigns due to advertising being outside of the context of selling and having an overemphasis on entertainment value and creativity warned Tai (2007: 40). Creativity and effectiveness have to be balanced. Different cultures, in different regions should be considered before embarking on an advertising campaign. It is therefore important for organisations to conduct market research before embarking on advertising campaigns (Fastoso & Whitelock, 2010: 32).

2.3.3.5.4 Sales

Le Meunier-FitzHugh and Piercy (2007: 939) identified sales as the main driving force towards business success. The lead entrepreneur's sales skill is what will ensure business growth. In order to achieve entrepreneurial success the sales force should understand which behaviour will enhance sales as well as which features of the product or service will bring the most value to the customer. Sales skills can be taught, but such acquired skills have to be implemented and applied. It has to be understood that the role of sales is to stimulate demand, rather than satisfy demand for product. Glaeser *et al.* (2010: 150) suggests that the ratio of sales per employee should be kept in mind in the quest for business success.

Higher performing sales people see their role as more consultative than as technical sales and are also more inclined to attribute the successful engagements with customers to relationship issues rather than technical product knowledge. (Le Meunier-FitzHugh & Piercy, 2007: 929). This complicates knowledge and sales skills transfer, as skills of an individual built on the foundation of role identity will render the skills transfer temporary, especially when role identification of mentor and employee differs. (Jones, Coviello & Tang, 2011: 632).

Steward, Hutt, Walker and Kumar (2009: 463) claimed that a business consultant is more valuable than a technical specialist consultant as the business consultant will take a more comprehensive view of the firm's relationship with a customer and provide business value rather than selling a product. The consultant will strive to solve a problem for the customer and, in such, create a more sustainable, longstanding relationship. Consultants will tap into the expertise of other specialists, which will bring benefit to the customer, but according to Dawes and Massey (2005: 1327), sales success is often hampered by a lack of communication and collaboration between marketing and sales. Many literary studies have been done to conceptualise and improve the relationship between sales and marketing in order to enhance sales success and, thereby, business success.

2.3.3.5.5. Networking

Networking (also called social capital) is a form of capital along with financial, human, and physical capital, and has an impact on business success. House (2000: 183) as well as Hitt and Ireland (2002: 3) acknowledged that entrepreneurs who make the most of networking opportunities are more successful than their isolated counterparts and that strategic leadership requires networking skills. De Klerk (2010: 37) believes that networking is necessary and when entrepreneurs or managers acknowledge its importance and engage in networking, it contributes towards the successfulness of the business.

The success of new ventures often depends on the entrepreneur's ability to network and create supportive relationships. Steier (2000: 163) claimed that relationships that develop through networking often form a conduit for information and resources. Such relationships will also provide entrepreneurs with new market opportunities. Smith and Lohrke (2007: 315) affirmed that informal networks will help entrepreneurs to know about, and win, tenders and

can also assist in corporate governance adherence. In networking, trust plays a significant role. The entrepreneur's reliance on various networking relationships will therefore vary.

During a study done by Etemad (2004: 135) it was found that entrepreneurs and students that networked with each other and venture capitalists showed a higher level of confidence and commitment, as well as a higher level of determination to meet entrepreneurial goals. Entrepreneurs have a propensity to share experiences and contacts, as well as ways and means to conquer adversity. Networking with venture capitalists will provide entrepreneurs with ways of reaching funding goals as well as an understanding of what funders will look for in an organisation. Such information will assist entrepreneurs in the preparation of a sound business model and plan (Steier, 2000: 163). De Klerk (2010: 46) recommends that entrepreneurs should network at every opportunity and not just within his or her own sphere of influence. A style of networking should be developed.

2.3.3.6 Customer relationships

According to Wickham (2004: 153), entrepreneurs have to develop the ability to extract customer requirements, collect information with regards to their needs and develop products and services as a solution to specific needs. Customer satisfaction is the first step towards sound customer relationships. When a customer is dissatisfied, recovery measures should be implemented as soon as possible (Lin, Wang & Chang, 2011: 511).

Marketing, and thus increased turnover and business success, is founded on customer relationships and service (Gummesson, 2004: 136). The first step of customer service is to understand the customers' needs and provide a solution to that specific need. It is necessary to keep track of changes in customer needs and to adjust the service offering accordingly on an ongoing basis. Wickham (2004: 153) holds that the organisation must continuously alter and adapt service and product offerings according to customer requirements and competitor offerings. Businesses should consider short- and long-term requirements.

Quality assurance is another facet of customer relationship management (Jun, Yang & Kim, 2004: 817). While a customer receives quality loyalty will follow. This is true for internal and external customers. To achieve true customer satisfaction and in such maintain good

customer relationships all team members should identify customers and provide the best possible service and highest quality products (Hanvanich, Droge & Calantone, 2003: 124).

Vargo and Lusch (2008: 3) alleged that maintaining customer relationships is about keeping the customer interested in buying the product or service offered, and to ensure that all customers are satisfied with the purchase and remain loyal. The marketing message should therefore be in line with what the product or service is offering. All promises should be fulfilled and the product variable should be well managed and geared towards customer requirements. Rao, Metts and Monge (2003: 11) warn that customer loyalty will not be achieved if any lack of standardisation in the product or service arises. All resources and processes that interact with customer resources and processes must be aligned and managed towards standardisation. A standardised, high quality product or service will not be enough to maintain positive customer relationships. The entire offering should be geared towards supporting the customers' needs and expectations. Enhanced customer experience will depend on value-add provided (Vargo & Lusch, 2008: 3).

2.3.3.7 Operations management

According to Krasnikov and Jayachandran (2008: 3), operations capability is the skill that will enable entrepreneurs to be efficient and productive, using resources to their full potential. Lindgreen, Palmer, Vanhamme and Wouters (2006: 57) show that superior customer service can be achieved through sound operational management, customer relationships and product superiority. Such an advantage can be achieved through operational capability, marketing and research and development

Variance in business processes is a common occurrence in smaller businesses (Kumar, Antony, Madu, Montgomery & Park, 2008: 878). Lu, Sadiq and Governatori (2009: 642) identified that another common occurrence is disconnection between documented processes and operations and variance in implementation from one employee to the next. The ultimate goal is that business process management is implemented in a consistent manner to promote replicability and standardisation of output. Himes (2007: 329) argues that in order to achieve the goal, management buy-in has to be obtained. It is further necessary to ensure effective utilisation of assets to avoid process variants to facilitate various business process management activities, such as process reuse, analysis and discovery.

Prajogo (2006: 1374) warns that in the service industry, entrepreneurs tend to focus mostly on customer contact, service delivery, customer service and quality, rather than process management. Performance is measured by customer retention, on-time delivery and quality. Innovation and process management do not receive much attention. While there is such a strong focus on customer service, creating a service culture is the most challenging issue for entrepreneurs. This could be due to a lack of processes ensuring standardisation and replicability (Gummesson, 2004: 138).

According to Tan, Kannan, Jayaram and Narasimhan (2004: 833), operations capability is about focusing on efficient delivery of quality products and services at minimum cost and with maximum flexibility. Duclos, Vokurka and Lummus (2003: 446) and Kim (2006: 1084) hold that operational management capability is measured by flexibility, cost efficiency and logistics and encompasses various areas of business.

2.3.3.6.1 Business process management

Operations management capability is often based on sound process development and benchmarking (Cooper, Edgett & Kleinschmidt, 2001: 361). It involves total quality management, pursuing international standards and enhancing quality and efficiency. Often it is necessary to implement business process reengineering to redesign business processes and workflow. Bhatt, Grover and Grover (2005: 253) found that information technology is employed to enhance efficiency. However, process reengineering might not lead to competitive advantage. Carr (2003: 41) argued that process reengineering is an essential to business management and success and is therefore implemented by all competitors. In addition, technology used for business process management is widely available and affordable. Ray *et al.* (2004: 23) disagree with Carr by saying that in some circumstances, assessing the effectiveness of business processes may be more appropriate than assessing overall firm performance.

2.3.3.6.2 Technology

Riemenschneider and Mykytyn (2000: 257) found that the successful use of technology is an important factor in the achievement of business success. The success criteria in using technology to achieve the maximum results include staying current and, in the process, have

the most up to date technology at hand (Ray *et al.*, 2004: 23). Training of end users and the accessibility and accuracy of data are also crucial success factors. When new technology is implemented, buy-in has to be obtained from all users. In order to stay globally competitive, entrepreneurs have to stay abreast of the fast changes in technology. To fall behind competitors is to commit entrepreneurial suicide (Bhatt *et al.*, 2005: 253).

Lu, Huang and Heng (2005: 395) identified many factors influencing the successful implementation of an information system such as top management buy-in, funding, interconnectivity between users and businesses and the creation of storage, transformation and transmission of information processes. Such processes should lead to real time interaction, more accuracy and efficiency, rapid response and reduced cost. Zhu (2004: 167) expressed that technology should lead to high operational efficiency and capability.

The development of technology and the adoption thereof led to the development of new skills, and different types of organisations (Zhu, 2004: 167). The role of technological innovation is crucial for business success. Technology can be used to increase productivity and wealth (Pearce & Robinson, 2005: 84). Technology has an important effect on business success and the development of new products. The entrepreneur that embraces technology will benefit through economic growth and increased scientific knowledge (Cronje *et al.*, 2004: 103).

Meintjies (2006: 164) affirmed that the inability of South African entrepreneurs to use information technology negatively affects business success. Technological training and education will enhance ways to optimise the use of information technology amongst South African entrepreneurs (Singh, 2005: 325). Urban *et al.* (2008: 60) agreed that entrepreneurs, despite the importance thereof and the resultant effect on venture growth, often ignore technical and industry specific competencies. Technology should be used to implement the entrepreneur's strategy and vision and drive the organisational growth.

Table 2.3 shows a summary of authors addressing the various micro environment variables. The components refer to questions asked in the empirical study.

Table 2.3: Variables impacting on the micro environment

Micro environment			
B27	Human resources	I have a documented recruitment process in place	Forin, Lubatkin & Schulze (2003: 623) Sonnentag & Frese (2002: 223) Westhead, Ucbasaran & Wright (2005: 72) Baldry, Bain, Bunzel, Gall, Gilbert & Hyman (2007: 67) Pearce and Robinson (2005: 106) Lazear (2004: 208) Wall & Wood (2005: 429) Zolin, Kuckertz & Kautonen (2011: 1097) Taylor (2006: 478) Cardon & Stevens (2004: 295)
B28	Human resources	My employees have documented job descriptions and role definitions	Unger, Rauch, Frese & Rosenbusch (2009: 561) Chow & Kleiner (2002: 121) Luszez & Kleiner (2000: 19) Feuer (2001: 32) Lengnick-Hall, Lengnick-Hall, Andrade & Drak (2009: 64) Buller & McEvoy (2012: 43) Marlow (2006: 467) Way & Johnson (2005: 3)
B29	Human resources	The performance of each employee is measured in a formal manner	Dransfield (2000: 71) Renton (2000: 44) Mahler (1975: 503) Chen (2008: 380) Vaccaro, Parente & Veloso (2010: 1076)
B30	Human resources	There are formal internal communications channels in place	Burmann & Zeplin (2005: 279) Punjaisrim, Evanschitzky & Wilson (2009: 209) West (2008: 223) Verčič, Verčič & Sriramesh (2012: 223) Johansen, Aggerholm & Frandsen (2012: 270)
B31	Human resources	We are a company free of racial tension	Sethi, Simith & Park (2002: 16) Chowdhury (2005: 727) Ng & Wyrick (2011: 368) Ely & Thomas, (2001: 229) Jackson, Joshi & Erhardt (2003: 801) Shore, Chung-Herrera, Dean, Ehrhart, Jung & Randel (2009:117) Pitts & Wise (2010: 44)
B32	Supply chain	There are documented service level agreements with suppliers	Arend & Wisner (2005: 403) Tan (2001: 195) Croom, Romano & Giannakis (2000: 67) Dubois, Hulthén & Pedersen (2004: 3). Giannakis & Louis (2011: 23) Manuj & Mentzer (2008: 23)

B33	Supply chain	Dispatch works well and orders are delivered according to client requirements	Slater (2004: 4) Richard (2000: 164)
B34	Supply chain	Scheduling of orders are well managed	Arend & Wisner (2005: 404) Maxwell, Blair & McDougall (2001: 468)
E3	Supply chain	Please explain how suppliers are chosen	Baiman, Rajan & Kanodia (2002: 53). Shin, Benton & Jun (2008: 2462)
B35	Quality	There are documented quality policies in place	Aldowaisan & Youssef (2006: 231) Hon (2005: 142) Wu, Pearn & Kotz (2009: 338) Zu, Fredendall & Douglas (2008: 630)
B36	Quality	Employees are aware of quality requirements	Prajogo & Sohal (2003: 901) Dimara, Petrou & Skuras (2004: 485) Reed, Lemak & Mero, (2000: 5) González-Benito, Martínez-Lorente & Dale (2003: 443)
B37	Quality	Quality a focus throughout the organisation	Sheehan (2007: 95) Dimara, Petrou & Skuras (2004: 485) Sluijs, Outinen, Wagner, Liukko & De Bakker (2001: 99)
B38	Quality	All employees understand their role in providing quality	Aldowaisan & Youssef (2006: 231) Markus & Vancza (1998: 361) Sharma, Lawrence & Lowe (2010: 251)
B40	Support	I have in the past received external financial support	Chell & Baines (2000: 195) Smith & Lohrke (2007: 315) Hyytinen & Takalob (2008: 113) Burkart, Panunzi & Shleifer (2003: 2167) Van Tonder (2007: 23)
B41	Support	At the start-up phase we were successful in raising venture capital support	Clarysse & Moray (2004: 55) Hsu (2007: 738) De Swardt (2006: 118) Goodale, Kuratko, Hornsby & Covin (2011: 116) Denis (2004: 301) Ebben & Johnson (2006: 851) Egan & Song (2008: 351) Getz & Petersen (2005: 219)
B42	Support	I have received non-financial support while running the business	Cesario & Higgins (2001: 16) Clarysse, Tartari & Salter (2011: 1084) Glaeser, Kerr & Ponzetto, (2010: 150). Tappeiner, Howorth, Achleitner & Schraml (2012: 38) Leary & Roberts (2010: 332) Singh & Sedory (2011: 1629)
B43	Financial management	Cash management is a focus area in business management	Hunger & Wheelen (2003: 10) Temtime & Pansiri (2004: 22) Akande (2011: 372). Gormley & Meade (2007: 923). Megginson, Byrd & Megginson (2003: 144)

			Smith (2009: 119). Du, Qiu & Xu (2011: 1240)
B44	Financial management	Our financial records are up to date and readily available	Van Tonder (2007: 14) Broyles (2003: 4-5) Cornwall, Vang & Hartman (2004: 26) Temtime & Pansiri (2004: 18) Akande (2011: 372). Gormley & Meade (2007: 923).
B45	Financial management	Our books are regularly audited	Carter, Brush, Greene, Hart & Gatewood (2006: 8) Cohen, Krishnamoorthy & Wright (2008: 166)
B46	Marketing	We know exactly who our target market is	Brush, Ceru & Blackburn (2009: 485) Flamholtz & Aksehirli (2000: 488). Wilkinson (2001: 23) Biemans, Brenčič & Malshe (2010: 183)
B47	Marketing	We regularly communicate with decision makers in our target market	Hunger & Wheelen (2003: 10) Goodstein (2000: 193) Pardo & Tunisini (2009: 851) Harris & Ogbonna (2003: 484)
B48	Marketing	The business regularly appear in the media	McKenna (1991: 66) Fatt (1998: 4) Baron & Shane (2005: 295) Piercy (2009: 857). Clark (2006: 1183) Wind (2008: 23) Fastoso and Whitelock (2010: 32)
B49	Marketing	We regularly advertise our product or service	Temtime & Pansiri (2004: 22) Vorhies & Morgan (2005: 80) Haas & Hansen (2005: 5) Goodstein (2000: 193) Fowler (2006: 26) Tai (2007: 40)
B50	Marketing	We have an experienced sales team	Le Meunier-FitzHugh & Piercy (2007: 929) Steward, Hutt, Walker & Kumar (2009: 463) Dawes & Massey (2005: 1327)
B51	Marketing	We often attend networking events	House (2000: 183) Hitt & Ireland (2002: 3) Steier (2000: 163) Smith & Lohrke (2007: 315) Etemad (2004: 135)
B52	Customer relationships	Customers are treated as important stakeholders	Timmons & Spinelli (2009: 249) Gruber (2007: 782) Lin, Wang & Chang (2011: 511)
B53	Customer relationships	We have high customer retention	Wickham (2004: 153) Gummesson (2004: 136). Rao, Metts & Monge (2003: 11)
B54	Customer relationships	We hardly ever receive complaints from customers	Timmons & Spinelli (2009: 249) Gruber (2007: 782) Jun, Yang & Kim (2004: 817)
B55	Customer	We spend time to understand what	Vargo & Lusch (2008: 3)

	relationships	our customers want	Prajogo (2006: 1374)
B56	Customer relationships	We regularly test customer satisfaction levels	Hanvanich, Droge & Calantone, 2003: 124).
B57	Operations	We have documented processes in place	Krasnikov & Jayachandran (2008: 3) Lu, Sadiq & Governatori (2009: 642) Lindgreen, Palmer, Vanhamme & Wouters (2006: 57) Kumar, Antony, Madu, Montgomery & Park (2008: 878)
B58	Operations	All employees are committed to service customers efficiently	Tan, Kannan, Jayaram & Narasimhan (2004: 833) Himes (2007: 329) Duclos, Vokurka & Lummus (2003: 446)
B59	Operations	Productivity is measured and controlled	Carr (2003: 41) Swanepoel, Erasmus & Schenk (2008: 372) Shah & Shin (2007: 768) Kim (2006: 1084) Duclos, Vokurka & Lummus (2003: 446) Cooper, Edgett & Kleinschmidt (2001: 361) Bhatt, Grover & Grover (2005: 253)
B60	Operations	We use technology to enforce processes	Riemenschneider & Mykytyn (2000: 257) Lu, Huang & Heng (2005: 395) Pearce & Robinson (2005: 84) Meintjies (2004: 164) Bhatt, Grover & Grover (2005: 253) Ray, Barney & Muhanna (2004: 23) Zhu (2004: 167) Singh (2005: 325)

2.4 SUMMARY

Through the ages, a recipe for entrepreneurial success has been sought and researched. As many scholars have tried to define business success. During the 1970s the focus was on the personality traits and attributes of the entrepreneur. A lot of research was done to identify the characteristics of successful entrepreneurs. Low and MacMillan (1988: 139) criticised this focus on individual characteristics to try and predict success. What all scholars agree on however is that entrepreneurship is a complex phenomenon with many variables impacting on the success thereof and a clear, universally accepted definition of business success has not been found.

From the literary study variables that impact on business success have been extracted. Entrepreneurial talent is considered the most important factor leading to business success. Entrepreneurial talent includes aspects such as a need for achievement and self-actualisation, being a self-starter, ability to tolerate stress and self-reliance. An ability to manage finances, sell and generate new ideas contributes towards being a successful entrepreneur. Competitiveness, motivation, assertiveness, willingness to take risks, creativity, innovation, internal locus of control, resilience, sound business knowledge and managerial skill are all characteristics that will help an entrepreneur to achieve success.

Zacharakis and Meyer (2000: 323) found that education and experience are mostly used by venture capitalists to determine which entrepreneurs to back. Such knowledge should include knowledge of the industry in which the business operates. The two main areas of education required are managerial training and entrepreneurial training. Education should include formal tertiary education as well as on-the-job training.

Managerial skill is another factor in entrepreneurial talent that is highlighted in the literature. Areas of management should include marketing, finance, research and development, operations and human resources. Coupled with this level of skill the entrepreneur should also be motivated and have the ability to motivate others, have a growth mentality and the ability to recognise and analyse opportunities. Most of all an entrepreneur should have a high propensity for stress, have tenacity and have the ability to make sound business decisions all while being a people person and have the ability to form sound relationships with employees and customers.

The second variable impacting on business success are sound business strategies and strong leadership in the organisation. Leaders that are able to delegate, support and guide are necessary in order to achieve business success. Such leaders should also be able to develop and execute sound strategies for the organisation. Business strategy should include overall strategic direction for the organisation, developing a long term vision with a roadmap and goals of how to achieve the set strategy as well as business planning, determining capacity requirements, extracting customer requirements and developing production capability to fulfil on such requirements. Business strategy should include change management strategies, growth strategies, and ultimately an exit strategy. An organisation that remains dependent on the entrepreneur for survival has not achieved sustainability.

The third variable impacting on business success is the macro environment. Macro environmental factors include environmental issues, political stability, availability of labour, physical infrastructure, economic parameters, openness of trade and government requirements. Market receptiveness also forms part of the macro environment as well as the amount of competitors and substitute products in the market. The macro environment cannot be controlled, but entrepreneurs should be aware of the macro environment they operate in and navigate their way around changes in the macro environment in order to achieve success.

Human capital is another variable that will have an impact on business success. Research has shown that there is a positive correlation between business success and human capital investment. In order to achieve business success and low staff turnover entrepreneurs will have to have sound recruitment and selection policies and procedures, develop team cohesiveness, have clear role definitions manage performance and diversity and bind all together with strong internal communications.

The fifth variable impacting on business success is the management and control of the entire supply chain and logistics. The quality delivered to the end-user will be as good as the worst quality in the upstream and downstream of the supply chain. The supply chain can be used to alleviate weaknesses through alliances. Logistics management is mainly responsible for customer satisfaction and cost effectiveness throughout the organisation. It is the component of the business that will ensure that the correct product is delivered to the correct place at the correct time and price. Quality management is another variable. An entrepreneur that wishes to be successful should implement quality measures and ensure a standardised delivery throughout the organisation. Total quality management means that every aspect and component of the business is quality controlled and that all employees are equally responsible for delivering quality.

Entrepreneurship is a hard lifestyle and without support and guidance business success will be difficult to achieve. Support should include financial support from formal and informal sources, such as banks and venture capitalists. In order to achieve such financial support, sound financial management is required. Financial management factors include financial planning, cash flow management, and record keeping.

When all is set up to navigate around, control and manage the variables that could affect the successfulness of the business venture, the entrepreneur has to take the product or service to market and grow the customer base. Marketing activities should include corporate branding, product marketing, communications, advertising, active selling and networking. Once the customers have been secured, building customer relationships has to become a main focus of the management of the organisation.

The last and eleventh variable impacting on business success is operational management. Without sound operational management, the business will not be able to deliver what the customer requires. Krasnikov and Jayachandran (2008: 3) conveyed that operations capability is the skill that will enable entrepreneurs to be efficient and productive. Operations management should include business process management and technology implemented across the financial, human resources, supply chain, production and quality departments.

Flamholtz and Aksehirli (2000: 488) developed a framework for entrepreneurial success and stated that the first step towards success is the identification of a market segment and a niche. In other words, to identify a need in the market and supply a solution thereto while the second step is to productise this solution to the need in the market. When such a product is then effectively marketed and sold to the potential customers, finances are managed well and total quality is implemented the entrepreneur stands a chance at business success.

For the purpose of the study, the effect of business process management on business success will be measured, but it is important to control for all eleven other variable to ensure that data gained is not skewed by other variables impacting on the business.

CHAPTER 3

CRITERIA AND MEASUREMENT OF BUSINESS SUCCESS

3.1 INTRODUCTION

The future of the business world, economic growth and humanity itself is largely dependent on business success (Dyllick & Hockerts, 2002: 130). In order to measure business success, it is necessary to define what “business success” means and to understand what criteria will determine such success. What constitutes such business success? Firstly, each discipline will define success according to its own criteria. Xu and Van der Heijden (2005: 137) contend that while accountants will site profitability as a measure of success, a human resource professional will define success as low employee turnover and employee productivity. Unger *et al.* (2009: 563) expressed that there is a positive relationship between human capital and business success and that human capital will assist entrepreneurs in acquiring other resources and that human capital has a strong influence on success.

The debate about the importance of human capital or financial capital has been raging for centuries. As early as 1989 Evans and Jovanovic (1989: 808) and Holtz-Eakin *et al.* (1989: 808) said that entrepreneurial businesses have a shortage of funding, while Cressy (1996: 1253) held that the lack of human capital is responsible for business failure. Vos *et al.* (2007: 2648) implied that small, micro and medium-sized enterprises (SMMEs) suffer from a lack of finance due to informational asymmetry and that growth and therefore business success is inhibited by the lack of finance. Davidson *et al.* (2009: 373) hypothesised that although growth is an often-used measure of success, growth should only follow after profitability. Firms that grow before high levels of profitability have been achieved are less likely to be successful.

Somchai (1992: 18) developed a measurement tool for business success, derived from the Du Pont model, stating three measures of success: return on equity, return on investment and net profit. This model is therefore based on financial ratios in line with accounting principles, disregarding other aspects of business success. At the same time Kaplan and Norton (1992: 71) developed the balanced scorecard, which incorporated financial, operational, learning and growth and customer service measures of success. Morrison and Teixeira (2004: 169)

developed a measurement tool divided in internal and external factors. Their model is depicted in Table 3.1.

Table 3.1: Business success measurement tool

INTERNAL	EXTERNAL
Owner-manager Socio-demographic profile Business entry motivations Personal and business goals Management capabilities Business Family involvement Ownership and organisational structure Length of time in operation Involvement in a range of business activities Staff and skills Confines of size	Competitive environment Degree of embeddedness in community Demand and seasonality Geographic location Human and financial resources Infrastructure and business support Micro/macro economy Micro/macro politics Natural disaster

Adopted from Morrison and Teixeira (2004: 169)

Fabling and Grimes (2007: 383) surveyed the measurement of business success using data from three thousand New Zealand firms. Issues such as leadership, planning practices, customer and supplier focus, employee practices, quality and process monitoring, benchmarking, community and social responsibility, innovation, IT use, and business structure were investigated. It was found that capital investment choices, R&D practices, market research and a range of employee practices are positively associated with firm success. Industry structure is also a key determinant of success and that key metrics of business success are firm size, age (sustainability) and profit (Galbreath, 2002: 8).

Balcaen and Ooghe (2006: 63) defined business success through first defining business failure. The ultimate business failure would be insolvency. Taffler and Agarwal (2003: 4) had defined failure by including loan default, closure of certain divisions, forced disposals of assets, in general financial distress, leading to loss of quality of life for the entrepreneur.

Before business success can be measured it is important to define business and entrepreneurial success. Investigate the criteria of business success that is divided into

financial and non-financial criteria and develop a measurement for business success. In developing the measurement the Du Pont model, the balanced scorecard, the Dynamic multi-dimensional performance framework and the Macro process model as well as some other lesser-known measurement tools are researched.

3.2 DEFINING BUSINESS AND ENTREPRENEURIAL SUCCESS

In the late nineties, Schiller and Crewson (1997: 523) defined business success as firm growth and duration of business. Van Praag (2003: 8) explained business success as the existence of the business and holds that if a business is in existence and the entrepreneur is self-employed there is a measure of success. Voluntary exit out of entrepreneurship is not failure.

The definition of business success is ambiguous. This ambiguity leads to an inability to compare businesses and therefore makes it impossible to provide an unbiased definition of business success (Koll, 2003: 141). This leads to a lack of criteria with which to measure business success (Olson, Zuiker, Danes, Stafford, Heck & Duncan, 2003: 639). Rogoff, Lee and Suh (2004: 364) showed that there was no single agreed upon definition of business success and that longevity is often used as a measure of business success and that termination would describe failure, yet a business that continues to exist, but fails to deliver value to stakeholders is not necessarily a success. Van der Merwe (2009b: 35) stated that numerous attempts have been made to define business success. Venter, Urban and Rwigema (2008: 512) defined business success as sound financial performance and harmony within the business.

Headd (2003: 51) concurred that defining business success is normally linked to sustainability and closure associated with failure. However, a study done by the United States Census Bureau indicated that approximately one third of firms that closed were successful at the point of closure. Davidson and Klofsten (2003: 8) considered stability and sustainability as the main factors of business success. Sustainability includes the business' flexibility to adapt to unexpected changes such as the loss of key personnel. Davidson and Klofsten (2003: 8) also pointed out that there is no business success without reliability and that a successful business will have good relationships with suppliers and customers.

Neely, Adams and Kennerly (2002: 43) considered a company that delivers shareholder value as successful and argues that reputation is a factor in success. Even profitable organisations will not be deemed successful if they have a tainted reputation. A good reputation will draw investment and drive success. Neely *et al.* (2002: 43) developed a performance prism to measure the level of success incorporating: stakeholder satisfaction, stakeholder contribution, successful strategies, processes in place and capabilities within the team.

Hunter (2003: 113) defined a successful business as a business with a dominant strategy of diversification, while Brush (2008: 21) defined a successful business as a business that has a clear vision, manages cash effectively and apply social skills to entice others to commit to the venture. Robinson and Chiang (2002: 855) are of the opinion that business success is defined by the innovativeness of the organisation and the extent to which the business introduces new technologies to the market, coupled with product development and process improvements.

Malmi and Ikäheimo (2001: 235) found that business success is all about shareholder value. To achieve stakeholder value, value based management is necessary according to Ittner and Larcker (2001: 349), who suggested that value based management integrates the balanced scorecard, strategic management and accounting systems. Neely *et al.* (2002: 377) agreed that a successful company is a company that provides value to their shareholders, but Paige and Littrell (2002: 315) defined small business success as a combination of tangible extrinsic outcomes and intrinsic factors. Johnson and Soenen (2003: 364) defined success as doing better than the competition in financial ratios and see efficient working capital management, uniqueness and superior financial performance as the main criteria for business success.

According to Young and O'Byrne (2000: 28), the entire goal of the company is to deliver value to investors. Such value creation has to be measured according to profit achieved in relation to the capital used to generate the profits. Traditional performance metrics such as earnings per share, book value, return on equity, return on assets and return on invested capital is not sufficient to determine shareholder value (Morin & Jarrell, 2001: 309). According to Simpson and Ashworth (2009: 4697), stakeholders include shareholders, the community in which the business operates, government, investors, suppliers, certification bodies, employees and clients. In order to achieve business success each of the stakeholder groups need to experience positive effects from the existence of the business.

Bosman (2007: 12) agreed that the primary goal of an organisation should be the creation of shareholder value, but further maintain that other stakeholders should also benefit from the business. The definition of business success, according to Bosman (2007: 14), is the creation of stakeholder value in various forms. Correia, Flynn, Uliana and Wormald (2007: 1120) explained business success and stakeholder value according to the financial ratios to determine return and suggest that net present value, internal rate of return, return on equity and return on assets, combined with earnings per share, price earnings ratio and economic value added, will measure the success of the business. This will only measure investor or shareholder return and not include other stakeholders. Seisreiner and Trager (2004: 8) argued that capital is only one aspect in the creation of shareholder value. Businesses should take other resources and stakeholders into consideration when determining business success. Arnold (2005: 736) felt that financial ratios are the best measurement, but also believes that value is created when investments in the company create more value than what was invested.

According to Jensen (2001: 16), management should primarily focus on market value-add. Business success can only be defined when all stakeholders are taken into consideration. Each stakeholder group will perceive the success of the business from a different perspective. Employees will consider the business successful when the working environment is conducive to productivity and financial return in the form of reward and compensation is stable and increasing (Kehoe & Collins, 2008: 149). Suppliers will consider the business successful when procurement is stable and increasing and bills are paid regularly. Clients will consider the business successful when the supply is of a constantly high quality and service is according to its requirements. According to Bosman (2007: 12), stakeholders should also make a contribution towards business success. While stakeholder value varies, at the end everything comes back to the issue of return on investment. Nelson and Wilson (2003: 105) believed that to truly be successful a business has to consider the triple bottom line, therefore take into consideration economic prosperity, environmental sustainability and social well-being. A successful business will be financially successful, minimize negative impact on the environment and work according to society's expectations. Peña (2002: 180) suggested that business success is defined by the effective deployment of human capital, the effective management of financial capital, the ability to adapt to changes and the implementation of successful strategies.

When considering the literature on business success, the definition of business success has to be categorised into two sections, financial success and non-financial success. Van der Merwe and Ellis (2007: 3) define a successful family business as one that does not harm family relationships and that has sound communications structures in place. It is not necessarily failure if there is conflict in the business. Gvozdanovic (2004: 62) argues that financial success is based on gross- and net profit, financial ratios and financial value to shareholders, while non-financial success is based on growth, sustainability, and providing a career and quality of life to owners and employees. Headd (2003: 55) defines a successful business as a growing business providing value for its stakeholders through financial and non-financial growth. Ari and Vonortas (2007: 475) expands on the theory of Headd (2003: 55) by saying that while small and medium-sized business shares are privately held by families or individuals, the expectation is still that return on investment will be realised through growth and profitability.

3.3 CRITERIA OF BUSINESS SUCCESS

During a study done by Kakati (2003: 447) 27 venture capitalists were asked to rate the most successful and biggest failure in business. It was found that the availability of financial resources, entrepreneur quality and competitive strategy were the main criteria of business success. Hienerth and Kessler (2006: 115) based their criteria of business success on growth in investments, employees, turnover, number of customers and number of clients and break success down into four dimensions: management, resources, environment and entrepreneurship. Buchel (2005: 274) listed success criteria as creating a positive climate, innovativeness, and open communications internally and externally and continue to say that successful businesses are strongly committed to business development.

Quesada and Gaza (2007: 5) defined key success criteria to measure the success of businesses and find that business processes in the various key performance areas should be developed in order to sustain business growth and create success. The key success factors are market management, product design, operational functioning, supply chain management, customer engagement, logistics and inventory management, business management, technology, financial management and human resource management. If each of these areas is successfully run, the business as a whole will be successful. Quesada and Gaza (2007:5) further found that

in order to achieve and measure success through these various success factors, key performance areas and business processes should be aligned. Bosman (2007: 4) declared that business success criterion is broken down into two areas: financial performance measures and measurement indicators to measure growth.

3.3.1 Financial criteria

Financial indicators of success are return on assets, return on equity, earning per share and headline earnings per share (Merchant, 2006: 893). Criteria to calculate growth performance is economic value add and market value-add (Bosman, 2007: 4). Flamholtz and Aksehirli (2000: 488) developed a pyramid system to measure business success, but warn that the pyramid should be used in combination with financial ratios such as return on equity (ROE) to efficiently determine success levels of an organisation.

Walker and Brown (2004: 593), in their study of 290 small businesses, found that financial criteria are normally used as a measure of business success. The firm has to be profitable, have a sound balance sheet and accumulate long-term assets through sound financial management. Not only should the business be profitable, but it should also have the ability to generate and retain cash. Aksoy, Cooil, Groening, Keiningham and Yalcin (2008: 105) measured business success according to revenue growth, increase in share price and increase in market share. Williams and Naumann (2011: 27) found that there are many benefits of increased customer satisfaction levels, but the measure of business success is still financial measures. Firstly the higher the satisfaction scores the higher the customer retention levels and the higher the chance of up selling and contract renewals. A positive correlation was found between customer satisfaction and earnings per share (Aksoy *et al.*, 2008: 106).

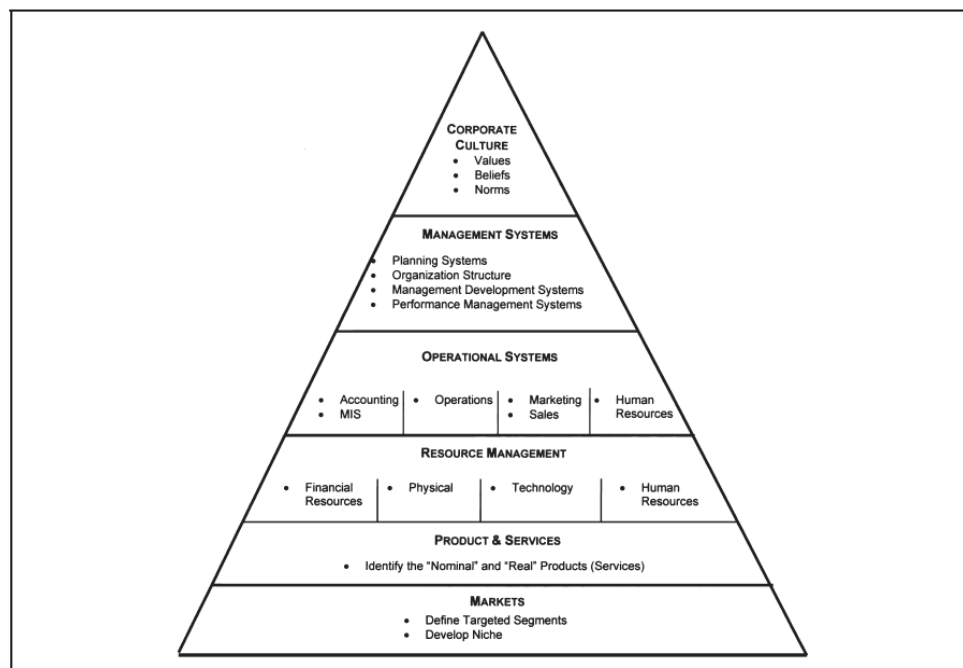
3.3.2 Non financial criteria

The Flamholtz (1995: 39) pyramid system forms a holistic view of business success. The pyramid shows six building blocks of successful organisations. The pyramid incorporates culture, management systems, operational systems, resource management, products and services as well as markets as criteria for business success. Culture speaks of the measure to which the organisations sticks to its values, norms and beliefs. (Neely *et al.*, 2002: 145).

Lewis and Heckman (2006: 139) shows that management systems include the ability of the organisation to plan efficiently, build an efficient organisational structure, implement management development systems and measure performance, its management and its employees. Boudreau and Ramstad (2005: 17) contend that organisational systems include the efficiency of accounting, production, marketing and human resources. Products and services should be in line with customer requirements and differentiation should be done between nominal and real products. The last segment is the ability of the organisation to segment target markets and develop a niche market to penetrate (Hung & Tsai, 2008: 780).

Flamholtz and Aksehirli (2000: 488) cautioned that the key success criteria areas cannot be carried out independently, but should occur simultaneously to determine and steer the success of the organisation. Their key success criterion is further explained in figure 3.1.

Figure 3.1: Six key building blocks of successful organisations



Source: Flamholtz (1995: 42)

Kakati (2003:447) found that successful entrepreneurs develop multiple resource-based capabilities to backup multiple-strategies to launch their products to growing markets and a focused strategy when entering a mature market, but Ritter and Gemünden (2002: 548) stated that technological abilities will be a criteria of business success as businesses need technology to produce a product or a service and at the same time technology is needed to

link the company to the outside world. García-Muiña and Navas-López criteria (2007: 30) sites criteria for business success are business strategy, technological competence and innovation. Without those the company cannot be considered successful.

Holtbrügge (2004: 255) found totally different criteria of business success during his international study. According to Holtbrügge (2004: 255), successful partner selection, cooperation agreements, management structures, acculturation process and knowledge management are signs of business success. Rogoff *et al.* (2004: 367) summarised the criteria of business success as growth, profitability and long-time viability. Hormozi, Sutton, McMinn and Lucio (2002: 755) listed the criteria for business success as a company that sells and delivers a good product or service to a specific target market at a price that customers are willing to pay through a sound and well thought out marketing plan. The company has to be managed by an excellent management team that instils trust in the investors.

Morgan and Rego (2006: 426) explored the link between customer satisfaction and business performance and found that the higher the customer satisfaction the higher the repurchase intent, the higher the customer advocacy and therefore customer retention. Higher satisfaction levels and loyalty will lead to improved revenue and profitability. Gruca and Rego (2005: 115) also found that increases in customer satisfaction lead to increases in business success and a reduction in risks. Another performance criterion for business success is the prominence of the brand in the market and the market share the organisation enjoys. Wong and Merrilees (2008: 372) argued that brands are an unseparated part of a firm's value and a strategic asset. A brand can become a competitive advantage for the business.

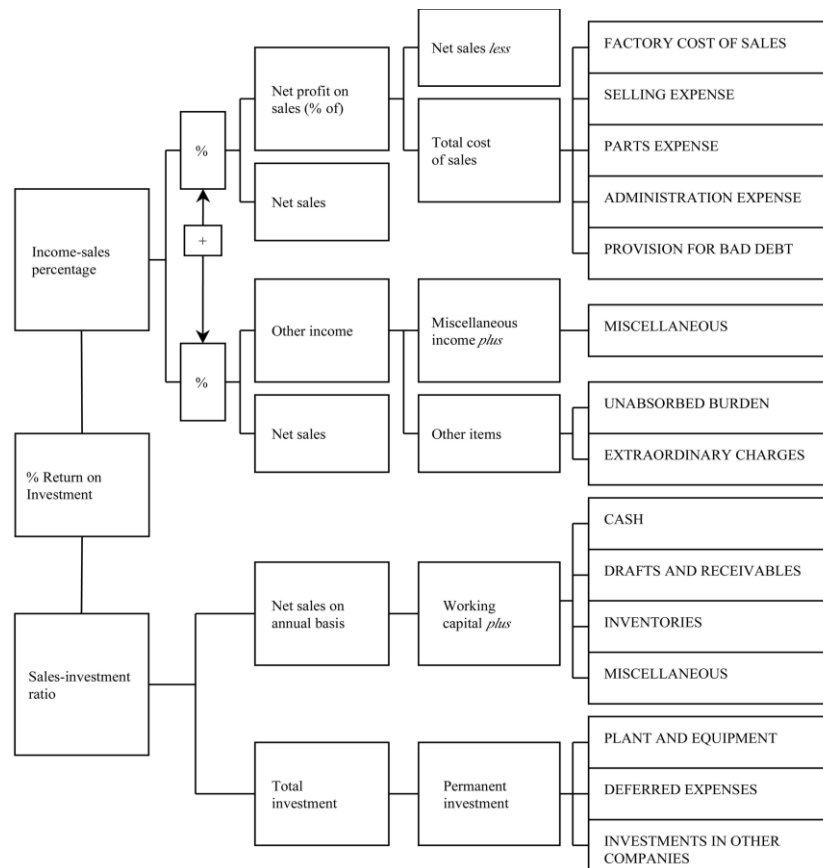
3.4 MEASUREMENT OF BUSINESS SUCCESS

To date there has not been a universally accepted measurement tool developed for business success. What measurement tools are in use are all focussed on financial measures, such as the Du Pont's pyramid of financial ratios. As early as 1987 Johnson and Kaplan (1987: 117) identified deficiencies in the use of financial ratios alone to measure business success. In 1989 Keegan *et al.* (1989: 45) suggested that financial and non-financial measures should be used in order to obtain a balanced measurement of business success.

3.4.1 Du Pont's pyramid of financial ratios

Du Pont used a pyramid of financial ratios that linked a wide range of ratios to return on investment (Neely, 2002: 146). The Du Pont model was developed in 1903, using various financial ratios to prove liquidity and profitability to measure success (Chandler, 1971: 417).

Figure 3.2: Du Pont model

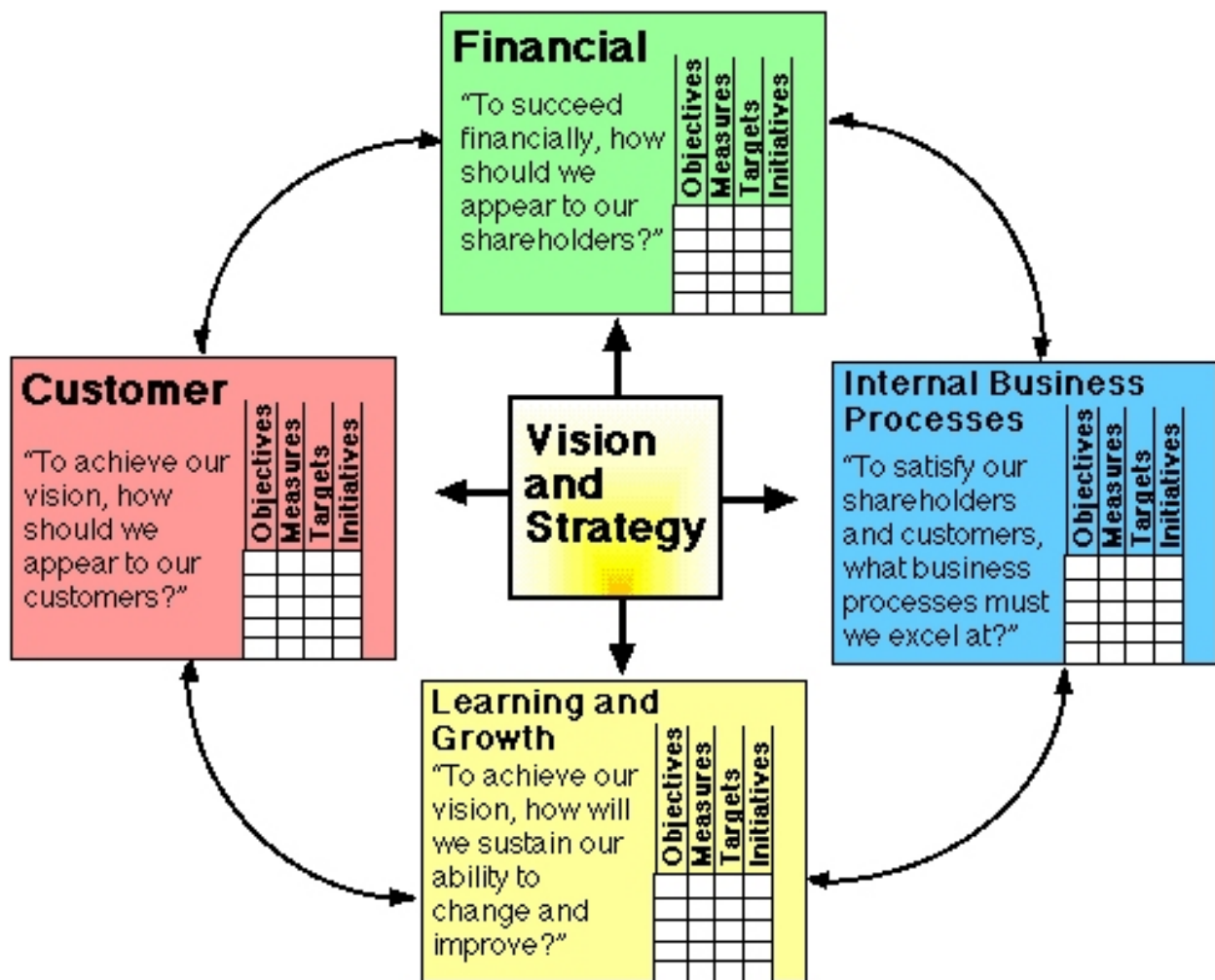


Source: Chandler (1971: 417)

3.4.2 Balanced scorecard

Kaplan and Norton (1992: 71) developed the balanced scorecard in an attempt to produce a balanced measurement tool. The balanced scorecard aimed to move away from financial measures alone and used three additional measurements: business processes, learning and growth and customers. It led businesses to track financial results while also monitor other areas of the business. According to Maltz, Shenhar and Reilly (2003: 187), however, the balanced scorecard has been shown to be inadequate in various circumstances.

Figure 3.3: Balanced scorecard



Source: Kaplan and Norton (1992: 76)

3.4.3 Dynamic multi-dimensional performance framework

During their research Maltz *et al.* (2003: 187) identified 12 measures as criteria to measure business success and developed what they called the Dynamic multi-dimensional performance (DMP) framework. The DMP framework was based on five major dimensions: Financial, Market, Process, People, and Future, with various measurements under each dimension such as sales levels, revenue growth, customer retention, market share, on-time delivery, quality, responsiveness and employee retention (Maltz *et al.*, 2003: 187).

3.4.4 Macro process model

According to Neely (2002: 378), the macro process model links the five stages of business processes to the performance measurement. These stages are inputs, processing, outputs, outcomes and goals. The Macro process model was developed in 1996 by Brown (2006: 14).

3.4.5 Other measurements

Walker and Brown (2004: 588) affirmed that measuring the success of the small business will include the achievement of personal goals for the entrepreneur. Factors that are important to the entrepreneur have to be taken into consideration. Financial success will ultimately form part of these goals, but cannot be the only measure of business success. Fielden *et al.* (2000: 295) listed possible personal goals as business growth, personal freedom, independence, flexibility, job satisfaction and pride. In contrast to this Johnson and Soenen (2003: 367) used five business growth indicators: size of the business, profitability, capital structure, liquidity, cash conversion cycles and earning volatility as the basis from which to measure business success. It is clear from their research that financial measures play a bigger role.

Lloyd (2003: 407) cautioned that business success is not success when quality of life and time with family is sacrificed in the process. According to Lloyd (2003: 423), a business that is successful allows work-life-balance for its management as well as providing self-actualisation to owners and employees. The successful business is a business that does not just strive for success, but achieves significance.

Reid and Smith (2000: 165) alleged that there is no universal or unique way in which to measure business success. It depends on the goal of the business at the outset of the organisation and to what measure such objectives have been met. In order to successfully measure the business' performance the market nexus also has to be taken into consideration. Reid and Smith (2000: 167) asserted that even if the objectives are met and the business is operating within market standards, a successful business must be sustainable and able to survive. Furthermore the business has to be economically active and provide employment. Even if life-style and business goals have been met, economic failure, especially financial

distress or insolvency, will render a business a failure (Lin, Penm, Gong & Chang, 2005: 111).

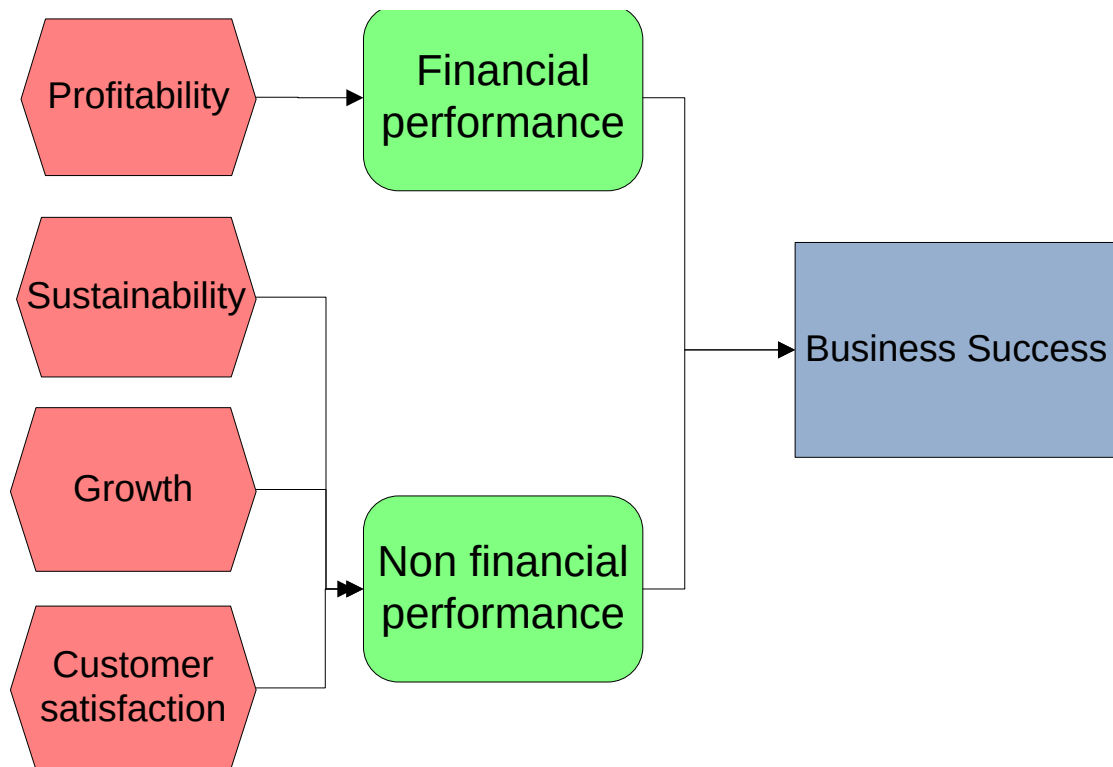
Balcaen and Oogh (2006: 63) investigated measurements of business success in order to accurately predict the possibility of failure and use a univariate analysis, risk index models, and multiple dicriminant models to determine the chance of failure. Hand (2004: 4) found that to accurately predict the chance of failure it is necessary to define measurements of business success and believes that such a definition does not exist. Platt and Platt (2002: 184) defined business failure as bankruptcy. Hackett and Dilts (2004: 43) stated that the measurement of business success is as straight forward as analysing the income statement. Sawhill and Williamson (2001: 378) stated that to measure business success is a complex issue. It is a matter of measuring the achievement of the business against each set goal.

De Brentani (2003: 169) developed seven keys to measure business success. During her research she found that business success is measured by the fit between the need of the customer and the solution offered, having expert and efficient front line employees, offering unique competencies, a culture that enhances creativity, good market potential, innovativeness and senior management involvement. Other measurements of business success such as growth in turnover and employees are relevant, but without the seven key measurements identified, the state of success will not be sustainable.

For the purpose of this study business success will be measured through financial and non-financial measures. The financial measurements used will be *Profitability* while the non-financial measurement will be *Sustainability, Business growth, and Customer satisfaction*.

The measurement tool is depicted in figure 3.4.

Figure 3.4: Measurement of business success



Source: Researcher's own construction

Table 3.2 summarises authors having done research on the definition and criteria of business success. The authors are grouped according to questions asked in the empirical study.

Table 3.2: Questions asked on business success

A9	Growth	Current annual turnover	Holtz-Eakin, Joulfaian & Rosen (989: 808) Fielden, Davidson & Makin, (2000: 295) Dyllick & Hockerts (2002: 130)
C1	Growth	The turnover of the business increases year on year	Vos, Yeh, Carter & Tagg (2007: 2648) Hienerth & Kessler (2006: 115) Brush, Ceru & Blackburn (2009: 483) Davidson & Klofsten (2003: 8)
A5	Growth	Amount of employees	Unger, Rauch, Frese & Rosenbusch (2009: 563) Hienerth & Kessler (2006: 115) Schiller & Crewson (1997: 523)
C2	Growth	Our employee count grow year on year.	Evans & Jovanovic (1989: 202) Cressy (1996: 1253) Simpson & Ashworth (2009: 4697) Xu & Van der Heijden (2005: 137)
C3	Growth	We regularly appoint new employees to keep up with the demand	Kaplan & Norton (1992: 71) Schiller & Crewson (1997: 523) Peña (2002: 180)

			Fielden, Davidson & Makin (2000: 295)
C4	Growth	Our organisation experienced growth in profits over the past few years	Quesada & Gaza (2007: 5) Kakati (2003: 447) Walker & Brown (2004: 593) Johnson & Soenen (2003: 364) Headd (2003: 55) Aksoy, Cooil, Groening, Keiningham & Yalcin (2008: 105)
C5	Profit	We are happy with our gross profit margin, which is in line with industry standards	Davidson, Steffens & Fitzsimmons (2009: 373) Johnson & Soenen (2003: 367) Martin & Petty (2000: 81) Arnold (2005: 736)
C6	Profit	Our net profit margins are in line with industry standards	Somchai (1992:18) Kaplan & Norton (1992:71) Nelson & Wilson (2003: 105)
C7	Profit	We show acceptable net profit	Brush (2008: 21) Rogoff, Lee & Suh (2004: 367) Keegan, Eiler & Jones (1989: 45) Morin & Jarrell (2001: 309)
C8	Profit	The financial well-being of our business is secure	Correia, Flynn, Uliana & Wormald (2007: 1120) Arnold (2005: 736) Bosman (2007: 4) Johnson & Kaplan (1987: 117)
C9	Customer satisfaction	Our customers are happy with our service/product	De Brentani (2003: 169) Jacobson (1995: 201) Hormozi, Sutton, McMinn & Lucio (2002: 755)
C10	Customer satisfaction	Customer retention is high	Fabling & Grimes (2007: 383) Gruca & Rego (2005: 115)
C11	Customer satisfaction	We don't have many returns and when we do we handle it to the satisfaction of the customer	Brush, Ceru & Blackburn (2009: 481) Urban, Van Vuuren & Barreira (2008: 59) Timmons & Spinelli (2009: 249)
C12	Market position	The competitive position of our organisation has improved over the last few years	Johnson & Soenen (2003: 364) Kakati (2003: 447)
C13	Market position	Our organisation experienced growth in market share over the last few years	Jensen (2001: 16) Hon (2005: 142)
C14	Market position	Our brand has strengthened in relation to our competition	Keegan, Eiler & Jones (1989: 45) O'Neill & Sohal (1999: 571)
C15	Sustainability	I see the business continuing into the future	Balcaen & Ooghe (2006: 63) Schiller & Crewson (1997: 523) Headd (2003: 51) Davidson & Klofsten (2003: 8)
C16	Sustainability	I see the business as a legacy handed to the next generation	Van Praag (2003: 8) Reid & Smith (2000: 167) Van der Merwe (2009a: 51) Kakati (2003: 447)
C17	Sustainability	The business is creating wealth for stakeholders	Neely, Adams & Kennerly (2002: 43) Malmi & Ikäheimo (2001: 235) Young & O'Byrne (2000: 81)

			Morin & Jarrell (2001: 309) Bosman (2007: 12) Seisreiner & Trager (2004: 8) Correia, Flynn, Uliana & Wormald (2007: 1120) Ari & Vonortas (2007: 475)
C18	Sustainability	The business is continuously creating more employment opportunities	Jensen (2001: 16) Hienerth & Kessler (2006: 115) Lin, Penm, Gong & Chang (2005: 111)
C19	Sustainability	Employees are committed to the business	Flamholtz & Aksehirli (2000: 488) Lloyd (2003: 407) De Brentani (2003: 169)
C20	Sustainability	The business remained stable during difficult market conditions	Nelson & Wilson (2003: 105) Reid & Smith (2000: 167) Fabling & Grimes (2007: 383)
C21	Sustainability	Our financial ratios have improved over time	Hackett & Dilts (2004: 43) Somchai (1992: 18) Hon (2005: 142) Gvozdanovic (2004: 62) Merchant (2006: 893)
C22	Sustainability	Productivity and efficiency has improved over the last couple of years	Jensen (2001: 16) Unger, Rauch, Frese & Rosenbusch (2009: 563) Bosman (2007: 12) Kehoe & Collins (2008: 149) Van der Merwe & Ellis (2007: 3) Lewis & Heckman (2006: 139) Boudreau & Ramstad (2005: 17) Hung & Tsai (2008: 780) García-Muiña & Navas-Lópezcriteria (2007: 30)

3.5 SUMMARY

Through decades attempts have been made to define and measure business success. To define business success, determine the criteria of business success and measure success achieved so that continued success may be achieved is of vital importance to the economy as well as the overall well-being of the human race. Yet to date no universally accepted measurement tool has been developed for business success. Somchai (1992: 18) developed a business success measurement tool, derived from the Du Pont model. The measurement tool is based on three measures: return on equity, return on investment and net profit. Flamholtz (1995: 39) developed a pyramid system to form a holistic view of business success. The pyramid incorporates culture, management systems, operational systems, resource management, products and services as criteria for business success.

From the literary research done in an attempt to define business success the following definition emerged. A successful business is a business that provides all shareholders value in some form or another, have a dominant strategy, with a clear vision. It is an organisation that is innovative and outperforms the competition in a manner that will lead to increasing turnover, operating at maximum productivity and quality at minimum cost while offering employment, add value to customers and contribute towards the broader community. A successful business uses assets, such as human capital, finances, inventory and plant and equipment efficiently and effectively while being environmentally sustainable. The successful business is a vibrant, growing organism that is sustainable and adds to the quality of life and wealth of all involved. It is important to note that business success is never a given, or a destination. It is a continuous journey, which could end at any time through changes in any one of the variables that could impact on business success as discussed in chapter 2.

In order to measure business success as described above, the criteria to be used has to be split in financial and non-financial measurements. Financial ratios can be used to measure business performance when financial measurements are used. Non-financial measurements include:

- Customer satisfaction
- Sustained growth
- Market share
- Brand equity
- Shareholder value
- Long-time sustainability

Business success is fluid and entrepreneurs cannot relax having achieved business success. A state of success has to be guarded and maintained. Many variables will impact on the successfulness of the business and issues in the macro environment can also have an impact on the success of the organisation. Business success has to be measured against set goals, which will differ from company to company. Such performance has to be measured on a continuous basis and sound management and planning must steer the company to achieve set goals.

A couple of business performance measurement tools have been developed by various scholars such as the Du Pont pyramid of financial ratios, the SMART tool, the balanced scorecard, the dynamic multi-dimensional performance framework and the macro process model. For the purpose of this study business success will be measured in financial and non-financial terms. Financially the measure used will be *Profitability* and non-financial measures used will be *Sustainability*, *Business growth* and *Customer satisfaction*.

CHAPTER 4

BUSINESS PROCESS MANAGEMENT

4.1 INTRODUCTION

Scholars such as Lindsay *et al.* (2003: 1015) believed that the road to success in business is the ability of the organisation to adapt to a changing business environment and to successfully implement business processes. Smith, Msetfi and Golding (2010: 326) agreed that process orientated structures will lead to being more responsiveness to clients and the environment. However, there is concern whether all entrepreneurs understand the nature of business processes. Wang and Wang (2006: 179) warned that the unpredictability of business activities means that business process management should provide a way to adapt to change. The traditional workflow approach does not provide support for a complex and dynamic business environment (Smith *et al.*, 2010: 326). Therefore, a cognitive approach is required with a continuous awareness of situations and real-time decisions on activities. Trkman (2010: 125) concurred that although business process management has become a popular concept, it has not yet been theoretically grounded. The effect of business process management on business success is yet to be determined. A fit between the business environment and business processes has to be found.

According to Jacobson (1995: 201), business processes are merely a set of internal activities performed to serve a customer and despite the fact that processes have been used throughout the ages, there is still confusion surrounding them due to their invisible nature. This chapter will endeavour to further investigate the literature available and try to define business process management in more depth. Current business process definitions found in the literature is short and rather gives key features than a definition. What can be found in the literature is that business processes are a purposeful activity; a mapping of how a certain job should be executed while providing cross-functional boundaries.

An empirical study done by Jarven and Stoddard (1998: 15) found that business process management can only succeed when the design effort is radical, but earlier Clemons, Thatcher and Row (1995: 9) held that radical change will bring about failure. While there are attempts made at defining, promoting and improving the understanding of business process

management, there is also a need to understand the impact of business process management on business success and the successfulness of the business process management implementations in itself.

Ray *et al.* (2004: 23) argued that firms that fail to translate their resources and capabilities into business processes cannot expect to realise their competitive advantage or potential. It is through business processes that a firm's resources and capabilities get exposed to the market and that the failure to exploit assets through business process management will result in a deterioration of the ability to generate competitive advantage. It is generally accepted that business process management has some effect on business efficiency. The full effect has to be investigated.

The history of business process management is discussed, followed by the definition of business processes and business process management. The elements of business process management are input, transformation and output. Components are production, which includes location decisions, facility layout and production processes, quality control processes, which includes policies and quality assurance processes, financial processes, human resources processes, which includes administration and performance management systems, supply chain processes and lastly technology, which includes business process management software and industrial technology. The states of business process management are the extraction of activities, development of processes, critical path analysis, implementation of processes and technology and maintenance and continuous improvement. The advantages of business process management as well as the critical success factors are researched.

4.2 BUSINESS PROCESS MANAGEMENT

In order to understand the value of business process management, it is necessary to understand the history, definitions and elements thereof. The concept of business process management started in the nineteen twenties through the innovation of Frederick Taylor and his theories of management science. Spender and Kijne (1997: 475) gave recognition to the work of Frederick Taylor as the “father of scientific management”.

4.2.1 History of business process management

Antras and Voth (2003: 52) wrote that throughout the history of mankind business was conducted in some form or another, whether it be trade or services delivered. During the late seventeenth hundreds the industrial revolution saw industry starting to focus on ways of improving efficiencies and reducing costs. Since then, the development of business process management went through various stages and has been a continuous process. Helpman (2004: 114) added that while productivity growth during the Industrial revolution was slow, it started accelerating by the eighteen hundreds.

Lindsay *et al.* (2003: 1015) identified four stages during the nineteen hundreds when industry focused on increasing productivity. By 1960 the focus was on producing more. In the next stage, by 1970 the focus was on lower cost and during the eighties the focus became quality. In the nineties it was how to produce quicker and shorten lead times while in the 21st century the focus moved to offering more through superior service. Uden and Naaranoja (2010: 268) show that ultimately, throughout the industrial revolution and all the various stages until the current focus on service quality, business process management was used and further developed to achieve the requirements to remain competitive. Brech, Thomson and Wilson (2010: 216) held that business processes and business process management, with resultant business process re-engineering, gained much prominence in the early nineteen hundreds, as businesses were challenged and forced by globalisation to break out of their traditional ways of doing business.

According to Smith and Fingar (2003: 102), a typical re-engineering process would start with “mapping” of current business processes and then a critical path analysis to assess which non-value-adding processes could be left out. The process would also strive to obliterate any bottlenecks.

In the late nineteen hundreds, the world saw the emergence of business process management through information technology (IT) (Ozcelik, 2010: 7). Two other information technology focused trends emerged, enterprise requirement planning (ERP) and e-business, forming a basis for organisations to interact electronically. Lee (2005:34) believed that both enterprise requirement planning and e-business systems were only successful due to business process

improvement initiatives which led to lower costs, reduced cycle times and more satisfied customers. The market realised that business processes do not stop when the products are dispatched (Lee, 2005: 34). Business process management was extended throughout the supply chain, including suppliers, customers and alliance partners. To achieve this, the information technology sector responded with efforts to supply business process management software in order to span multiple applications, departments and business partners (De Oliveira, McCormack & Trkman, 2012: 5488).

4.2.2 Definition of business process

As early as 1990, Davenport and Short (1990: 12) defined a business process as a set of related tasks performed to achieve a business outcome. A business process has structure, inputs, outputs, customers and owners. Hammer and Champy (1993: 34) described business processes as a collection of activities that uses a collection of inputs and creates an output that adds value to the customer. A good business process should have a goal and should be improved continuously, taking external factors into consideration. Davenport (1993: 207) explained a process as “a structured set of activities designed to produce a specified output for a particular customer or market, therefore a process can be seen as a specific ordering of work activities across time and place with a beginning, an end and clearly identified inputs and outputs”.

Venkatraman (1994: 73) expressed business processes as the manner in which work gets done within an organisation. Hinterhuber (1995: 65) defined business processes as a set of integrated and coordinated activities to convert inputs into outputs. Later Becker, Von Uthman, Zur Mijhlen and Rosemann (1999: 10) outlined business processes as the automated movement of documents or tasks according to a set of procedural rules. Becker, Uthman, Mijhlen and Rosemann (1999: 12) described business processes as a sequence of activities required to perform operations on economically relevant objects, whose control logic lies within the control sphere of an information system.

Business processes are “a sequence of activities which transform inputs into outputs”. A production process is seen as a linear progression, taking raw material and transforming it into a finished product (Lindsay *et al.*, 2003: 1017). Activities required to achieve a certain

outcome are identified, prioritised, standardised and mapped to provide a clear and improvable roadmap to achieve an outcome. Kalpic and Bernus (2006: 40) described business processes as a set of activities intended to transform system inputs into desired system outputs by the application of system resources.

Lee (2005: 29) identified key features of a process as predictable and definable inputs such as a linear, logical sequence, a clearly definable set of activities and a predictable and desired outcome. Where there is a process it infers that something that is definable, describable and repeatable exists. Smith and Fingar (2003: 94) argued that business processes are nothing more than the flow of interactions among participants at every level. Strnadl (2006: 67) identified business processes as a complete dynamically coordinated set of activities or logically related tasks that must be performed to deliver value to customers.

Considering the various opinions and definitions, business processes are a set of activities, mapped and improved to provide a blue print of how inputs should be transformed into outputs in a standardised manner and according to the requirements of the customer.

4.2.3 Definition of business process management

Zairi (1997: 64) characterised business process management as all efforts in an organisation to analyse and continuously improve fundamental activities, such as manufacturing, marketing, communications and other elements of company operations. Lindsay *et al.* (2003: 1017) found that business process management identifies the key mechanisms and strives to improve in order to maximise productivity and minimise cost. Business process management will also identify areas where technology can optimise the processes (Demirkan, Kauffman, Vayghan, Fill, Karagiannis & Maglio, 2008: 356). Through the management of mapped and implemented business processes, often executed through technology, delivery will be standardised and efficiency maximised. Lack of business processes and the resultant lack of business process management will lead to a lack of standardisation (Zairi, 1997: 64).

According to Lee (2005: 29), business process management is ultimately a set of structural changes, the use of systems and the management of individual projects. Lee (2005: 30) argued that within business process management the process must be describable in a

standardised business process and executable to provide expected outputs in a repeatable manner. Smith and Fingar (2003: 97) understood that business process management language (BPML) has made an important contribution towards business process management. The language provides a link between the process flow charts, process maps and executable computer code.

Business process management (BPM) as “a philosophical approach to organisation-wide management in which the focus is on the processes through which it operates, and the streamlining and optimising of these processes, for which software solutions may be used” (Janke, 2006: 6).

Collating the various definitions of business process management available in the literature, for the purpose of this study, business process management will be defined as management of business processes, the implementation and continuous improvement thereof and adherence thereto through the use of sound technologies in order to enforce standardised delivery of high quality.

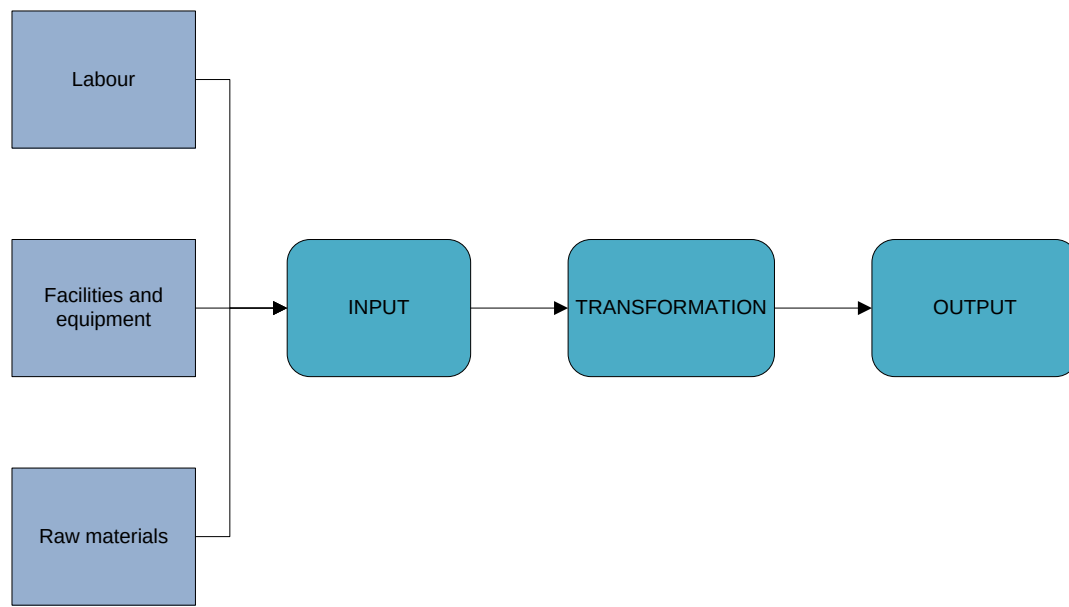
4.2.4 Elements of business process management

Robb (1986: 55) showed the elements of business process management as input, transformation and output, known as the systems theory. It has its origins in the application of an analytical method and arose from an attempt to describe the general laws governing systems behaviour. Leymann, Roller and Schmidt, (2002: 198) explain that the focus is on the relationship between different activities or parts of the system to produce a product or a service. Mingers and White (2010: 1147) reminded us that the founders of systems thinking were Ackoff and Hall in 1962. In 1963, Churchman added to the theory but was challenged in 1979 by Ackoff (1979: 55).

Each process consists of a repeatable set of sub-activities with measurable inputs, value add and output (Brassler & Schneider, 2001: 119). Hernandez, Mula, Ferriols and Poler (2008: 842) held that business process management is, in essence, a methodology establishing a way of doing things with standardisation of procedures to achieve a certain outcome. It provides a better idea of the activities required to deliver a service or product. The process is developed

in three sectors, namely inputs, transformation and output delivered according to a certain process. Kingsman (2000: 73) shows that product flow will follow the workflows and will be dependent on information and document flow. The elements of business process management are depicted in figure 4.1.

Figure 4.1: Elements of business process management



Source: Researcher's own construction

4.2.4.1 Input

Grönroos and Ojasalo (2004: 414) found that the productivity of a process is directly related to how effectively inputs are transformed into value for customers. It is assumed that a change in inputs could lead to changes in the quality of outputs. In the service industry, changes in resources and production systems will affect the quality of services. Quality is a function of how effectively inputs are used during the transformation process and how effectively the capacity in the process is utilised (Jaaskelainen, 2010: 360).

The first step in business process management is process and production planning. According to Hernandez *et al.* (2008: 843), the planning stage is governed by the company's product, information and decision flows. Inputs are to be identified. Brassler and Schneider (2001: 119) identified inputs as strategic decisions, raw materials, technical equipment such as machines, computers, handling systems, facilities and human resources and classify inputs

into two categories: sustaining factors and consuming factors. Sustaining factors are necessary to the general existence of the process and are reusable, such as machinery and facilities. Consuming factors are exhausted by the process, such as raw materials (Brassler & Schneider, 2001: 118).

Chen, Hwang and Shao (2005: 447) classified inputs into four categories: general service inputs (cost of sale), special service inputs (value add), ancillary inputs (extras such as human resources) and capital inputs (facilities and fixed assets).

4.2.4.2 Transformation

Transformation is the set of actions that transform all inputs into outputs and can be offered to a client in order to earn money. Liang and Hong (1994: 95) warned that the transformation system includes concepts such as project management, process flow, facility layout, material flow, ergonomics, workplace organisation and supporting software. All the developments are integrated into a whole system that enables competitive manufacturing. According to Otto and Scholl (2011: 277), the assembly line is a stem where a set of tasks is distributed in sequential order among workstations according to operation times. Each employee has to perform at a standardised quality and within a set time. Each task has to be performed in sequence. The challenge is to assign tasks to workstations in such a manner that cycle times and precedence sequencing are met while optimum cycle times are achieved at minimum cost, using capacity in the most efficient manner (Liang & Hong, 1994: 95).

Marksberry, Badurdeen and Maginnis (2011: 3) expressed that the transformation process includes five departments: sales, design, product development, production control and manufacturing. Earlier Brassler and Schneider (2001: 121) warned that there are often some constraints in the transformation processes. These constraints are classified into five categories:

- Assembly constraints, when all components are not at the assembly point at the correct time.
- Sequence constraints, the limitation of the amount of products in the production line at any given time.

- Capacity constraints, which includes human capacity as well as production line capacity shortages.
- Performance constraints, a lack of performance due to low productivity levels or down time.
- Logistical constraints, such as transport problems, dispatch problems, delayed receiving of raw materials, stock shortages or warehouse wastages.

During the transformation process sequences, parallelisms and bottlenecks have to be identified to increase productivity and efficiencies (Lewis & Slack, 2003: 106). Brassler and Schneider (2001: 121) stated that a bottleneck is any block that presents a sequential behaviour pattern problem. The transformation process should strive toward optimum sequencing of activities and balancing of lines. Balancing of lines should lead to material and work flowing according to optimum cycle times, with no duplications and no bottlenecks in the system. According to Becker and Scholl (2004: 694), assembly lines are essential when mass production is embarked upon. Assembly lines are developed from straight single-model lines to more flexible systems, such as parallel workstations and multi-model lines. Becker and Scholl (2004: 695) felt that an effective assembly line will transgress peripheral departments and will distribute the total workload evenly throughout the organisation.

4.2.4.3 Output

The ultimate objective of the transformation process is to deliver a high quality product or service in a standardised manner at minimum cost. Johnston, Maguire and McGinnity (2009: 513) found that several business improvement techniques have been developed to eradicate any discrepancies in manufacturing environments. Such techniques include the “six-sigma” methodology that identifies input variables and controlling them to ensure a standardised output.

Johnston *et al.* (2009: 513) asserted that outputs have to be monitored according to statistical quality procedures and out of control situations have to be rectified as they occur. The objective is to obtain a defect free manufacturing system and minimise process variation in order to minimise time to market and enhance customer satisfaction at minimum cost. Hon (2005: 139) argued that performance measurement with regards to outputs is essential and

that where performance measurement does not exist improvement is not possible. Measurement of the quality of outputs is required to reflect the current state of the manufacturing situation, to assess the operational efficiency, continuously improve and gauge the effectiveness of management decisions (Abdulmaleka & Rajgopal, 2007: 223).

Markus and Vancza (1998: 361) declared there are various methods of measurements, as well as measurement tools available. According to Hon (2005: 142), there are five types of measurements: the market valuation of the company, financial ratios, quality measurements such as human resources and leadership measurements, product quality and customer satisfaction and, lastly, cost effectiveness. When the manufacturing process is standardised and quality is controlled, the outputs will be of a standardised quality and according to client requirements, leading to customer satisfaction. High quality will not achieve anything if there is no need in the market for what is being produced. Outcomes have to be in line with customer requirements. Lai, Xie, Tan and Yang (2008: 202) warn that customer requirements may change and it is the responsibility of the organisation to stay abreast of what clients want.

According to Markus and Vancza (1998: 363), product development is on the crossroads of engineering and economic research. It is necessary to be in touch with the market requirements, spending power and buying needs when developing outcomes and product lines to produce such outcomes.

4.2.5 Components of business process management

To be a truly world-class organisation, team cohesiveness and full integration of all the functional areas of the business is required. Each component of the business should have a clear understanding of the importance of cross-functional processes (O'Neill & Sohal, 1999: 571). Gunasekarana and Ngaib (2005: 423) later found that as the competitive landscape changes from cost and quality to flexibility and responsiveness, the value of business process management is increasing.

While, traditionally, business process management focussed on production processes, O'Brian (2004: 52) stated that it should focus on the entire organisation's core business

processes, such as manufacturing, distribution, finance and human resources. The perception still exists that business process management is only about setting and controlling processes to eliminate deviations and optimise productivity. According to Thompson, Strickland and Gamble (2005: 401), this is only half of what business process management entails. Business process management includes all areas of business, including change management and creating a changeable organisation.

Chang (2006: 242) identified continuous process improvement as a key principle of business process management and warns that organisations need to adapt to such continuous change. Processes should be scrutinised and continuously brought in line with entrepreneurial needs across the entire organisation. Brassler and Schneider (2001: 121) argued that, besides the basic manufacturing process, there are many supporting processes in the operations system, such as procurement, research and development, supply chain and logistics, human resources, finances and quality control. Production is a “widely branching value chain with a high degree of interdependence”. Changes in one part of the system will affect all of the sections.

4.2.5.1 Production

Production consists of all the facets required in order to transform inputs into outputs and is identified by Xue, Offodile, Zhou and Troutt (2011: 674) as an integrated optimisation model of aggregate production planning, scheduling and sequencing, facility layout, location decisions and the continuous improvement of the entire system. Results of a study done by Chapman, Soosay and Kandampully (2003: 630) showed that the integrated model realises greater cost savings.

4.2.5.1.1 Location decisions

Schmenner (2000: 126) researched over 200 organisations that have recently moved and found that plant location decisions are an integral part of decision making. It is not just about choosing a site. Schmenner (2000: 127) warns that the location decision should only be made after decisions such as the company’s capacity needs, current capacity, manufacturing strategy and expected future demands. Plant relocation should only be considered in the first place if problems include lack of storage space and inventory control. The cost involved with scrapping old facilities should be born in mind (Umble, Haft & Umble, 2003: 241).

Location decisions impact on the entire supply chain and logistics (Lopes, Barreto, Ferreira & Santos, 2008: 366). Ambrosino and Scutellà (2005: 610) insisted that the success of the entire enterprise may depend on the correct location decision and that such decision should be made based on acquired experience. Awasthi, Chauhanb and Goyal (2011: 98) warned that issues such as traffic congestion, human resource and raw material supply and proximity to customers or transport facilities should be kept in mind when making location decisions. Figueiredo, Guimarães and Woodward (2002: 341) held that the object is to minimise distribution cost and maximise efficiencies in the shortest cycle times possible.

In the development and management of business processes, the impact of the location of the facility has to be kept in mind (Awasthi, Chauhanb & Goyal, 2011: 98). Matouschek and Robert-Nicoud (2005: 570) argued that proximity to supply and demand entities has to be taken into account when processes such as recruitment and procurement, as well as dispatch processes, are developed. The optimal location decision will vary according to the firm and industry. Production processes are not just applicable in manufacturing. According to Pyon, Woo and Park (2011: 3267), the service industry can only achieve service improvement through processes. Value creation is ultimately linked with business processes and customers are part of the process. In this perspective, customer complaints provide input and help improve processes.

4.2.5.1.2 Facility layout

Facility layout is concerned with the allocation of activities to space to ensure optimisation of productivity and the achievement of objectives (Liggert, 2000: 197). Zanding (2001: 133) stated that the optimum facility layout has to be found to level production in order to maximise productivity and efficiency. It is a process whereby production units are properly arranged to maximise product flow efficiencies and to minimise the variations in parts consumption and workloads at the workstation. Bohnen, Maschek and Deuse (2011: 5) explained that application of conventional levelling approaches in industry is constrained by the requested product diversity. Production levelling has been used to sequence workstations and machinery optimally during manufacturing; so that peaks and valleys in demand for products are smoothed out across the planning period to enable overall cost reductions and improved efficiencies (Abdulmalek & Rajgopal, 2007: 223).

Tompkins (2003: 324) argued that facility layout is one of the key areas that can contribute towards increased productivity and that up to 30% of material handling costs can be saved through effective facility layout. He also stated that facility layout will affect operational performance, manufacturing lead times, throughput and work-in-process. Leung and Suri (1990: 77) classified facility layout into five phases: design, implementation, growth, maturity and obsolescence. Each phase has to be handled individually and the correct decisions have to be made to achieve optimum productivity. Deb and Bhattacharyya (2005: 305) asserted that the objective of good facility layout is to minimise material handling costs, improve productivity and flexibility, shorten cycle times and to utilise the available floor space to maximum capacity.

4.2.5.1.3 Development and implementation of production processes

In the quest for higher profitability, organisations are forced to develop new production techniques and reduce cycle times in order to satisfy customer's growing needs (Lee, 2005: 29). Current markets demand higher and more standardised quality at competitive prices. Business process management is the solution developed in order to achieve higher efficiencies and productivity at lower cost (Leymann *et al.*, 2002: 198). In a study done by Palm (2006: 2) it was found that business process management increased productivity, but only moderately reduced inventory. Tools used to achieve optimisation are just-in-time manufacturing, waste elimination and value stream mapping. Palm (2006: 3) studied preferred tools such as total preventative maintenance, cycle time and assembly line balancing.

The rationale of business process management is the removal of non-value-adding activities from the processes within the organisation (Smith & Fingar, 2002: 102). The second step is to remove all waste products from the process. The result would be maximum productivity at minimum waste and less cost. According to Soriano and Forrester (2003: 104), organisations that do not develop and manage processes and apply process management principles will not remain globally competitive. Schonberger (2004: 20) held that, in order to achieve business optimisation, organisations should focus on business process management, continuous learning, creating a cohesive team and continuously eliminating time and raw material waste. Quality assurance should be implemented in such a manner that waste products will be at a minimum (Hernandez *et al.*, 2008: 842).

Rose (2005: 14) warned that, for production processes to be efficient, all processes should be planned. The first step is to select methods of production, tools to be used and sequence of operation. The sequence of operation, the machines to be used and time to be used for each activity is documented. According to Van der Aalst and Van Hee (2002: 112), the optimum path has to be found and communication between the various parts of the process should be flawless. Interaction between various parts has to be timed exactly. The efficiency of the material handling equipment and process should be high and the flow of material through the process has to happen according to time schedules.

4.2.5.2 Quality control

According to Kolesar (1993: 317), statistical quality control had its origin with Shewhart in 1924. The original research was very philosophical and very practical and is still implemented today. It involves quality policies and quality assurance policies.

4.2.5.2.1 Quality policies

Dimara, Petrou and Skuras (2004: 485) insisted that having a quality policy or certification is viewed as a protection for their own quality standards and delivery and can also be used as a promotion mechanism. Ilbery and Kneafsey (2000: 217) explained that the concept of quality is contested, constructed and represented differently by diverse actors operating within a variety of regulatory and market arenas. Quality is defined in terms of product specification and attraction rather than through official certification schemes or association with region of origin. Shin, Benton and Jun (2009: 2462) stated that a quality policy assists in procurement decisions and setting standards to maintain quality throughout the supply chain. Supplier quality performance can be measured through setting standards to identify inconformity of the end product. Delivery performance can be estimated based on documented expected delivery standards (Ketokivi & Schroeder, 2004: 171). Quality policies also have an impact on financial results through minimising of defects and return, while having a positive impact on customer relationships through on time delivery of high quality products (Hernandez *et al.*, 2008: 842).

Sluijs, Outinen, Wagner, Liukko and De Bakker (2001: 99) measured the correlation between quality policies and the effectiveness of quality management in the healthcare industry and

found that a quality policy has some influence on the effectiveness of quality management, however, more quality management activities do not necessarily imply more effects. Sluijs *et al.* (2001: 102) recommended that, since quality management activities differ in the degree to which they bring about changes and improvements, it be recommended that policy makers promote quality management, which has the most effect on quality.

4.2.5.2.2 Quality assurance processes

Quality assurance processes ensure standardisation through business process management and aim to improve business processes, but business process management spans the entire organisation and involves various components of the business (Anttila, 1992: 208). Al-Mashari and Zairi (2000: 11) warned that quality processes should not be confused with business processes. Total quality management form part of business process management and share features, but are not in totality business process alone.

Wu, Pearn and Kotz (2009: 338) researched the structure of process and quantifying process performance and the impact thereof on successful quality improvement initiatives. Process capability analysis has become an important and well-defined tool in applications of statistical process control to achieve continuous improvement of quality and productivity. Wu *et al.* (2009: 338) warned that numerical measures of whether or not a manufacturing process is capable of meeting predetermined quality levels of product intolerance have received substantial attention in the quest to standardise purchase decisions. Various process capability tools such as the capability index, internal controls and six-sigma have been developed through the ages.

Success or failure will be determined by how well quality assurance objectives are met (Baron-Epel, Levin-Zamir, Satran-Argaman, Livny & Amit, 2004: 213). Quality assurance can contribute to maintaining a high quality within each production system. The goal of quality assurance is to improve performance and focuses on on-going work rather than a final outcome at any given point. According to Ader, Berensson, Carlsson, Granath and Urwitz (2001: 187), quality assurance methods are based on the assumption that there are a number of standards that should be met and the assumption that compliance with the standards will assure a high quality of performance. Evaluating the compliance with these standards can

determine levels of performance. Such standards can be converted into guidelines for quality work across the company (Marksberry *et al.*, 2011: 3).

Innala and Torvinen (1995: 179) suggested that computer aided quality assurance (CAQ) can play a very important role in producing high quality products. Quality assurance has become more complicated due to the current trends of just-in-time, decreasing batch sizes and pressures to continuously improve. Thus, conventionally used quality control methods have to be revised to tackle the problem of statistical reliability (Grönroos & Ojasalo, 2004: 414).

4.2.5.3 Financial processes

Ozcelik (2010: 7) provided an example of Ford Motor Company that increased the speed of payments and improved company relations with suppliers through the development of processes in the financial department. Niemira and Saaty (2004: 573) developed an imbalance-crisis turning point process to forecast the likelihood of a financial crisis based on an analytic network process framework. The process captures the outcome of dependence and gives feedback within and between clusters of explanatory factors. Through this process, crisis can be forecast and avoided (O'Brian, 2004: 52).

Financial processes include invoicing processes, debtors control, payment processes, financial record keeping and financial policies, such as decision making parameters, income and expense control, ratio management, budgeting and cash management (Guillen, Badell, Espuna & Puigjaner, 2006: 421). Cohen, Krishnamoorthy and Wright (2008: 166) show that the various financial processes are all interrelated. For example, delays in payments can substitute part of financing requirements. Similarly, debtor management will influence cash management. Armstrong (2006: 325) argues that cash management processes should provide decision-making support on a high frequency basis and is not just a matter of cash in and cash out matter.

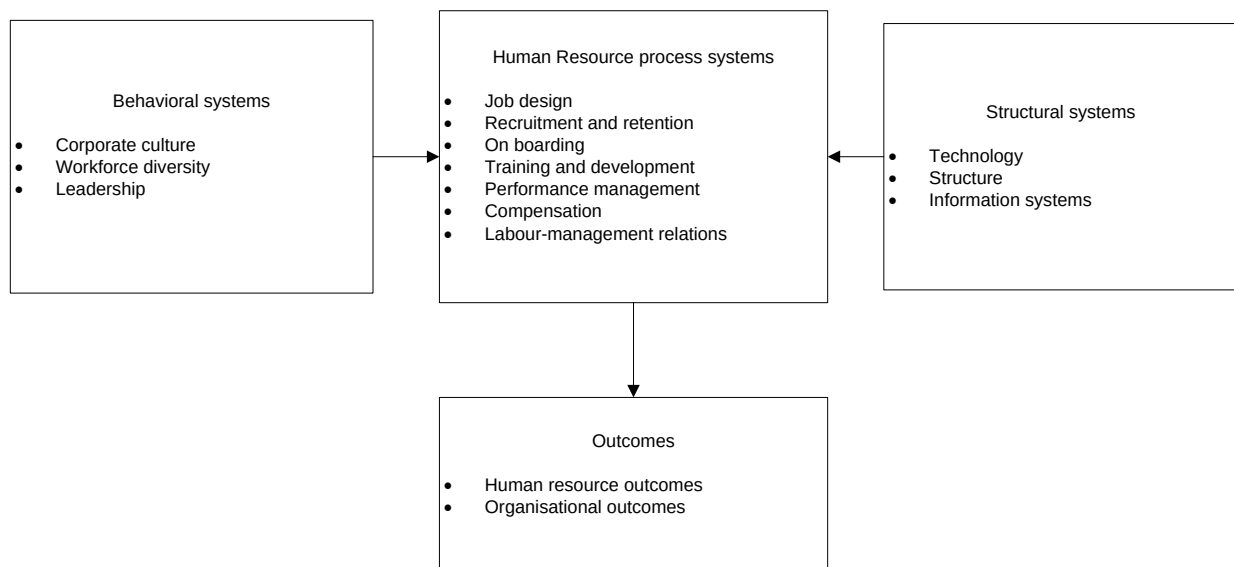
The data usually required to manage the cash includes sales, collections on accounts receivable, spending, sources of short-term financing and interest received. Management of cash is also associated with the operation of the supply chain as it will influence dates and amounts of raw material (Niemira & Saaty, 2004: 573). Cohen *et al.* (2008: 166) expressed that non-financial information should be included in the auditing process. Erickson, Mayhew

and Felix (2000: 165) maintained that financial fraud can be detected through considering the consistency between reported financial performance and non-financial information, such as economic and industry trends.

4.2.5.4 Human resources

Hernandez and O'Connor (2010: 10) asserted that human resource processes, as depicted in figure 4.2 are paramount to business success and have to be mapped and implemented equally to production processes. Human resource assets form the cornerstone of stability within the organisation (Neely, Gregory & Platts, 2005: 1228). The human resource structure of an organisation has a profound effect on the coordination of tasks. Haber and Reichel (2007: 119) argued that the human capital of an entrepreneurial enterprise, especially managerial skills, is the greatest contributing factor to business success. Figure 4.2 depicts the integration of human resource processes.

Figure 4.2: Integration of human resource processes



Source: Hernandez and O'Connor (2010: 9)

Earlier Wimbush (2005: 463) warned that human resource processes should work in concert with business and integrate with unit managers in order to achieve maximum employee efficiency and productivity and achieve organisational goals. Managers and human resource professionals have to learn more about each other's roles and duties and the processes to be

followed. Such processes include recruitment and selection, on-boarding, administrative processes and performance management systems (Joachims, 2002: 658).

4.2.5.4.1 Recruitment, selection and on-boarding

After in-depth research, researchers still do not have a clear idea about why recruitment processes have the effects they do. Recruitment processes are complex due to the number of variables involved and the nature of their relationships (Breaugh & Starke, 2000: 405). Collins and Han (2004: 685) offered a framework for the recruitment process that mediates the relationships between recruitment activities and the successful outcome thereof. When recruitment processes are efficient the impact on business success is vast, resulting in low staff turnover, a cohesive team and increased productivity. Hausknecht, Day and Thomas (2004: 639) researched selection methods and processes for efficient selection and how it would add towards successful recruitment.

Hernandez and O'Connor (2010: 11) stated that recruitment processes play a vital role in helping the organisation to adapt and remain competitive. New employees bring new technologies and methodologies to the company (De Lima, Da Costa & De Faria, 2009: 407). Once the workforce is in place, methods must be put in place to match the correct skillsets with specific job requirements. It is necessary for management to understand the job that must be performed and the qualification of employees necessary to fulfil on the jobs (Dransfield, 2000: 69). Hernandez and O'Connor (2010: 11) identified the on-boarding process steps as job analysis, setting criteria for employees to be successful, clear job descriptions and processes to be developed and communicated to employees, adequate training to equip employees to perform at optimum levels and providing the correct technology and equipment required.

According to Bradt and Vonnegut (2009: 3), an on-boarding process can dramatically improve the performance, fitness and readiness for the job of every person who takes on a new role. Efficient on-boarding helps to build, sustain and perpetuate high-performing teams. An organisation wide on-boarding program for new employees will be a culture shaping, sustainable competitive advantage (De Lima *et al.*, 2009: 407). On-boarding is the process of acquiring, accommodating, assimilating and accelerating new employees. Benson, Finegold and Mohrman (2004: 315) insisted that investment in employee training and development

should form part of the on-boarding process and that efficient on-boarding will have an effect on employee turnover. Research done by Rock and Donde (2008: 10) showed that effective on-boarding and training also have a positive effect on turnover.

4.2.5.4.2 Human resource administration

In order to run the organisation efficiently, various human resource processes have to be in place. Collins and Clark (2003: 740) asserted that efficient human resource administration will assist in creating organisational competitive advantage. These processes include leave systems, disciplinary processes, legal issues such as restraints of trade, payroll, skills gap analysis, training, reward and recognition, statutory requirements and general administration. Ferris, Hochwarter, Douglas, Blass, Kolodinsky and Treadway (2002: 65) argued that human resource processes in organisations also involve directing behavioural practices and strategies by employees to achieve controlled outcomes in ways that maximise productivity and minimise negativity. Human resource processes draw from research in topic areas labelled impression management, self-presentation, interpersonal influence and organisational politics (Collins & Clark, 2003: 740). Efforts have to be made to integrate human resource processes to the knowledge base and identifying skills gaps. Ultimately, human resource processes address the what, the where, the 'who and the how' of influence (Dasborough, Ashkanasy, Tee & Tse, 2009: 571).

Allen, Shore, and Griffeth (2003: 99) proposed that a relationship between human resource practices, organisational support, employee loyalty and business success exists. Supportive human resource practices and administration will include career planning, reward and recognition as well as participation of employees in decision making. Gelade and Ivery (2003: 393) added that human resource administration should include ergonomics, training needs analysis and capacity planning. Successful human resource practices will have a positive effect on business success through increased sales, customer satisfaction, staff retention and overall organisational performance (Allen *et al.*, 2003: 99).

4.2.5.4.3 Performance management system

Joachims (2002: 658) supposed that, when you can measure what you are speaking about and express it in numbers, you know something about it. Yet it is surprising that organisations

find the area of measurement so difficult to manage. Without proper performance measurement, employees cannot be guided to improve on performance and productivity, often resulting in misalignment between performance and company goals and objectives (Halachmi, 2005: 502). At most businesses there is an awareness of the need for performance measurement, yet it is done on an *ad hoc* basis. As early as 1975, Mahler (1975: 503) conducted a survey on performance management and found that, out of five thousand managers, almost half had never received performance reviews:

- 44 percent had never been told the requirements for higher-level jobs; and
- 31 percent had never been encouraged by their superiors to take specific actions to prepare themselves for advancement.

Dransfield (2000: 69) believed that performance management concerns getting the best performance possible from individuals in an organisation. Effective performance management involves sharing an understanding of what is required while managing and developing employees in a manner through which the organisational vision can be achieved (Egbu, 2004: 301). Performance objectives have to be developed for each individual according to the company mission and vision. According to Swanepoel, Erasmus and Schenk (2008: 372), performance management is a process of setting performance objectives and standards and the continuous measurement of the achievement of these goals in order to achieve the overall goals of the organisation.

Dransfield (2000: 70) further held that a good performance management system should include a statement that outlines the organisational values, organisational and individual objectives, key performance areas and indexes, regular performance reviews, performance related pay, training and counselling. Each employee is judged according to key performance areas (Joachims, 2002: 658). The entire performance management system has to be developed to steer employees so that every action contributes towards the achievement of organisational goals and objectives. According to Neely *et al.* (2005: 1228), performance measurement is the process of quantifying the efficiency and effectiveness of action. A performance measurement system is the set of criteria used to quantify both efficiency and effectiveness of actions. The theory is based on the assumption that action leads to performance and that there are internal and external factors that affect the efficiency and effectiveness of this relationship (Rock & Donde, 2008: 10).

Nilsson and Kald (2002: 235) insisted that performance management is an essential part of implementing business strategies. Such strategies should then translate into financial targets. De Leeuw and Van den Berg (2011: 224) agreed that businesses where performance management practices are implemented outperform their peers and that there is a strong link between performance management and performance improvement. It is only when individual behaviour in an organisation can be managed that the achievement of organisational goals becomes possible (De Lima *et al.*, 2009: 407).

4.2.5.5 Supply chain and logistics

Mentzer, Dewitt, Keebler, Min, Nix, Smith and Zacharia (2001: 18) explained that supply chain as the systemic, strategic coordination of the traditional business functions and the tactics across businesses within the supply chain, used for the purposes of improving the long-term performance of the individual businesses and the supply chain as a whole. Johnson and Templar (2011: 88) suggested that excellent supply chain management and business process management across the supply chain would directly impact on organisational performance.

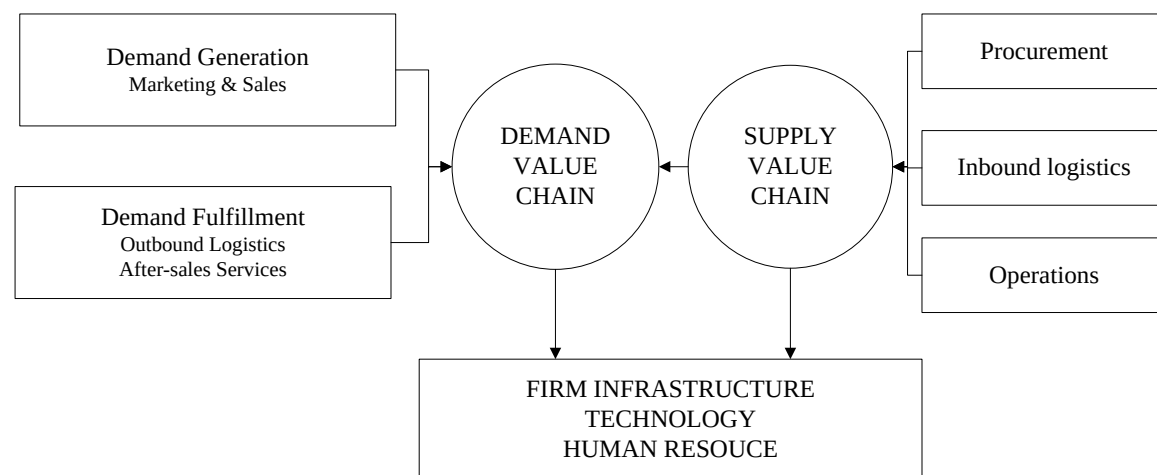
Sound business process management across supply chains can enable the organisation to provide the product or service at a more competitive price, increase service levels and reduce cost through reducing operating expenditure (Johnson & Templar, 2011: 92). Sound supply chain management can make a positive contribution towards reducing the cycle time, reducing inventory, increasing productivity and improving the efficacy of an organisation in generating sales from fixed assets (Mentzer *et al.*, 2001: 18). Christopher and Peck (2003: 46) found that supply chain management based on sound business process management will create customer value through superior service. Ray *et al.* (2004: 23) showed that there is a positive relationship between increased levels of service and sales volumes, as well as customer retention.

Various scholars, such as Zsidisin, Ellram and Ogden (2003: 129) and Sabath (2003: 62), agreed that business process management spanning across the supply chain will reduce cost of goods due to a combined buying power, reduce inventory holding costs through improved inventory management, eliminate non-value adding supply chain activities and maximise the extraction of value from fixed assets. Cutting-Decelle, Das, Young, Case, Rahimifard,

Anumba and Bouchlaghem (2006: 29) showed that the supply chain spans the input, transformation and transition of a product from price to payment. According to Farris and Hutchinson (2002: 288), a reduction in inventory reduces holding costs and has a positive impact on profitability. Trying to gain any one of the benefits of supply chain processes without the other will expose the businesses involved to a degree of risk. An example of this would be to seek higher utilisation of manufacturing equipment, which can lead to an increase in productivity, resulting in over production of finished goods inventory (Chan, 2007: 79). As with any other part of business processes, it is important that all parts of the processes work together and are in sync (Sabath, 2003: 62).

Chan (2007: 79) agreed that business process management across the supply chain would be beneficial to the organisation through the reduction of cost and cycle times while increasing productivity, efficiencies and profitability, that business process management in the supply chain spans across inventory management, scheduling of jobs, transport routes, warehousing processes, procurement processes, receiving and dispatch and quality control and that business processes should be developed across all areas of the supply chain. Chan (2007: 84) illustrated the structure of a sound supply chain in figure 4.3.

Figure 4.3: Demand and supply value chain



Source: Chan (2007: 80)

Peck (2005: 210) cautioned that research is required to identify, assess, analyse and treat areas of risk and then develop plans to mitigate risk. Neiger, Rotaru and Churilov (2009: 154) agreed that despite the benefits of sound supply chain management, a process-based supply chain creates new sources of risk due to the complex systemic nature of the supply chains.

The need to reduce the increased level of supply chain vulnerability has been identified as a key research issue in the domain of supply chain management. Giannakis and Louis (2011: 23) also cautioned about the high level of complexity of supply chains and the inherent risks that exist. The risks are recognised as major limiting factors in achieving high levels of supply chain performance. Information technology decision support systems can be used to manage complex supply chain systems (Peck, 2005: 210).

4.2.5.6 Technology

McAdam, Keogh, Galbraith and Laurie (2005: 1418) warned that technology could lead to a lack of business process definition through creating a complex and dynamic environment as well as technological risk. Small and medium-sized businesses are individualistic with different needs and infrastructure. Technology includes information technology hardware and software as well as production technology used in the production of the product or service (Lee, 2005: 34).

4.2.5.6.1 Business process management software

During the early 1990s, the use of technology in the reengineering of business processes was recommended by Davenport (1993: 95). While Davenport (1993: 95) warned that information technology is not sufficient as a total solution, he felt that the use of information technology for process innovation is of vital importance. Grover, Teng and Fiedler (1993: 433) found that many scholars have used the term “information technology enabled business process redesign” to refer to the use of information technology in the redesign of processes. Information technology can be beneficial when designing and implementing processes, but also acknowledge the fact that processes can be redesigned or developed without the need to implement technology. Despite the fact that the first modern computer was developed in 1939, Brynjolfsson and Hitt (2000: 23) asked how computers contribute to business performance and economic growth.

According to Ray *et al.* (2004: 27), information technology is crucial in the performance and maintenance of business processes. Shao and Lin (2001: 447) found that information technology assists the organisation in increasing efficiencies and can provide economic improvement. Maintaining processes involves significant information processing, especially

in the customer relationship management field, where customers make inquiries, request changes or conduct financial transactions (Yao, Liu & Chan, 2010: 353). To manage the full process requires a portfolio of information technology applications. The extent of knowledge sharing between information technology and line managers will determine the success of the business process management as well as the effectiveness of the interaction between customers and the business (Attaran, 2004: 585). Ray *et al.* (2004: 28) concluded that information technology is required to improve process performance and some knowledge of the workflow software is required by line management to enable the organisation to conceive, develop and use information technology applications to improve process performance.

4.2.5.6.2 Industrial technology

According to Voss (1986: 17), functional performance of a piece of technology is the reason why an organisation would purchase the technology. Should the technology not perform functionally, there would be no return on investment. Functional performance includes the usability of the technology by the users (Fan & Watanabe, 2006: 303). The entire product has to be evaluated for fit between functions required and functions provided. MacDonald and Smith (2004: 107) warned that implementing industrial technology can disrupt supplier and customer relations.

It is of utmost importance to keep technology up to date however, as competitive advantage will be lost when an organisation falls behind on what is available in the market (Teece, 2006: 351). Resellers could also be embracing new technologies and systems and often behaviour modification is required to adopt new technologies. The promised benefits must therefore outstrip the possible cost of disruption. Promised benefits of new technologies often include time saving, improved quality, more personalised service and ultimately higher profits (Ordoobadi & Mulvaney, 2001: 157).

It is unclear whether investment in technology always pays dividends. There is contradicting information in the literature (Goldenberg, 2000: 32). Haegele (2000: 33) found that 48% of small businesses experienced an increase in customer service with the implementation of new technologies. His research included an investigation of the interrelationship between the use of technology and customer trust, commitment and future intentions and found that the implementation of technology mostly does render return on investment for organisations.

Watanabea, Matsumotob and Hura (2004: 941) attempted to elucidate the relationship between technology and research and development (R&D) activities and found that technologies dramatically improve the performance of research and development, production processes, goods and services by means of innovation. New technologies combined with R&D brought about sustainable growth, triggered by the increase in functionality development by means of the effective assimilation of technology (Goldenberg, 2000: 32). Hsu (2005: 1317) emphasised the importance of technology and held that it is displayed through its strength in industrial innovation. Innovation is a key factor accelerating technological development, and shortening product lifecycles. This is what motivates businesses to invest in research and development.

4.2.6 Stages of business process management

According to Lee (2005: 29-41), there are eight stages that would comprise a business process management system:

- Process discovery: finding out how things are actually done
- Process design: modelling, simulating and redesigning a process
- Process deployment: distributing the process to all participants
- Process execution: ensuring the process is carried out by all
- Process maintenance: resolving exceptions, adaptations
- Process interaction: allowance for human interaction with the process
- Process optimisation: process improvement
- Process analysis: measuring performance and devising improvement strategies

Larsen and Myers (2000: 395) identified the first stage as the gathering of data and interviewing of employees. A benchmarking study against competitors will provide extra information. Once all of the data is collected, a workshop is required to discuss findings with the relevant stakeholders. Once a consensus has been reached, mapping of processes can begin, recording the processes as is. The next step would be to plan the automation of the process workflow and to ensure access to information. After the critical path analysis has been done and re-mapping completed, it is important to ensure that the correct role players have been assigned to every part of the process. Implementation of the processes, through mapping of final version, training of employees, building process adherence into policies and

choosing the correct technology to drive processes completes the business process reengineering phase. Business process management then becomes a continuous process of improvement and automation (Strnadl, 2006: 67).

According to Cameron and Braiden (2004: 261), the steps to follow to implement business processes are: to ascertain whether the business is ready for process development, to plan the re-engineering process carefully, creating the vision first, train the team and communicate about the changes about to happen, assess the culture of the organisation, benchmark and gain external support, do an organisational assessment, map the current way of working, do a critical path analysis, re-design processes according to improvement opportunities found, implement processes and, finally, embark on a continuous improvement process.

There are six stages of *Business process management*.

4.2.6.1 Extraction of activities

Reijers and Mansar (2005: 283) gave the first step of developing business processes as determining whether tasks are related to the same type of order and, if necessary, to determine where new processes are required. If each part of the business process is not specific, it could result in less effective management of part of the process. Klocke, Roderburg and Zeppenfeld (2011: 417) warned that the development of production systems leads to high amounts of planning. The challenge is to develop a systematic and scientific approach for aggregating, describing, explaining and combining single processes. Well-developed manufacturing processes can help to break the limits of production systems, realise innovative products and should start with innovation (Maine, Lubik & Garnsey, 2012: 179).

Reijers and Mansarb (2005: 283) insisted that it is important to outline a clear framework before starting to develop processes. The framework is not a model of a business process. It is a set of ideas that could direct the thought processes to develop the new processes. Processes can be extracted through observation and interviews with appropriate employees (Maine *et al.*, 2012: 179). Houshmand and Jamshidnezhad (2006: 4) developed an innovative method to solve design problems and provide a model to guide the designer through the design process and avoid costly trial and error approaches. The first step is to determine the goals and objectives of the design. There are four domains within the design: the customer, functional,

physical and process domains (Houshmand & Jamshidnezhad, 2006: 4). Needs are defined in the customer domain. In other words, process design should start with customer requirements and then develop to satisfy such needs. Production steps are distinguished in the function domain. The flow through technology is depicted in the physical domain (Klocke *et al.*, 2011: 417).

4.2.6.2 Development of processes

Many scholars have researched various methods used to develop processes. According to Avison and Fitzgerald (2003: 592), the methods used must result in the development of better processes and, in such, better products and service. A better development process must result in overall standardisation of delivery. De Lima, Da Costa, and De Faria (2009: 403) asserted that an enterprise's operational systems are characterised by their complexity and dynamics. New operations systems' design requirements are compelling businesses to engage in an in-depth change process. According to Brown and Fai (2006: 60), in an operation's strategic management system context, performance measurement subsystems, processes and measures used to assess an enterprises performance are the main focus areas of process development.

Amoako-Gyampah and Acquaah (2008: 575) argued that design initiatives are developed to form a strategic fit between operations strategy and production planning systems. Alignment should be achieved between operations, manufacturing strategies and competitive strategies, using business performance as a measurement. Slack, Lewis and Bates (2004: 372) insisted that the design process should be a representation of operational processes. Processes should be formulated according to previous methodologies to achieve outcomes. The development of processes is a continuous, complex and dynamic evolution (Nightingale, 2000: 913).

4.2.6.3 Critical path analysis

Once the mapping of the processes has been completed, unnecessary tasks have to be eliminated. Castano, De Antonellis and Melchiori (1999: 253) expressed that a common way of identifying an unnecessary task is to determine whether it adds value from a customer's point of view. When a task is redundant or a duplication, it should be eliminated. Reijers and Mansar (2005: 283) identified the next step in the critical path analysis as the removal of bottlenecks. Examples of bottlenecks include when production is piling up in a bath or when

a specific task can only be done periodically, for example when technology is only available at certain times. Removing such constraints will speed up the cycle times and increase efficiencies (Castano *et al.*, 1999: 254).

Van der Aalst and Van Hee (2002: 112) suggested that during the critical path analysis stage, the division of a general task into two or more alternatives, or alternatively the integration of two or more tasks into one general task, should be considered. During this stage it is possible to design tasks that are better aligned with the capabilities of resources to improve the quality of the business process, improve utilisation of resources, with resultant cost and time advantages. Van der Aalst and Van Hee (2002: 112) warned that too much specialisation could make processes less flexible, less efficient and cause monotonous work. It could also have a negative effect on quality.

Proposed new actions as offered by users should be used as inputs for the design recommendation generating process (Greasley, 2004: 230). Proposed actions can be tested to verify their internal coherence and consistency. An impact analysis is developed and the proposed actions are ranked based on an importance performance strategic criterion. Faisal *et al.* (2006: 535) also pointed out that during the critical path analysis, it is necessary to check for bottlenecks, duplications and improvement opportunities. Such improvement opportunities should be built into the mapped processes to ensure knowledge sharing and avoid different methodologies to be employed in the organisation. Continuous learning and improvement will bring about changes to the processes on an on-going basis, thus the critical path analysis is a continuous process (Temponi, 2005: 17).

4.2.6.4 The implementation process

Coughlan and Coughlan (2002: 220) argued that the intended results of process development are connected to the learning process that is established when developing solutions. The process of reviewing methodologies and performance indicators are organised in four main phases and the phases are sequenced in specific steps (Antras & Voth, 2003: 52). Processes are designed based on best methodologies. Once processes are developed and mapped, it has to be communicated to all relevant employees. This is called the process participation phase. The next step would be for employees to work according to the processes. Technologies can be implemented to enforce adherence to processes. De Lima *et al.* (2009: 407) cautioned that

it is necessary to hold workshops with all employees before the methodologies are enforced in order to obtain buy-in from all and to ensure that everybody is aware of what is expected of them. It is also important to ensure that management buy-in is obtained (Rose, 2005: 14).

4.2.6.5 Technology implementation

Bhatt (2000: 143) understood that technology and network infrastructure has a huge impact on business process management. The technology environment has to be integrated, which will lead to a controllable infrastructure. Porter and Miller (1985: 149) argued earlier that information technology would enable organisations to provide higher value to customers. The positive correlation was found to be stronger for manufacturing firms than service firms. Bhatt (2000: 143) agreed and added that well-defined processes and technology will ensure standardised service leading to a higher quality of products and services, delivered in the right quantity, at the right place and at the right time.

Most scholars consider information technology as a major tool and an enabler of business process management. Al-Mashari and Zairi (2000: 10) identified the advantages of using technology in the execution of business process management as automation, access to information, tracking ability, analytical functions and integration. Information technologies will facilitate the flow of information between divisions and will ensure that information is accessible, accurate and consistent. Davenport and Short (1990: 14) described the relationship between information technology and business processes as a recursive loop, with each refining the other and each being dependent on the other.

According to Smith and Fingar (2003: 97), there are plenty of ways in which information technology can be used to automate business processes. New techniques and software are constantly being developed. The focus is on six domains of change within the company: process, organisation, location, data, application and technology (Al-Mashari & Zairi, 2000: 10). Smith and Fingar (2003: 97) understood that process is not a domain on its own, but represents change across the other five domains and site tools that can be used in the management of business processes such as six sigma, total quality management, balanced scorecard, activity-based costing, economic value-added and value analysis. According to Attaran (2004: 585), information technology can be both an enabler and facilitator in business process projects.

4.2.6.6 Maintenance and continuous improvement

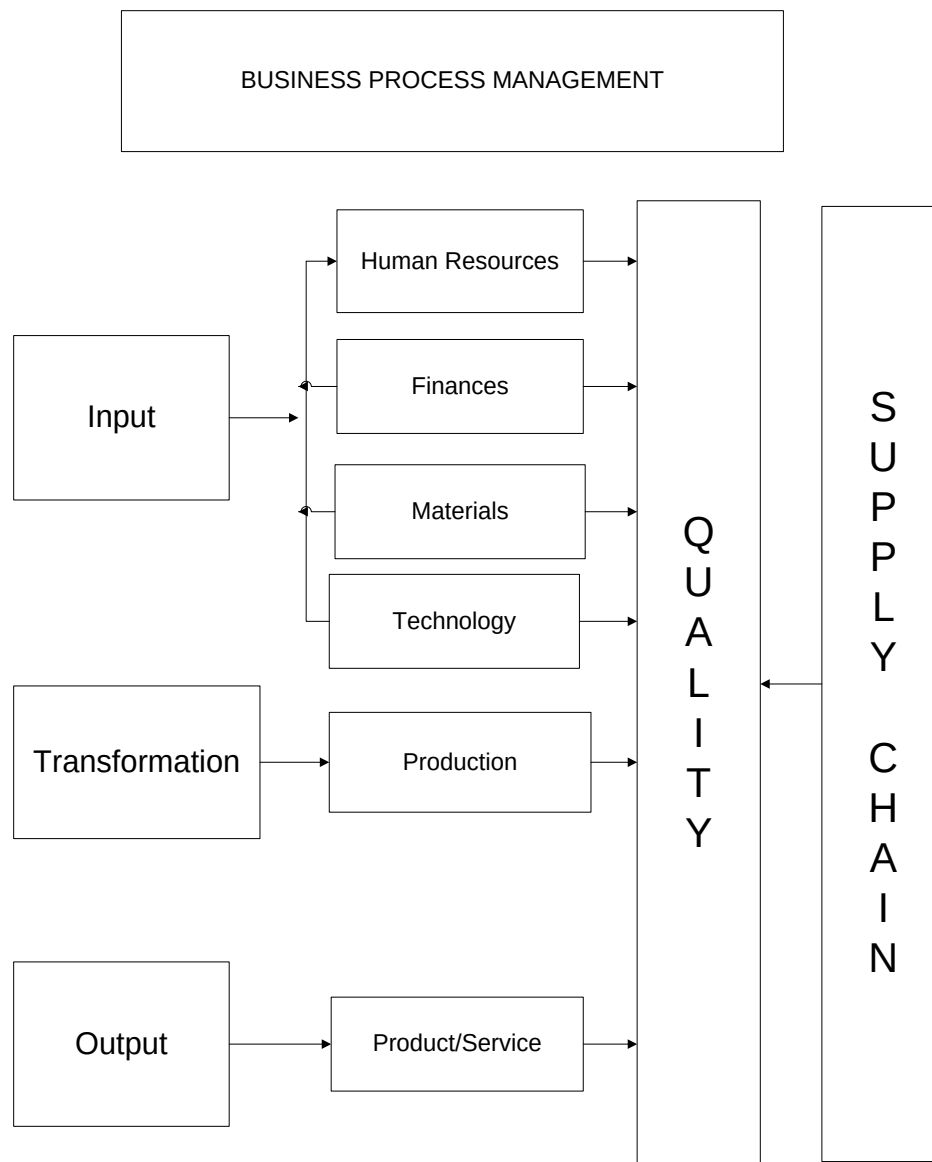
Bhatt (2000: 139) warned that as soon as the business processes are implemented and supported by the correct technology, the maintenance and continuous improvement process should start. Business processes can never become stagnant (De Oliveira *et al.*, 2012: 5488). Effort has to be exerted to improve efficiencies, effectiveness and flexibility on an on-going basis. All improvements have to focus on customer service and to increase the quality of the product and service provided to the customer (Lee, 2005: 29). Bhatt (2000: 139) furthermore held that business process improvement is a bottom-up process therefore changes and employees working with the processes should initiate improvements. Boer, Berger, Chapman and Gertsen (2000: 865) agreed that careful monitoring of the balance between top-down and bottom-up procedures has been found to be important and that employee behaviour and employee commitment are crucial elements for continuous improvement.

Managing continuous improvement requires an organisational context that enables incremental development through organisational learning (Anand, Ward, Takikonda & Schilling, 2009: 423). Granerud and Rocha (2011: 1030) insisted that training forms a big part in continuous improvement. There are always ways of doing things better and the people working with the processes should be trained to find improvement opportunities. When a system to document such knowledge is not in place, soon everybody will work in different ways again and the improved process will not be learnt by peers (Granerud & Rocha, 2011: 1032).

During the improvement and maintenance phase, it is important to define, identify and analyse potential causes of problems and, in the process, eliminate waste, scrap, rework and returned goods (Bhatt, 2000: 140). This, in turn, will reduce the cost of quality deficiencies. Oliver (2009: 546) asserted that effective continuous improvement is directly in relation to the integration thereof into the organisation through operations and incremental improvements in normal practices.

The entire business process management structure is depicted in Figure 4.4.

Figure 4.4: Business process management structure



Source: Researcher's own construction

4.2.7 Advantages of good business process management

Lee (2005: 34) identified the advantages of sound business process management (BPM) as lowering of costs, reduced cycle times, more satisfied customers and the ability to share best business practices and knowledge throughout the organisation. Reijers and Mansar (2005: 283) concurred that applying processes will yield faster processing times at less cost. Sound business process management will also yield efficiency gains. Shah and Shin (2007: 768) also sited cost reduction and improved productivity leading to increased profitability as advantages to business process management. In addition, business process management will

have a positive effect on quality assurance and effective project management (Parast, 2011: 45).

The CIGNA Corporation successfully realised savings of \$100 million by improving its processes in the customer relationship area of the business (Ozcelik, 2010: 7). Kalpic and Bernus (2006: 40) listed advantages of business process management as the reduction of process complexity, improved transparency of the system's behaviour, a better understanding and uniform representation of processes, better capitalisation of business knowledge and improved reusability of resources. Earlier Keating, Oliva, Repenning, Rockart and Sterman (1999: 120) found that, in some cases, successful implementation of business process led to declining business performance, causing layoffs, low morale and the collapse of commitment to continuous improvement and term this phenomenon the "Improvement Paradox".

Even if cost reduction through lean manufacturing and sound business process management is only 20% of the net effect on the business, it is equal to improving income by 50% (Heizer & Render, 2004: 6). Bhatt (2000: 139) identified that business process management will move the company towards zero defect manufacturing. In a business that works according to business processes, error detection will occur earlier during the production process and prevention of problems will be possible. It will also be possible to find the root causes of problems while identifying where and with whom in the process the problem occurred. In service businesses it will be possible to meet and exceed customer expectations. Dennis, Carte and Kelly (2003: 31) cautioned that a lack of processes, failing to recognise the need for processes and a lack of process thinking would lead to disaster in an organisation. Business process management could achieve dramatic improvements in critical areas such as cost, quality, service and speed of delivery (Kalpic & Bernus, 2006: 40).

Business processes are the key with which a firm can unlock their competitive potential (Ray *et al.*, 2004: 23). Resources can only become a source of competitive advantage if they are exploited through business processes. Abdolvand, Albadvi and Ferdowsi (2008: 497) on the other hand reported that 60–80% of business process initiatives are unsuccessful. Vergidis, Tiwari and Majeed (2008: 69) warned that the service industry is not convinced that business process management will bring measurable benefits or business success.

Business process management provides a broad range of facilities to manage operational business processes and will achieve business effectiveness and efficiency, but in order to gain the benefits of business process management the correct techniques and control-flow in combination with mature support for data management and database technology should be utilised (Muehlen, 2004: 271). Raghu and Vinze (2007: 1062) developed a framework to ensure that the effects of business processes will achieve the correct business goals. Business processes often cut across multiple functional areas within the organisation as well as throughout the supply chain (Muehlen, 2004: 271). Activities should therefore be coordinated in order to gain the benefits and achieve business goals. In order to realise the advantages of business process management it is necessary to find the most optimal combination of activities to form the process and thus bind the various aspects of the organisation together (Din, Abd-Hamid & Bryde, 2011: 1044).

4.2.8 Critical success factors of business process management

According to Trkman (2009: 128), business process management is a success when it continuously meets predetermined goals within a single project or across the organisation. Ariyachandra and Frolick (2008: 113) identified critical success factors as top management buy-in, sound project management, cross-disciplinary work teams, internal communication and end user training. Lu *et al.* (2006: 395) added leadership and investment as critical success factors.

The first success factor as a good fit between the business environment and the processes, thereafter proper management and continuous improvement is required (Trkman, 2009: 128). Business process management should translate strategy into specific tasks to fulfil on needs. Grant (2002: 85) contested that process cannot be the sole focus. Ignoring other factors such as technology will lead to failure. Ozcelik (2010: 9) provided guidance on successful implementation of business processes by warning that failure could come through expecting too much too soon, undertaking process development without a comprehensive cost-benefit analysis.

Ozcelik (2010: 9) also stated that a lack of expertise with regards to designing of processes and lack of partnership between information technology and other parts of the business would

lead to failure. Larsen and Myers (2000: 397) researched factors associated with business process management success and suggested an increased likelihood of success when senior management and vision drive business processes. Strong project management capability, a strong focus, well established objectives and a multi-disciplinary team are further criteria of success as well as a well-executed change management, communications strategy and effective methodologies (Lu *et al.*, 2006: 395). Huang, Lu and Duan (2011: 9483) insisted that the correct resources, such as machines, money, manpower and software, should be allocated to business process management in order achieve the correct outcomes.

Teamwork is a prerequisite for successful business process management (Launonen & Kess, 2002: 205). Further criteria identified included problem solving skills, productive meetings and sound communication. The skills required are innovation, resource investigation, organising and project management (Tarafdar & Gordon, 2007: 353). Project management should involve the allocation of ownership of each task and time lines. It also involves the identification of where tasks can be running simultaneously and which tasks need to be completed before the next step can be undertaken (Hernandez *et al.*, 2008: 842). Kalpic and Bernus (2002: 299) held that sound information and knowledge combined with the correct skill with regards to re-engineering and process development is of crucial importance.

Process orientation has a fundamental problem in that it requires organisations to formalise business processes to the finest detail (Saastamoinen, 1995: 238). A rationalistic approach could be harmful to the organisation. There has to be a balance between responsiveness and formalisation. Over processing of a business can render the organisation less responsive and flexible. Low formalisation increases flexibility but can put a strain on the business process management systems (Kalpic & Bernus, 2002: 299). Hollnagel and Woods (2005: 83) expanded stating that there is also a trade-off between detail and ambiguity. Especially service industry organisations have to deal with volatility and informality. Processes therefore have to be kept generic and flexible. Hatch (2006: 195) provided an outline of how, when, who and where activities should be executed to gain the benefits of business process management. There is a growing dependency on computing technology in the execution of business process management, which contributes to the complexity and renders the system more prone to hazards (MacDonald & Smith, 2004: 107). Sell and Braun (2009: 4) argued that people, organisations and technology converge in the business process management system. It can therefore be assumed they are also the cause of the problem.

Table 4.1 summarises authors having done research on business process management. The authors are grouped according to questions asked in the empirical study.

Table 4.1: Questions asked on business process management

D1	Location	Our production facility is situated close to the labour supply	Ambrosino & Scutellà (2005: 610) Awasthi, Chauhanb & Goyal (2011: 98)
D2	Location	Our business is close to suppliers	Schmenner (2000: 126) Lopes, Barreto, Ferreira & Santos (2008: 366)
D3	Location	We operate in close proximity to most of our customers	Ambrosino & Scutellà (2005: 610) Matouschek & Robert-Nicoud (2005: 570) Figueiredo, Guimarães & Woodward (2002: 341)
D4	Location	Our current location fulfil our capacity needs	Schmenner (2000: 126) Pyon, Woo & Park (2011: 3267) Umble, Haft & Umble (2003: 241)
D5	Location	We do not experience transport or traffic problems at our current location	Lopes, Barreto, Ferreira & Santos (2008: 366) Awasthi, Chauhanb & Goyal (2011: 98)
D6	Facility layout	Our facility layout is planned for maximum productivity	Zanding (2001: 133) Thompkins (2003: 324) Abdulmalek & Rajgopal (2007: 223)
D7	Facility layout	Our production plant has been assessed by a professional operations consultant	Leung & Suri (1990: 77) Soriano & Forrester (2002: 104)
D8	Facility layout	Down time in the production facility is at a minimum	Deb & Bhattacharyya (2005: 305) Schonberger (2004: 20)
D9	Facility layout	Raw materials flow efficiently through the plant	Palm (2006: 2) Brown & Fai (2006: 60) Kalpic and Bernus (2006: 40)
D10	Facility layout	Material handling cost is at a minimum	De Lima, Da Costa, & De Faria (2009: 403) Ozcelik (2010: 7)
D11	Facility layout	The facility layout is conducive to creating the shortest cycle time possible	Avison & Fitzgerald (2003: 592)
D12	Production processes	Everybody in the organisation are aware of which processes to follow in order to deliver the product/service	Lindsay, Downs & Lunn (2003: 1015) Clemons, Thatcher & Row (1995: 9) Lee (2005: 29) Cameron & Braiden (2004: 261) Reijers & Mansar (2005: 283) Leymann, Roller & Schmidt (2002: 198)
D13	Production processes	Organisational processes are mapped	Jarven & Stoddard (1998: 15) Smith & Fingar (2003: 94) Strnadl (2006: 67) Smith, Msetfi & Golding (2010: 326)

D14	Production processes	Organisational processes are mapped and followed	Ray, Barney & Muhanna. (2004: 23) Venkatraman (1994: 73) Kalpic & Bernus (2006: 40) Davenport (1993: 207) Helpman (2004: 114) Kingsman (2000: 73) Jaaskelainen (2010: 360) Gunasekarana & Ngaib (2005: 423) Din, Abd-Hamid & Bryde (2011: 1044)
D15	Production processes	Adherence to processes are incorporated into the performance management system	Davenport & Short (1990: 12) Earlier, Hammer & Champy (1993: 34) Hon (2005: 139) Uden & Naaranoja (2010: 268) Brassler & Schneider, (2010: 118)
D16	Production processes	Duplications and bottlenecks have been eliminated out of the production process	Lindsay, Downs & Lunn (2003: 1015) Hinterhuber (1995: 65) Chen, Hwang & Shao (2005: 447) Lewis & Slack (2003: 106) Brassler & Schneider (2001: 121)
D17	Production processes	We have formal maintenance processes on all machinery	Scholl (2004: 694) Becker & Scholl (2004: 695) Klocke, Roderburg & Zeppenfeld (2011: 417) Chapman, Soosay & Kandampully (2003: 630)
D18	Production processes	There are formal maintenance processes in production facilities	Antras & Voth (2003: 52) Rose (2005: 14) Bhatt (2000: 139) De Oliveira, McCormack & Trkman (2012: 5488) Demirkan, Kauffman, Vayghan, Fill, Karagiannis & Maglio, (2008: 356) Temponi (2005: 17).
D19	Production processes	A critical path analysis has been done on all processes	Later, Becker, Von Uthman, Zur Mijhlen & Rosemann (1999: 10) Castano, De Antonellis & Melchiori (1999: 253) Van der Aalst and & Hee (2002: 112) Abdulmaleka & Rajgopal (2007: 223) Maine, Lubik & Garnsey (2012: 179) Nightingale (2000: 913).
D20	Quality control	Quality control processes are mapped into the production processes	Zairi (1997: 64) Lindsay, Downs & Lunn (2003: 1017) Lee (2005: 29) Al-Mashari & Zairi (2000: 11) Ketokivi & Schroeder (2004: 171) Parast (2011: 45)
D21	Quality control	Every employee is aware of his/her role in providing a quality product or service	Hernandez, Mula, Ferriols & Poler (2008: 842) Brassler & Schneider (2001: 119)

			Marksberry, Badurdeen & Maginnis (2011: 3) Tarafdar & Gordon (2007: 353)
D22	Quality control	Delivery is of a standardised manner according to processes	Grönroos & Ojasalo (2004: 414) Otto & Scholl (2011: 277) Johnston, Maguire & McGinnity (2009: 513) Lai, Xie, Tan & Yang (2008: 202)
D23	Quality control	There is a continuous improvement plan in place	Brassler & Schneider (2001: 119) Johnston, Maguire & McGinnity (2009: 513) Thompson, Strickland & Gamble (2005: 401) Chang (2006: 286)
D24	Quality control	The business delivers a standardised product and service	Brassler & Schneider (2001: 121) Schonberger (2004: 20) Shin, Benton & Jun (2008: 2462) Baron-Epel, Levin-Zamir, Satran-Argaman, Livny & Amit (2004: 213)
D25	Financial processes	All invoices are sent out timeously	Ozcelik (2010: 7)
D26	Financial processes	Money is collected in a processes and standardised manner	Erickson, Mayhew & Felix (2000: 165)
D27	Financial processes	Financial systems are working well	O'Brian (2004: 52) Niemira & Saaty (2004: 573) Guillen, Badell, Espuna & Puigjaner (2006: 421)
D28	Financial processes	Financial records are accurate and accessible	Cohen, Krishnamoorthy & Wright (2008: 166) Erickson, Mayhew & Felix (2000: 165) Bradt & Vonnegut (2009: 3) Armstrong (2006: 325)
D29	Human Resources	New employees are immediately introduced to policies and procedures	Brassler & Schneider (2001: 121) Breaugh & Starke (2000: 405) Hernandez & O'Connor (2010: 11) Dasborough, Ashkanasy, Tee & Tse (2009: 571)
D30	Human Resources	Human resource administration is well managed and data is up to date	Hernandez & O'Connor (2010: 10) Ferris, Hochwarter, Douglas, Blass, Kolodinsky & Treadway (2002: 65)
D31	Human Resources	There are formal disciplinary procedures in place and employees are aware of them	Ferris, Hochwarter, Douglas, Blass, Kolodinsky & Treadway (2002: 65)
D32	Human Resources	Processes and technology assist employees in achieving maximum productivity	Dransfield (2000: 69) Neely, Gregory & Platts (2005: 1228) Coughlan & Coughlan (2002: 220)
D33	Human resources	Adherence to processes from part of the performance management system	Joachims (2002: 658) Mahler (1975: 503) De Lima, Da Costa & De Faria (2009:

			407) Rock & Donde (2008: 10) Halachmi (2005: 502) Egbu (2004: 301)
D34	Supply chain	Processes are mapped across the supply chain	Shin, Benton & Jun (2008: 2462) Johnson & Templar (2011: 88) Christopher & Peck (2003: 46)
D35	Supply chain	Supply chain relationships are well managed	Mentzer, Dewitt, Keebler, Min, Nix, Smith & Zacharia (2001: 18) Cutting-Decelle, Das, Young, Case, Rahimifard, Anumba & Bouchlaghem (2006: 29)
D36	Supply chain	We hardly ever experience problems with suppliers	Farris & Hutchinson (2002: 288)
D37	Supply chain	Inventory is managed across the supply chain	Zsidisin, Ellram & Ogden (2003: 129) Sabath (2003: 62) Chan (2007: 79)
D38	Technology	We have implemented business process management software	Smith & Fingar (2003: 97) Lee (2005:34) Grover, Teng & Fiedler (1993: 433) Bhatt (2000: 143)
D39	Technology	We are happy with the technology in the factory	Davenport (1993: 95) MacDonald & Smith (2004: 107) Goldenberg (2000: 32) Haegle (2000: 33) Shao & Lin (2001: 447)
D40	Technology	All users are well trained on the necessary software	Janke (2006: 6-12) Watanabea, Matsumotob & Hura (2004: 941) Al-Mashari & Zairi (2000: 10) Yao, Liu & Chan (2010: 353).
D41	Technology	Technology- and line managers share knowledge throughout the organisation	Innala & Torvinen (1995: 179) Ray, Barney & Muhanna (2004: 27) Porter & Miller (1985: 149) Attaran (2004: 585) Fan & Watanabe (2006: 303) Ordoobadi & Mulvaney (2001: 157)

4.3 SUMMARY

Business process management started in the 1700s when organisations started to focus on ways of improving efficiencies and reducing cost. Business process management went through various stages of development. Business process management gained interest in the 1800s and was formally outlined in the 1990s by Davenport and Short (1990: 11) as a set of related tasks performed to achieve a business outcome. A business process has structure, inputs, transformation, outputs, customers and owners and depicts the manner in which work gets done within an organisation. Business process management was defined by Zairi (1997:

64) as all efforts in an organisation to analyse and continuously improve fundamental activities, such as manufacturing, marketing, communications and other elements of company operations.

The elements of business process management are inputs, transformation and outputs. Inputs include raw materials, human resources, facilities and equipment. Inputs are put through the transformation process to create an output which can be sold to customers to generate return on investment from the production process. Business processes are managed across various components such as production processes, quality control derived from quality policies and quality assurance processes, financial processes, human resource processes, supply chain processes and production processes. Human resource processes includes recruitment, selection, on-boarding, job descriptions, administration, training and development, performance management and reward.

Business process management is implemented in various stages. During the reengineering phase, process activities are extracted and mapped in a diagram. Thereafter, processes are developed through the observation of methodologies. A critical path analysis is done to identify and eliminate bottlenecks and duplications. Line balancing ensures that the optimum cycle time is achieved. Proposed new actions are incorporated to achieve process improvements. This stage includes achieving optimum facility lay-out. Once the optimum processes have been achieved, processes are implemented through communicating methodologies to employees. Employees follow the processes and enter into a continuous improvement process by finding even better ways of production. Technology is available to drive business process management.

As soon as the business processes are implemented and supported by the correct technology, the maintenance and continuous improvement process should start. Business processes can never become stagnant. Effort has to be exerted to improve efficiencies, effectiveness and flexibility on an on-going basis. Business process management has been found to be hugely advantageous to organisations. Such advantages include lowering of costs, reduced cycle times, more satisfied customers and the ability to share best business practices and knowledge throughout the organisation. Business process management will have a positive effect on quality assurance and effective project management, as well as the reduction of process

complexity, improved transparency of the system's behaviour, a better understanding and uniform representation of processes and improved reusability of resources.

In order to realise the advantages of business process management, certain success criteria has been identified, such as a good fit between the business environment and the processes. Processes have to be driven by senior management with strong project management capabilities. Teamwork is another prerequisite. Further criteria identified are problem solving skills, productive meetings and sound communication. Skills required are innovation, resource investigation, organising and project management.

It has become clear from the literary research that business process management is a complex yet necessary process of business management. As is shown in figure 4.2 business process management has to span across all facets of the business. Quality management processes have to permeate all processes and be managed through processes. Inputs such as materials, labour, finances, technology and facilities have to go through production according to mapped processes in order to add value and provide an output to the next entity in the supply chain until the product or service is delivered to the end-user. The actual effect of *Business process management* on *Perceived business success* will be empirically tested to determine the correlation between *Business process management* and *Business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

There are various independent variables impacting on *Perceived business success*. *Business process management* is one such independent variable. *Perceived business success* as a dependent variable has been investigated in the past, yet according to Skerlavaj, Indihar, Stemberger, Skrinjar and Dimovski (2007: 346), no comprehensive or substantial correlation with variables impacting business success has been drawn. Ariyachandra and Frolick (2008: 113) insisted that several scholars tried to identify success factors of *Business process management*, but failed. *Business process management* remains largely atheoretical (Karim, Somers & Bhattacharjee, 2007: 101).

Terziovski, Fitzpatrick and O'Neill (2003: 35) claimed that all literature on *Business process management* to date is merely a rehashing of old ideas and that nothing new is at play. It is therefore important to research the effect of *Business process management* as an independent variable on *Perceived business success*. In order to measure the correlation effectively it is necessary to control for all the other variables as identified in chapter 2. Therefore the effect of other independent variables will also be measured. *Perceived business success* will be measured by *Sustainability, Business growth, Profitability and Customer satisfaction*.

This study focuses on SMEs in the Gauteng region of South Africa. A database of owner-managed businesses has been used. Entrepreneurs were randomly chosen. Welman and Kruger (2001: 70) advised that the distinguishing feature of true research is that participants are chosen by random assignment. Entrepreneurs were asked to take part in an electronic survey and face-to-face interviews. A link to the questionnaire was sent to participants via the Internet. Struwig and Stead (2004: 102) stated that there are advantages to Internet research as it has wide access to a variety of people at low cost, but warned that Internet surveys are plagued by low response rates.

This chapter will cover the research methodology described in chapter 1. The process of research and its application to this study is discussed. Bryman and Bell (2007: 28) identified

seven steps in the research process. The first step is the identification of the problem, secondly, designing the research and the third step is presenting the research design. Step four is to choose the sampling design and step five is gathering of data. Step six is processing and analysing the data, with step seven being reporting of the results.

The research design as well as the conceptual model will be discussed in detail. In this chapter the quantitative methodology, data collection, the development of the questionnaire and interview template, methodology of conducting interviews, determining reliability and viability and methods of analysis are discussed in line with the methodologies as described by Bryman and Bell (2007: 28).

5.2 RESEARCH DEFINED

According to Leedy and Ormrod (2005: 8), as well as Wisker (2001: 114), research is a process of collecting, analysing and interpreting collected data to increase the understanding around a certain subject. Zikmund (2003: 7) explains the purpose of research as the solution to fill a gap in knowledge. Such gaps can pertain to the economy, the macro environment, the market or the micro environment. Bryman and Bell (2007: 5) explained scientific research as the understanding of the complex nature of business and how problems will be solved in order to find new ways of doing things and advance the general efficiency.

For the purpose of this study, research is defined as the systematic following of a process to collect and analyse data in order to investigate factors, draw accurate conclusions and provide sound recommendations. The independent variables, specifically *Business process management*, will be researched and correlations drawn will contribute to the body of knowledge in determining which variables will have the biggest effect on the dependent variable, *Perceived business success*.

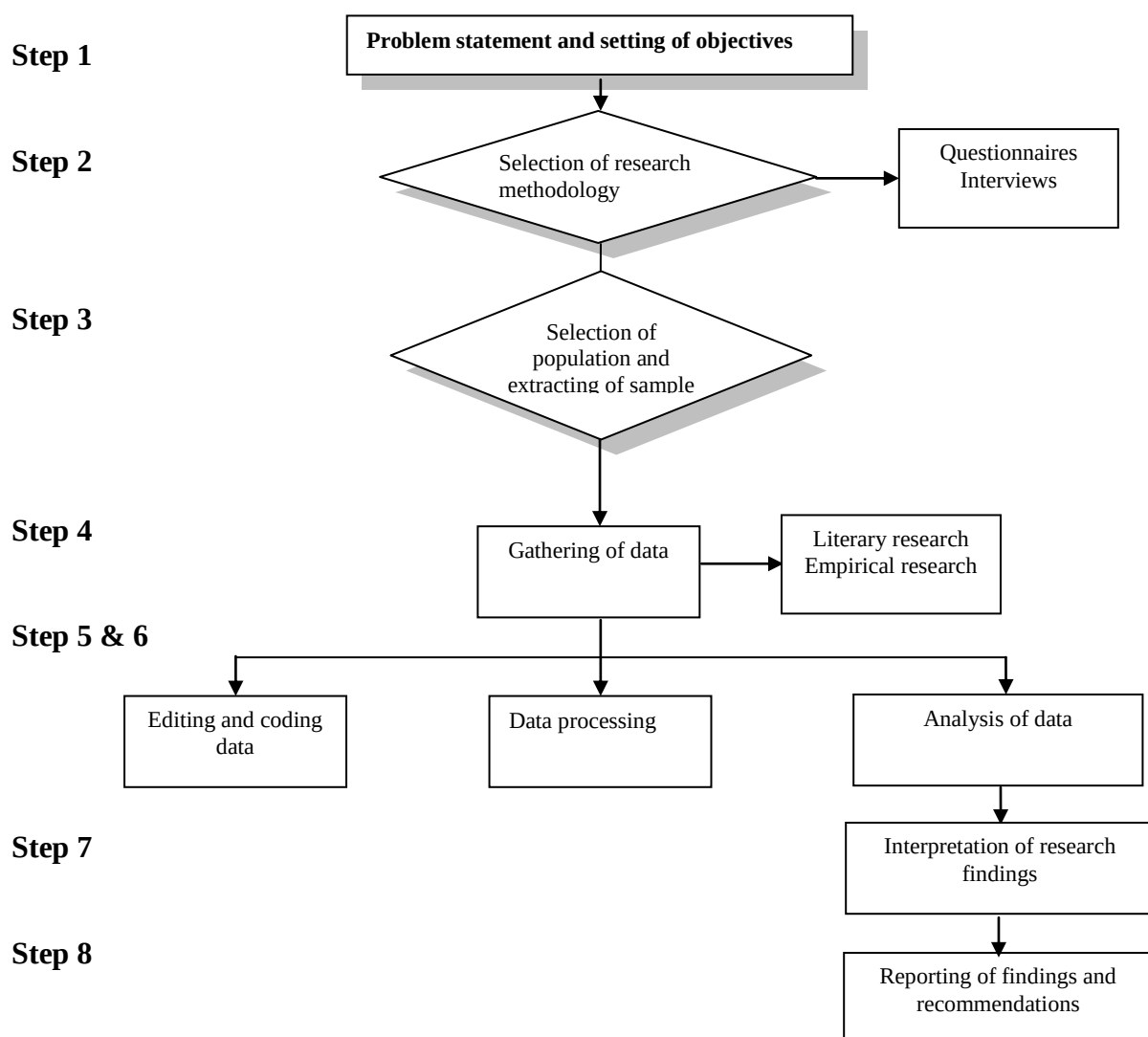
5.3 RESEARCH PROCESS

The research process follows the seven steps of Bryman and Bell (2007: 28) and will thus include the identification of the problem, the research design, sampling methods, the process of gathering the data, processing and analysing the data and reporting on the results. Peiffer

and Chudoba (2008: 107) showed that the research process is based on three requirements: the persistent recording of the process, the need for a notification mechanism such as e-mail and straight forward transformation of data into information. Cooper and Schindler (2008: 11) warned that research should be undertaken in an orderly manner. Zikmund (2003: 59-73) holds that the steps of business research should combine the steps of scientific research.

Figure 5.1 is a graphical diagram of the various steps of the business research process.

Figure 5.1: Steps of business research process



Source: Adapted from Zikmund (2003: 61)

5.3.1 Problem statement and research objectives

In order to research successfully, a problem or a gap in the knowledge base has to be identified. Primary and secondary research objectives have to be set (Cooper & Schindler, 2008: 83).

5.3.1.1 Identification of the problem statement

The problem statement identifies the gap in knowledge to be filled (Cooper & Schindler, 2008: 83). Zikmund (2003: 94) stated that the problem must be clearly defined and must provide the objective of the study. The quality of the research question will determine the quality of the research. Malterud (2001: 483) warned that the nature of the research question will determine the correct outcome of the study. Zikmund and Babin (2007: 104) added that the identification of the research problem is the most important step in the research and it must be well stated and relevant.

For the purpose of this research, the question is whether there is a linear relationship between the independent variables such as *Business process management* and *Perceived business success* as measured through *Sustainability, Business growth, Profitability and Customer satisfaction*. Entrepreneurs will be approached to take part in an electronic survey as well as interviews. Through the correlations drawn it will be determined which independent variables have significant relationships with *Perceived business success* measures in order to make recommendations to the chance of *Perceived business success*.

5.3.1.2 Research objectives

5.3.1.2.1 Primary objectives

The primary objective of this study is twofold: firstly to identify the independent variables with regards to *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management* and its impact on *Perceived business success* in small and medium-sized businesses in the Gauteng province of South Africa, and secondly to measure the effect of the independent variables on the dependent variable and make practical

recommendations to ensure the successful management and ultimately sustainability of small and medium-sized businesses.

5.3.1.2.2 Secondary objectives

Secondary objectives are to define various business terms and to understand the classification of small and medium-sized enterprises, furthermore to gain insight into *Perceived business success* through literary research. Variables that can impact on *Perceived business success* in the SMME market will be identified and developed through literary research. Measurement criteria for *Perceived business success* will be developed and relevant data will be collected to test the impact of the independent variables on *Perceived business success*. The validity and reliability of the measuring questionnaire will be assessed as well as the influence of the independent variables on the dependent variable, being *Perceived business success*. Ultimately the objective of the study will be to provide recommendations and solutions to entrepreneurs to enhance the chances of *Perceived business success*.

5.3.2 Research design

Research design is developed to fulfil the research objectives and answer the research question. It is designed to prove or disprove the hypothesis. Van den Berg (2007: 75) held that the research design should provide a framework for the research, detailing the procedures required for obtaining the relevant information.

According to Leedy and Omrod (2005: 85), research design should guide the research structure. Glatthorn and Joyner (2005:97) agreed by saying that research design is developed to interpret the research. Cooper and Schindler (2008: 156) added that the blueprint should guide the gathering, measurement and analysis of the data.

5.3.2.1 Types of research design

Bryman and Bell (2007: 28) describe research design as the strategy chosen by the researcher that the researcher adopts to solve the research problem. The choices in research design are qualitative, quantitative or mixed method design which is a mixture of the qualitative and

quantitative methods (Glatthorn & Joyner, 2005: 39). Bryman and Bell (2007: 28) described qualitative research design as research that uses words rather than figures to quantify data. Qualitative design relies on the skill of the researcher and leads to an in-depth understanding of the situation around the research. Borrego, Douglas and Amelink (2009: 53) showed that qualitative research involves recording data through interviews or observations. In this study interviews were conducted.

Bryman and Bell (2007: 28) also described quantitative research as research quantifying data into numerical factors allowing for exact measurements. Cooper and Schindler (2008: 164) held that quantitative research provides the opportunity to use statistics to determine certain outcomes and to analyse data.

5.3.2.1.1 Qualitative research

According to Welman and Kruger (2001: 74), qualitative data is collected to ensure the richness of data. This part of the research is required to gain more in-depth knowledge of the relationship between *Business process management* and *Perceived business success* and to clarify the humane aspects affecting the correlation. Qualitative research determines the sample's perception of processes and the effect thereof on the business. It also determines the level of awareness of the need for systems and processes.

Pope and Mays (2000: 147) confirmed that qualitative data is collected in an unstructured manner. Qualitative research is used to provide complex textual descriptions of how a relationship between two variables behaves. It brings in the beliefs, opinions, emotions and relationships of individuals. Myers and Newman (2006: 91) held that qualitative methods are also effective in identifying intangible factors, such as social norms, socioeconomic status, gender roles, ethnicity and religion, whose role in the research issue may not be readily apparent. The qualitative data is used in combination with quantitative data in order to gain a deeper understanding of the relationship between *Business process management* and *Perceived business success* (Pope & Mays, 2000: 148).

The qualitative methods that are used for the purposes of this study are face-to-face interviews, with interviews conducted from an interview template designed from the literary research in chapter 2 to 4. Questions are developed to determine the entrepreneur's

perception about the successfulness of the business and to determine what he or she attributes the success to. Questions focus on *Business growth*, *Political stability*, *Customer relationship management* and *Entrepreneurial abilities and attributes*.

Levy (2005: 341) explained that qualitative research is necessary due to the challenge of getting to know the research subject better, including their introspections, self-expression, ignorance, uncertainty, body language, contradictions and defences. Methods that could be used to collect this type of data are interviews, focus group sessions and observation. Humans are complex and such methods are necessary to determine what is underlying and theoretically operative. Marchel and Owens (2007: 301) warned that researchers and participants have to be careful of subjectivity in qualitative research. Earlier Riley and Love (2000: 164) warned against positivism in qualitative research.

5.3.2.1.2 Quantitative methods

Quantitative research methods were described by Cavana, Delahaye and Sekaran (2001: 472) as methods to acquire, verify and validate information in applied research. These methods are used to help researchers understand various factors and how research can be applied to businesses in order to make informed decisions. Quantitative research is mostly based on questionnaires and includes various analytical approaches, including both constant comparative analysis and statistics.

The first step of quantitative research is the development of research questions. Cavana *et al.* (2001: 472) identified nine stages in the research cycle: choosing a topic, development of guidelines for managing the process, research project development, developing sample extraction, briefing of subjects, data collection, topic analysis, evaluating the implications of the findings and reporting on findings and outcomes of the research. For the purpose of this research, all these stages have been followed. Data collection is done through a mixed method research, with the main focus being on quantitative research.

The data was collected through an online survey. Participants were asked to complete online questionnaires. A link was sent to a database of 3000 entrepreneurs and small business managers of small and medium-sized businesses in Gauteng, as drawn off of the Matrix database system. Filling in the questionnaire took approximately 20 minutes. Westerman

(2006: 263) expanded on the theories of Cavana *et al.* (2001: 472) and pointed out that there is a diversity of viewpoints on quantitative research which shows that investigators have varying opinions about quantitative methods. Quantitative research is interpretive, but research methods often require a reconceptualisation. The collection of data for this research was systematic in order to ensure that the same conclusions will be reached, regardless of who the analysis is done by. The measurements are in line with four levels of measurements as provided by Welman and Kruger (2001: 131). The questionnaire is based on a Likert scale and measurements are distinguishable in order of rank with equal intervals and will result in an absolute answer. The Likert scale used was a five point Likert scale with respondents choosing a statement according to how much they agree or disagree with the statement.

There are three types of research strategies that can be applied in quantitative and qualitative research.

5.3.2.1.3 Types of research strategies

- Exploratory research

According to Kothari (2008: 24), the objective of exploratory research is the development of the hypotheses rather than the testing thereof. Davis (2005: 146) explained that exploratory research is a rigorous process and delves into the depth of the situation. Cooper and Schindler (2008: 157) held that exploratory research asks “what” and “why” and makes use of various tools to determine the accuracy of the findings.

- Descriptive research

Descriptive research strives to discover different research scenarios with regards to populations, samples and objects (Zikmund & Babin, 2007: 51). According to Zikmund (2003: 58), descriptive research explains variances in different groups of data. Wisker (2001: 118) contends that descriptive research also describes frequencies, averages and percentages through the use of surveys and or interviews. Zikmund (2003: 59) further explains that descriptive research determines who, what, when, where and how things are done and describes a certain scenario.

- Causal research

Glatthorn and Joyner (2005: 100) argued that the main objective of casual research is to determine the cause and the effect relationship between a dependent and an independent variable. Cooper and Schindler (2008: 157) described causal research strategy as correlational research. Leedy and Ormrod (2005: 181-182) warned that a positive correlation does not necessarily describe a relationship. Salkind (2006: 11) agrees that casual research goes beyond correlations and also seeks to identify the reason behind cause-and-effect relationships.

Criteria to consider when making a research design decision include:

- Establishing the appropriate causal order or sequence of events
- Identifying any possible concomitant variations
- Controlling extraneous variables, other possible explanations or causal factors

(Zikmund, 2003: 58).

For the purpose of this study, descriptive and causal research will be done. There are various factors affecting business success. The literary study focused on variables in chapter 2, grouped into three sections; *Entrepreneurial abilities*, the *Macro environment* and the *Micro environment*. Chapter 3 focused on the criteria of business success, the definition and the measurement thereof. Through the literary study it became apparent that the success measurements can be split into two categories, financial and non-financial. The most used financial measure is *Profitability*, while non-financial measures are *Sustainability*, *Customer satisfaction* and *Business growth*. The *Perceived business success* literature review is followed by a study on *Business process management*. The definition thereof, elements and components of *Business process management*, success criteria, stages of implementation and advantages of sound *Business process management* are discussed in chapter 4.

According to Field (2009: 431), the stages of an empirical study are to specify and operationalise the construct, create a database through random sampling of the population of entrepreneurs in Gauteng, collect data, test for reliability and validity through a factor analysis, analysis of the data and reporting thereof. The research is therefore a relational study executed through mixed method design, using qualitative and quantitative data. Time in

research is cross-sectional. The qualitative study is an interpretive description based on grounded theory and is done to validate data collected through questionnaires. Struwig and Stead (2004: 15) asserted that both qualitative and quantitative research is required as these methods differ in the conceptions of reality.

5.3.3 Research methodology

Selecting a research methodology concerns selecting the manner in which data is to be collected (Voss, Tsikriktsis & Frohlich, 2002: 195). According to Glatthorn and Joyner (2005: 193), there are three methods of gathering research data, being observation, experimentation and surveys. Zikmund (2003:65) provided four methods of research methodologies, being secondary data studies, observation, experiments and surveys.

5.3.3.1 Experiments

Salkind (2006: 217) held that experiments are the best research methodology for causal research. This method consists of a study in which a cause and its effect on a variable are researched. Zikmund and Babin (2007: 56) explained that experiments are done through establishing two groups and comparing the data of the test group to the control group which does not receive any treatment. The dependent variable is measured before and after the experiment. There is therefore data captured before and after the treatment. Bryman and Bell (2007: 45) warned that the groups should be randomly assigned to ensure that the variance between the groups cannot be attributed to manipulation of the administering of the independent variable.

There are two types of experiments being used, field experiments and laboratory experiments. A field experiment is administered in a natural realistic environment and a laboratory experiment is conducted in an artificial situation in a laboratory where the researcher has more control and extraneous variables can be controlled (Zikmund & Babin, 2007: 270). Salkind (2006: 217) held that experiments are the most efficient methodology to establish cause-and-effect relationships.

5.3.3.2 Observation

Khothari (2008: 28) expressed that observation is a systematic process of recording behavioural patterns, objects and occurrences by watching them occur. Zikmund (2003: 235) held that the researcher is adjacent to what is being studied and is not a participant. Salkind (2006: 203) argued that no questioning of or communicating with subjects should occur. The types of information that can be gathered through observation are physical actions, verbal behaviours, body language, relations, patterns, attitudes and expectations (Zikmund, 2003: 235).

Wisker (2001: 178-183) cites the advantage of observation as that the objects or people being observed are unaware of the fact, therefore data is natural and without bias but Makore-Rukuni (2001: 113-122) warned that observation does not provide for the researcher to probe for information.

5.3.3.3 Surveys

Surveys are a method of collecting active primary data. Data is collected from people through the use of survey instruments designed to obtain information (Davis, 2005: 274). Zikmund and Babin (2007: 186) showed that a survey is based on communication with a representative sample of individuals. Neuman (2006: 273) offered that surveys can be used to gather data about opinions, characteristics and behaviours. Cooper and Schindler (2008: 215) contended that questionnaires are useful in collecting survey data but that data sets should be collected in a manner to be easily compared.

Truell, Bartlett and Alexander (2002: 38) explained that mail surveys involve sending a respondent a questionnaire to fill in and return. Davis (2005: 279) believed that mail surveys allow the researcher to reach a geographically dispersed sample at a relatively low cost. It also offers anonymity, confidentiality and the respondents can respond in their own time. Welman *et al.* (2005: 187) warned that there is very little control over conditions with mail surveys. Respondents could omit questions or get somebody else to fill in the questionnaire.

5.3.3.4 Interviews

Interviews are conducted face-to-face with respondents. Appointments can be set up or respondents can be approached in public. Interviews can also be conducted telephonically (Zikmund & Babin, 2007: 211). Welman, Kruger and Mitchell (2005: 164) believed that the greatest advantage of interviews is that the interviewer is in control of the interview situation and can prod deeper to ascertain the accuracy of the data. Zikmund (2003: 62) identified that the disadvantage of personal interviews is costs and the time it takes. It also requires a skilled interviewer. Weiman *et al.* (2005: 163) warned that the appearance, body language, tone of voice and wording of the question may affect the respondent.

Tustin, Ugthelm, Martins and Van Wyk (2005: 155) cited various advantages of telephone interviews. It produces faster results, saves cost of travelling and offers anonymity. It is also more controlled. However, there are also disadvantages such as it being limited to voice and facial expressions or any graphical depictions of the research are lost. Time is limited and respondents might be less committed.

5.3.3.5 Secondary data studies

Secondary data is information gathered from data collected by other researchers or for other purposes (Zikmund & Babin, 2007: 160). Bryman and Bell (2007: 328) identified advantages of secondary data as providing deeper insight into issues and providing an opportunity to do a cross cultural analysis. Secondary data tends to be of high quality and saves cost.

For the purpose of this study the collection of data was done through Internet mail surveys (structured questionnaire) and interviews. Questionnaires were mostly sent out via e-mail. Entrepreneurs were also handed printed questionnaires. Entrepreneurs from the sample group were sent a link to an electronic questionnaire. The respondents could complete it when convenient. Upon submission the questionnaire would upload onto the web and the data could be downloaded. Entrepreneurs from Gauteng were randomly selected from a Matrix database. A random sample of 3000 entrepreneurs and managers of small and medium-sized businesses were drawn through the Matrix software and e-mailed with a request to take part in the survey. A total of 326 entrepreneurs responded, but 18 had to be discarded due to

businesses being too big or small, respondents being from outside of Gauteng or questionnaires being filled in incorrectly.

Interviews were done face-to-face. An interview template was designed and interviewees were asked questions. According to Zikmund and Babin (2007: 211), interviews increase the percentages of people willing to participate and the interviewer is in complete control of the interview situation. Face-to-face interviews were done by the researcher after calling for volunteers from the sample group. Interviews were done by appointment with entrepreneurs or business managers. The interviews and questionnaires were done during late 2011.

5.3.4 Population and sampling

The full population from which a sample is drawn for the purpose of research is determined. There are various ways of deciding on the population and of extracting the sample from the population (Zikmund, 2003: 48).

5.3.4.1 Study population

Cooper and Schindler (2008: 90) defined a population as the full group of elements a researcher wishes to investigate. The population could be people, events, records or elements that contain the desired information and can provide answers to the measurement question. Wegner (2007: 6) held that a population is a representative of every possible item that is relevant to a certain study.

In this study the population was pulled from the Gauteng region. The Gauteng province is central to South Africa and includes the main cities of Johannesburg and Pretoria. It also includes towns such as Heidelberg, Bronkhorstspuit, Vanderbijlpark and Vereeniging. A Matrix database was drawn of all the SME businesses in Gauteng. The population comprises of entrepreneurs and managers of small and medium-sized businesses in the Gauteng region.

The full database lists approximately 80 000 businesses across all industries in Gauteng. It contains approximately 165 000 names of executives and decision makers. The population developed for this study consists of operations managers and lead entrepreneurs in SME

businesses in Gauteng. The classification of the businesses was done according to guidelines of the National Small Business Act (Act No. 102 of 1996).

5.3.4.2 Sampling

When conducting empirical research a sample has to be drawn from the population (Struwig & Stead, 2004: 121). There are different types of sampling methods, each with advantages and disadvantages. Alston and Bowles (2003: 66) warned that the sampling methodology is critical to the success of the research. Royse (2008: 189) said that when making use of sample theory smaller observations are likely to provide the potential idea of expectations concerning the overall research population. Cooper and Schindler (2008: 374) described sampling as a quantitative research process of selecting some elements as the representative of the total population.

McDaniels and Gates (2003: 64) referred to sampling as a subset from a larger population but warn that it must be representative of the full population. Wisker (2001: 139) contended that the sample must be accurate and precise. Kent (2007: 229) believed that using a sample rather than collecting data from a full population saves cost. Wegner (2007: 213) agreed that collecting data from a full population will be impossible due to time and cost constraints.

There are various sampling methods that can be used. Zikmund and Babin (2007: 411) described probability sampling as a method where each member of the population has a known probability of being chosen. According to Salkind (2006: 86), there are four techniques of probability sampling: simple random sampling, systematic sampling, stratified sampling and cluster sampling. Bryman and Bell (2007: 186) described simple random sampling as the most basic form of probability sampling where each member of the population has an equal and independent chance of selection.

Systematic sampling is described by Bryman and Bell (2007: 187) as a variation of the simple random sample technique where elements are chosen at exact intervals. Neuman (2006: 231) explains stratified sampling as a random sample in which the researcher identifies a set of mutually exclusive subgroups or strata. It divides the population and then uses random selection. Cluster sampling selects units rather than individual elements (Zikmund & Babin, 2007: 417).

Non-probability sampling is a technique where the sample is extracted according to certain criteria or preferences and the probability of being chosen is unknown (Zikmund & Babin, 2007: 411). There are four types of non-probability sampling, namely convenience sampling, judgement sampling, quota sampling and snowball sampling. Kent (2007: 235) described convenience sampling as a method of choosing elements due to it being readily available. With judgement sampling an experienced researcher selects the sample based on own preference about some appropriate characteristic required of the sample member (Zikmund & Babin, 2007: 412). Quota sampling is a technique that ensures that various subgroups of a population will be represented according to certain characteristics. Snowball sampling applies probability sampling for an initial selection after which more elements are chosen according to information gained from probability sample (Zikmund & Babin, 2007: 414).

For this research the sample size was determined through assessing the size and characteristics of the population, the objectives of the research, the viability of receiving responses and the required confidence level. Zikmund (1994: 409) provided a formula for calculating the sample size. The sample was worked out to be 3000.

$$n = \frac{Z^2 q^2 S^2}{H^2}$$

Where n = sample size

Z = confidence level

S = standard deviation of population

H = desired precision level

Q = desired confidence level

The sample is therefore n = 3000 from a population of N = 165 000. The sample of 3000 enabled the researcher to reach a confidence level of 95%. Being done at a 95% confidence level ensured that the estimated proportions should not differ with more than 5% from the population. Stratified sampling was used due to the fact that the focus of the study was on the SME market. Only businesses with a staff complement of between five and 200 employees with a turnover of between R1 000 000 (one million rand) and R100 000 000 (one hundred million rand) will be chosen. SMEs were divided into groups according to headcount and

turnover. The stratum is based on the classification of SME businesses by the National Small Business Act 102 of 1996.

Qualitative interviewees were selected on the basis of richness of data. Struwig and Stead (2004: 121) recommended that qualitative subjects are purposefully selected. While the quantitative data will be collected through an internet questionnaire, qualitative data will be collected through face-to-face interviews. The amount of interviews was determined according to how many participants volunteer to be interviewed, but of all participants only 20 interviewees were targeted. The results of the qualitative data are described in chapter 6.

Even though the sample is stratified to include businesses with various turnover levels and years in existence, the sampling strives to be as unbiased and random as possible. When determining the sample, personal characteristics of the entrepreneurs such as age and gender were taken into account. Each record had a uniform inclusion probability. The sample was drawn without replacement. The sample was drawn from a Matrix database which enables the researcher to draw a database according to certain criteria such as employee count and turnover levels. This was done to ensure that only small and medium-sized businesses were incorporated in the research.

While the dependent variable is *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*, the independent variables are divided into four categories, *Entrepreneurial abilities*, *the Macro environment*, *the Micro environment* and *Business process management*. Take note that one latent variable intended to measure the dependent variable, *Market position*, was not extracted as a factor (refer to the empirical study) and was therefore discarded in the statistical analysis.

5.3.5 Data collection methods

There are no set rules or criteria for choosing data collection methods (Maxwell, 2005: 93). Grinnell and Unrau (2008: 300) offered that the choice of data collection methods should be based upon the needs of the researcher. Constraints such as budget, human resources and time should also be taken into consideration. After deciding on the research design and having obtained the research participants through stratified random sampling from a database of

small and medium-sized businesses in Gauteng, the data collecting methods that were decided upon were questionnaires and face-to-face interviews.

5.3.5.1 Designing research questionnaires

Babbie (2007: 246) defines questionnaires as a “document containing questions and/or other types of items designed to solicit information appropriate analysis” or “a collection of questions or statements that allow the researcher to test the attitudes or perceptions on certain issues”. Kent (2007: 151), Wegner (2007: 231) and Wisker (2001: 147) agree that the questionnaire is a research instrument used to collect data on a paper document or electronically. Zikmund (2003: 330) warned that the development of the questionnaire is of vital importance to the success of the research. Kent (2007: 151) held that a questionnaire should list all the questions a researcher wishes to ask of respondents and provide a manner in which the responses can be recorded. Kent (2007: 152) further teaches that questions must be in a logical sequence, draw accurate information, have a standardised format and facilitate data processing.

Neuman (2006: 278-281) held that questions should be designed to assure that the correct data is collected. He warned that jargon, slang and abbreviations should be avoided. Ambiguous and vague questions should also be avoided; questions should be clear and understandable. Double-barrelled questions and leading questions should not be used. Questions should be within the intellectual range of the respondents and no double negatives should be used.

During the design of a questionnaire there are various choices of questions. Open-ended questions provide respondents the freedom to answer in any way they wish and can be used to air opinions, detect attitudes and probe deeper into issues (Davis, 2005: 208). Tustin *et al.* (2005: 397) identify the disadvantage of open-ended questions as the difficulty to code responses, therefore answers are more qualitative than quantitative. Zikmund and Babin (2007: 356) suggested that, with fixed-alternative questions, respondents are given specific, limited-alternative responses and asked to choose the one closest to their own viewpoint. This makes it faster and easier for respondents to answer and easier for the researcher to code as answers are in groupings. There are various types of fixed-alternative groupings such as dichotomous questions where respondents choose between two alternatives and multiple-

choice questions where respondents choose from more than two options (Tustin *et al.*, 2005: 397). Davis (2005: 211) suggests scaled responses, where the respondent rates something on a point along a continuum with numerical points.

5.3.5.2 Questionnaire

The questionnaire was developed according to the literary research. Completion of the questionnaire took 20 minutes. Questions were constructed to test the relationship between the independent variables and *Perceived business success* as measured through *Sustainability, Business growth, Profitability* and *Customer satisfaction*.

For the purpose of this study multiple-choice questions were used on five-point Likert scale. Zikmund and Babin (2007: 333) defined Likert scale questions as a measure of attitudes designed to allow respondents to rate how strongly they agree or disagree with statements, ranging from very positive to very negative attitudes toward some object (Davis, 2005: 211). Zikmund and Babin (2007: 368) warned that an attractive and user-friendly layout is important in questionnaires, as it will entice the respondent to fill in the questionnaire. The Likert scale used in this study gave statements such as strongly agree (1), agree (2), neutral view (3), disagree (4) and strongly disagree (5). The respondent had to choose to which extent he or she agrees or disagrees with the research statement given.

Observed variances are partitioned into components to explain different variables. Struwig and Stead (2004: 89) warned that standardised questionnaires and interview templates are required to avoid variations in answers. The questionnaire is developed to be self-administered by participants and data collection is systematic. According to Welman and Kruger (2001: 128), systematic data collection is replicable and can be collected by field workers without compromising the validity or integrity of the data. Robson (2002: 62) shows that an empirical survey, which is the “collection of standardised information from a specific population, or sample”, is usually done by means of a questionnaire or interview.

The questionnaire was compiled in four sections:

- Section A: Information with regards to the business itself and the lead entrepreneur

- Section B: Likert scale questions with regards to independent variables impacting on *Perceived business success*
- Section C: Likert scale questions with regards to *Perceived business success*
- Section D: Likert scale question with regards to *Business process management*

The ultimate objective of the questionnaire is to collect the correct data to determine the linear relationship between the independent and dependent variables. A range of questions were asked, starting with the demographics of the entrepreneur, the history of the business, factors impacting on business success, the measurement of *Perceived business success* and *Business process management*. The empirical study was done over a short period to minimise the effect of maturation that can occur during the study. Each entrepreneur in the sample only filled in the questionnaire once to avoid testing carryover.

The independent variables were divided into four sections: *Entrepreneurial abilities*, *Macro environment*, *Micro environment* and *Business process management*. The particular variables for the first three independent variables are listed in table 5.1 below.

Table 5.1: Variables impacting on *Perceived business success*

<i>Entrepreneurial abilities</i>	<i>Macro environment</i>	<i>Micro environment</i>
Education *	Physical infrastructure	<i>Human resource management</i>
Managerial skill *	<i>Political stability</i>	<i>Supply chain management</i>
Ability to identify opportunities *	Economic conditions	<i>Quality management</i>
Experience *	Corporate governance	<i>Financial support</i>
Motivation *	Market receptiveness	<i>Non-financial support</i>
Innovation *	<i>Competitive landscape</i>	<i>Financial management</i>
Locus of control *		<i>Marketing</i>
Risk propensity *		<i>Customer relationship management</i>
Ability to handle stress *		
<i>Leadership abilities</i>		
<i>Strategic abilities</i>		
<i>Entrepreneurial attributes *</i>		

Source: Author's own construct

The third section of the questionnaire focussed on the measurement of *Perceived business success*. In order to measure the correlation between the independent and dependent variables it is necessary to determine the level of *Perceived business success*. According to Reid and Smith (2000: 165), there is no universal measurement of *Perceived business success*, however, during the literary research it was determined that there are certain trends and duplications amongst scholars. Farrington, Venter and Boshoff (2010: 32) split *Perceived business success* into financial performance and growth. Van der Merwe (2009b: 32) believed that continuity in family business, perceived success, financial performance and family harmony are signs of *Perceived business success*.

From the literary research it is clear that most scholars measure *Perceived business success* through financial and non-financial measurements. The financial measurement mostly used is *Profitability*. The most prominent non-financial measurements are *Business growth* and *Customer relationship management* (customer satisfaction). For the purpose of this study, these measurements will be used.

The fourth section of the questionnaire focussed on *Business process management* in order to measure its effect on *Perceived business success*. *Business process management* elements run through three phases; input, transformation and output. When the soundness of *Business process management* implementation is measured, it has to be consistent through all three phases. The implementation of *Business process management* in all components will be investigated.

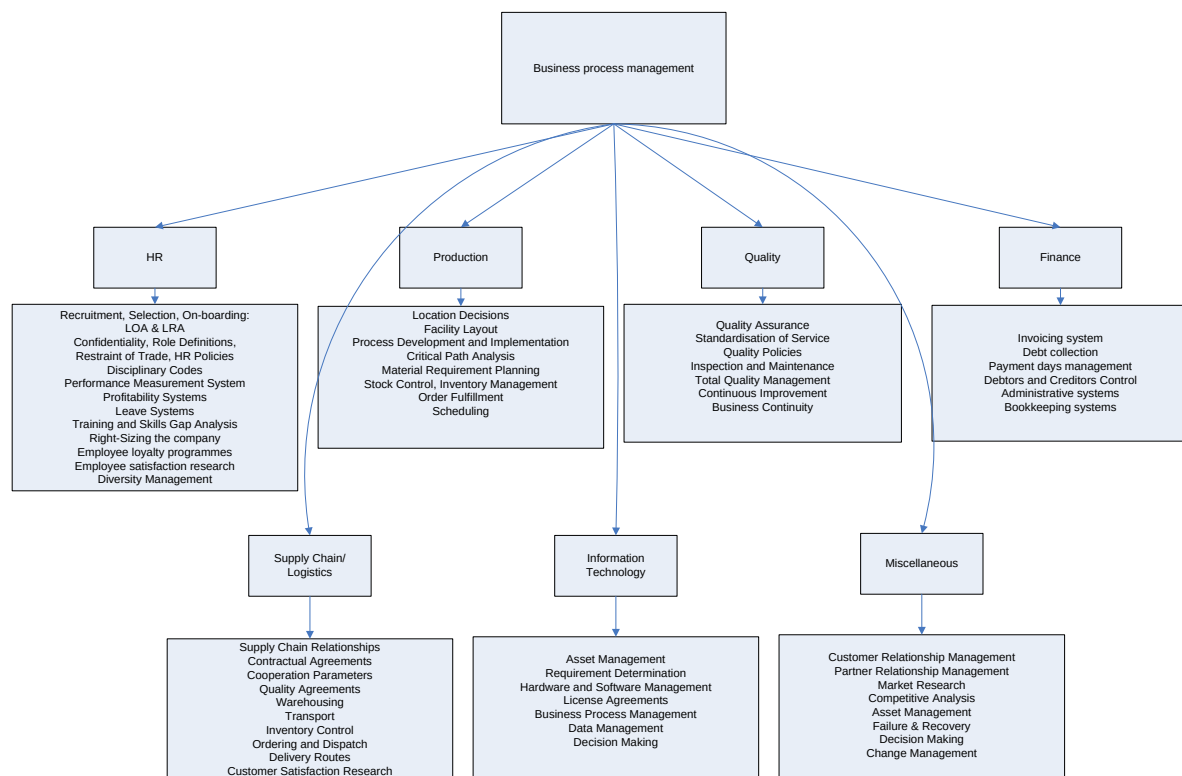
These components include:

- Production
- Location decisions
- Facility layout
- Process development
- Quality control processes
- Financial processes
- Human resources
- Recruitment and selection
- Human resources administration

- Performance management
- Supply chain and logistics
- Technology
- Software
- Industrial technology
- Processes

The structure of the *Business process management* model is explained through figure 5.2.

Fig 5.2: Structure of *Business process management*



Source: Author's own construct

The impact of *Business process management* on *Perceived business success* will be determined. Although there are various opinions of the implementation stages of *Business process management* includes:

- Extraction of activities
- Development of processes
- Critical path analysis
- Implementation

- Technology implementation
- Maintenance and continuous improvement

The questionnaire is attached as Appendix 1.

5.3.5.3 Design of the interview template

Eisenhardt (1989: 532) held that multiple data collection methods strengthen the grounding of the theory by triangulation of evidence. Runeson and Host (2009: 131) warned that analytical research is not sufficient for investigating complex real life issues, involving humans and their interactions with technology.

A specific design or sequence of questions will not work with every interview. The interviewee should read the situation and adapt (Patton, 2002: 379). Friesen (2010: 107) disagreed by saying that it is better to ask all interviewees the same question in order to capture responses and compare data correctly. Voss *et al.* (2002: 197) contended that interview questions should draw on literature and examples of previous research, that questions should be asked in a logical sequence and format and that all interviewees should be asked similar questions.

A standardised interview template was constructed with formalised questions based on the literary research and theory, in order to ensure that each interview extracts the same data from each of the interviewees. The interview template is constructed with open-ended questions only and strives to extract more in-depth information on each of the sections in the questionnaire. The interview template therefore follows the construct of the questionnaire, but delves deeper into issues such as:

- Whether the entrepreneur considers his or her business successful
- To what he or she contributes the success
- Whether they consider themselves entrepreneurs
- The level of entrepreneurial and business skills
- Staff and customer turnover
- Supply chain efficiencies
- Quality control
- Availability of support

- The marketing and sales focus
- Technology available

The interview template is attached as Appendix 2.

5.3.5.4 Conducting of face-to-face interviews

Qualitative research is a necessary component of a study. It is used to analyse the data from in-depth, open-ended interviews (Everitt & Howell, 2002: 14) as well as to engage in naturalistic inquiry, studying real-world settings inductively to generate a deeper understanding of research situations and construct case studies. This will yield patterns and themes as well as correlations between variables (Myers & Newman, 2006: 17).

Zikmund and Babin (2007: 211) define interviews as direct communication in which respondents are asked questions in a face-to-face situation. The advantage of interviews is that respondents are normally willing to participate (Weiman, Kruger & Mitchell, 2005: 164), but Zikmund and Babin (2007: 211) contended that the biggest advantage of interviews is that the researcher is in control of the situation and can delve deeper into certain issues. It is also possible for the researcher to take note of body language and facial expressions. Neuman (2006: 301) identified another advantage as that the researcher can ask complex questions.

According to Welman and Kruger (2001: 158), there are various principles to be adhered to when conducting interviews:

- Dress appropriately and according to the standards of the interviewee
- The interviewer should be careful not to engender resistance against him or herself
- The interviewer should not lead the interviewee to answer in a specific manner
- The interviewer should be well versed in the questions as well as the background thereto

Myers and Newman (2006: 2) warned that the following pitfalls exist with regards to conducting interviews:

- There is time pressure with having to answer a question asked face-to-face, which could make the interviewee uncomfortable
- Interviews are normally held with strangers leading to possible trust issues

- Time pressures could lead to incomplete data collection
- The interview has to be conducted at the correct level in the company
- Only interviewing one person in a company can provide a biased view of situations
- There is an element of interpretation by the interviewer in every fact obtained
- Language barriers could play a role

Fontana and Frey (2000: 645) cautioned against the Hawthorne effect whereby the interviewer becomes part of the interaction which can interfere with people's behaviour and can be seen as intrusive. These pitfalls were taken into consideration when the interviews were conducted. Bryman and Bell (2007: 32) warned that the interaction between the researcher and the participant relies on the skill of the researcher. The purpose of qualitative research is to investigate the nature of the study objects and describe the various relationships (Leedy & Ormrod, 2005: 94).

According to Bryman and Bell (2007: 31), quantitative research will emphasise numerical data and relies upon the research instrument used to collect data but quantitative data can be used to draw correlations between variables in order to explain the effect of the independent variable on the dependent variable.

For the purpose of this study a sample of twenty entrepreneurs was approached to conduct interviews. These entrepreneurs were chosen to represent the various stratified channels of entrepreneurs as far as headcount and turnover are concerned and were chosen from the sample of 3000 entrepreneurs extracted for the questionnaire database.

Interviews of approximately one hour were scheduled at the interviewee's offices in order to get a feel for the organisation. Interviews were conducted by the researcher. The variables used as independent variables were identified through the literary study and the empirical study strived to determine the correlation between these variables and *Perceived business success*, with a special focus on *Business process management*.

Quantitative research also leads to a more in-depth relationship between the researcher and participant. The qualitative research in this study is guided by theoretical knowledge gained during the literary studies.

5.3.3.5 Reliability and validity

The purpose of the study is to test the causal relationship between the dependent and independent variables. In other words, to what extent do the independent variables cause or detract from *Perceived business success* and at which point do these variables start affecting *Sustainability, Business growth, Profitability* and *Customer satisfaction*. It is necessary to test the validity of the data in order to test to which degree the changes in the dependent variable were correctly attributed to the independent variable.

During this study independent variables that could have a possible negative or positive affect on the dependent variable were identified. According to Welman and Kruger (2004: 98), it is necessary to meet the *ceteris paribus* principle. This means there must be a correlation between variables; the cause must precede the effect. It is therefore necessary to eliminate the threat to internal validity. It is necessary to check the reliability and validity of the research tools used. In other words, do the instruments test for the research question.

5.3.3.5.1 Factor analysis for validity

Factor analysis is a prototypical multivariate, interdependence technique. It identifies a reduced number of factors from a larger number of measured variables (Zikmund & Babin, 2007: 608). A factor analysis has to be done in order to determine whether different variables are measuring the correct aspects. The factor analysis reduces redundancy by grouping the variables measuring the same items together. Kent (2007: 420) describes the factor analysis as loading the correlation between the variables with the factors with which it is mostly associated (Kent, 2007: 420).

As early as 1967 Knapp and Swoyer (1967: 13) warned that before carrying out a factor analysis of the data the investigator should check the correlation matrix to see if it is significantly different and suggested the Bartlett test. Field (2009: 453) warned that a test of the significance of a correlation matrix should be carried out prior to a factor analysis of sample data in order to guard against the postulation of a factor structure which may be based largely on sampling error.

According to Trochim and Donnelly (2008: 85), reliability and validity are interrelated. Construct validity refers to the degree to which inferences can legitimately be made from the operationalisation of the study. Trochim and Donnelly (2008: 57) identified three types of validity: face validity, assuring that the operationalisation is a good translation of the construct, predictive validity, based on the idea that the measure is able to predict what it theoretically should be able to predict and concurrent validity, the ability to distinguish between groups. Struwig and Stead (2004: 137) distinguished between internal and external validity. External validity refers to the extent to which the result can be generalised and internal validity addresses the issue of whether the independent variable is responsible for the effect on the dependent variable.

For the purpose of this study, a factor analysis was done to test the validity of the research instrument. Certain assumptions were made, such as: that a normal distribution exists, that the same variances will exist throughout the sample and that *Business process management* is an independent variable and is not affected by any other variable. Descriptive statistics were conducted to determine the distribution in data and to determine the normality. The statistics were also used to identify problems with the data.

Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) as well as a Bartlett's test of sphericity were conducted. The Kaiser-Meyer-Olkin test was done to determine the appropriateness of the data for factor analysis (Gurbuz & Aykol, 2009: 327). Field (2005: 640) explained that the KMO test shows whether the sample is adequate and the Bartlett's test of sphericity indicates whether the patterns of correlations will yield reliable factors.

The factor analysis was conducted using SPSS computer software. The clusters of variables were arranged in an R-matrix or correlation matrix. Tables of the correlation coefficient between variables were drawn. The purpose of drawing a correlation coefficient is to reduce the amount of variables through grouping them into factors or underlying dimension (Field, 2009: 628). The correlation matrix measures on a scale between 1.0 and -1.0. If there is a perfect positive linear relationship between two holdings, the correlation will be 1.0. If there is a perfect negative linear relationship between the two holdings, the correlation coefficient is -1.0. A factor loading of zero means that there is no relationship between the factors.

In the factor analysis the correlation matrix is used to determine whether the various questions measure the same factor (Welman & Kruger, 2001: 73). The KMO test, which is an adequacy test, should also test between 1 and 0.5. Anything under 0.5 is unacceptable.

5.3.3.5.2 Reliability

Reliability tests whether the instrument produces consistent results if the test is repeated. Different types of reliability tests can be done. When a questionnaire is used and analysis is done by correlating two different sets of scores internal reliability is tested through the Cronbach alpha (Bryman & Bell, 2007: 163). The Cronbach alpha test calculates the mean of all reliability coefficients.

After the questionnaire was completed by the sample of entrepreneurs the reliability was determined before the validity was examined. The reliability was tested through doing the Cronbach alpha test. Santos (1999: 37) described Cronbach's alpha as an index of reliability associated with the variation accounted for by the true score of the underlying construct, which is the hypothetical variable that is being measured. Alpha coefficient ranges in value from 0 to 1. The higher the score, the more reliable the generated scale is. A score of 0.7 is seen to be an acceptable reliability coefficient. Trochim and Donnelly (2008: 84) declared that reliability in research means that the data is repeatable and consistent. In other words, if the same test is done twice the outcome would be the same. Reliability is expressed as a ratio of true level on the measure/the entire measure or the variance of the true score/ the variance of the measure.

According to Struwig and Stead (2004: 196), Cronbach alpha is used to test reliability and should be between 0.9 and 0.6, but 0.6 is already questionable (Field, 2009: 628). The variance is tested for significance through an ANOVA test and reported in percentages.

5.3.3.6 Statistical analysis

The objective of statistical analysis is to draw information from data. Raw data is of no value until it is analysed (Kent, 2007: 261). Monette, Sullivan and De Jong (2008: 364) showed that statistical analysis is one of the last steps in the process. Raw data is collected according to the literary research and will determine the choice of procedures (Wegner, 2007: 33). Rubin

and Babbie (2005: 552) defined statistical analysis as the tool used by researchers to convert data to relevant information able to contribute to the body of knowledge or fill a knowledge gap. Cooper and Schindler (2008: 93) held that statistical analysis will analyse data for patterns and correlations. The interpretation thereof can provide insight in certain situations or conditions and show the way forward. Wegner (2007: 33) defined statistical analysis as the procedure to make sense of raw data. Such data must be in an organised and sequential format. It must be accurate and available.

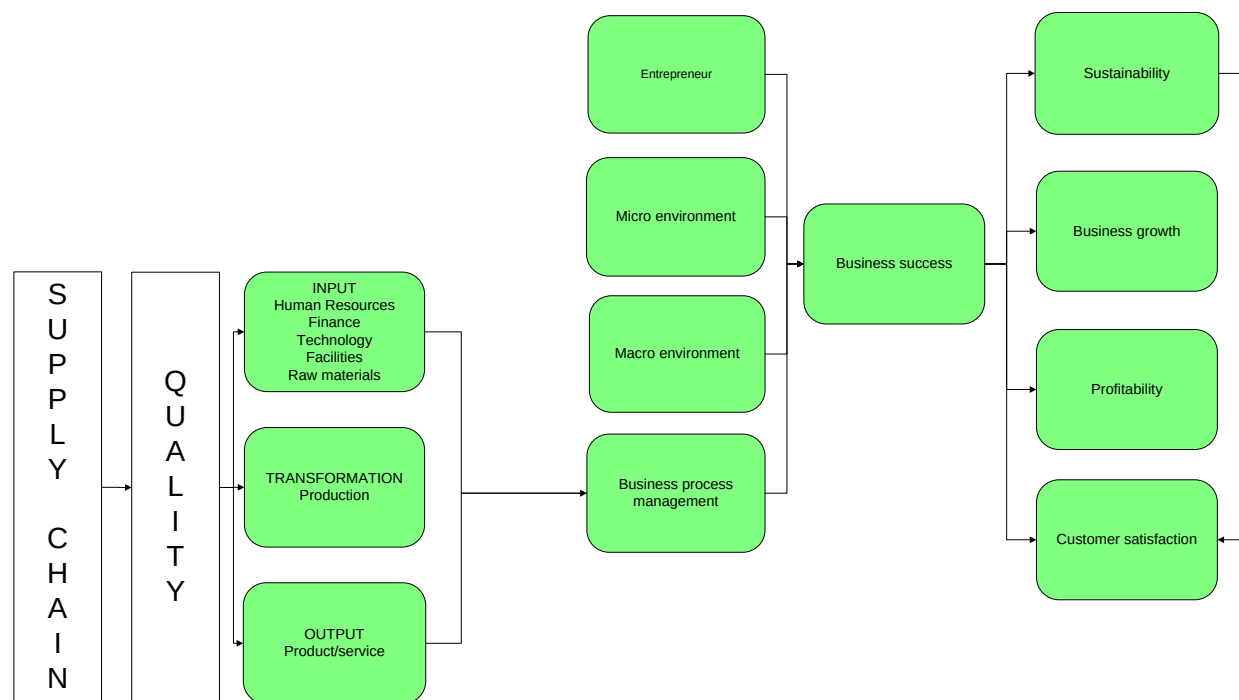
Data should be prepared to check for missing or repeated values and errors (Zikmund & Babin, 2007: 608). For this research, data was cleaned and recorded on Excel and after reliability and viability was determined, statistically analysed to determine the linear relationship between the independent and dependent variables, *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. Independent variables are grouped into four categories, *Entrepreneurial abilities*, which consists of three items: *Entrepreneurial attributes*, *Leadership abilities* and *Strategic abilities*, the *Macro environment*, which consists of two items: *Political stability* and *Competitive landscape* and the *Micro environment* which consists of three constructs: *Business management*, *Support received* and *Market interaction*. *Business management* consists of four items: *Human resource management*, *Supply chain management*, *Quality management* and *Financial management*. *Market interaction* consists of two items: *Marketing* and *Customer relationship management*. The fourth category is *Business process management* which consists of two constructs: *Business process infrastructure*, with three items: *Business location*, *Facility layout* and *Technology utilisation* and *Business process management* which consists of five items: *Human resource processes*, *Production processes*, *Quality control processes*, *Supply chain processes* and *Financial processes*.

Descriptive statistics, such as means and standard deviations were used for analysis. The variables were analysed using ANOVA in order to assess the effect that the independent variables will have on the dependent variables. The correlation was tested through the R^2 test, with the t-value and *p*-level used to test for statistical significance of the correlation. The analysis parameter used for the *p*-level is acceptable if $p < 0.1$ and significant if $p < 0.05$. The t-value was considered significant if above 1.96.

The data to test the independent variables is extracted in section B of the questionnaire and data with regards to *Perceived business success* was extracted in section C. *Business process management* was extracted through pertinent questions asked in section D.

The research model is depicted in figure 5.3.

Fig 5.3: Research model



Source: Researcher's own construction

5.3.3.7 Reporting

Reporting the findings is the last step in research together with making recommendations according to the findings (Zikmund & Babin, 2007: 68). The reporting for this study is done in chapter 6 and recommendations are given in chapter 7.

5.4 CONCEPTUAL MODEL

According to Moody (2004: 243), drawing a conceptual model will set the standard of the research. Conceptual models should be based on common sense, literary research, subjective opinions and experience. Whipple, Patten and Verity (2005: 83) showed that a conceptual

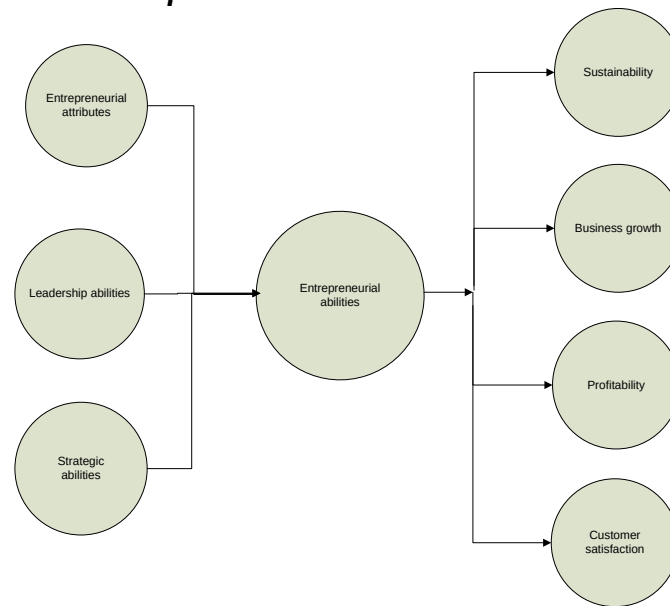
model of research should be depicted graphically in order to show the rationale behind the study and should contain a null hypothesis. Dresner (2008: 216) found conceptual modelling of a research concept useful in revealing the underlying perceptions. It leads to an improvement in the researcher's ability to recognise and apply correction when non-linear feedback loops or duplications are detected.

In this study, *Business process management*, amongst other variables, form the independent variables and *Perceived business success* forms the dependent variable. The study proposes that there are various factors impacting on *Perceived business success* and that improved *Business process management*, amongst others, will positively affect the chances of *Perceived business success*. It measures the correlation between the independent variables and *Perceived business success*.

The conceptual model is based on the model of Van der Merwe and Ellis (2007: 24) as well as the literary study. While there are many variables impacting on *Perceived business success*, a special focus is on the impact of *Business process management* on *Perceived business success*. The correlation to be drawn is therefore between various aspects of *Business process management* and the *Perceived business success* measures, as well as other variables impacting on *Perceived business success* as divided into three sub-sections: *Entrepreneurial abilities and attributes*, the *macro environment* and the *micro environment*. For the purpose of this study, *Perceived business success* is measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. A fifth measurement; *Market position* was identified through the literary research. However, during the factor analysis *Market position* items were loaded under *Sustainability* and this was therefore not used as a separate measurement.

The conceptual model is depicted in figure 5.4.

Fig 5.4: Proposed conceptual model with regards to the effect of *Entrepreneurial abilities*, measured through *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* on *Business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construct

Sufficient evidence has been gained from the literary research to hypothesise that:

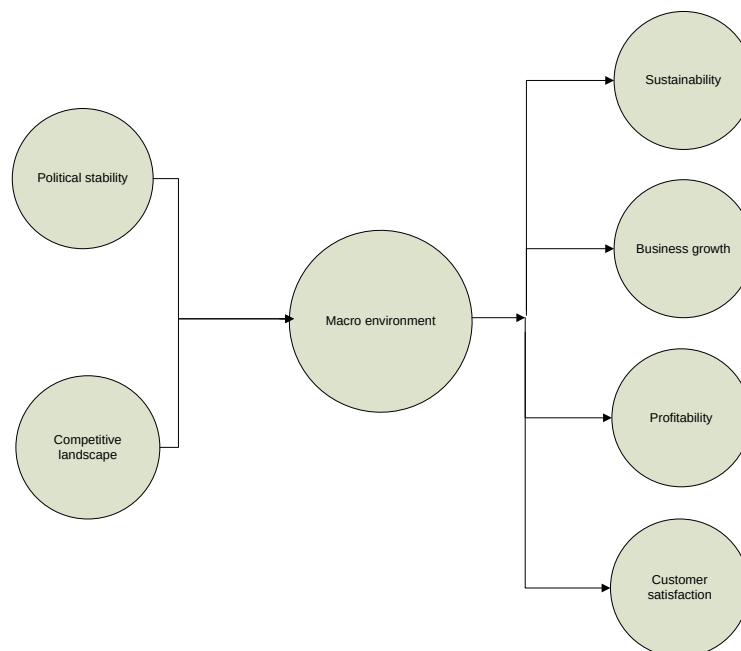
- H^{1a}: There is a statistical significant relationship between the *Entrepreneurial attributes* of the entrepreneur and the *Sustainability* of the participating businesses.
- H^{1b}: There is a statistical significant relationship between the *Entrepreneurial attributes* of the entrepreneur and *Business growth* of the participating businesses.
- H^{1c}: There is a statistical significant relationship between the *Entrepreneurial attributes* of the entrepreneur and the *Profitability* of the participating businesses.
- H^{1d}: There is a statistical significant relationship between the *Entrepreneurial attributes* of the entrepreneur and *Customer satisfaction* experienced in the participating businesses.
- H^{2a}: There is a statistical significant relationship between the *Leadership ability* of the entrepreneur and the *Sustainability* of the participating businesses.
- H^{2b}: There is a statistical significant relationship between the *Leadership ability* of the entrepreneur and *Business growth* of the participating businesses.
- H^{2c}: There is a statistical significant relationship between the *Leadership ability* of the entrepreneur and the *Profitability* of the participating businesses.

- H^{2d}: There is a statistical significant relationship between the *Leadership ability* of the entrepreneur and *Customer satisfaction* experienced in the participating businesses.
- H^{3a}: There is a statistical significant relationship between the *Strategic ability* of the entrepreneur and the *Sustainability* of the participating businesses.
- H^{3b}: There is a statistical significant relationship between the *Strategic ability* of the entrepreneur and *Business growth* the participating businesses.
- H^{3c}: There is a statistical significant relationship between the *Strategic ability* of the entrepreneur and the *Profitability* of the participating businesses.
- H^{3d}: There is a statistical significant relationship between the *Strategic ability* of the entrepreneur and *Customer satisfaction* experienced in the participating businesses.

5.4.1 Macro environment

The 2nd conceptual model depicts the effect of the *Macro environment* on *Perceived business success* and is shown in figure 5.5. The *Macro environment* consists of two factors: *Political stability* and *Competitive landscape*.

Fig 5.5: Proposed conceptual model with regards to the effect of the *Macro environment*, as measured through *Political stability* and *Competitive landscape*, on *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construction

Sufficient evidence has been gained from the literary research to hypothesise that:

- H^{4a}: There is a statistical significant relationship between the *Political stability* in the *Macro environment* and the *Sustainability* of the participating businesses.
- H^{4b}: There is a statistical significant relationship between the *Political stability* in the *Macro environment* and *Business growth* of the participating businesses.
- H^{4c}: There is a statistical significant relationship between the *Political stability* in the *Macro environment* and the *Profitability* of the participating businesses.
- H^{4d}: There is a statistical significant relationship between the *Political stability* in the *Macro environment* and *Customer satisfaction* experienced in the participating businesses.
- H^{5a}: There is a statistical significant relationship between the *Competitive landscape* of the business and the *Sustainability* of the participating businesses.
- H^{5b}: There is a statistical significant relationship between the *Competitive landscape* of the business and *Business growth* of the participating businesses.
- H^{5c}: There is a statistical significant relationship between the *Competitive landscape* of the business and the *Profitability* of the participating businesses.
- H^{5d}: There is a statistical significant relationship between the *Competitive landscape* of the business and *Customer satisfaction* experienced in the participating businesses.

5.4.2 Micro environment

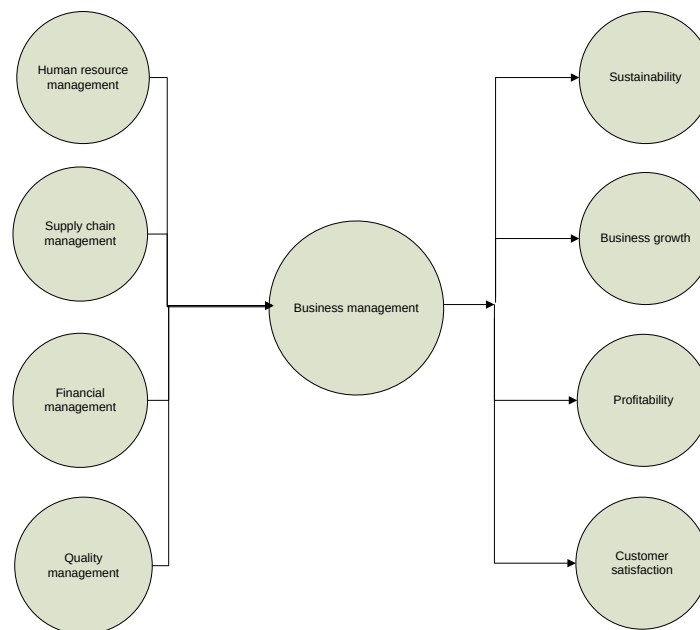
The next conceptual models are the effect of the *Micro environment* on *Perceived business success* as measured in *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. The *Micro environment* is classified into three groups: *Business management*, *Support* and *Market interactivity*.

5.4.2.1 Business management

The first component of the *Micro environment* is *Business management*, which consists of four factors: *Human resources management*, *Supply chain management*, *Financial management* and *Quality management*.

The third concept, figure 5.6, is the effect of *Business management* on *Perceived business success*.

Fig 5.6: Proposed conceptual model with regards to the effect of *Business management*, as measured through *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* on *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construction

Sufficient evidence has been gained from the literary research to hypothesise that:

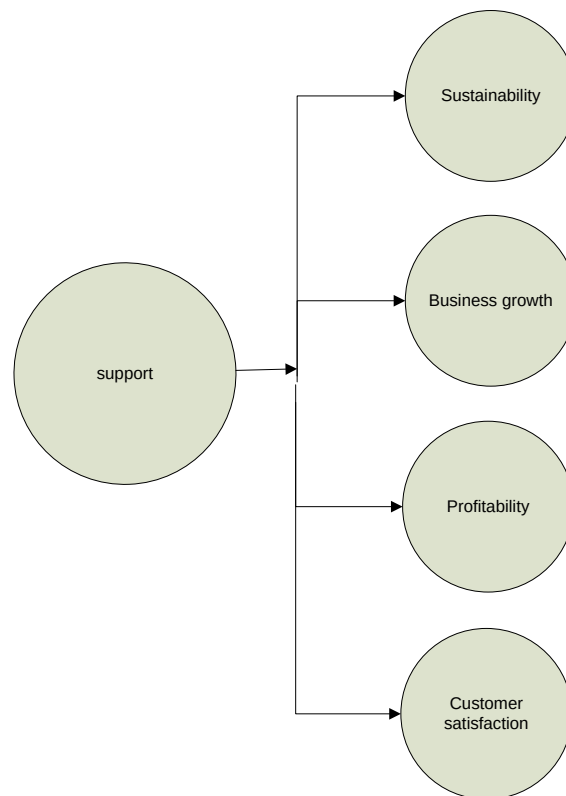
- H^{6a}: There is a statistical significant relationship between *Human resource management* in the business and the *Sustainability* of the participating businesses.
- H^{6b}: There is a statistical significant relationship between the *Human resource management* in the business and *Business growth* of the participating businesses.
- H^{6c}: There is a statistical significant relationship between the *Human resource management* in the business and the *Profitability* of the participating businesses.
- H^{6d}: There is a statistical significant relationship between the *Human resource management* in the business and *Customer satisfaction* experienced in the participating businesses.
- H^{7a}: There is a statistical significant relationship between the *Supply chain management* in the business and the *Sustainability* of the participating businesses.

- H^{7b}: There is a statistical significant relationship between the *Supply chain management* in the business and the *Business growth* of the participating businesses.
- H^{7c}: There is a statistical significant relationship between the *Supply chain management* in the business and the *Profitability* of the participating businesses.
- H^{7d}: There is a statistical significant relationship between the *Supply chain management* and *Customer satisfaction* experienced in the participating businesses.
- H^{8a}: There is a statistical significant relationship between the *Quality management* in the business and the *Sustainability* of the participating businesses.
- H^{8b}: There is a statistical significant relationship between the *Quality management* in the business and *Business growth* of the participating businesses.
- H^{8c}: There is a statistical significant relationship between the *Quality management* in the business and the *Profitability* of the participating businesses.
- H^{8d}: There is a statistical significant relationship between the *Quality management* in the business and *Customer satisfaction* experienced in the participating businesses.
- H^{9a}: There is a statistical significant relationship between the *Financial management* in the business and the *Sustainability* of the participating businesses.
- H^{9b}: There is a statistical significant relationship between the *Financial management* in the business and *Business growth* of the participating businesses.
- H^{9c}: There is a statistical significant relationship between the *Financial management* in the business and the *Profitability* of the participating businesses.
- H^{9d}: There is a statistical significant relationship between the *Financial management* in the business and *Customer satisfaction* experienced in the participating businesses.

5.4.2.2 Support

The effect of support received by the entrepreneur on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction* is depicted in figure 5.7.

Fig 5.7: Proposed conceptual model with regards to the effect of *Support* on *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construction

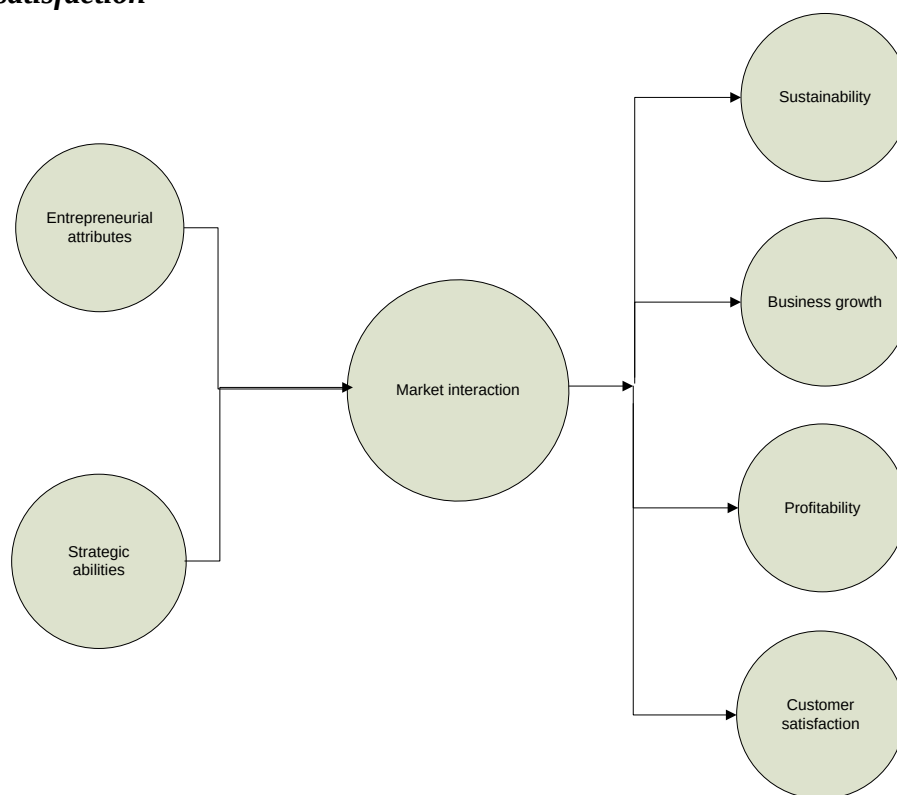
Sufficient evidence has been gained from the literary research to hypothesise that:

- H^{10a}: There is a statistical significant relationship between the *Business support* obtained by the entrepreneur and the *Sustainability* of the participating businesses.
- H^{10b}: There is a statistical significant relationship between the *Business support* obtained by the entrepreneur and *Business growth* of the participating businesses.
- H^{10c}: There is a statistical significant relationship between the *Business support* obtained by the entrepreneur and the *Profitability* of the participating businesses.
- H^{10d}: There is a statistical significant relationship between the *Business support* obtained by the entrepreneur and *Customer satisfaction* experienced in the participating businesses.

5.4.2.3 Market interaction

Market interaction is measured through two constructs; *Marketing* and *Customer relationship management*. Figure 5.8 depicts the effect of *Market interaction* on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*.

Fig 5.8: Proposed conceptual model with regards to the effect of *Market interaction* including factors such as *Marketing* and *Customer relationship management* on *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construction

Sufficient evidence has been gained from the literary research to hypothesise that:

- H^{11a}: There is a statistical significant relationship between the *Marketing* of the business and the *Sustainability* of the participating businesses.
- H^{11b}: There is a statistical significant relationship between the *Marketing* of the business and *Business growth* of the participating businesses.
- H^{11c}: There is a statistical significant relationship between the *Marketing* of the business and the *Profitability* of the participating businesses.

- H^{11d}: There is a statistical significant relationship between the *Marketing* of the business and *Customer satisfaction* experienced in the participating businesses.
- H^{12a}: There is a statistical significant relationship between the *Customer relationship management* of the business and the *Sustainability* of the participating businesses.
- H^{12b}: There is a statistical significant relationship between the *Customer relationship management* of the business and *Business growth* of the participating businesses.
- H^{12c}: There is a statistical significant relationship between the *Customer relationship management* of the business and the *Profitability* of the participating businesses.
- H^{12d}: There is a statistical significant relationship between the *Customer relationship management* of the business and *Customer satisfaction* experienced in the participating businesses.

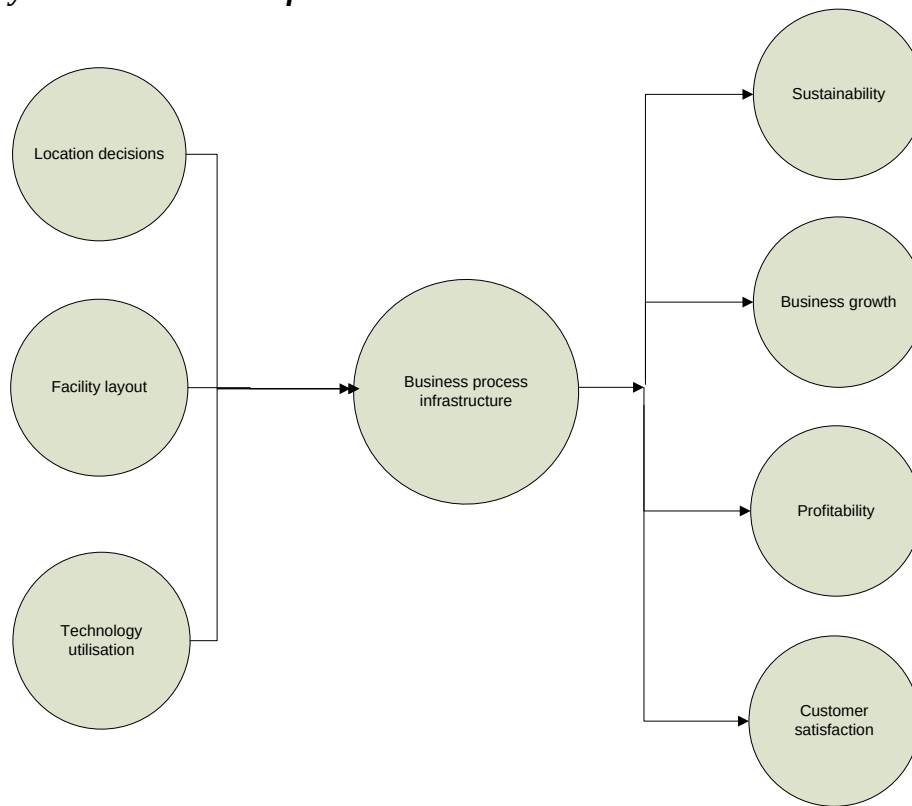
5.4.3 Business process management

Business process management consists of *Business process infrastructure* and *Business process management*.

5.4.3.1 Business process infrastructure

Business process infrastructure consists of three items; *Business location*, *Facility layout* and *Technology utilisation*. *Business process infrastructure* is depicted in figure 5.9

Fig 5.9: Proposed conceptual model with regards to the effect of *Business process infrastructure* including factors such as *Business location*, *Facility layout* and *Technology* on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construct

Sufficient evidence has been gained from the literary research to hypothesise that:

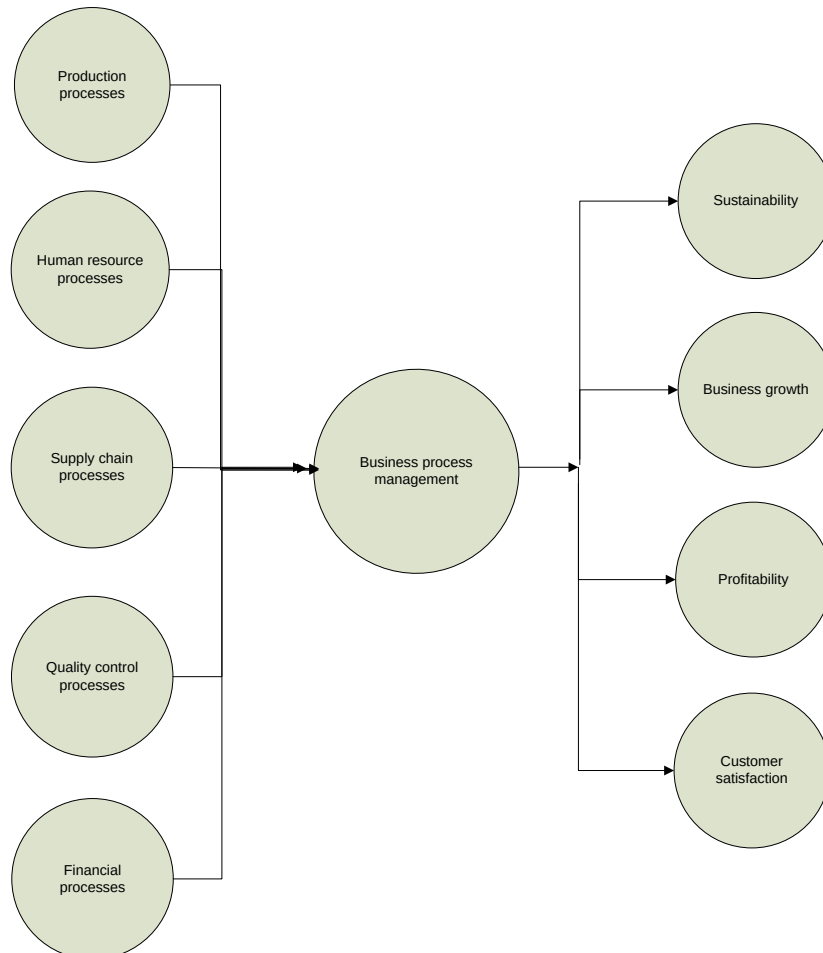
- H^{13a}: There is a statistical significant relationship between the *Business location* and the *Sustainability* of the participating businesses.
- H^{13b}: There is a statistical significant relationship between the *Business location* and *Business growth* of the participating businesses.
- H^{13c}: There is a statistical significant relationship between the *Business location* and the *Profitability* of the participating businesses.
- H^{13d}: There is a statistical significant relationship between the *Business location* and *Customer satisfaction* experienced in the participating businesses.
- H^{14a}: There is a statistical significant relationship between the *Facility layout* of the business and the *Sustainability* of the participating businesses.
- H^{14b}: There is a statistical significant relationship between the *Facility layout* of the business and *Business growth* of the participating businesses.

- H^{14c}: There is a statistical significant relationship between the *Facility layout* of the business and the *Profitability* of the participating businesses.
- H^{14d}: There is a statistical significant relationship between the *Facility layout* of the business and *Customer satisfaction* experienced in the participating businesses.
- H^{15a}: There is a statistical significant relationship between *Technology utilisation* in the business and the *Sustainability* of the participating businesses.
- H^{15b}: There is a statistical significant relationship between *Technology utilisation* in the business and *Business growth* of the participating businesses.
- H^{15c}: There is a statistical significant relationship between *Technology utilisation* in the business and the *Profitability* of the participating businesses.
- H^{15d}: There is a statistical significant relationship between *Technology utilisation* in the business and *Customer satisfaction* experienced in the participating businesses.

5.4.3.2 Business process management

Business process management consists of five items: *Production processes*, *Human resource processes*, *Quality control processes*, *Supply chain processes* and *Financial processes*. The effect of *Business process management* on *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction* is depicted in figure 5.10.

Fig 5.10: Proposed conceptual model with regards to the effect of *Business process management* including factors such as *Human resource processes*, *Quality control processes*, *Supply chain processes* and *Financial processes* on *Business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*



Source: Researcher's own construct

Sufficient evidence has been gained from the literary research to hypothesise that:

- H^{16a}: There is a statistical significant relationship between the *Production processes* in the business and the *Sustainability* of the participating businesses.
- H^{16b}: There is a statistical significant relationship between the *Production processes* in the business and *Business growth* of the participating businesses.
- H^{16c}: There is a statistical significant relationship between the *Production processes* in the business and the *Profitability* of the participating businesses.
- H^{16d}: There is a statistical significant relationship between the *Production processes* in the business and *Customer satisfaction* experienced in the participating businesses.

- H^{17a}: There is a statistical significant relationship between the *Human resource processes* in the business and the *Sustainability* of the participating businesses.
- H^{17b}: There is a statistical significant relationship between the *Human resource processes* in the business and *Business growth* of the participating businesses.
- H^{17c}: There is a statistical significant relationship between the *Human resource processes* in the business and the *Profitability* of the participating businesses.
- H^{17d}: There is a statistical significant relationship between the *Human resource processes* in the business and *Customer satisfaction* experienced in the participating businesses.
- H^{18a}: There is a statistical significant relationship between the *Supply chain processes* in the business and the *Sustainability* of the participating businesses.
- H^{18b}: There is a statistical significant relationship between the *Supply chain processes* in the business and *Business growth* of the participating businesses.
- H^{18c}: There is a statistical significant relationship between the *Supply chain processes* in the business and the *Profitability* of the participating businesses.
- H^{18d}: There is a statistical significant relationship between the *Supply chain processes* in the business and *Customer satisfaction* experienced in the participating businesses.
- H^{19a}: There is a statistical significant relationship between the *Financial processes* in the business and the *Sustainability* of the participating businesses.
- H^{19b}: There is a statistical significant relationship between the *Financial processes* in the business and *Business growth* of the participating businesses.
- H^{19c}: There is a statistical significant relationship between the *Financial processes* in the business and the *Profitability* of the participating businesses.
- H^{19d}: There is a statistical significant relationship between the *Financial processes* in the business and *Customer satisfaction* experienced in the participating businesses.
- H^{20a}: There is a statistical significant relationship between the *Quality control processes* in the business and the *Sustainability* of the participating businesses.
- H^{20b}: There is a statistical significant relationship between the *Quality control processes* in the business and *Business growth* of the participating businesses.
- H^{20c}: There is a statistical significant relationship between the *Quality control processes* in the business and the *Profitability* of the participating businesses.
- H^{20d}: There is a statistical significant relationship between the *Quality control processes* in the business and *Customer satisfaction* experienced in the participating businesses.

5.5 SUMMARY

The effect of independent variables such as *Business process management* on *Perceived business success* was investigated in the past but no comprehensive or substantial correlation could be identified. Scholars have varying opinions with regards to the achievement of *Perceived business success*. It is therefore important to research the effects of *Business process management* and other variables as independent variables on *Perceived business success* as the dependent variable.

The measurement of *Perceived business success* will be based on *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. This study focuses on SME organisations in the Gauteng region of South Africa. The sample database includes entrepreneurs from all industries.

The empirical study was designed through a mixed method-qualitative and quantitative-empirical study. The measurement of *Perceived business success* was developed through the literary study. Relevant data was collected through the means of a questionnaire and interviews. The statistical model was fitted to the data and assessed. The research was done at a significance level of 0.05 (5%), testing for the t-value and *p*-test, through an ANOVA test. A factor analysis was done to determine the validity and reliability of the measurement instrument.

A web-based survey tool was used to gather data from the sample. Through the Stellar Survey tool, each lead entrepreneurs or operations managers in the sample was sent a link to the questionnaire. The respondents were able to fill in and submit the questionnaire online, whereafter 20 entrepreneurs were interviewed. The data was cleaned and a factor analysis was conducted to test for validity. A reliability test was also done. The results of the factor analysis, reliability test and the statistical analysis are described in chapter 6.

CHAPTER 6

RESULTS AND DISCUSSION

6.1 INTRODUCTION

Chapter 6 analyses and processes the findings from the empirical study. Findings have been evaluated and measured against the literary research done in chapters 2 through to 4. The empirical study focuses on very small, small and medium-sized businesses in Gauteng. These businesses were classified according to the definition of SME businesses as acquired from the department of trade and industry (Amended National Small Business Act 102 of 2004).

Through the literary research the study strived to gain insight into variables impacting on *Perceived business success* and to determine the items that could measure business success in the SME market. Variables impacting on *Perceived business success* were identified. Through the empirical study the research strived to determine the extent of the correlation between the dependent variable (*Perceived business success*) and the independent variables: *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*. An objective of the study is to contribute to the body of knowledge and, by doing so, enhance the understanding of what creates business success in the SME market and make sustainable recommendations about the use of processes.

The empirical research strives to find the solution to the research question. The researcher met all the criteria to achieve the objectives and adhered to all research principles.

The primary objective of the study is to identify the independent variables with regards to *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management* that could impact on the dependent variable *Perceived business success*, as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction* in small and medium-sized businesses in Gauteng province in South Africa and to measure the effect of the independent variables on the dependent variables in order to make practical recommendation to ensure the successful management and ultimately sustainability of small and medium-sized businesses.

The secondary objectives were achieved through defining various business terms and classifying small and medium-sized businesses according to the Amended National Small Business Act No. 102 of 2004. Insight was gained into *Perceived business success* through the literary research and such insight was applied in the development of a business measure for the purpose of this study.

Independent variables that could have an impact on *Perceived business success* in the SMME market were determined through the literary research. The impact of *Business process management* and its importance in achieving *Perceived business success* was investigated through correlations drawn and a measure of business success was developed through the literary research. Data to test the impact of the different variables on *Perceived business success* was collected through surveys conducted by questionnaires sent and interviews held.

Questionnaires and the interviews were used to collect data and validity and reliability of the measuring instrument was determined through a factor analysis using the Cronbach alpha coefficient, a Kaiser-Meyer-Olkin measure of sampling adequacy and a Bartlett's test of sphericity. The influence of the independent variables on the dependent variable, *Perceived business success* was assessed through correlation coefficients and the significance (t-value and p-level) was determined.

The impact of each independent variable on each measure of the dependent variable, *Perceived business success*, was analysed and explained. Recommendations were made accordingly.

Through the research entrepreneurs in South Africa can gain insight into the challenges of entrepreneurship as well the measurements of *Perceived business success* in order to predict the chances of success more accurately. The enhancement of the use of *Business process management* will be a goal and a contribution that can be made to the body of knowledge that could enhance the ratio of entrepreneurial success in South Africa. Furthermore, the researcher strived to contribute to the body of knowledge by defining *Perceived business success* accurately.

The research questions are therefore:

- Whether variables such as *Business process management*, as independent variables, will affect *Perceived business success* as the dependent variable
- Whether *Entrepreneurial abilities and attributes* affect *Perceived business success*
- Whether the *Macro environment* affects *Perceived business success*
- Whether the *Micro environment* such as *Business management, Market interaction* and *Support* will affect *Perceived business success*

6.2 RESULTS OF THE QUANTITATIVE EMPIRICAL STUDY

The quantitative data from all 308 respondents was captured on an Excel spread sheet. Data was analysed through an SPSS software programme. Results are discussed in this section.

6.2.1 Responses to the survey

An Internet survey was conducted, whereby 3000 e-mails were sent to a database of entrepreneurs and managers in small and medium-sized businesses. Three hundred and twenty-six responses were received, but 18 responses were discarded due to the company falling outside of the definition for small or medium-sized businesses, or the questionnaire not having been completed in full. The Internet survey therefore yielded a 10.8% response rate which is in line with the findings of Truell *et al.* (2002: 38) that mail surveys will render a small response rate. Davis (2005: 279) also warned that, while mail surveys allow the researcher to reach a geographically dispersed sample at a relatively low cost and offer anonymity and confidentiality, while the respondents can respond at their own time, there is little control over the response rates. Welman *et al.* (2005: 187) warned that respondents could omit questions or get somebody else to fill in the questionnaire.

Where only a couple of questions were left out, the respondent was phoned and those questions were telephonically discussed. According to Field's (2009: 98) equation, a response rate of 308 out of a sample size of 3000 is adequate.

6.2.2 Biographical information of respondents

Biographical information of all respondents was recorded to determine whom the study deals with. The demographics determined for the entrepreneur include: age, gender, marital status and qualifications. Business classification demographics were also recorded.

6.2.2.1 Age group classification of the respondents

6.2.2.1.1 Purpose of the question

The purpose of question A1 (refer to Appendix 1) is to determine the age group classification of the entrepreneurs participating in the survey. The results were predefined to five age groups.

6.2.2.1.2 Results obtained

Table 6.1 presents the age group classification of all the responds to the survey.

Table 6.1: Age group classification

Age group	Total	Percentage
Younger than 29 years of age	17	5.52%
Between 30 and 39 years of age	60	19.48%
Between 40 and 49 years of age	86	27.92%
Between 50 and 59 years of age	94	30.52%
Older than 60 years of age	50	16.23%
Not indicated	1	0.33%
Total	308	100%

6.2.2.1.3 Analysis of the results

The majority of the entrepreneurs were between 40 and 59 years old, with 28.01% being between 40 and 49 years old and 30.62% being between 50 and 59 years old. It is a clear indication that entrepreneurs are more likely to start a business after the age of 40 and retire at the age of 59 or 60 years of age. A total of 5.54% (17) of the respondents were younger than 29 years old and 19.54% were between 30 and 39 years of age. Only 16.29% were over 60 years of age, showing that as entrepreneurs get older they are more likely to take the risk

of entrepreneurship, or they are more confident about their abilities. The trend increases further until the entrepreneurs are in their fifties, where it starts declining again after 59. One respondent did not fill in the age field.

6.2.2.2 Gender

6.2.2.2.1 Purpose of the question

The purpose of question A2 (refer to Appendix 1) was to determine and differentiate between the number of male and female participants. The respondents had to select between male and female in the questionnaire.

6.2.2.2.2 Results obtained

Results of the question answers are depicted in Table 6.2 which indicates the ratio of male and female respondents.

Table 6.2: Gender distribution

Gender	Total	Percentage
Male	234	75.97%
Female	70	22.73%
Not indicated	4	1.3%
Total	308	100%

6.2.2.2.3 Analysis of the results

Table 6.2 indicates that 75.97% of participants were male and only 22.73% were woman, proving that there are more male than female entrepreneurs. Four respondents did not fill in the gender field on the questionnaire.

6.2.2.3 Marital status

6.2.2.3.1 Purpose of the question

The purpose of question A3 (refer to Appendix 1) was to determine the marital status of the participants. Participants had to choose between four marital status groupings: single, married, divorced or widow/er. It is important to know what support entrepreneurs have when operating a business. Marriage influences the support structure as well as flexibility of entrepreneurs.

6.2.2.3.2 Results obtained

The marital status of respondents was determined and depicted in table 6.3.

Table 6.3: Marital status of participants

Marital status	Total	Percentage
Single	37	12.01%
Married	235	76.30%
Divorced	29	9.42%
Widow/er	2	0.65%
Not indicated	5	1.62%
Total	308	100%

6.2.2.3.3 Analysis of the results

The majority of the respondents (76.30%) equating to 235 are married, with only 37 (12.01%) of participants being single. A total of 29 respondents (9.42%) are divorced and only two (0.65%) are widowed. Five respondents failed to complete the marital status question. This analysis shows that it is easier for married people to become entrepreneurs due to the support structure of being married.

6.2.2.4 Highest academic qualifications

6.2.2.4.1 Purpose of the question

It is necessary to determine the highest educational levels of the entrepreneurs as skills, education and knowledge are all factors that would impact on business success. Respondents could choose from six different educational levels: no matric, matric, certificate, diploma, university degree or post-graduation qualification.

6.2.2.4.2 Results obtained

The results of the question “Highest academic qualifications” as obtained are depicted in table 6.4.

Table 6.4: Highest academic qualifications of respondents

Qualification	Total	Percentage
Lower than grade 12	6	1.95%
Grade 12	61	19.81%
Certificate	33	10.71%
Diploma	75	24.35%
Degree	61	19.81%
Post-graduation qualification	72	23.38%
Total	308	100.00%

6.2.2.4.3 Analysis of results

Only 1.95% of respondents did not have a matric qualification. There is quite an even distribution between the rest of the educational levels with 19.81% with matric, 10.71% with a certificate and 24.35% with a diploma. A total of 19.81% had a university degree, while 23.38% had a post-graduate degree. The results show that people at all levels of education can enter the entrepreneurial field, but people without matric might not have the confidence to do so.

6.2.3 Structure of the participating businesses

The next set of questions was developed to classify businesses into small or medium-sized businesses.

6.2.3.1 Number of permanent employees

The Amended National Small Business Act 102 of 2004 classifies SMMEs into various categories. Very small enterprises have a headcount of a minimum of five employees while small businesses have a minimum of 10 employees and medium-enterprises have between 50 and 200 employees, they are still owner managed, but have more managers.

6.2.3.1.1 Purpose of the question

Permanent employee count is one of the major classification points included in the National Small Business Act No.102 of 1996 to determine whether a business is small, medium or large. The growth in employee count is also one of the main measures of *Perceived business success*. It is therefore important to show the size of the respondents by headcount. Respondents could choose between six different categories.

6.2.3.1.2 Results obtained

The results of the question with regards to permanent employee count are depicted in figure 6.5.

Table 6.5: Number of permanent employees

Employee count	Total	Percentage
Less than 10 employees = very small	53	17.21%
11 - 25 employees = small	110	35.71%
26 - 50 employees = small	42	13.64%
51 - 100 employees = medium	39	12.66%
101 - 200 employees = medium	64	20.78%
Total	308	100%

6.2.3.1.3 Analysis of the results

One hundred and ten respondents have between 11 and 25 permanent employees (35.71%) and are therefore small businesses. A total of 17.31% of participant businesses have between 5 and 10 employees and are therefore very small businesses, 13.64% have between 26 and 50 permanent employees. Furthermore 12.66% have between 51 and 100 permanent employees and 20.78% have between 100 and 200 permanent employees. The total amount of medium-sized participants according to employee count classification is 47.08%.

6.2.3.2 Years since inception of current business

6.2.3.2.1 Purpose of the question

The question was asked to determine how many years the current business of the respondent has been in business. It is important to know whether there are enough stable and sustainable businesses in the sample group. *Sustainability*, being one of the main factors of *Perceived business success* is an important measurement. Respondents had eight categories to choose from as far as years in business are concerned.

6.2.3.2.2 Results obtained

Results obtained with regards to years in the business are depicted in table 6.6.

Table 6.6: Years since inception of the business

Years in business	Total	Percentage
Less than 1 year	6	1.9%
1 - 2 years	19	6.17%
3 - 5 years	29	9.43%
6 - 10 years	59	19.41%
11- 15 years	41	13.31%
16 -25 years	58	18.81%
26 - 30 years	50	16.23%
More than 31 years	45	14.61%
Not indicated	1	0.32%
Total	308	100%

6.2.3.2.3 Analysis of the results

A small percentage (1.95%) of the respondents has been in the current business for less than one year. For 6.19% of the entrepreneurs it has been between one and two years since they started the current businesses and for 9.45% between three and five years. The bulk of the businesses (19.22%) have been in existence for between six and 10 years and 13.36% have been in existence between 11 and 15 years. For 18.89% of the entrepreneurs the businesses have been in business for 16 to 25 years and for 16.29% of entrepreneurs between 26 and 30 years. There is a substantial amount of entrepreneurs (14.66%) that have been operating in their current businesses for over 30 years. There is therefore an even spread across young and older businesses amongst the respondents. One respondent failed to fill in the question.

6.2.3.3 Legal status

6.2.3.3.1 Purpose of the question

The purpose of the question concerning the legal status of the participating businesses was to determine the legal status of the business the respondent is involved in. When a business is registered as a private company it has to be audited annually, which will have an effect on the sound management and accountability of the business. Respondents had eight different legal statuses to choose from.

6.2.3.3.2 Results obtained

Results obtained with regards to the legal status of business are depicted in table 6.7.

Table 6.7: Legal status of businesses participating in the research

Legal status	Total	Percentage
Proprietorship	25	8.12%
Partnership	4	1.30%
Private company	158	51.30%
Public company	15	4.88%
Closed corporation	101	32.79%
Co-operative	2	0.64%
Trust	2	0.64%
Franchise	0	0.00%
Not indicated	1	0.39%
Total	308	100%

6.2.3.3.3 Analysis of results

Most (51.30%) of the businesses were private companies and 32.79% were closed corporations. No franchises or franchisors took part in the survey, but 8.12% were proprietorships. Only 1.3% of the participating businesses were partnerships and 4.88% were public businesses. There were only two trusts and two co-operatives represented amongst the businesses. The conclusion can be reached that 84.37% of entrepreneurial businesses are either private businesses or closed corporations. One respondent failed to fill in the question.

6.2.3.4 Turnover of businesses

6.2.3.4.1 Purpose of the question

The purpose of question A8 (refer to Appendix 1) is to determine the classification of the business according to annual turnover. Annual turnover is one of the major points of classification in the National Small Business Act No.102 of 1996. Growth in annual turnover is a strong measurement of *Perceived business success* according to the literature study done in chapter 3. Respondents had seven categories of annual turnover to choose from, as shown in table 6.8 below.

6.2.3.4.2 Results obtained

The results for the question with regards to turnover are depicted in table 6.8.

Table 6.8: Annual turnover of participating businesses

Annual turnover	Total	Percentage
Less than R2 million = very small	30	9.74%
R2.1 - R5 million = small	74	24.03%
R5.1 - R10 million = small	41	13.31%
R10.1 - R15 million = small	9	2.92%
R15.1 - R25 million = medium	27	8.76%
R25.1 - R50 million = medium	55	17.86%
More than R50.1 = medium	72	23.38%
Total	308	100%

6.2.3.4.3 Analysis of results

The Amended National Small Business Act 102 of 2004 uses annual turnover to classify businesses into micro, very small, small and medium-sized businesses. Very small businesses have an annual turnover of at least R1 000 000 (one million rand), while small businesses have an annual turnover of R15 000 000 (fifteen million rand) and medium-sized businesses between R50 000 000 (fifty million rand) and R200 000 000 (two hundred million rand). According to this classification, 9.74% of the businesses were very small, 40.26% were small businesses and 50.00% were medium-sized businesses.

6.2.3.5 Infrastructure

6.2.3.5.1 Purpose of the question

The lack of infrastructure can be a major contributor towards business failure. When a business has to operate without electricity, water, phones and connectivity, or when loads have to be delivered via insufficient or ill-maintained roads, it will render it almost impossible for the entrepreneur to achieve *Perceived business success*. Respondents were therefore asked about the infrastructure in the business environment in Gauteng and had to give a ‘yes’ or ‘no’ answer.

6.2.3.5.2 Results obtained

The results obtained with regards to the infrastructure with which the business operates are depicted in table 6.9.

Table 6.9: Infrastructure conditions

Infrastructure	Yes	No	Percentage Yes
Electricity	272	36	88.31%
Water	297	11	96.43%
Roads	267	41	86.69%
Phones	271	37	87.99%
Broadband connectivity	229	79	74.35%

6.2.3.5.3 Analysis of results obtained

Most entrepreneurs in Gauteng are satisfied that the infrastructure is sufficient to conduct business and that business success is not hampered by a lack of infrastructure. There are 88.31% of entrepreneurs who still feel that electricity supply is sufficient, with only 11.69% feeling that a lack of electricity supply is affecting their chances of business success. Furthermore 96.43% of entrepreneurs feel that water supply is sufficient, with only 3.57% complaining about water supply. The road infrastructure is sufficient according to 86.69% of entrepreneurs with only 13.31% asserting that problems with the roads are affecting their businesses. With regards to telephone infrastructure, 87.99% are satisfied and 74.35% are happy with the broadband supply and connectivity. Only 12.01% of entrepreneurs are unhappy with phone infrastructure and 25.65% are unhappy with the broadband supply. It can therefore be concluded that, in general, entrepreneurs in Gauteng do not have the perception that infrastructure supply in Gauteng is significantly affecting business success rates.

6.2.4 Results of the analysis of *Perceived business success* as dependent variable

Through literary research, measurement factors of *Perceived business success* were extracted. For the purpose of this study the factors used to measure *Perceived business success* are *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*.

6.2.4.1 Construct validity of the questionnaire measuring *Perceived business success*

The exploratory factor analysis on the 22 items with regards to *Perceived business success* was conducted using SPSS software. From the literary study it could be deducted that the factors measuring *Perceived business success* would correlate with each other, therefore an Oblimin oblique rotation was done (Field, 2009: 643). The correlation matrix yielded results ranging from 0.055 to 0.779, confirming that oblique rotation is recommended (Field, 2009: 643).

According to Field (2009: 647), factors with eigen-values greater than one should be retained. A total of 20 items demonstrated sufficient discriminant validity with a factor loading greater than 0.350. Two items were deleted. The pattern matrix of the results obtained during the factor analysis is provided in Table 6.10.

Four factors with eigen-values greater than one, explaining 60.17% of the variance before rotation, were extracted in the exploratory factor analysis. After rotation, these factors could be identified as *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*.

After rotation, two items loaded onto more than one factor. The item, **Growth1** loaded significantly on *Sustainability* and *Business growth*, and item **Mark3** loaded significantly on *Sustainability* and *Customer satisfaction*. These factors will be classified under the factor that yielded the highest factor loading. **Growth1** and **Mark3** will therefore be classified under *Sustainability*.

Table 6.10: Pattern matrix of Oblimin rotated-principal component factor analysis

Items	Factor 1: Sustainability	Factor 2: Business growth	Factor 3: Profitability	Factor 4: Customer satisfaction
Sus7	0.810	0.004	-0.192	-0.081
Sus6	0.784	0.062	-0.039	-0.037
Sus8	0.575	0.017	-0.092	0.150
Profit4	0.563	-0.002	-0.313	0.027
Mark1	0.537	-0.134	0.131	0.332
Sus1	0.501	-0.091	0.114	0.263
Growth4	0.498	-0.247	-0.252	-0.051
Mark2	0.480	-0.268	0.123	0.244
Sus3	0.445	-0.167	-0.235	-0.037
Growth1	0.442	-0.371	-0.112	-0.010
Mark3	0.397	-0.258	0.139	0.358
Growth3	-0.128	-0.917	-0.069	-0.025
Growth2	-0.042	-0.892	-0.060	0.008
Sus4	0.180	-0.705	0.029	-0.046
Profit1	0.119	-0.006	-0.749	0.076
Profit2	-0.017	-0.128	-0.722	0.192
Profit3	0.179	-0.092	-0.719	0.061
Custs1	0.051	-0.061	0.008	0.669
Custs2	0.095	-0.028	-0.127	0.596
Custs3	-0.065	0.089	-0.097	0.573
Cronbach alpha	0.922	0.889	0.890	0.704

(1) Loadings greater than 0.35 were considered significant

(2) The items included in the factor analysis are provided in Appendix 3

(3) The four extracted factors were labelled as follows:

- Factor 1: *Sustainability*
- Factor 2: *Business Growth*
- Factor 3: *Profitability*
- Factor 4: *Customer satisfaction*

Eleven items loaded significantly onto factor one, labelled *Sustainability*. Five of the eight items used to measure the dependent variable *Sustainability* (refer to Table 3.2) loaded under factor one as expected. These items were **Sus1**, **Sus3**, **Sus6**, **Sus7** and **Sus8**. Item **Sus4** intended to measure the dependent variable *Sustainability* loaded onto *Business growth*. **Mark1** and **Mark2**, intended to measure the latent variable *Market position* did not load onto *Market position* but loaded well onto factor one, *Sustainability*. Similarly, **Profit4** intended to measure the dependent variable *Profitability* and **Growth4** intended to measure the dependent variable *Business growth* loaded onto factor one, measuring *Sustainability*. Two items, “I see the business as a legacy handed to the next generation” (**Sus2**) and “Employees are committed to the business” (**Sus5**), intended to measure *Sustainability*, did not have an Eigen-value greater than one and were therefore deleted.

The second factor, *Business growth* comprised three items. Two of the three items (**Growth2** & **Growth3**) were intended to measure the dependent variable, *Business growth*, but **Growth1** and **Growth4** intended to measure the dependent variable *Business growth* loaded onto the dependent variable *Sustainability*.

Factor three, *Profitability*, also comprised of three items, **Profit1**, **Profit2** and **Profit3**. All three of these items were intended to measure the dependent variable *Profitability*, therefore loading onto the correct factor. **Profit4**, however, intended to measure the dependent variable *Profitability*, loaded onto *Sustainability*. Factor four, *Customer satisfaction* comprised of three items, **Custs1**, **Custs2** and **Custs3**. All three of these items were intended to measure the dependent variable, *Customer satisfaction*.

It can be seen that the four factors of dependent variables used to measure *Perceived business success* were incorporated into the pattern matrix. One latent factor, *Market position* fell away as the items intended to measure *Market position* loaded onto factor one, *Sustainability*. **Mark 3** loaded onto *Sustainability* and *Customer satisfaction*, but the bigger loading was for *Sustainability*. The items and its classification are attached as Appendix 3. The exploratory factor analysis and its interpretation show that the construct has acceptable validity.

6.2.4.2 Reliability of the questionnaire measuring *Perceived business success*

To determine the consistency between the items of the measuring instrument, the Cronbach alpha coefficient was used. Cronbach alpha coefficient is used to test reliability and should be between 0.9 and 0.6, but 0.6 is already questionable (Field, 2009: 628). The greater the Cronbach alpha coefficient is, the more reliable the scale.

All 308 retained responses were used in the Cronbach alpha coefficient. The Cronbach alpha coefficient values are all above 0.7, with factor one, *Sustainability* yielding a Cronbach alpha of 0.922, factor two, *Business growth* being 0.889, factor three, *Profitability*, 0.890 and factor four, *Customer satisfaction*, 0.704. This indicates that the instrument used in this study to measure *Perceived business success* is reliable.

6.2.5 Results of the analysis of the independent variables

Variables identified through the literary research and researched in the empirical study can be grouped into four categories: *Entrepreneurial abilities*, *Macro environment*, *Micro environment* and *Business process management*.

6.2.5.1 Construct validity and reliability of the questionnaire

The factor analysis is done to ensure that the instruments used measure what it is intended to measure. Reliability is measured to determine whether a factor will measure the same every time and validity measures the accuracy of a measure (Zikmund & Babin, 2007: 323).

A total of 20 factor analyses were loaded. Insignificant factors with a loading of lower than 0.350 were deleted. A principal Axis Factoring extraction method was used for all the exploratory factor analyses. Missing values were excluded pairwise. The factor analysis of the factors is provided in tables 6.11 to 6.30.

6.2.5.1.1 Entrepreneurial attributes

Table 6.11 shows the factor analysis results with regards to *Entrepreneurial attributes* as an independent variable.

Table 6.11: Factor analysis with regards to *Entrepreneurial attributes*

Item	Factor loading
I find it easy to find new opportunities (Att7)	0.790
I have the ability to delegate (Att10)	0.782
I have the ability to handle stressful situations (Att11)	0.405
I have the ability to make sound business decisions (Att12)	0.372
Cronbach alpha coefficient: 0.664	
Percentage of variance explained: 34.43%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.668	
Bartlett's test of sphericity: >0.001	

The factor which measured *Entrepreneurial attributes* comprised of five items, but the factor loading for one item, “**I have many years experience in being an entrepreneur**” (Att7), was smaller than 0.350 and was therefore deleted. The remaining four factors explained 34.43% of the variance for the entire set of variables. The factor loading for **Att7** was 0.790 while **Att10** was 0.782. **Att11** was 0.405 and **Att12** was 0.372, therefore all were acceptable. The Cronbach alpha coefficient is 0.664 which, although under 0.7, is still acceptable as Field (2009: 678) suggested that a Cronbach alpha coefficient as low as 0.6 is acceptable when attitudes are being measured. The KMO measure is 0.668, which is acceptable. The Bartlett's test, which tests whether variances are all equal, rejects at the 0.05 significance level, therefore with measurement smaller than 0.001. The KMO and Bartlett's test of sphericity indicate that the variables are adequately related for factor analysis.

Entrepreneurial abilities are measured through issues such as training and experience, managerial training, ability to identify business opportunities, to delegate and to take risks. It also includes motivation and the ability to handle stress.

6.2.5.1.2 Leadership abilities

Table 6.12 shows the factor analysis results with regards to the *Leadership abilities* of the entrepreneur as an independent variable.

Table 6.12: Factor analysis with regards to *Leadership abilities* of the entrepreneur

Item	Factor loading
I find it easy to lead others to share my vision (Lead1)	0.759
My employees form a cohesive team (Lead2)	0.751
Employees have bought into my objectives (Lead3)	0.719
I can easily lead my employees through change (Lead4)	0.638
Cronbach alpha coefficient: 0.808	
Percentage of variance explained: 51.65%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.792	
Bartlett's test of sphericity: >0.001	

The factor measuring *Leadership abilities* of the entrepreneur comprised of four items. All four items loaded at a level higher than 0.350 with **Lead1** loading at 0.751, **Lead2** following at 0.751, **Lead3** being 0.719 and **Lead4** being 0.638, which are all acceptable. The Cronbach alpha coefficient is 0.808, which is considered good, with the percentage of variance explained by the factor 51.65%. The KMO measure is 0.792, which is acceptable and the Bartlett's test is lower than 0.001. The factor analysis for the independent variable *Leadership abilities* therefore shows that the measurement instrument is reliable and valid.

Leadership abilities were measured through issues such as the ability to get employees to buy-into a vision, to form a cohesive team, to communicate and share objectives in a manner that employees will work towards such objectives and leading a team through change without to much disruption.

6.2.5.1.3 Strategic abilities

Table 6.13 shows the factor analysis results with regards to the *Strategic abilities* of the entrepreneur as an independent variable.

Table 6.13: Factor analysis with regards to *Strategic abilities* of the entrepreneur

Item	Factor loading
Strategic management comes easily to me (Strat1)	0.743
I have the ability to execute strategy (Strat2)	0.716
I have a growth plan and employees have bought into it (Strat3)	0.622
I have an exit strategy for when I want to retire (Strat4)	0.438
Cronbach alpha coefficient: 0.721	
Percentage of variance explained: 41.08%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.712	
Bartlett's test of sphericity: >0.001	

The factor measuring the *Strategic abilities* of the entrepreneur comprises of 4 items. The percentage of variance explained by the items is 41.08%. All 4 items loaded higher than 0.350, with **Strat1** being 0.743, **Strat2** 0.712, **Strat3** 0.622 and **Strat4** being 0.438. The Cronbach alpha coefficient is 0.721 and shows that the measurement instrument with regards to *Strategic abilities* is valid. The KMO measure is acceptable at 0.712. The Bartlett's test is smaller than 0.001. Variables are therefore adequately related.

Strategic abilities were measured through issues such as the ability to plan and execute strategy for an organisation. Such plans should include a marketing strategy, a change management plan, an exit strategy and a rollout plan to execute the strategy.

6.2.5.1.4 Political Stability

Table 6.14 shows the factor analysis results with regards to the *Political stability* in the *Macro environment* as an independent variable. *Political stability* in the macro environment, comprised of four items, with one item, “**I consider the business environment politically stable**” (**stab1**), having a loading smaller than 0.350 and therefore having been deleted. The remaining three items, **Stab2**, **Stab3**, and **Stab4** all loaded between 0.484 and 0.881. The Cronbach alpha coefficient is 0.721, which is acceptable, with the percentage of variance explained by the items being 38.51%. The KMO measure is 0.628, which is acceptable. The Bartlett's test is <0.001, showing that the factor is reliable and valid. This indicates that the results of the study should be a reliable indication of the statistical situation in the entire population. The factor *Political stability* is comprised of items such as the corporate

governance expected from entrepreneurs, the economic situation, issues such as import or export duties and a lack of political volatility in the country.

Table 6.14: Factor analysis with regards to *Political stability*

Item	Factor loading
The politics in the country impact on my business (Stab2)	0.881
The business is affected by the economic situation (Stab3)	0.702
Government compliancy requirements impacts negatively on my ability to run the business (Stab4)	0.484
Cronbach alpha coefficient: 0.721	
Percentage of variance explained: 38.51%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.628	
Bartlett's test of sphericity: >0.001	

6.2.5.1.5 Competitive landscape

Table 6.15 shows the factor analysis results with regards to the *Competitive landscape* in the *Macro environment* as an independent variable.

Table 6.15: Factor analysis with regards to *Competitive landscape*

Item	Factor loading
I compare favourably to competitors (Land3)	0.722
The market is receptive to my product or service (Land1)	0.624
The competitive position of our business has improved (Land4)	0.578
I fully understand the competitive landscape impacting on my business (Land2)	0.546
Cronbach alpha coefficient: 0.710	
Percentage of variance explained: 38.60%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.724	
Bartlett's test of sphericity: >0.001	

The factor measuring the independent variable, *Competitive landscape* forms part of the *Macro environment* and comprises of four items. The factor loading for all four items was higher than 0.350 and the Cronbach alpha coefficient is 0.710, which is acceptable, with the percentage of variance explained by the items 38.60%. The KMO measure is 0.724, which is

acceptable and the Bartlett's test is less than 0.001, showing that the measurement instrument with regards to *Competitive landscape* is reliable and valid.

The independent variable, *Competitive landscape*, forms part of the *Macro environment* and is measured through issues such as an understanding of direct competitors in the market, how well the market will accept a product or a service, market positioning and whether there is a threat of new entrants in the market.

6.2.5.1.6 Human resource management

Table 6.16 shows the factor analysis results with regards to the *Human resource management* in the *Micro environment* as an independent variable.

Table 6.16: Factor analysis with regards to *Human resource management*

Item	Factor loading
The performance of each employee is measured in a formal manner (Human3)	0.830
My employees have documented role definitions in place (Human2)	0.821
There are formal internal communications channels in place (Human4)	0.717
I have documented recruitment processes in place (Human1)	0.686
Cronbach alpha coefficient: 0.848	
Percentage of variance explained: 47.11%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.806	
Bartlett's test of sphericity: >0.001	

The factor measuring *Human resource management* comprises of five items, with one item, **“We are a company free of racial tension” (Human5)**, deleted due to a factor loading of less than 0.350. The remaining factors loaded between 0.686 and 0.830 and are therefore acceptable. The Cronbach alpha coefficient is 0.848, which is good, with the percentage of variance explained by the items being 47.11%. The KMO measure is great at 0.806 indicating that the data is factor analysable. The Bartlett's test is smaller than 0.001. The factor can therefore be considered reliable and valid.

The independent variable *Human resource management* is measured through issues such as sound recruitment and selection, on-boarding, performance management, clear role definitions, internal communication channels and diversity management.

6.2.5.1.7 Supply chain management

Table 6.17 shows the factor analysis results with regards to the *Supply chain management* in the *Micro environment* as an independent variable.

Table 6.17: Factor analysis with regards to *Supply chain management*

Item	Factor loading
Scheduling of orders is well managed (Supply3)	0.933
Dispatch works well and orders are delivered according to customer expectations (Supply2)	0.830
Cronbach alpha coefficient: 0.693	
Percentage of variance explained: 54.79%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.549	
Bartlett's test of sphericity: >0.001	

The factor *Supply chain management* comprised of four items with two items, “**There are documented service level agreements with suppliers**” (Supply1) and “**Please explain how suppliers are chosen**” (Supply4), deleted due the factor loadings being lower than 0.350. Two items **Supply3** and **Supply2** remain with high loading of 0.933 and 0.830 respectively. The Cronbach alpha coefficient is 0.693 which, although lower than 0.70 is only marginally lower and higher than 0.6 and is therefore acceptable. The percentage of variance explained by the items is 54.79%. The KMO measure is 0.549, which is just above the rejection point. The Bartlett's test is >0.001 indicating that the correlation between variables is sufficient for factor analysis.

The factor *Supply chain management* is measured through items such as the quality of suppliers, dispatch, receiving, delivery routes, scheduling and service level agreements.

6.2.5.1.8 Quality management

Table 6.18 shows the factor analysis results with regards to *Quality management* in the *Micro environment* as an independent variable.

Table 6.18: Factor analysis with regards to *Quality management*

Item	Factor loading
Employees are aware of quality requirements (Qual2)	0.891
There is a quality focus throughout the organisation (Qual3)	0.762
All employees understand their roles in providing quality (Qual4)	0.708
There are documented quality policies in place (Qual1)	0.623
Cronbach alpha coefficient: 0.832	
Percentage of variance explained: 56.60%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.760	
Bartlett's test of sphericity: >0.001	

The factor measuring *Quality management* comprises of four items, with a 56.60% variance explained by the items. The factor loadings of all four items were greater than 0.350. The Cronbach alpha coefficient is excellent at 0.832, showing that the factor is reliable. The KMO measure is 0.760 indicating that the sample is adequate. The Bartlett's test is smaller than 0.001.

Quality management is measured through items such as having documented quality control processes and policies in place, all employees understanding their role in providing quality and knowing what customers would consider quality.

6.2.5.1.9 Financial management

Table 6.19 shows the factor analysis results with regards to *Financial management* in the *Micro environment* as an independent variable.

Table 6.19: Factor analysis with regards to *Financial management*

Item	Factor loading
Financial records are up to date and readily available (Fin2)	0.961
Books are regularly audited (Fin3)	0.766
Cash management is a focus in the business (Fin1)	0.420
Cronbach alpha coefficient: 0.744	
Percentage of variance explained: 56.78%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.589	
Bartlett's test of sphericity: >0.001	

The factor *Financial management* comprises of three items with factor loadings between 0.420 and 0.961. The Cronbach alpha coefficient is 0.744 rendering factor reliable, with the percentage of variance explained being 56.78%. The KMO measure is 0.589, which is acceptable. The Bartlett's test is smaller than 0.001.

Financial management is measured through issues such as cash flow management, record keeping, auditing and income versus expense control.

6.2.5.1.10 Support

Table 6.20 shows the factor analysis results with regards to *Support* in the *Micro environment* as an independent variable.

Table 6.20: Factor analysis with regards to *Support*

Item	Factor loading
During the start-up phase we were able to raise venture capital (Sup2)	0.753
I have received financial support (Sup1)	0.513
I have received non-financial support while running the business (Sup3)	0.415
Cronbach alpha coefficient: 0.811	
Percentage of variance explained: 33.41%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.599	
Bartlett's test of sphericity: >0.001	

The factor measuring *Support* comprises of three items, all items yielding a factor loading higher than 0.350, with **Sup1** being 0.513, **Sup2** 0.753 and **Sup3** being 0.415 showing that the measurement instrument with regards to *Support* is valid and therefore measures what it is

intended to measure. The Cronbach alpha coefficient is 0.811 showing reasonable items coefficient, with the percentage of variance explained by the items 33.41%. The KMO measure is 0.599, which is good and the Bartlett's test is smaller than 0.001.

The independent variable *Support* is measured in two sections, financial support and non-financial support. Financial support will be supplied through venture capital or any other form of financial aid. Non-financial support is received through mentorship, guidance, training or services.

6.2.5.1.11 Marketing

Table 6.21 shows the factor analysis results with regards to *Marketing* in the *Micro environment* as an independent variable.

Table 6.21: Factor analysis with regards to *Marketing*

Item	Factor loading
The business regularly appears in the media (Mark3)	0.740
We regularly advertise our products or services (Mark2)	0.678
We have an experienced sales team (Mark5)	0.658
We regularly communicate with decision makers (Mark4)	0.542
We often attend networking events (Mark6)	0.519
We know exactly who our target market is (Mark1)	0.419
Cronbach alpha coefficient: 0.764	
Percentage of variance explained: 36.30%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.758	
Bartlett's test of sphericity: >0.001	

The factor measuring *Marketing management* comprises of six items, all with factor loadings higher than 0.350. The Cronbach alpha coefficient is 0.764, which is reliable and the percentage of variance explained 36.30%. The KMO measure is 0.758 indicating that the sampling is adequate. The Bartlett's test is smaller than 0.001, indicating that the correlation between variables is sufficient for factor analysis.

Marketing management is measured through items such as advertising, communications, sales, networking and promotions. The activities required in marketing are to know who the target market is and communicating the benefits of the product and service in a manner that will increase demand for the product.

6.2.5.1.12 Customer relationship management

Table 6.22 shows the factor analysis results with regards to *Customer relationship management* in the *Micro environment* as an independent variable.

Table 6.22: Factor analysis with regards to *Customer relationship management*

Item	Factor loading
We spend time to understand what our customers want (Cust4)	0.792
Customers are treated as important stakeholders (Cust1)	0.748
We have high customer retention (Cust2)	0.686
All employees are committed to servicing customers (Cust6)	0.640
We hardly ever receive complaints from customers (Cust3)	0.479
We regularly test customer satisfaction levels (Cust5)	0.394
Cronbach alpha coefficient: 0.788	
Percentage of variance explained: 40.84%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.818	
Bartlett's test of sphericity: >0.001	

Customer relationship management comprises of six items which all loaded higher than 0.350, with the percentage of variance explained 40.84%. The KMO measure is 0.818 and the Bartlett's test is smaller than 0.001. The *Customer relationship* factor can therefore be considered reliable and valid. It is an indication that the same results will be obtained should the research be repeated and that the results will remain constant throughout the population. The Cronbach alpha coefficient is 0.788.

6.2.5.1.13 Business location

Table 6.23 shows the factor analysis results with regards to *Location decisions* in *Business process management* as an independent variable.

Table 6.23: Factor analysis with regards to *Business location*

Item	Factor loading
Our business is close to suppliers (Loc2)	0.725
We operate in close proximity to most of our customers (Loc3)	0.633
Our production facility is situated close to the labour supply (Loc1)	0.542
Our current location fulfils our capacity needs (Loc4)	0.426
We do not experience transport or traffic problems at our current location (Loc5)	0.421
Cronbach alpha coefficient: 0.682	
Percentage of variance explained: 31.57%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.697	
Bartlett's test of sphericity: >0.001	

Business location comprises of five items. The factor loading for *Business location* ranges between 0.421 and 0.725, with the “**business being in close proximity to suppliers**” (Loc2) yielding the highest factor loading. The Cronbach alpha coefficient is 0.682 which is marginally lower than 0.70, but still acceptable. The percentage of variance explained by the items is 31.57%. The KMO measure is 0.697 which is good and the Bartlett's test is smaller than 0.001.

The factor *Business location* is measured through items such as being in close proximity to clients, suppliers and labour. It also includes how efficiently the location will render delivery routes and how easily raw materials can be supplied to the location. The fit between the facility and the production requirements is also a measure of sound business location decisions.

6.2.5.1.14 Facility layout

Table 6.24 shows the factor analysis results with regards to *Facility layout* in *Business process management* as an independent variable.

Table 6.24: Factor analysis with regards to *Facility layout*

Item	Factor loading
Raw materials flow efficiently through the plant (Fac4)	0.899
Material handling cost is at a minimum (Fac5)	0.796
Downtime in the production facility is at a minimum (Fac3)	0.723
Cronbach alpha coefficient: 0.849	
Percentage of variance explained: 37.70%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.755	
Bartlett's test of sphericity: >0.001	

Facility layout comprises of six items but three items, “**Our facility layout is planned for maximum productivity**” (Fac1), “**Our production plant has been assessed by a professional operations consultant**” (Fac2) and “**The facility layout is conducive to creating the shortest cycle time possible**” (Fac6), had to be deleted due to factor loadings being smaller than 0.350. The remaining items all loaded higher than 0.723. The Cronbach alpha coefficient is 0.849, with the percentage of variance explained 37.70%. The KMO measure is 0.755 which is good and the Bartlett’s test is smaller than 0.001.

The factor *Facility layout* is measured through items such as the efficiency of the flow of materials and labour through the facility to enable the most cost effective and productive production process with the shortest cycle times. The absence of duplications in roles and bottlenecks in the facility could enhance *Perceived business success*.

6.2.5.1.15 Production processes

Table 6.25 shows the factor analysis results with regards to *Production processes* in *Business process management* as an independent variable.

Production processes comprises of eight items, all with factor loadings greater than 0.350, ranging from 0.564 to 0.887, therefore considered highly viable. The Cronbach alpha coefficient is 0.909 which is also highly reliable, with the percentage of variance explained 56.84%. The KMO measure is 0.839 which is excellent and the Bartlett’s test is smaller than 0.001.

Table 6.25: Factor analysis with regards to *Production processes*

Item	Factor loading
Organisational processes are mapped and followed (Prod3)	0.887
Organisational processes are mapped (Prod2)	0.886
Adherence to processes are incorporated into the performance management system (Prod4)	0.811
We have formal maintenance processes on all machinery (Prod6)	0.771
There are formal maintenance processes in production facilities (Prod7)	0.739
A critical path analysis has been done on all processes (Prod8)	0.656
Duplications and bottlenecks have been eliminated out of the production process (Prod5)	0.654
Everybody in the organisation is aware of which processes to follow in order to deliver the product/service (Prod1)	0.564
Cronbach alpha coefficient: 0.909	
Percentage of variance explained: 56.84%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.839	
Bartlett's test of sphericity: >0.001	

The factor *Production processes* is measured through items such as having developed, mapped and implemented processes in place. It is also measured by the amount of continuous improvement activities, such as critical path analysis having been done. Short cycle times are a measure of sound production processes. Maintenance processes will ensure that production processes and the equipment used to execute the processes are maintained. All duplications and bottlenecks in a production process should be removed to enhance productivity.

6.2.5.1.16 Quality control processes

Table 6.26 shows the factor analysis results with regards to *Quality control processes* in *Business process management* as an independent variable.

Table 6.26: Factor analysis with regards to *Quality control processes*

Item	Factor loading
Delivery is of a standardised manner according to processes (Con3)	0.812
Every employee is aware of his/her role in providing a quality product or service (Con2)	0.693
There is a continuous improvement plan in place (Con4)	0.679
Quality control processes are mapped into the production processes (Con1)	0.621
The business delivers a standardised product and service (Con5)	0.552
Cronbach alpha coefficient: 0.801	
Percentage of variance explained: 45.60%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.754	
Bartlett's test of sphericity: >0.001	

Quality control processes comprise of five items with a percentage of 45.60% explained variance. The factor loadings are all greater than 0.350, indicating that the factor is valid. The KMO measure of sampling adequacy is 0.754; indicating that patterns of correlations are compact and that factor analysis should yield reliable factors. The Cronbach alpha coefficient is 0.801 showing that the factor is reliable. The percentage of variance explained is 45.60%. The Bartlett's test is smaller than 0.001.

The factor *Quality control processes* is measured through the measure to which quality control measures have been incorporated into the production process and performance measurements. A good measure of *Quality control processes* is the level of standardisation of the output of the production process and to what extent the quality delivered is in line with customer expectations and requirements. The presence of total quality management, in other words everybody in the organisation is involved in quality control, and continuous improvement is also a measurement of *Quality control processes*.

6.2.5.1.17 Financial processes

Table 6.27 shows the factor analysis results with regards to *Financial processes* in *Business process management* as an independent variable.

Table 6.27: Factor analysis with regards to *Financial processes*

Item	Factor loading
Money is collected in a processed and standardised manner (Finance2)	0.843
All invoices are sent out timeously (Finance1)	0.744
Financial records are accurate and accessible (Finance4)	0.638
Cronbach alpha coefficient: 0.782	
Percentage of variance explained: 43.63%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.699	
Bartlett's test of sphericity: >0.001	

The factor measuring *Financial processes* comprises of three items with one, “**Financial systems are working well**” (**Finance3**), being deleted due to insufficient factor loading, less than 0.350. The factor loadings for the remaining items range from 0.638 to 0.843, rendering the factor valid. The Cronbach alpha coefficient is 0.782 showing reliability, with the percentage of variance explained 43.63%. The KMO measure is 0.699 which is acceptable and the Bartlett's test is smaller than 0.001. Items measuring *Financial processes* include the invoicing process, debt collection process, financial record keeping, financial reporting and supplier payment processes.

6.2.5.1.18 Human resource processes

Table 6.28 shows the factor analysis results with regards to *Human resource processes* in *Business process management* as an independent variable.

Human resource processes comprises of five items, with a percentage of 60.90 variance explained by the items. All the items yielded a factor loading of higher than 0.350, ranging between 0.687 and 0.810. The Cronbach alpha coefficient is 0.882, rendering the factor reliable. The KMO measure is 0.822 and the Bartlett's test is smaller than 0.001.

The efficiency of *Human resource processes* is measured through the efficiency of the recruitment and selection processes, the human resource administration, the on-boarding processes, performance measurement processes, policies and procedures in place, disciplinary procedures and ergonomics.

Table 6.28: Factor analysis with regards to *Human resource processes*

Item	Factor loading
Processes and technology assist employees in achieving maximum productivity (HR4)	0.810
Human resource administration is well managed and data is up to date (HR2)	0.804
New employees are immediately introduced to policies and procedures (HR1)	0.791
Adherence to processes forms part of the performance management system (HR5)	0.778
There are formal disciplinary procedures in place and employees are aware of them (HR3)	0.687
Cronbach alpha coefficient: 0.882	
Percentage of variance explained: 60.09%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.822	
Bartlett's test of sphericity: >0.001	

6.2.5.1.19 Supply chain processes

Table 6.29 shows the factor analysis results with regards to *Supply chain processes* in *Business process management* as an independent variable.

Table 6.29: Factor analysis with regards to *Supply chain processes*

Item	Factor loading
Supply chain relationships are well managed (SC2)	0.833
Inventory is managed across the supply chain (SC4)	0.738
Processes are mapped across the supply chain (SC1)	0.627
We hardly ever experience problems with suppliers (SC3)	0.533
Cronbach alpha coefficient: 0.774	
Percentage of variance explained: 47.92%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.748	
Bartlett's test of sphericity: >0.001	

The factor measuring *Supply chain processes* comprises of four items, all with factor loadings greater than 0.350. The Cronbach alpha coefficient is 0.774 rendering the factor valid. The percentage of variance explained is 47.92% and the KMO measure is 0.748. The Bartlett's test is smaller than 0.001.

Supply chain processes are measured through items such as congenial relationships across the supply chain, processes being mapped across the supply chain, inventory management, service level agreements, rejections and complaints.

6.2.5.1.20 Technology utilisation

Table 6.30 shows the factor analysis results with regards to *Technology utilisation* in *Business process management* as an independent variable.

Table 6.30: Factor analysis with regards to *Technology utilisation*

Item	Factor loading
Technology managers share knowledge throughout the organisation (Tech4)	0.858
All users are well trained on the necessary software (Tech3)	0.830
We are happy with the technology in the factory	0.684
We have implemented business process management software (Tech1)	0.536
Cronbach alpha coefficient: 0.815	
Percentage of variance explained: 54.52%	
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.759	
Bartlett's test of sphericity: >0.001	

Technology utilisation comprises of four items, all with factor loadings greater than 0.35, ranging from 0.536 to 0.858. The factor loadings indicate that the measuring instrument is valid and will render research findings compliant with research principles. The factor loading indicates justification to believe that the factors would correlate with each other. The Cronbach alpha coefficient is 0.815 showing a reliable scale. The percentage of variance explained is 54.52%. The KMO measure is 0.759 showing that the data is factor-analysable. The Bartlett's test is <0.001, showing that the strength of the relationships amongst variables is strong.

Technology utilisation, according to the literature, includes the choice of the correct information technology hardware, software and production technology. It also includes the effective maintenance of technology and training of users to manage and use technology optimally.

6.2.5.1.21 Conclusion

An exploratory factor analysis was conducted to determine the validity and reliability of the measurement instrument. Both the dependent variables and the independent variables were subjected to factor analysis. It was expected that the independent variables and the dependent variable *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction* will correlate. An Oblimin oblique rotation was performed on the principal components of the exploratory factor analysis. The correlation matrix is presented in Table 6.10. Bartlett's test of sphericity was conducted on all factors and loaded smaller than 0.001 for all factors. The Kaiser-Meyer-Olkin measure of sample adequacy was done. All items with test results smaller than 0.350, were deleted. The factor analysis was done on 20 factors.

Cronbach alpha tests were done on all factors and most loaded at the minimum measurement of 0.70, except for three factors, which were marginally lower than 0.70. The percentage of variance explained by the items were done and reported. The various test results are depicted in tables 6.11 to 6.30 and analysed below each table.

6.2.5.2 Relationship between independent and dependent variables

Correlations are drawn between all independent and dependent variables. Independent variables are broken into four sections, *Entrepreneurial abilities*, *Macro environment*, *Micro environment* and *Business process management*. Through the correlations the effect of each independent variable on each factor of the dependent variable, *Perceived business success* will be determined.

6.2.5.2.1 Entrepreneurial abilities

In this section, the influence of selected independent variables measuring *Entrepreneurial abilities* on the *Perceived business success* of the participating businesses is investigated. To determine whether the independent variables, *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability*, have an impact on the four dependent variables measuring *Perceived business success*, a multiple linear regression analysis was performed. The dependent variables measuring *Perceived business success* are *Sustainability*, *Business growth*,

Profitability and *Customer satisfaction*. Data from all participants were captured and averages of all items were computed, with missing values automatically being replaced through mean substitution. The results of the multiple linear regression analysis investigating the influence of *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* on the *Sustainability* of the participating businesses are presented in table 6.32. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.31: Multiple linear regression analysis results: Impact of the independent variables *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* on the dependent variable *Sustainability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.125	0.268		4.198	0.000
<i>Entrepreneurial attributes</i>	0.322	0.078	0.255	4.124	0.000**
<i>Leadership ability</i>	0.355	0.075	0.336	4.726	0.000**
<i>Strategic ability</i>	-0.019	0.072	-0.019	-0.262	0.793

$R^2 = 0.257$ (** $p < 0.05$; $p < 0.10^*$)

The independent variables measuring the *Entrepreneurial abilities* of the participating entrepreneurs, i.e. *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* in this study explain 25.7% of the variance in the *Sustainability* of the participating businesses. As reported in Table 6.31, significant positive relationships are evident between *Entrepreneurial attributes* (4.124; $p < 0.001$) and *Leadership ability* (4.726; $p < 0.001$) and the dependent variable *Sustainability* of the business. No statistical significant relationship could be found between the independent variable *Strategic ability* of the entrepreneur and *Sustainability* ($p = 0.793$) of the participating businesses. Based on these results, support is found for hypotheses H^{1a} and H^{2a} , but not for H^{3a} , meaning that hypotheses H^{1a} and H^{2a} were accepted, but not H^{3a} . There is a positive regression coefficient indicating that *Entrepreneurial attributes* and *Leadership abilities* have a significant effect on *Sustainability*. Therefore it can be assumed that strong leaders will be more likely to create *Sustainable* businesses.

The results of the multiple linear regression analysis on the influence of the entrepreneur on *Business growth* in terms of employee count are presented in table 6.32.

Table 6.32: Multiple linear regression analysis results: Impact of the independent variables *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.394	0.369		1.069	0.286
<i>Entrepreneurial attributes</i>	0.378	0.108	0.229	3.515	0.001**
<i>Leadership ability</i>	0.395	0.103	0.286	3.815	0.000**
<i>Strategic ability</i>	-0.065	0.100	-0.050	-0.657	0.512

$R^2 = 0.175$ (** $p < 0.05$; $p < 0.10^*$)

The independent variables measuring the *Entrepreneurial abilities* of the participating entrepreneurs, i.e. *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* in this study explain 17.5% of the variance in the *Business growth* of the participating businesses. Significant positive relationships were found between *Entrepreneurial attributes* (3.515; $p = 0.001$) and *Leadership ability* (3.815; $p < 0.001$), and the dependent variable *Business growth* of the business. No statistical significant relationship could be found between the independent variable *Strategic ability* of the entrepreneur and *Business growth* ($p = 0.512$) of the participating businesses. Support was therefore found for hypotheses H^{1b} and H^{2b} , but not for H^{3b} , meaning that hypotheses H^{1b} and H^{2b} were accepted, but not H^{3b} .

The results of the multiple linear regression analysis on the influence of the entrepreneur on *Profitability* are presented in table 6.33.

Table 6.33: Multiple linear regression analysis results: Impact of the independent variables *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* on the dependent variable *Profitability of the business*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.021	0.391		2.607	0.010
<i>Entrepreneurial attributes</i>	0.213	0.114	0.125	1.863	0.063*
<i>Leadership ability</i>	0.274	0.110	0.193	2.495	0.013**
<i>Strategic ability</i>	0.108	0.106	0.081	1.026	0.306

$R^2 = 0.119$ (** $p < 0.05$; $p < 0.10^*$)

The independent variables measuring the *Entrepreneurial abilities* of the participating entrepreneurs, i.e. *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* in this study explain 11.9% of the variance in the *Profitability* of the participating businesses. As reported in Table 6.33, a significant positive relationship is evident between *Leadership ability* of the entrepreneur and the *Profitability* of the participating businesses (2.495; $p=0.001$). There is an acceptable relationship between *Entrepreneurial attributes* (1.863; $p=0.063$) and *Profitability*. Support is therefore found for hypothesis H^{2c} and H^{1c} but not for H^{3c} . The hypothesis H^{1c} and H^{2c} is accepted, but H^{3c} was not accepted.

The results of the multiple linear regression analysis on the influence of the entrepreneur on *Customer satisfaction* are presented in table 6.34.

Table 6.34: Multiple linear regression analysis results: Impact of the independent variables *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.833	0.232		12.205	0.000
<i>Entrepreneurial attributes</i>	0.123	0.068	0.123	1.813	0.071
<i>Leadership ability</i>	0.210	0.065	0.252	3.227	0.001*
<i>Strategic ability</i>	-0.009	0.063	-0.012	-0.151	0.880

$R^2 = 0.106$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Entrepreneurial abilities* of the participating entrepreneurs, i.e. *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* in this study explain 10.6% of the variance in the *Customer satisfaction* in the participating businesses. As reported in Table 6.34, a significant positive relationship is evident between *Leadership ability* of the entrepreneur and the *Customer satisfaction* in the participating businesses (3.227; $p=0.001$). Support is therefore found for hypothesis H^{2d} , but not for H^{1d} and H^{3d} . The hypothesis H^{2d} is accepted, but H^{1d} and H^{3d} were not accepted.

6.2.5.2.2 Macro environment

A multiple linear regression analysis is performed to determine whether the independent variables in the *Macro environment*, such as *Political stability* and *Competitive landscape* will impact on *Perceived business successes* as measured through *Sustainability*, *Growth*, *Profitability* and *Customer satisfaction*. Data from all participants was captured and averages of all items were computed, with missing values automatically being replaced through mean substitution.

The results of the multiple linear regression analysis with regards to the influence of the *Macro environment* on *Sustainability* are presented in table 6.35. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.35: Multiple linear regression analysis results: Impact of the independent variables *Political stability* and *Competitive landscape* on the dependent variable *Sustainability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.813	0.286		2.842	0.005
<i>Political stability</i>	-0.070	0.041	-0.079	-1.731	0.085
<i>Competitive landscape</i>	0.775	0.059	0.602	13.164	0.000**

$R^2 = 0.364$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Macro environment* of the business, i.e. *Political stability* and *Competitive landscape* in this study explain 36.4% of the variance in the *Sustainability* of the participating businesses. As reported in Table 6.35, a significant positive relationship is evident between the *Competitive landscape* of the business and the *Sustainability* of the participating businesses (13.164; $p < 0.001$). Support is therefore found for hypothesis H^{5a} , but not for H^{4a} . The hypothesis H^{5a} is accepted, but H^{4a} was not accepted.

The positive regression coefficients indicate that the more favourable the *Competitive landscape* is, the more sustainable the business will be. The results of the multiple linear regression analysis of the *Macro environment* on *Business growth* are presented in table 6.36.

Table 6.36: Multiple linear regression analysis results: Impact of the independent variables *Political stability* and *Competitive landscape* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.779	0.428		1.821	0.070
<i>Political stability</i>	-0.092	0.061	-0.079	-1.517	0.130
<i>Competitive landscape</i>	0.679	0.088	0.404	7.707	0.000**

$R^2 = 0.166$ (** $p < 0.05$; $p < 0.10^*$)

The independent variables measuring the *Macro environment* of the business, i.e. *Political stability* and *Competitive landscape* in this study explain only 16.6% of the variance in the *Business growth* of the participating businesses. A significant positive relationship is evident between the *Competitive landscape* of the business and the *Business growth* of the participating businesses (7.707; $p < 0.001$). Support is therefore found for hypothesis H^{5b} , but not for H^{4b} . The hypothesis H^{5b} is accepted, but H^{4b} was not accepted.

The results of the multiple linear regression analysis on the influence of the *Macro environment* on *Profitability* are presented in table 6.37.

Table 6.37: Multiple linear regression analysis results: Impact of the independent variables *Political stability* and *Competitive landscape* on the dependent variable *Profitability of the business*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.963	0.443		2.175	0.030
<i>Political stability</i>	0.099	0.063	-0.083	-1.569	0.118
<i>Competitive landscape</i>	0.668	0.091	0.387	7.329	0.000**

$R^2 = 0.153$ (** $p < 0.05$; $p < 0.10^*$)

The independent variables measuring the *Macro environment* of the business, i.e. *Political stability* and *Competitive landscape* in this study explain 15.3% of the variance in the *Profitability* of the participating businesses. As reported in Table 6.37, a significant positive relationship is evident between the *Competitive landscape* of the business and the

Profitability of participating businesses (7.329; $p < 0.001$). Support is therefore found for hypothesis H^{5c} , but not for H^{4c} . The hypothesis H^{5c} is accepted, but H^{4c} was not accepted. The positive regression coefficients indicate that the more stable and favourable the *Macro environment*, especially the *Competitive landscape* is, the higher the chances of *Profitability*.

The results of the multiple linear regression analysis on the influence of the *Macro environment* on *Customer satisfaction* are presented in table 6.38.

Table 6.38: Multiple linear regression analysis results: Impact of the independent variables *Political stability* and *Competitive landscape* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.281	0.258		8.828	0.000
<i>Political stability</i>	0.033	0.037	0.047	0.901	0.369
<i>Competitive landscape</i>	0.412	0.053	0.404	7.733	0.000**

$R^2 = 0.168$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Macro environment* of the business, i.e. *Political stability* and *Competitive landscape* in this study explain 16.8% of the variance in the *Customer satisfaction* in the participating businesses. As reported in Table 6.38, a significant positive relationship is evident between the *Competitive landscape* of the business and *Customer satisfaction* in the participating businesses (7.733; $p < 0.001$). Support is therefore found for hypothesis H^{5d} , but not for H^{4d} . The hypothesis H^{5d} is accepted, but H^{4d} was not accepted.

6.2.5.2.3 Micro environment

The *Micro environment* is controlled by the entrepreneur or business managers and for the purpose of this study is compiled out of four factors, *Human resource management*, *Supply chain management*, *Quality management* and *Financial management*.

To determine whether the independent variables, *Business management*, including: *Human resources management*, *Supply chain management*, *Quality management* and *Financial*

management, impact on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*, further multiple linear regressions were performed. Data from all participants was captured and averages of all items were computed, with missing values automatically being replaced through mean substitution. The next regression is the effect of *Business management* on *Perceived business success* as measured through *Sustainability*.

The results of the multiple linear regression analysis are presented in table 6.39. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.39: Multiple linear regression analysis results: Impact of the independent variables *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* on the dependent variable *Sustainability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.492	0.287		5.195	0.000
<i>Human resource management</i>	0.124	0.049	0.153	2.517	0.012**
<i>Supply chain management</i>	0.097	0.058	0.102	1.677	0.095*
<i>Quality management</i>	0.148	0.073	0.140	2.041	0.042**
<i>Financial management</i>	0.197	0.059	0.191	3.310	0.001**

$R^2 = 0.184$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Business management* of the participating businesses, namely *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* in this study explain 18.4% of the variance in the *Sustainability* of the participating businesses. Statistical significant positive relationships were found between *Human resource management* (2.517; $p = 0.012$), *Supply chain management* (1.677; $p = 0.095$), *Quality management* (2.041; $p = 0.042$) and *Financial management* (3.310; $p = 0.001$), and the dependent variable *Sustainability* of the business. Support was therefore found for hypotheses H^{6a} , H^{7a} , H^{8a} and H^{9a} , meaning that hypotheses H^{6a} , H^{7a} , H^{8a} and H^{9a} were accepted. The significant positive regression coefficients indicate that the more effectively the micro or internal environment is managed, the more sustainable the business will be.

The results of the multiple linear regression analysis on the influence of sound *Business management* on *Business growth* in terms of employee count are presented in table 6.40.

Table 6.40: Multiple linear regression analysis results: Impact of the independent variables *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.337	0.388		3.449	0.001
<i>Human resource management</i>	0.278	0.066	0.262	4.181	0.000**
<i>Supply chain management</i>	0.007	0.078	0.005	0.087	0.931
<i>Quality management</i>	0.163	0.098	0.118	1.665	0.097*
<i>Financial management</i>	0.059	0.080	0.044	0.731	0.465

$R^2 = 0.128$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business management* of the participating businesses, namely *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* in this study explain 12.8% of the variance in the *Business growth* of the participating businesses. Statistical significant positive relationships were found between *Human resource management* (4.181; $p < 0.001$) and *Quality management* (1.665; $p = 0.097$), and the dependent variable *Business growth* of the business. No statistical significant relationship could be found between the independent variables *Supply chain management* (0.087; $p = 0.931$) and *Financial management* (0.731; $p = 0.465$), of the business and *Business growth* of the participating businesses. Support was, therefore, found for hypotheses H^{6b} and H^{8b} , meaning that hypotheses H^{6b} and H^{8b} were accepted, but not H^{7b} and H^{9b} .

The results of the multiple linear regression analysis on the influence of *Business management* on *Profitability* are presented in table 6.41.

Table 6.41: Multiple linear regression analysis results: Impact of the independent variables *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* on the dependent variable *Profitability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.234	0.407		3.028	0.003
<i>Human resource management</i>	0.104	0.070	0.095	1.489	0.138
<i>Supply chain management</i>	0.123	0.082	0.096	1.499	0.135
<i>Quality management</i>	0.138	0.103	0.097	1.334	0.183
<i>Financial management</i>	0.165	0.084	0.119	1.957	0.051*

$R^2 = 0.088$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Business management* of the participating businesses, namely *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* in this study explain 8.8% of the variance in the *Profitability* of the participating businesses. Statistical significant positive relationships ($p < 0.10$) were found between *Financial management* (1.957; $p = 0.051$) and the dependent variable *Profitability* of the business. No statistical significant relationship could be found between the independent variables *Human resource management* (1.489; $p = 0.138$), *Supply chain management* (1.499; $p = 0.135$) and *Quality management* (1.334; $p = 0.183$) of the business and *Profitability* of the participating businesses. Support was therefore found for hypotheses H^{9c} , but not for H^{6c} , H^{7c} and H^{8c} . Hypothesis H^{9c} was accepted, but not H^{6c} , H^{7c} and H^{8c} . The significant positive regression coefficients indicate that the more effective the *Financial management* the more profitable the business will be.

The results of the multiple linear regression analysis on the influence of *Sound business management* on *Customer satisfaction* are presented in table 6.42.

Table 6.42: Multiple linear regression analysis results: Impact of the independent variables *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.939	0.211		9.189	0.000
<i>Human resource management</i>	-0.062	0.036	-0.096	-1.707	0.089*
<i>Supply chain management</i>	0.274	0.042	0.365	6.470	0.000**
<i>Quality management</i>	0.138	0.053	0.164	2.585	0.010**
<i>Financial management</i>	0.173	0.044	0.213	3.966	0.000**

$R^2 = 0.285$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business management* of the participating businesses, namely *Human resource management*, *Supply chain management*, *Quality management* and *Financial management* in this study explain 28.5% of the variance in the *Customer satisfaction* in the participating businesses. Statistical significant relationships were found between *Human resource management* (-1.707; $p = 0.089$), *Supply chain management* (6.470; $p < 0.001$), *Quality management* (2.585; $p = 0.010$) and *Financial management* (3.966; $p < 0.001$) and the dependent variable *Customer satisfaction*. Support was therefore found for hypotheses H^{6d} , H^{7d} , H^{8d} and H^{9d} , meaning that hypotheses H^{6d} , H^{7d} , H^{8d} and H^{9d} were accepted. The significant positive regression coefficients indicate that the more effectively the *Micro environment* is managed, the more satisfied the customers of the business will be.

It has to be noted that, although significant, the correlations between *Human resource management* and *Customer satisfaction* is a negative relationship, indicating that the better human resources are being managed the less satisfied customers will be. A strong positive relationship exists between *Supply chain management*, *Quality management*, *Financial management* and *Customer satisfaction*.

6.2.5.2.4 Support

To determine whether the independent variable, *Support received*, impacts on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*, a multiple linear regression analysis was performed. Data from all

participants was captured and averages of all items were computed, with missing values automatically being replaced through mean substitution. The next regression is the effect of *Support received* on *Perceived business success* as measured through *Sustainability*.

The results of the multiple linear regression analysis are presented in table 6.43. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.43: Multiple linear regression analysis results: Impact of the independent variable *Business support* on the dependent variable *Sustainability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	3.545	0.126		28.134	0.000
<i>Business support</i>	0.070	0.042	0.096	1.681	0.094*

$R^2 = 0.006$ (** $p < 0.05$; $p < 0.10$ *)

The independent variable measuring *Support* of the participating businesses in this study explain 6% of the variance in *Sustainability* in the participating businesses. A statistical acceptable relationship were found between *Business support* (1.681; $p = 0.094$) and the dependent variable *Sustainability*. Support was therefore found for hypothesis H^{10a} , meaning that hypothesis H^{10a} was accepted. Although a weak relationship, there are positive regression coefficients indicating that, should the entrepreneur receive *Support*, the *Sustainability* of the business could be positively affected.

The result of the multiple linear regression analysis on the influence of *Support* received on *Business growth* is presented in table 6.44.

Table 6.44: Multiple linear regression analysis results: Impact of the independent variable *Business support* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.881	0.164		17.572	0.000
<i>Business support</i>	0.120	0.054	0.126	2.215	0.028**

$R^2 = 0.013$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business support* for the participating businesses in this study explain 13% of the variance in *Business growth* in the participating businesses. Statistical significant relationships were found between *Business support* (2.215, $p=0.028$) and the dependent variable *Business growth*. Support was therefore found for hypothesis H^{10b} , meaning that hypothesis H^{10b} was accepted. Positive regression coefficients exist indicating that the more *Support* the entrepreneur receives the more *Business growth* will be experienced.

The results of the multiple linear regression analysis on the influence of *Business support* received on *Profitability* are presented in table 6.45.

Table 6.45: Multiple linear regression analysis results: Impact of the independent variable *Business support* on the dependent variable *Profitability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.942	0.168		17.500	0.000
<i>Business support</i>	0.140	0.056	0.142	2.503	0.013**

$R^2=0.017$ (** $p<0.05$; $p<0.10$ *)

The independent variables measuring *Business support* for the participating businesses in this study explain 17% of the variance in *Profitability* in the participating businesses. Statistical significant relationships were found between *Business support* (2.503, $p=0.013$) and the dependent variable *Profitability*. Support was, therefore, found for hypothesis H^{10c} , meaning that hypothesis H^{10c} was accepted.

The results of the multiple linear regression analysis on the influence of *Support received* on *Customer satisfaction* are presented in table 6.46.

Table 6.46: Multiple linear regression analysis results: Impact of the independent variable *Business support* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	4.181	0.100		41.838	0.000
<i>Business support</i>	-0.023	0.033	-0.040	-0.697	0.486

$R^2 = 0.002$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business support* for the participating businesses in this study explain 2% of the variance in *Customer satisfaction* in the participating businesses. No statistical significant relationship could be found between *Business support* (-0.697 , $p = 0.486$) and the dependent variable *Customer satisfaction*. No support was found for hypothesis H^{10d} and the hypothesis H^{10d} was therefore rejected. There are no significant positive regression coefficients as only 2% of *Customer satisfaction* will be influenced by *Business support* received.

6.2.5.2.5 Market interaction

The effect of the independent variables, *Market interaction* through *Marketing* and *Customer relationship management*, on *Perceived business success* as measured through *Sustainability*, *Growth*, *Profitability* and *Customer satisfaction*, is researched through a multiple linear regression analysis. Data from all participants were captured and averages were computed, with missing values automatically being replaced through mean substitution. The next regression is the effect of *Market interaction* on *Perceived business success* as measured through *Sustainability*.

The results of the multiple linear regression analysis are presented in table 6.47. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.47: Multiple linear regression analysis results: Impact of the independent variables *Marketing* and *Customer relationship management* on the dependent variable *Sustainability of the business*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.019	0.283		3.606	0.000
<i>Marketing</i>	0.211	0.051	0.226	4.172	0.000**
<i>Customer relationship management</i>	0.501	0.076	0.360	6.636	0.000**

$R^2 = 0.247$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Market interactivity* of the business, i.e. *Marketing of the business* and *Customer relationship management* in this study explain 24.7% of the variance in the *Sustainability* of the participating businesses. As reported in Table 6.47, a significant positive relationship is evident between the *Marketing* of the business and the *Sustainability* in the participating businesses (4.172; $p < 0.001$) as well as between *Customer relationship management* and *Sustainability* of the business (6.636; $p < 0.001$). Support was found for hypotheses H^{11a} and H^{12a} . The hypotheses H^{11a} and H^{12a} were accepted.

The results of the multiple linear regression analysis on the influence of *Marketing interaction* on *Business growth* in terms of employee count are presented in table 6.48.

Table 6.48: Multiple linear regression analysis results: Impact of the independent variables *Market interaction* and *Customer relationship management* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.825	0.395		2.090	0.037
<i>Marketing</i>	0.319	0.071	0.262	4.510	0.000**
<i>Customer relationship management</i>	0.325	0.105	0.179	3.082	0.002**

$R^2 = 0.138$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Market interactivity* of the business, i.e. *Marketing of the business* and *Customer relationship management* in this study explain 13.8% of the variance in the *Business growth* in the participating businesses. As reported in Table 6.48, a

significant positive relationship is evident between the *Marketing* of the business and *Business growth* in the participating businesses (4.510; $p < 0.001$) as well between *Customer relationship management* and *Business growth* of the business (3.082; $p = 0.002$). Support is therefore found for hypotheses H^{11b} and H^{12b} . The hypotheses H^{11b} and H^{12b} were accepted.

The results of the multiple linear regression analysis on the influence of *Market interaction* on *Profitability* are presented in table 6.49.

Table 6.49: Multiple linear regression analysis results: Impact of the independent variables *Marketing* and *Customer relationship Management* on the dependent variable *Profitability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.832	0.411		2.022	0.044
<i>Marketing</i>	0.166	0.074	0.133	2.251	0.025**
<i>Customer relationship management</i>	0.486	0.110	0.260	4.421	0.000**

$R^2 = 0.113$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Market interactivity* of the business, i.e. *Marketing of the business* and *Customer relationship management* in this study explain 11.3% of the variance in the *Profitability* in the participating businesses. As reported in Table 6.49, a significant positive relationship is evident between the *Marketing* of the business and *Profitability* in the participating businesses (2.251; $p = 0.025$) as well as between *Customer relationship management* and *Profitability* of the business (4.421; $p < 0.001$). Support is therefore found for hypotheses H^{11c} and H^{12c} . The hypotheses H^{11c} and H^{12c} were accepted.

The results of the multiple linear regression analysis on the influence of market interaction on customer satisfaction are presented in table 6.50.

Table 6.50: Multiple linear regression analysis results: Impact of the independent variables *Marketing* and *Customer relationship management* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.709	0.214		7.971	0.000
<i>Marketing</i>	-0.008	0.038	-0.011	-0.210	0.834
<i>Customer relationship management</i>	0.612	0.057	0.557	10.685	0.000*

$R^2 = 0.305$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Market interactivity* of the business, i.e. *Marketing* of the business and *Customer relationship management* in this study explain 30.5% of the variance in the *Customer satisfaction* in the participating businesses. As reported in Table 6.50, no significant relationship is evident between the *Marketing* of the business and *Customer satisfaction* in the participating businesses (-0.210; $p = 0.834$). The relationship is also a negative correlation. The relationship between *Customer relationship management* and *Customer satisfaction* (10.685; $p < 0.001$) is very strong. Support is therefore found for hypothesis H^{12d} but not for H^{11d} . The hypothesis H^{12d} is accepted, but H^{11d} is rejected.

6.2.5.2.6 Business process management

Business process management permeates every section of the business (Abdolvand *et al.*, 2008: 503). While the *Entrepreneurial abilities*, the *Macro environment* and the *Micro environment*, as depicted in figure 5.3, impact on *Perceived business success*, Croom (2005: 55) held that *Business process management* is required to secure a standardised flow through input, transformation and output. The effect of *Business process management* on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*, is therefore researched through linear regression correlations.

6.2.5.2.6.1 Business process infrastructure

Another objective of this study is to prove or disprove the hypothesis that *Business infrastructure* will affect *perceived business success*. To determine whether the independent

variable *Business process infrastructure* impacts on *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*, a multiple linear regression analysis was performed. Data from all participants was captured and averages of all items were computed, with missing values automatically being replaced through mean substitution. The first regression is the effect of *Business process infrastructure* on *Perceived business success* as measured through *Sustainability*.

The results of the multiple linear regression analysis on the influence of *Business process infrastructure* on *Sustainability* are presented in table 6.51. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.51: Multiple linear regression analysis results: Impact of the independent variables *Business location*, *Facility layout* and *Technology utilisation* on the dependent variable *Sustainability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.970	0.246		8.020	0.000
<i>Business location</i>	0.135	0.065	0.122	2.075	0.039**
<i>Facility layout</i>	0.131	0.059	0.136	2.228	0.027**
<i>Technology utilisation</i>	0.257	0.054	0.270	4.776	0.000**

$R^2 = 0.164$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Business infrastructure* of the participating businesses, namely *Business location*, *Facility layout* and *Technology utilisation* in this study explain 16.4% of the variance in the *Sustainability* of the participating businesses. Statistical significant positive relationships were found between *Business location* (2.075; $p = 0.039$), *Facility layout* (2.228; $p = 0.027$) and *Technology utilisation* (4.776; $p < 0.001$) and the dependent variable *Sustainability* of the business. Support was therefore found for hypotheses H^{13a} , H^{14a} and H^{15a} , meaning that hypotheses H^{13a} , H^{14a} and H^{15a} were accepted. The significant positive regression coefficients indicate that the more effective the *Business infrastructure* is, the more *Sustainable* the business will be.

The results of the multiple linear regression analysis on the influence of *Business infrastructure* on *Business growth* with regards to employees are presented in table 6.52.

Table 6.52: Multiple linear regression analysis results: Impact of the independent variables *Business location*, *Facility layout* and *Technology utilisation* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.676	0.338		4.964	0.000
<i>Business location</i>	0.183	0.090	0.127	2.045	0.042**
<i>Facility layout</i>	0.026	0.081	0.021	0.321	0.748
<i>Technology utilisation</i>	0.246	0.074	0.198	3.337	0.001**

$R^2 = 0.073$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Business infrastructure* of the participating businesses, namely *Business location*, *Facility layout* and *Technology utilisation* in this study explain 7.3% of the variance in the *Business growth* of the participating businesses. Statistical significant positive relationships were found between *Business location* (2.045; $p = 0.042$) and *Technology utilisation* (3.337; $p < 0.001$) and the dependent variable *Business growth* of the business. No statistical significant relationship could be found between the independent variable *Facility layout* and *Business growth* (0.321; $p = 0.748$) of the participating businesses. Support was therefore found for hypotheses H^{13b} and H^{15b} , but not for H^{14b} , meaning that hypotheses H^{13b} and H^{15b} were accepted, but hypothesis H^{14b} was not accepted. The significant positive regression coefficients indicate that the more effective the *Business infrastructure* is, the more the business will grow.

The results of the multiple linear regression analysis on the influence of *Infrastructure* on *Profitability* are presented in table 6.53.

Table 6.53: Multiple linear regression analysis results: Impact of the independent variables *Business location*, *Facility layout* and *Technology utilisation* on the dependent variable *Profitability* of the business

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.369	0.337		4.069	0.000
<i>Business location</i>	0.066	0.089	0.044	0.740	0.460
<i>Facility layout</i>	0.188	0.080	0.146	2.332	0.020**
<i>Technology utilisation</i>	0.329	0.074	0.258	4.471	0.000**

$R^2 = 0.128$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Business infrastructure* of the participating businesses, namely *Business location*, *Facility layout* and *Technology utilisation* in this study explain 12.8% of the variance in the *Profitability* of the participating businesses. Statistical significant positive relationships were found between *Facility layout* (2.332; $p = 0.020$) and *Technology utilisation* (4.471; $p < 0.001$) and the dependent variable *Profitability* of the business. No statistical significant relationship could be found between the independent variable *Business location* (0.740; $p = 0.460$) and the *Profitability* of the participating businesses. Support was, therefore, found for hypotheses H^{14c} and H^{15c} , but not for H^{13c} , meaning that hypotheses H^{14c} and H^{15c} were accepted, but hypothesis H^{13c} was not accepted.

The significant positive regression coefficients indicate that the better the facility layout and technology utilisation is, the more profitable the business will be, but that business location has no significant impact on profitability.

The results of the multiple linear regression analysis on the influence of *Business infrastructure* on *Customer satisfaction* are presented in table 6.54.

Table 6.54: Multiple linear regression analysis results: Impact of the independent variables *Business location*, *Facility layout* and *Technology utilisation* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.915	0.197		14.825	0.000
<i>Business location</i>	0.018	0.052	0.021	0.346	0.730
<i>Facility layout</i>	0.173	0.047	0.228	3.673	0.000**
<i>Technology utilisation</i>	0.164	0.043	0.218	3.804	0.000**

$R^2 = 0.142$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring the *Business infrastructure* of the participating businesses, namely *Business location*, *Facility layout* and *Technology utilisation* in this study explain 14.2% of the variance in the *Customer satisfaction* in the participating businesses. Statistical significant positive relationships were found between *Facility layout* (3.673; $p < 0.001$) and *Technology utilisation* (3.804; $p < 0.001$) and the dependent variable *Customer satisfaction* in the business. No statistical significant relationship could be found between the independent variable *Business location* (0.346; $p = 0.730$) and the *Customer satisfaction* in the participating businesses. Support was therefore found for hypotheses H^{14d} and H^{15d} , but not for H^{13d} , meaning that hypotheses H^{14d} and H^{15d} were accepted, but hypothesis H^{13d} was not accepted.

The significant positive regression coefficients indicate that the more effective the *Facility layout* and *Technology utilisation* is the more satisfied the customers of the business will be, but that *Business location* does not significantly impact *Customer satisfaction*.

6.2.5.2.6.2 Business process management

To prove or disprove the hypothesis that *Business process management* will positively affect *Perceived business success* a further linear regression analysis was done between the independent variable, *Business process management*, and *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. Data from all participants was captured and averages of all items were computed, with missing values automatically being replaced through mean substitution.

The results of the multiple linear regression analysis on the influence of *Business process management* on *Sustainability* are presented in table 6.55. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 6.55: Multiple linear regression analysis results: Impact of the independent variables of *Business Process Management*, *Production*, *Human resource*, *Supply chain*, *Financial processes* and *Quality control processes* on the dependent variable *Sustainability of the business*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.529	0.264		5.799	0.000
<i>Production processes</i>	0.117	0.082	0.122	1.427	0.155
<i>Human resource processes</i>	0.133	0.071	0.141	1.863	0.064*
<i>Supply chain processes</i>	-0.101	0.078	-0.095	-1.297	0.196
<i>Financial processes</i>	0.188	0.069	0.165	2.733	0.007**
<i>Quality control processes</i>	0.246	0.092	0.227	2.663	0.008**

$R^2 = 0.233$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business process management* of the participating businesses, namely *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* in this study explain 23.3% of the variance in the *Sustainability* in the participating businesses. Statistical significant relationships were found between *Human resource management* (1.863; $p = 0.064$), *Financial processes* (2.733; $p = 0.007$) and *Quality control processes* (2.663; $p = 0.008$) and the dependent variable *Sustainability*. No significant relationship was found between *Production processes* (1.427; $p = 0.155$) and *Supply chain processes* (-1.297; $p = 0.196$) and the dependent variable *Sustainability*. Support was therefore found for hypotheses H^{17a} , H^{19a} and H^{20a} , therefore hypotheses H^{17a} , H^{19a} and H^{20a} were accepted, but hypotheses H^{16a} and H^{18a} are rejected.

The significant positive regression coefficients indicate that the more effective the *Business process management*, the more *Sustainable* the business will be, but that there are no significant relationships between *Production processes* and *Supply chain processes* and *Sustainability*.

The results of the multiple linear regression analysis on the influence of *Business process management* on *Business growth* are presented in table 6.56.

Table 6.56: Multiple linear regression analysis results: Impact of the independent variables of *Business process management*, *Production*, *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* on the dependent variable *Business growth*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	1.359	0.363		3.741	0.000
<i>Production processes</i>	0.129	0.113	0.104	1.145	0.253
<i>Human resource processes</i>	0.210	0.098	0.171	2.132	0.034**
<i>Supply chain processes</i>	-0.120	0.107	-0.087	-1.119	0.264
<i>Financial processes</i>	-0.028	0.095	-0.019	-0.295	0.768
<i>Quality control processes</i>	0.322	0.127	0.227	2.532	0.012**

$R^2 = 0.146$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business process management* of the participating businesses, namely *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* in this study explain 14.6% of the variance in *Business growth* in the participating businesses. Statistical significant relationships were found between *Human resource management* (2.132; $p = 0.034$) and *Quality control processes* (2.532; $p = 0.012$) and the dependent variable *Business growth*. No significant relationship was found between *Financial processes* (-0.0295; $p = 0.768$), *Production processes* (1.145; $p = 0.253$) or *Supply chain processes* (-1.119; $p = 0.264$) and the dependent variable *Business growth*. Hypotheses H^{17b} and H^{20b} were accepted, but hypotheses H^{16a} , H^{18a} and H^{19ba} are rejected.

The significant positive regression coefficients indicate that the more effective the *Business process management*, the more *Business growth* there will be, but that there are no significant relationships between *Production processes*, *Supply chain processes* or *Financial processes* and *Business growth*.

The results of the multiple linear regression analysis on the influence of *Business process management* on *Profitability* are presented in table 6.57.

Table 6.57: Multiple linear regression analysis results: Impact of the independent variables of *Business process management*, *Production processes*, *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* on the dependent variable *Profitability of the business*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	0.644	0.371		1.738	0.083
<i>Production processes</i>	-0.005	0.115	-0.004	-0.039	0.969
<i>Human resource processes</i>	0.130	0.101	0.103	1.295	0.196
<i>Supply chain processes</i>	0.053	0.110	0.037	0.485	0.628
<i>Financial processes</i>	0.335	0.097	0.219	3.460	0.001**
<i>Quality control processes</i>	0.181	0.130	0.125	1.395	0.164

$R^2 = 0.157$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business process management* of the participating businesses, namely *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* in this study explain 15.7% of the variance in *Profitability* in the participating businesses. Only one statistical significant relationship was found between *Financial processes* (3.460; $p = 0.001$) and *Profitability*. There is no statistical relationship between *Human resource management* (1.295; $p = 0.196$), *Quality control processes* (1.395; $p = 0.164$) or *Production processes* (-0.039; $p = 0.969$) and the dependent variable *Profitability*. Only hypothesis H^{19c} was accepted and hypotheses H^{16c} and H^{17c} , H^{18c} and H^{20c} were rejected.

The results of the multiple linear regression analysis on the influence of *Business process management* on *Customer satisfaction* are presented in table 6.58.

Table 6.58: Multiple linear regression analysis results: Impact of the independent variables of *Business process management*, *Production processes*, *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* on the dependent variable *Customer satisfaction*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.032	0.204		9.943	0.000
<i>Production processes</i>	-0.080	0.063	-0.106	-1.261	0.208
<i>Human resource processes</i>	0.035	0.055	0.047	0.638	0.524
<i>Supply chain processes</i>	0.050	0.060	0.060	0.829	0.408
<i>Financial processes</i>	0.311	0.053	0.345	5.831	0.000**
<i>Quality control processes</i>	0.208	0.072	0.243	2.903	0.004**

$R^2 = 0.261$ (** $p < 0.05$; $p < 0.10$ *)

The independent variables measuring *Business process management* of the participating businesses, namely *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes* in this study explain 26.1% of the variance in *Customer satisfaction* in the participating businesses. Statistical significant relationships were found between *Financial processes* (5.831; $p < 0.001$) and *Quality control processes* (2.903; $p = 0.004$) and *Profitability*. There is no statistical relationship between *Human resource management* (0.638; $p = 0.524$), *Supply chain processes* (0.829; $p = 0.408$) or *Production processes* (-1.261; $p = 0.208$) and the dependent variable *Profitability*. The hypotheses H^{19d} and H^{20d} were accepted, and the hypotheses H^{16d} , H^{17d} and H^{18d} were rejected.

6.2.5.3 Conclusion

In total, 80 hypotheses were accepted or not accepted through 28 linear regression correlations. In varying degrees significant relationships were found between independent and dependent variables, but some hypotheses were rejected. Conclusions drawn for the correlations will be discussed in chapter 7.

6.2.6 Results of the qualitative empirical study

Twenty respondents to the quantitative research were interviewed. The object was to determine what sets successful entrepreneurs apart from the others and to determine the presence of *Business process management* within these organisations. Interviewees were interviewed according to a template, attached as Appendix 2.

Out of the 20 respondents, 17 (85%) considered their businesses successful, while only three felt that there is too little profit, showing that entrepreneurs consider the presence of profit as the main measure of *Perceived business success*.

When asked what contributes to their business success the factors that were listed by the entrepreneurs were:

- Quality of human resources
- A strong focus on the core business
- Manufacturing efficiencies
- Increasing revenue lines
- Understanding of the market and identification of business opportunities
- Entrepreneurial drive
- Strong value systems
- A sound understanding of business and business experience
- Tenacity and determination
- Strong unique differentiator
- Commitment and integrity
- Quality management
- Finding a niche market
- Managerial talent
- Low inventory, just-in-time systems and technology
- Processes and systems
- Sales and marketing ability
- Market demand for the product
- Corporate governance
- Strong strategy

- Customer satisfaction focus

Only one entrepreneur mentioned processes and systems. Proving that successful entrepreneurs do not regard processes as an important factor in business success. Business processes are seen as a tool to achieve other success factors, such as managerial efficiencies.

Despite a difficult market, 85% of the interviewees showed business growth in headcount and turnover of between 5% and 25%. 100% of interviewees considered themselves to be entrepreneurs with entrepreneurial talent, but only 15% had any form of entrepreneurial training. 90% of these entrepreneurs considered themselves to be strategists. There is a 0.33 correlation between entrepreneurs considering themselves as entrepreneurs and *Perceived business success*. There is, however, almost no correlation (0.096) between *Business growth* or *Profitability* and entrepreneurial training, with exactly the same correlation between *Perceived business success* and *Strategic abilities*.

Only 60% of interviewees showed *Leadership abilities* from a young age. There is no correlation between *Leadership abilities* at a young age and *Perceived business success*. Most of the entrepreneurs who did not show *Leadership abilities* at all are still successful in business. Only 55% of the entrepreneurs felt that they have a cohesive team. The correlation between team cohesiveness and *Perceived business success* is 0.34. Team cohesiveness therefore has a definite effect on *Perceived business success*. Staff turnover was very low for all entrepreneurs, ranging from 0% to 10% per annum.

It was found that suppliers are chosen upon quality of delivery, price, value for money, culture, reliability and product fit. *Quality management* is executed through testing, spot checks and certification, as well as customer satisfaction surveys. Other measure of *Quality management* include variance reporting, returns and warranty data and performance appraisals.

Only one company out of 20 said that *Quality management* is not a focus in the company. That company is still successful in that it showed *Profitability* and *Business growth* over the last financial year. Only 30% of the respondents received financial *Support*, but all report to have received non-financial *Support* and mentorship.

There is hardly any relationship between financial training and *Perceived business success* and a similarly weak relationship between *Marketing awareness* and *Perceived business success*. Amongst the successful businesses there is a strong focus on sales, with sales being handled through representatives, by the business owner personally, through the website, telesales and e-mail campaigning. Contact with current clients is maintained through functions, conferences, regular meetings, electronic contact, newsletters, superior service ethics, delivering according to customer requirements and in some cases project teams are constantly on site at the customer.

A clear characteristic of these successful businesses is very high customer retention, between 80% and 100%. Each one of them uses technology in some form or another. The most prominent technology is Enterprise Resource Management (ERP), accounting systems, workflow systems, customer relationship management (CRM) systems and social media tools.

There is a high awareness of *Financial management* and sales, as well as the characteristics needed by an entrepreneur to succeed. The strongest relationship found was between *Perceived business success*, employee turnover and team cohesiveness. According to the qualitative study it seems as if people matter more than processes, but that processes are necessary to ensure efficiencies and quality throughout the organisation.

6.3 SUMMARY

The empirical study, developed in line with the literary study, focused on very small, small and medium-sized businesses in Gauteng. The empirical study strived to gain insight into the effect of independent variables on *Perceived business success*. Through the empirical research the correlations between independent variables and dependent variables were drawn after a factor analysis determined the reliability and validity of the measurement instrument.

The independent variables are divided into four categories, *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*. *Entrepreneurial abilities* comprised of three factors: *Entrepreneurial abilities*, *Leadership abilities* and *Strategic abilities*. The *Macro environment* as an independent variable

comprised of two factors: *Political stability* and the *Competitive landscape*. The *Micro environment* was divided into *Business management* comprising of four factors: *Human resource management*, *Financial management*, *Supply chain management* and *Quality control*, as well as *Support* and *Market interaction* which was made up of two factors: *Marketing* and *Customer relationship management*. The last group of independent variables is *Business process management* which is divided into two categories, *Business process infrastructure* comprising of three factors: *Business location*, *Facility layout* and *Technology utilisation* and *Business process management* comprising of five factors: *Production processes*, *Human resources processes*, *Financial processes*, *Supply chain processes* and *Quality control processes*.

All criteria were met to ensure the research was conducted according to research principles. It was hoped that, through the research, entrepreneurs in South Africa will gain some insight into the creation of entrepreneurial success as well the measurements of *Perceived business success* in order to more accurately predict outcomes.

The study was based on a sample of 308 entrepreneurs who were all respondents to a quantitative survey. Twenty of the respondents were interviewed for qualitative research. The majority of the respondents were between 40% and 59% and 76.8% of the respondents were male. Respondents were mostly educated, with 23.4% with post matric qualifications. Most of the businesses had between 11 and 25 employees, but the sizes of businesses ranged between five and 200 employees. The ages of businesses ranged from start up to businesses that have been in existence for more than 30 years. Most businesses were private businesses or closed corporations and turnovers ranged from under R2 000 000 (two million rand) to R1 000 000 000 (one hundred million rand).

The findings and recommendations of the study will be described in chapter 7.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

Carree and Thurika (2002: 3) describe successful entrepreneurship as the solution to poverty and a vehicle for employment creation. Glaeser *et al.* (2010: 1) agreed that entrepreneurs have a direct impact on the local economy. Naudé (2010: 33) also contended that entrepreneurship is the answer to break down barriers to wealth creation.

The purpose of this chapter is to provide a conclusion to the empirical and literary study with regards to the variables impacting on *Perceived business success*. The chapter will provide recommendations to facilitate entrepreneurial success and provide a guideline of what entrepreneurs could focus on to enhance business success.

In answering the research questions, whether business process-related factors such as, *Entrepreneurial abilities, Leadership abilities, Strategic abilities, the Macro environment, the Micro environment, Business management and Support received*, will impact on *Perceived business success*, a contribution will be made to the body of knowledge with regards to entrepreneurship. The development of a guideline about the required focus areas to enhance the chance of business success will be developed.

The main purpose of this study was to investigate the impact of various independent variables on the dependent variable, *Perceived business success* measured by *Sustainability, Business growth, Profitability and Customer satisfaction*. Once it is determined which factors will have a major effect on business success, a guideline can be established to lead entrepreneurs to focus on the correct areas of business in order to enhance business success.

7.2 CONCLUSIONS

In this section conclusions will be drawn based on literature review and the findings of the quantitative and qualitative empirical research.

7.2.1 Demographics

7.2.1.1 Biographical information of respondents

7.2.1.1.1 Age group classification of the respondents

The majority of the participating entrepreneurs were between 40 and 59 years of age with 28% being between the ages of 40 and 49. Thirty percent of the entrepreneurs were between 50 and 59. Only 16.29% were over 60 years of age. A total of only 5.54% (17) of the respondents were younger than 29 years old and 19.54% were between 30 and 39 years of age, showing that as entrepreneurs get older they are more likely to take the risk of entrepreneurship, or they are more confident about their abilities. The trend increases further until the entrepreneurs are in their fifties, where it starts declining again after 59 years of age.

7.2.1.1.2 Gender

Seventy six percent of participants were male and only 23% were female. This could indicate that entrepreneurship is still more male driven.

7.2.1.1.3 Marital status

A total of 76% percent of the respondents were in stable marriages. This could indicate that being in a stable relationship is more conducive to entrepreneurship.

7.2.1.1.4 Highest academic qualifications

Only 2% of the entrepreneurs did not have a Grade 12 qualification. There is quite an even distribution between the rest of the highest educational levels with 19.81% having a Grade 12 qualification, 10.71% with a certificate and 24.35% with a diploma. Nineteen point eighty one percent had a university degree, while 23.38% had a post-graduate degree. The results show that people at all levels of education can enter the entrepreneurial field, but people without a Grade 12 qualification might not have the confidence to do so. Education, no matter at which level will contribute towards the success of the business.

7.2.1.2 Structure of the participating businesses

7.2.1.2.1 Classification of the business

Businesses were classified into small, medium and large enterprises according to the Amended National Small Business Act 102 of 2004. One of the criteria for business classification is the number of permanent employees employed by the business. A business with five to ten employees is classified as very small, 11 to 50 are small and 51 to 200 are medium. Therefore all businesses with less than 50 employees are classified as small, including very small and micro businesses. The bulk of the businesses (36%) had between 11 and 25 employees, a further 17% had between 5 and 10 employees and 14% employed between 26 and 50 employees. Therefore, 49% of the participants were classified as small businesses.

7.2.1.2.2 Years since inception of the business

As *Sustainability* is one of the measures of *Perceived business success* used for the purpose of this study, the years since inception of the businesses of respondents were determined. Out of 308 respondents only 2% were relatively new businesses and 19% had been in business for between six and 10 years. Thirteen percent had been in business for between 11 and 15 years and 19% had been in business for between 16 and 25 years. Sixteen percent had been in business for between 26 and 30 years and 15% had been in business for more than 30 years. Although the GEM report (Bosma & Harding, 2007: 18) showed that only 3.6% of entrepreneurial businesses survive, which is consistent with further GEM reports (Herrington *et al.*, 2011: 4), the outcome of this study shows that once the business has survived past the start-up phase, which according to Herrington *et al.* (2011: 4) is three and a half years, there is better hope of surviving past 30 years.

7.2.1.2.3 Legal status

Fifty one percent of the respondents operated their businesses as private companies and 33% operated as closed corporations (CCs). No franchises or franchisors took part in the survey, but 8.12% of the participating businesses were proprietorships. Only 1.3% of the businesses

were partnerships and 4.88% public companies. There were only two trusts and two co-operatives represented amongst the businesses that took part in the study.

The conclusion can be reached that 84.37% of entrepreneurial businesses are either private companies or closed corporations (CCs).

7.2.1.2.4 Turnover

Turnover is another criterion of business classification by the Amended National Small Business Act of 102 of 2004. Very small businesses have an annual turnover of at least R1 000 000 (one million rand), while small businesses have an annual turnover of R15 000 000 (fifteen million rand) and medium businesses between R50 000 000 (fifty million rand) and R200 000 000 (two hundred million rand). Most of the businesses that took part in the survey had a turnover of R2 100 000 (two million one hundred thousand rand) to R5 000 000 (five million rand). Only 10% had a turnover of lower than R2 million, therefore 10% of the businesses were very small, 40% were small businesses and 50% were medium-sized businesses.

7.2.1.2.5 Infrastructure

The conclusion can be drawn that most entrepreneurs in Gauteng are satisfied that the infrastructure is sufficient to conduct business and that *Perceived business success* is not hampered by a lack of infrastructure. There are 88% of the participating entrepreneurs that find that electricity supply is sufficient, with only 12% feeling that a lack of electricity supply is affecting their chances of business success. Furthermore, 96% of entrepreneurs feel that water supply is sufficient, with only 3.57% complaining about water supply. The road infrastructure is sufficient according to 86.69% of the respondents, with only 13.31% asserting that problems with the roads are affecting their businesses. With regards to telephone infrastructure, 87.99% are satisfied and 74.35% are happy with the broadband supply and connectivity. Only 12.01% of entrepreneurs are unhappy with phone infrastructure and 25.65% are unhappy with the broadband supply. It can therefore be concluded that, in general, entrepreneurs in Gauteng do not have the perception that there is a lack infrastructure supply in Gauteng and this is therefore not significantly affecting entrepreneurial success rates.

7.2.2 Independent variables identified

Through the literary research, as well as the qualitative and quantitative empirical study, variables impacting on *Perceived business success* were identified. These variables could be grouped into four categories, the first of these categories is *Entrepreneurial abilities*, measured through *Entrepreneurial attributes* which include issues such as knowledge, experience, managerial skill, the ability to identify business opportunities, motivation and the ability to handle stress. *Leadership abilities* and *Strategic abilities* were also identified as variables measuring *Entrepreneurial abilities*.

Through the literary and empirical study independent variables measuring the *Macro environment* impacting on *Perceived business success* were identified as *Political stability*, *Governmental regulations*, *Compliance requirements* and the *Competitive landscape*, including competition in the market and market receptiveness.

Variables in the *Micro environment* identified through the study were *Business management*, comprising of *Human resource management*, *Supply chain management*, *Quality management* and *Financial management*. It was found that *Support received* would also impact on *Perceived business success*. *Market interaction*, including *Marketing* and *Customer satisfaction* were also found to have an impact on *Perceived business success*.

The empirical and literary study gave special focus to *Business process management* as an independent variable. Lindsay *et al.* (2003: 1015) held that the road to business success is the successful implementation of business processes. Smith *et al.* (2010: 326) showed that it is only through *Business process management* that the variables in delivery can be eliminated. Trkman (2010: 125) concurred that *Business process management* is important, but warned that the real significance of the effect has yet to be determined. Through the literary and empirical study, independent variables possibly affecting *Perceived business success* were identified as *Business process infrastructure*, measured through *Location decisions*, *Facility layout* and *Technology utilisation*. The variable *Business process management* comprised of *Production processes*, *Human resources processes*, *Supply chain processes*, *Quality control processes* and *Financial processes*.

Once selected variables impacting on *Perceived business success* were identified through the literary research, the quantitative and qualitative empirical research was used to determine the effect of each of the variables on *Perceived business success* as measured through *Sustainability, Business growth, Profitability* and *Customer satisfaction*.

7.2.3 Qualitative research

Of the 308 respondents, 20 were randomly chosen to be interviewed. The objective of the qualitative research was to determine what sets successful entrepreneurs apart from less successful entrepreneurs. Out of the 20 interviewees, 17 considered their businesses to be successful. The entrepreneurs who did not consider their businesses to be successful cited *Profitability* as the reason for the lack of *Perceived business success*.

There were many reasons for success given by the entrepreneurs. Twenty interviewees cited 21 reasons for success. The conclusion can be drawn that every entrepreneur considers a different factor as a reason for success and that there is no universal “recipe” for business success amongst entrepreneurs. This finding concurs with scholars such as Rogoff *et al.* (2004: 364) and Watson *et al.* (1998: 223) that business success is attributable to a complex set of interrelated factors and that a clear definition of business success has not yet been found. As early as 1987 scholars such as Jemison (1987: 1093) sought the elusive component securing business success. Jemison (1987: 1093) showed that success is not based on a specific set of attributes but on a variety of different factors implemented in the correct combination.

Of the 20 interviewees, 50% cited human factors, such as the quality of human resources, a strong focus, entrepreneurial drive and strong value systems as reasons for success. Twenty five percent cited production-related factors and 25% cited marketing-related factors. This shows that most entrepreneurs believe that the human element in a business is what drives success.

The interviewees all considered themselves to have entrepreneurial talent, but only 15% had entrepreneurial training. Only 60% of the interviewees showed leadership capabilities from a young age, yet the 40% of interviewees who did not show leadership abilities at a young age

still perceived their businesses to be successful. Herrington *et al.* (2011: 4) cited a lack of entrepreneurial training as a reason for failure in the GEM report of 2010. The conclusion can be drawn that entrepreneurs can still achieve business success without natural *Leadership abilities* or training.

Entrepreneurs consider team cohesiveness as the main reason for business success and staff turnover is low at the interviewees considering their businesses to be successful. Naquin and Tynan (2003: 332) considered teamwork and cohesiveness as the top priority in human resources. Beal *et al.* (2003: 989) indicated that it is necessary to capitalise on team cohesiveness in order to affect business success positively and Huang (2009: 786) insists that the makeup of every team should be aligned with, and work towards, achieving organisational goals. The literature is therefore in line with how important the entrepreneurs perceived team cohesiveness. It can be concluded that team cohesiveness has a major impact on business success.

The 20 interviewees gave ten criteria according to which suppliers were chosen. These criteria can be grouped into price, quality, fit between client and supplier and BEE rating. It can be concluded that, in order to create business success, it is important to create a fit with clients and provide the appropriate quality at an acceptable price. Through the literary research, *Customer satisfaction* was identified as a measure of *Perceived business success* (Timmons & Spinelli, 2009: 249). Goodale *et al.* (2011: 116) suggested moving away from the traditional manner of conducting research where scientists and innovators are working in isolation and rather involving customers in product or service development in order to deepen the relationship between the two organisations.

All interviewees held that quality is a priority focus area in their organisations and that quality processes are in place. Such quality processes included inspection, certification, customer satisfaction measurements and performance appraisals. The interviewees that cited quality as a strong focus all perceived their businesses to be successful. It can therefore be concluded that the relationship between *Quality management* and *Perceived business success* is strong, which concurs with Combe and Greenley (2004: 1456) who call for superior quality of product and service in order to be successful.

To summarise, according to the 20 entrepreneurs interviewed, 17 perceived their businesses as successful. The main ingredients of *Perceived business success* mentioned are *Quality management*, *Technology utilisation*, team cohesiveness and being a preferred employer, relating to low employee turnover. *Leadership ability* is considered a strong factor in creating business success, but leadership potential is not always realised from a young age. Entrepreneurs that considered their businesses as successful mostly base such perception on *Profitability* and *Customer satisfaction*. According to feedback from interviewees, entrepreneurial training does not have a huge impact on *Perceived business success*, but being able to deliver high quality at the most cost effective price are two factors that would increase turnover and customer retention, therefore enhancing the probability of business success.

7.2.4 Determining the viability and reliability of the questionnaire

7.2.4.1 Questionnaire measuring the dependent variable *Perceived business success*

The four factors extracted measuring the dependent variable *Perceived business success* were *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. Out of 22 items 20 loaded greater than 0.350, ranging between 0.397 to 0.917. According to Field (2009: 643), loadings smaller than 0.350 are not significant and should therefore be discarded.

Eleven items loaded significantly onto the factor *Sustainability*, of which three were intended to measure the original latent variable *Market position*. Two items loaded onto two of the factors, but higher for *Sustainability* and were therefore used for the *Sustainability* measurement. Three items loaded significantly onto the factor labelled *Business growth*, *Profitability* and *Customer satisfaction* each.

Two items were deleted due to loading smaller than 0.350. These items were “**I see the business as a legacy handed to the next generation**” (Sus2) and “**Employees are committed to the business**” (Sus5). No items loaded significantly onto the original latent variable *Market position* therefore *Market position* was deleted as a factor.

Cronbach alpha coefficients calculated for the four factors were all above the 0.70 cut-off, which according to Adcock and Collier (2001: 529) is sufficient. The Cronbach alpha coefficients calculated were:

- *Sustainability* – 0.922
- *Business growth* – 0.889
- *Profitability* – 0.890
- *Customer Satisfaction* – 0.704

The Cronbach alpha coefficients calculated therefore shows that there is internal consistency between the items measuring the variables indicating acceptable reliability of the measuring instrument. That means in practice that should the research be repeated, the results will be similar.

7.2.4.2 Questionnaire measuring the independent variables

Twenty factors were analysed. Insignificant items with a factor loading smaller than 0.350 were deleted (Field, 2009: 643). Extracted factors are *Entrepreneurial abilities*, *Leadership abilities*, *Strategic abilities*, *Political stability*, *Competitive landscape*, *Human resource management*, *Supply chain management*, *Quality management*, *Financial management*, *Support*, *Marketing*, *Customer relationship management*, *Business location*, *Facility layout*, *Production processes*, *Quality control processes*, *Financial processes*, *Human resource processes*, *Supply chain processes* and *Technology utilisation*. The factor analysis was done through the Kaiser-Meyers-Olkin measure of sampling adequacy and a Bartlett's test of sphericity was calculated.

Furthermore, as a general rule, factor loadings for a sample size of 300 should be greater than 0.350 and the KMO test should be above 0.05. The Bartlett's test should be as low as possible, but is rejected at 0.05 (Zikmund & Babin, 2007: 323). With regard to the factors extracted measuring the independent variables in this study all Bartlett's tests were smaller than 0.001, showing that the group variances are equal to the lowest KMO test. The KMO test for the variable *Supply chain* for instance was 0.549, but most were 0.6 or 0.7 and a couple were above 0.8, showing that patterns of correlations are compact and that a factor analysis will yield distinct and reliable factors. According to Field (2009: 788), values

between 0.5 and 0.7 are mediocre and values above 0.7 are good. Values between 0.8 and 0.9 are superb. Welman and Kruger (2001: 98) held that when the relevant tests are within the required parameters it is possible to interpret observed changes in linear regression analysis and attribute the variances in the dependent variable with greater confidence.

With regard to the reliability of the items measuring the independent variables, the Cronbach alpha coefficient values should not be lower than 0.7 in order to indicate good reliability. Out of the 20 constructs, three obtained Cronbach alpha coefficient values lower than 0.7, i.e.:

- *Entrepreneurial attributes* – 0.664
- *Supply chain management* – 0.693
- *Business location* – 0.682

All three of these constructs were only marginally below 0.7 and still above 0.6, which is still acceptable, although questionable according to Field (2009: 628).

Based on the fact that the factor loading for all remaining items in all the constructs were greater than 0.350, the Cronbach alpha coefficients calculated were all acceptable, the lowest KMO test was 0.549, and all Bartlett's tests were smaller than 0.001, the measurement instrument can therefore be regarded as being valid and reliable and the results of the study could therefore be statistically analysed through linear multiple regression analysis.

7.2.5 Relationship between variables

According to Cooper and Schindler (2008: 115), multiple linear regression analysis is used to predict the effect on a dependent variable by several independent or explanatory variables. It allows for the simultaneous investigation of the effect of two or more independent variables. A linear regression analysis was performed to see whether the independent variables, as identified in this study, had a significant influence on the dependent variable *Perceived business success* as measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. Twenty eight regression models were used to prove or disprove 80 hypotheses.

The effect of the independent variables on the dependent variable was tested through the coefficient of determination (R^2), showing the measure of predictability of a future outcome based on the effect of the independent variables. According to Field (2009: 167), the R^2 is a measure of how much the independent variable will affect the dependent variable, but such measure would be more than what would be expected by chance. In other words, the correlation coefficient (R^2) shows that for every unit increase in entrepreneurial abilities, there will be a unit increase in the dependent variable. A correlation coefficient is measured between 1 and -1.

Due to the fact that the correlation is drawn from a sample it was important to determine the significance, or p -level. In this study a p -level of $p < 0.005$ is considered a strong significance and $p < 0.10$ is seen as acceptable. A p -level greater than 0.10 would result in a rejection of the hypothesis, as it would indicate that any correlation between the two variables could be due to chance and not necessarily due to the effect of the independent variable on the dependent variable. The ideal would be a t -value > 1.96 , coupled with a p -value < 0.1 and preferably $p < 0.05$ to be considered to be predictable outside of the sample (Field, 2009: 637).

The results of all of the regressions are discussed in the paragraphs below.

7.2.5.1 Entrepreneurial abilities

The effect of *Entrepreneurial abilities* on *Perceived business success* was measured by calculating the relationship between *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* and *Perceived business success*. The correlation coefficient for *Entrepreneurial abilities* shows that there is a correlation of 0.257 between *Entrepreneurial abilities* and *Sustainability* of the business, 0.175 between *Entrepreneurial abilities* and *Business growth*, 0.119 between *Entrepreneurial abilities* and *Profitability* and 0.106 between *Entrepreneurial abilities* and *Customer satisfaction*.

The Multiple Regression Analysis reveals that the factors: *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* exert a positive influence on all four factors of the dependent variable. It can therefore be concluded that the stronger the *Entrepreneurial attributes*, *Leadership ability* and *Strategic ability* are, the more sustainable the business will be, the more likely the business is to grow and the more profitable the business would be. It

also indicates that the customers will be more satisfied. In line with these findings, Lin *et al.* (2006: 168-181) held that successful entrepreneurs are able to adjust strategies according to their capabilities, the human capital available and the *Macro environment*. Low and Abrahamson (1997: 142) cite variables that could impact on *Perceived business success* as growth orientation, a positive entrepreneurial culture and sound strategy.

The t-test and *p*-level for the correlation between strategic abilities and all measures of *Perceived business success* are not significant and therefore the hypotheses were rejected. There is a significant relationship between *Leadership ability* and *Profitability*, with $p=0.013$, and an acceptable relationship between *Entrepreneurial attributes* and *Profitability* with $p=0.063$ but the hypotheses for *Strategic ability* was rejected. There is therefore no significant relationship between *Strategic ability* and *Profitability*. The same was true for the correlation between *Entrepreneurial abilities* and *Customer satisfaction*. The only significant relationship is between *Leadership ability* and *Customer satisfaction*, indicating that, although the analysis shows that there are positive relationships between the independent variables and the dependent variable, the effect of *Strategic ability* and *Perceived business success* could be by chance. Causality could only be proved between *Entrepreneurial attributes* and *Sustainability*, *Business growth* and *Profitability* and between *Leadership ability* and all four measures of *Perceived business success*. No causal relationship could be empirically proven between *Strategic ability* and *Perceived business success*.

The conclusion can be drawn that the entrepreneur has a significant effect on business success, but that *Strategic ability* does not contribute towards improving any measure of business success as used in this study. While the *Entrepreneurial abilities* will cause an improvement in *Sustainability*, *Business growth* and *Profitability*, it will not improve *Customer satisfaction*. *Leadership ability* plays the most significant role in achieving business success. These findings are in contrast with Joyce *et al.* (2003: 69) who identified *Strategic ability* as a factor contributing towards *Perceived business success*. It is also contradictory to the findings of Cassar (2006: 610) that a growth strategy will create *Profitability*. The findings are in line with Ireland and Webb (2007: 49) who held that *Leadership ability* will harness business success and innovation.

In summary, the empirical and literary research shows that entrepreneurs should focus on developing *Entrepreneurial attributes*, such as entrepreneurial knowledge, tenacity and an

ability to handle stress, in order to create *Sustainability*, *Business growth* and *Profitability*, but that *Customer satisfaction* should be achieved through other factors. *Strategic ability* has no impact on *Perceived business success*, which could be due to the fact that strategy could be developed, but not implemented. In order to affect business success positively, entrepreneurs should focus on developing *Leadership abilities*.

7.2.5.2 Macro environment

The correlations between the *Macro environment* and *Sustainability* (0.364), *Business growth* (0.166), *Profitability* (0.153) and *Customer satisfaction* (0.168) are positive. Therefore, 36.4%, 16.6%, 15.3% and 16.8% of the variance in *Perceived business success* will be explained by the *Political stability* and the *Competitive landscape* respectively. The relationship between *Political stability* and any of the *Perceived business success* measures is insignificant, but the *Competitive landscape* has a significant effect on *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. This finding is in contrast with the theory of Lin *et al.* (2006: 169) who held that macro environmental factors such as environmental hostility, political stability and complexity of corporate governance would impact on business success. Dimitratos *et al.* (2004: 19) also identified that *Macro environment* factors, such as *Political stability*, affect the entrepreneur's chances of business success. However, Kiss *et al.* (2012: 266) believed that a social environment and a positive competitive landscape are conducive to business success, which is in line with the empirical findings with regards to the *Competitive landscape*.

While there is a positive correlation between the *Macro environment* and *Perceived business success*, the relationship between *Political stability* and any of the factors measuring *Perceived business success* is not significant and can therefore be coincidental. Results show, however, that when the *Competitive landscape* becomes more positive, *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction* will increase by 36.4%, 16.6%, 15.3% and 16.8% respectively. While the scholars such as Zott (2003: 97), Hunger and Wheelen (2003: 9) predicted success according to various factors, it has been proven that the *Competitive landscape* is the factor in the *Macro environment* that will positively affect business success. Hunger and Wheelen (2003: 9) warned however that, while there is a positive correlation between a positive *Competitive landscape* and *Perceived business*

success, the ability of the entrepreneur to navigate around and through macro environmental issues will negate some of the positive or negative effects of the *Macro environment*.

It can be concluded that although the political environment the business operates in can be uncomfortable, it will not seriously affect the entrepreneur's chances of business success. The *Competitive landscape*, however, will have an effect on the entrepreneur's chances of business success. In order to create a positive competitive landscape the entrepreneur should develop an understanding of direct competitors in the market, how well the market will accept a product or a service, market positioning and whether there is a threat of new entrants in the market (Combe & Greenley, 2004: 1456).

7.2.5.3 Micro environment

The *Micro environment* is classified into *Business management*, *Support received* and *Market interaction*.

7.2.5.3.1 Business management

Business management consists of four factors, *Human resource management*, *Supply chain management*, *Quality management* and *Financial management*.

A positive correlation was found between *Business management* and all measures of *Perceived business success*, *Sustainability* ($R^2=0.184$), *Business growth* ($R^2=0.128$), *Profitability* ($R^2=0.088$) and *Customer satisfaction* ($R^2=0.285$).

The relationships between *Human resource management* (2.517; $p=0.012$), *Supply chain management* (1.677; $p=0.095$), *Quality management* (2.041; $p=0.042$) and *Financial management* (3.310; $p=0.001$) and *Sustainability* were proven to be significant. *Human resource management* also has a highly significant effect on *Business growth* (4.141; $p<0.001$). The correlation between *Supply chain management* (0.087; $p=0.931$) and *Financial management* (0.731; $p=0.465$) and *Business growth* is not significant, but the correlation between *Quality management* (1.665; $p=0.097$) and *Business growth* is moderately significant.

The only significant correlation between *Business management* and *Profitability* is between *Financial management* (1.957; $p=0.051$) and *Profitability*. All three other hypotheses were rejected proving Temtime and Pansiri's (2004: 22) theory that the performance of the business will be affected by a lack of *Financial management*. Du *et al.* (2011: 1240) found that entrepreneurs often have a lack of *Financial management* knowledge and that sound *Financial management* is the backbone of the management of the enterprise. Temtime and Pansiri (2004: 24) agreed that a lack of *Financial management* knowledge will negatively impact on business success.

The results of the empirical study show statistically significant correlations between *Human resource management* (-1.707; $p=0.089$), *Supply chain management* (6.470; $p<0.001$), *Quality management* (2.585; $p=0.010$) and *Financial management* and *Customer satisfaction*. It has to be noted that the significant statistical relationship between *Human resource management* and *Customer satisfaction* is significant and it is negative. It can be concluded that a high focus on *Human resource management* will detract from the focus on *Customer relationship management*.

The research findings agree with Zolin *et al.* (2011: 1097) who considered *Human resource management* of utmost importance in achieving success in business, but Taylor (2006: 478) warned that entrepreneurial businesses will not necessarily increase in turnover with increasing human resources. The findings are also in line with Chan (2007: 84) who warned that *Quality management* should be developed across all areas of the supply chain and Shin *et al.* (2009: 2462) agreed that quality policies would positively affect business success.

It has to be noted that *Supply chain management* has a significant relationship with *Sustainability* and *Customer satisfaction*, but not with *Profitability* or *Business growth*. This disproves Niemira and Saaty (2004: 573), who contended that cash flow would be associated with the operation of the supply chain, as it will influence dates and amounts of raw material. Johnson and Templar (2011: 88) agreed with the empirical findings that excellent *Supply chain management* will directly impact on *Perceived business success*, but did not specify that it will not impact on *Profitability* or *Business growth*.

While no statistical significant relationship exists between *Financial management* and *Business growth* it has been proven that there is a significant relationship between *Financial*

management and *Profitability* which, in turn, will affect *Sustainability* and *Customer satisfaction*. The relationship between *Financial management*, *Sustainability* and *Customer satisfaction* is more significant than that of *Profitability*.

The findings of the quantitative study agree with the finding of the qualitative study that sound *Human resource management* will positively affect all measures of *Perceived business success*. Good *Supply chain management* will positively affect *Sustainability* and *Customer satisfaction* but it will not affect *Business growth* or *Profitability*. A quality focus in the company will render the business more *Sustainable*, will positively affect *Business growth* and will lead to *Customer satisfaction*, but will not affect *Profitability*. Sound *Financial management* will positively affect *Sustainability*, *Profitability* and *Customer satisfaction* but will not affect *Business growth*. Entrepreneurs who want to enhance business success should focus on *Human resource management* as a priority. To increase *Customer satisfaction*, *Supply chain management* and *Quality management* should receive attention. *Business growth* can be achieved through sound *Human resource management*, *Quality management* and *Financial management*. The main conclusion is that, in order to become more profitable, the entrepreneur has to give attention to sound *Financial management*. No other factor of *Business management* will positively affect *Profitability* in isolation. *Financial management* is affected through sound cash flow management, record keeping, auditing, management of collection- and payment days and income versus expense control. These conclusions are in line with Denis (2004: 301) who contended that sound and conservative financial management would positively affect business success.

7.2.5.3.2 Support

Ireland and Webb (2007: 49) believed that *Support* is the most crucial factor contributing towards business success and that *Support* will positively impact on the innovativeness of the business. However, the empirical study showed that, although the correlations between *Support received* and *Sustainability* (1.681; $p=0.094$), *Business growth* (2.215, $p=0.028$) and *Profitability* (2.503, $p=0.013$) are significant, the effects of the independent variable on the dependent variable are small, with the correlation between *Support* and *Sustainability* being only 0.006, *Business growth* 0.013, *Profitability* 0.017 and *Customer satisfaction* only 0.002. The relationship between *Support* and *Customer satisfaction* is negative and not significant (-0.697 ; $p=0.486$).

While it can be understood that *Support* for the entrepreneur will not affect *Customer satisfaction*, it is surprising that only 6% of the variance in sustainability is explained by *Support received*. The general assumption would be that, when supported, the entrepreneur would be enabled to create *Sustainability*. However, the findings support the view of Clemens (2006: 72) that a good entrepreneur with tenacity and a tolerance for stress will make a success regardless of *Support received*. The results show that entrepreneurs should rather focus on the development of their own abilities (especially as leaders) and *Business management*, than rely on *Support* to sustain the business.

7.2.5.3.3 Market interaction

Market interaction consists of two independent variables, *Marketing* and *Customer relationship management*. Through the results of the empirical study it is shown that *Market interaction* has one of the most significant correlations with *Perceived business success*. The correlation coefficient between *Market interaction* and *Sustainability* ($R^2=0.247$), *Business growth* ($R^2=0.138$) and *Profitability* ($R^2=0.113$) are strongly positive. All these relationships are also shown to be statistically significant, especially the relationship between *Customer relationship management* and *Sustainability* (6.636; $p<0.001$). There is no significant relationship between *Market interaction* and *Customer satisfaction*. While all hypotheses for *Market interaction* were accepted, both hypotheses for the effect of *Market interaction* on *Customer satisfaction* were rejected. The assumption could be made that when a product or service has been marketed the customer expectations are raised. It is not surprising that the effect of *Customer relationship management* on *Customer satisfaction* is the most significant (10.685; $p<0.001$), therefore it can safely be concluded that the higher the focus on *Customer relationship management*, the more satisfied the customers will be.

The findings of the empirical study concurs with Naumes *et al.* (2007: 62) who advised that maintaining the company's marketing functions will achieve *Profitability*. The significant relationship between *Customer relationship management* and *Sustainability* also proves the point of Eisenhardt and Martin (2000: 1105) that cooperative relationships with clients will achieve business success.

It can be concluded that when there is a strong focus on *Marketing* and *Customer relationship management* the business will be more *Sustainable* and *Profitable* as well as show more

Business growth. The only aspect of *Perceived business success* which will not be positively affected by marketing is *Customer satisfaction*. Entrepreneurs should therefore not focus on *Marketing* to satisfy customers, but to open new markets and obtain new customers and, in such, positively affect *Profitability*, *Sustainability* and *Business growth*. The interconnectedness of all the factors should not be ignored. Through intensive *Marketing*, more customers will be secured which will require more employees and therefore affect *Business growth*. This is in line with the findings of Brush, *et al.* (2009: 485) that no business will be sustainable without marketing.

7.2.5.4 Business process management

Abdolvand *et al.* (2008: 503) warned that *Business process management* permeates every section of the business and Croom (2005: 55) argued that *Business process management* is required to secure a standardised output of the service or product. *Business process management*, for the purpose of this study, was divided into two sections, *Business process infrastructure* and *Business process management*.

7.2.5.4.1 Business process infrastructure

Business process infrastructure is represented by three independent variables: *Business location*, *Facility layout* and *Technology utilisation*. The correlation coefficient for the relationship between *Business process infrastructure* and *Sustainability* ($R^2=0.164$), *Business growth* ($R^2=0.073$), *Profitability* ($R^2=0.128$) and *Customer satisfaction* ($R^2=0.142$) are all positive. Therefore, sound *Business process infrastructure* will explain 16.4% of the increase in *Sustainability*, 7.3% of *Business growth*, 12.8% of *Profitability* and 14.2% of *Customer satisfaction*.

The relationships between *Business process infrastructure* and *Sustainability* is significant for all variables, especially the effect of *Technology utilisation* on *Sustainability* (4.776; $p<0.001$). While only 7.3% of the variance in *Business growth* is explained by *Business process infrastructure*, the relationships between *Business location* (2.045; $p=0.039$) and *Technology utilisation* (3.337; $p<0.001$) and *Business growth* are both statistically significant. The relationship between *Facility layout* and *Business growth* is insignificant (0.321; $p=0.748$). These findings concur with Xue *et al.* (2011: 674) who believed that sound

Business process infrastructure will include sound production planning, well planned *Facility layout* and *Business location* decisions and will positive impact on business success.

Facility layout (2.332; $p=0.020$) and *Technology utilisation* (4.471; $p<0.001$) are shown to have a significant relationship with *Profitability*, but *Business location* will not. Similarly *Facility layout* (3.673; $p<0.001$) and *Technology utilisation* (3.804; $p<0.001$) have a significant relationship with *Customer satisfaction*, but *Business location* does not have a significant relationship with *Customer satisfaction*. These findings are in line with Chapman *et al.* (2003: 630) who showed that greater cost savings can be realised through sound *Business location* and *Facility layout* planning. The results of the linear regressions prove their point with regards to *Facility layout* and *Technology utilisation*, but there is no significant relationship between *Business location* and *Profitability*. It can be concluded that there are significant relationships between *Business location*, *Facility layout* and *Technology utilisation* on *Sustainability* of the business. *Business growth* will be positively affected by *Business location* and *Technology utilisation*. *Profitability* and *Customer satisfaction* will be positively affected by *Facility layout* and *Technology utilisation*.

Technology utilisation is shown to have the most significant relationship on all measures of *Perceived business success*. This proves the point of Davenport (1993: 95) who, as early as 1993, recommended the use of technology, but warned that it is not a total solution. Ray *et al.* (2004: 27) concurred that *Technology utilisation* is crucial in the performance of the business and Shao and Lin (2001: 447) found that information technology assists the organisation in increasing efficiencies.

It can also be noted that *Business location* has no effect on *Customer satisfaction* or *Profitability*. The assumption can be made that, as long as the service or product is delivered according to customer requirements, customers are not concerned with *Business location*, which disproves Schmenner (2000: 126) who stated that *Business location* decisions are integral to business success.

The theory of Al-Mashari and Zairi (2000: 10) that the advantages of *Technology utilisation* in the execution of *Business process management* are automation, access to information, tracking ability, analytical functions and integration, which will lead to business success, is

proven by the linear regression coefficients drawn between the independent variables of *Business process infrastructure* and *Perceived business success* measurements.

The study shows that, should an entrepreneur make sound *Business location* decisions, the business will be more *Sustainable* and will achieve *Business growth*. Entrepreneurs should not rely on the location of the business to achieve *Customer satisfaction* or *profitability*. *Facility layout* on the other hand will contribute towards *Profitability* and *Customer satisfaction* as it affects the cycle times of delivery and minimises the cost of production. There is clear proof that effective *Technology utilisation* is required to positively impact on all measures of *Perceived business success*. *Technology utilisation* includes the correct choice of information technology hardware, software and production technology. It also includes the effective maintenance of technology and training of users to manage and use technology optimally.

7.2.5.4.2 Business process management

Business process management is measured through five independent variables: *Production processes*, *Human resource processes*, *Supply chain processes*, *Financial processes* and *Quality control processes*. A relative strong correlation coefficient was found between *Business process management* and *Sustainability* ($R^2=0.233$), *Business growth* ($R^2=0.146$), *Profitability* ($R^2=0.157$) and *Customer satisfaction* ($R=0.261$). It has to be noted that out of all of these variables, the biggest effect on *Perceived business success* is explained by *Business process management*, especially on *Sustainability* and *Customer satisfaction*.

The positive correlation is caused by the significance in relationships between *Sustainability*, *Human resource processes* and *Financial processes*, as well as between *Business growth*, *Human resource processes* and *Quality control processes*. The significance of the relationship between *Financial processes* and *Profitability* (3.460; $p=0.001$) is strong and could be expected. No other significant relationships exist between the independent variables of *Business process management* and *Profitability*. It can therefore be concluded that *Production processes*, *Human resource processes*, *Quality control processes* and *Supply chain processes* will not positively affect *Profitability*. This contradicts the theory of Croom *et al.* (2000: 67) that *Supply chain processes* will contribute towards business success and the

reduction in risk, especially as *Supply chain processes* do not have a significant relationship with any of the *Perceived business success* factors.

It is interesting that *Production processes* have no significant relationship with *Sustainability*, *Business growth*, *Profitability* or *Customer satisfaction*, but that *Human resource processes* and *Quality control processes* positively affect most of the dependent variables. This disproves the theory of Pyon *et al.* (2011: 3267) that business success can only be achieved through production processes and that value creation is ultimately linked with business processes. It is therefore concluded that the priority focus should be on *Human resource processes* and *Quality control processes* to enhance business success.

A high percentage of *Perceived business success* can be explained through *Business process management*. The significant relationships involve *Quality control processes*, *Human resource processes* and *Financial processes*, but *Production processes* and *Supply chain processes* have no significant effect on *Perceived business success*. While Lee (2005: 29) held that, in a quest for higher *Profitability*, organisations are forced to develop new production techniques and reduce cycle times in order to satisfy customer's growing needs, the empirical research shows that *Production processes* in isolation will not improve any of the *Perceived business success* measurements but that the integration of all the processes is required to enhance success. This finding supports the theory of Haber and Reichel (2007: 119) that *Human resource processes* is the greatest contributing factor to *Perceived business success*.

Tan (2001: 195) suggested vertical integration of all *Business process management* to realise business success without the entrepreneur having to own or produce all necessary resources. The findings of the linear regression coefficients prove this point and show that *Production processes* in isolation will have no effect on *Perceived business success*. *Financial processes* should be developed in order to affect *Profitability* positively.

In order to enhance business success, entrepreneurs should develop and maintain *Business process management*, with a special focus on *Human resource processes*, *Quality control processes* and *Financial processes*. While *Production processes* and *Supply chain processes* will enhance efficiencies and productivity, as proven by Boudreau and Ramstad (2005: 17), these processes will not directly contribute to business success.

In order to improve *Quality control processes*, total quality management should be a focus in the business, in other words, everybody in the organisation should be involved in quality control and continuous improvement. In order to enhance *Financial processes* to positively affect *Profitability*, entrepreneurs should improve the invoicing process, debt collection process, financial record keeping, financial reporting and supplier payment processes. Efficiency of *Human resource processes* includes recruitment and selection processes, the human resource administration, the on-boarding processes, performance measurement processes, policies and procedures, disciplinary procedures and ergonomics.

7.3 RECOMMENDATIONS

Through the literary and empirical study it has become obvious that the achievement of business success is a complex issue with many interrelated factors impacting thereon. This finding agrees with Watson *et al.* (1998: 223) who warned that business success is attributable to a complex set of interrelated factors that increase the probability of success. It has also become apparent that all factors impacting on business success should be applied in an integrated manner. To achieve business success requires an intensive focus and management of the various factors impacting thereon.

The measurement of *Perceived business success* can be achieved through the measurement of *Sustainability, Business growth, Profitability* and *Customer satisfaction*.

It has been found that the *Entrepreneurial abilities*, the *Macro environment* and the *Micro environment* impacts on *Perceived business success* and that *Business process management* underlies important aspects of successful businesses. The effects of selected independent variables on the dependent variable *Perceived business success* were investigated in order to show entrepreneurs which factors would enhance business success and, therefore, should receive attention. Based on the findings of this study, the following recommendations are put forward.

It is recommended that entrepreneurs focus on the development of their own characteristics, capabilities, knowledge and abilities, especially their leadership ability in order to enhance

business success. It can be highlighted that a good understanding of financial management is required to ensure the profitability of the business.

Although the influence of the macro environment on the business cannot directly be controlled, Lin et al. (2006: 168-181) warned that the best entrepreneurs can do is to navigate the business through and around factors in the macro or external environment. Through the study it has been found that the factor in the macro environment with the most impact on the success of the participating businesses is the influence of the competitive landscape. It is therefore necessary for entrepreneurs to fully understand and if possible, choose the competitive landscape the business will operate in carefully, and through a regular competitor analysis adjust according to the landscape.

The area where leadership, control and management will have the biggest impact on the success of a business is, however, the micro or internal environment. It has been found that the factors with the biggest effect on the perceived success of the participating businesses are *Human resource management* and *Quality management*. *Supply chain management* will enhance *Sustainability* of the organisation, while *Customer satisfaction* and *Financial management* will enhance *Profitability*.

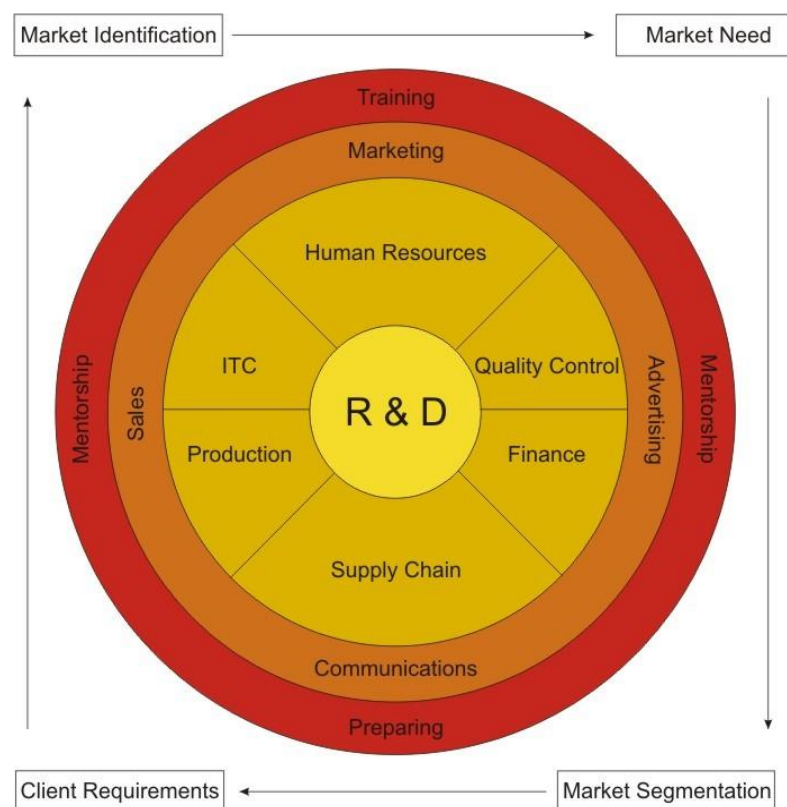
Through the qualitative research it was also found that *Human resource management* is considered the main factor enhancing business success. It was found that *Marketing* and *Customer relationship management* has a strong relationship with *Perceived business success* and should the entrepreneur strive to enhance business success, *Marketing* and *Customer relationship management* should not be neglected. *Business process management* should be implemented across the entire business and entrepreneurs should work towards integrating the various silos. Once again it is *Human resource processes*, *Quality control processes* and *Financial processes* that will impact most on business success. Efficient *Facility layout* enhances *Business success*, but effective *Technology utilisation* is of utmost importance.

The most significant relationships found during the study were between *Customer relationship management* and *Customer satisfaction* and *Sustainability*, *Competitive landscape* and *Perceived business success* as a whole, *Supply chain management* and *customer satisfaction*. These findings provide a clear guideline of which factors in business an entrepreneur should focus on in order to enhance business success. The highest correlation

coefficients were found between *Entrepreneurial abilities* and *Sustainability*, the *Macro environment* and *Sustainability*, *Business management* and *Customer satisfaction*, *Market interaction* and *Customer satisfaction* and *Business process management* and *Sustainability* and *Customer satisfaction*.

A business model developed from the literary and empirical research findings is depicted in figure 7.1 below.

Figure 7.1: Business success model



Source: Researcher's own construct

A step-by-step “success recipe” could be developed from the research conducted during this study:

1. Before starting a business the entrepreneur should develop personal entrepreneurial abilities required to enhance business success, with a special focus on leadership ability.
2. Research and development must be done to identify threats in the macro environment, and to choose the optimum competitive landscape to operate in.

3. A marketing and customer relationship strategy must receive special focus addressing the correct target market and extraction of exact customer requirements.
4. The product or service must be developed in line with customer expectations.
5. Effective facility layout must be planned.
6. Correct technology utilisation should be planned and executed.
7. Human resource capacity planning has to be executed carefully.
8. Human resource processes and policies must be in place to minimise staff turnover.
9. Quality control processes must be developed to ensure standardised output of high quality.
10. Quality control processes should run throughout the supply chain to ensure high quality on input.
11. Operational excellence must be created through business process management throughout the organisation, considering input, transformation and output.
12. All factors should be interrelated and integrated.
13. Continuous research and development and business management should create continuous improvement and total quality management.

Through following a step-by-step “recipe” towards business success, considering all the factors impacting on business success, the entrepreneur will be able to plan, lead, organise and control.

7.4 ACHIEVEMENT OF OBJECTIVES

The measure of success of the study is to which extent the objectives have been achieved.

7.4.1 Primary objective

The primary objective of this study is to identify the process related factors impacting on *Perceived business success* in small and medium-sized businesses in the Gauteng province of South Africa, and secondly to measure the effect of each independent variable on each measurement of *Perceived business success* in order to make practical recommendations and, in such, contribute to the body of knowledge.

The primary objective has been achieved through the identification of independent variables through the literary research and drawing of 28 linear regression coefficients in order to determine the relationship between each of the independent variables and *Perceived business success* measurements as the dependent variable. From the results of the empirical study, recommendations could be made and a step-by-step recipe could be developed toward enhancing business success in small and medium-sized businesses in Gauteng.

7.4.2 Secondary objectives

The first secondary objective was to define various business terms, which was done in the literary study and included in chapter 2.

The classification of small and medium-sized businesses is understood and explained in 1.2, the background of the study, as extracted from the Amended National Small Business Act No. 102 of 2004. The classification of business is also described in 1.4.3 where various terms have been defined.

Insight was gained into *Perceived business success* through the literary research and such insight was applied in the development of a business measure for the purpose of this study. *Perceived business success* was measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*.

Independent variables that could have an impact on *Perceived business success* in the SMME market were determined through the literary research. Independent variables were, according to the literary research classified into four areas: *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*. From these independent variables and the *Perceived business success* measurements, 80 hypotheses were formulated.

The impact of *Business process management* and its importance in achieving *Perceived business success* was investigated through correlations drawn and depicted in tables 6.56 to 6.59, included in chapter 6. It was proven that sound *Business process management* has a

significant relationship with *Perceived business success* and that *Human resource processes*, *Financial processes* and *Quality control processes* are the most significant.

A measure of business success was developed through the literary research. *Perceived business success* is measured through *Sustainability*, *Business Growth*, *Profitability* and *Customer satisfaction*.

Data to test the impact of the different variables on *Perceived business success* was collected through surveys conducted by questionnaires sent and interviews held. Three hundred and eight entrepreneurs took part in the research and 20 entrepreneurs were interviewed.

The extent to which the entrepreneurs are aware of the variables impacting on *Perceived business success* was determined through the questionnaires and the interviews. Suggestions made by entrepreneurs to enhance business success were in line with the empirical and literary research findings. Suggestions included: cash flow management, gaining entrepreneurial knowledge and skill, competitive and market research, awareness of the need for customer relationship management and the importance of human resource management, especially team cohesiveness. A lack of awareness of the need for *Production processes* was identified.

Validity and reliability of the measuring instrument was determined through a factor analysis using the Cronbach alpha coefficient, a Kaiser-Meyer-Olkin measure of sampling adequacy and a Bartlett's test of sphericity. It was proven that the measurement instrument was reliable and valid. Construct validity was proven

The influence of the independent variables on the dependent variable, *Perceived business success* was assessed through correlation coefficients and the significance (t-value and p-level) was determined. Hypotheses that did not show a significant statistical relationship were rejected.

The impact of each independent variable on each measure of the dependent variable, *Perceived business success*, was analysed and explained. Recommendations were made accordingly. It is hoped that through the recommendations a contribution will be made to the

body of knowledge, providing entrepreneurs with a clearer picture of how to achieve business success.

Through the achievement of the primary and secondary objectives, the research questions were answered.

7.5 SUGGESTIONS FOR FUTURE RESEARCH

Through this research, independent variables were identified and a measure for *Perceived business success* as the dependent variable was identified. Independent variables were classified into four areas: *Entrepreneurial abilities*, the *Macro environment*, the *Micro environment* and *Business process management*. *Perceived business success* was measured through *Sustainability*, *Business growth*, *Profitability* and *Customer satisfaction*. The impact of each of the independent variables on the dependent variable has been determined and recommendations have been made with regards to focus areas that will enhance the chances of business success. Further research should be done into each of the areas of the independent variables and the *Perceived business success* measurement to examine how the variables with a significant relationship with *Perceived business success* could be explored and implemented to enhance business success.

7.6 SUMMARY

It has been proven through the literary research that entrepreneurship is the solution to poverty (Carree & Thurika, 2002: 3). During chapter 7 a conclusion and recommendations from the empirical and literary research were provided. Through the conclusion and recommendations a contribution was made to the body of knowledge to enhance business success.

Three hundred and eight respondents took part in the survey and 20 entrepreneurs were interviewed for qualitative research. It was shown that the majority of entrepreneurs are between 40 and 59 years of age showing that entrepreneurs are more likely to start a business after the age of 40 and mostly retire at the age of 60. Seventy six percent of participants were male indicating that entrepreneurship is still more male driven. Seventy seven percent of the

respondents were in stable marriages. This could indicate that being in a stable relationship is more conducive to entrepreneurship. The entrepreneurs were all educated, but came from various levels of education. It cannot be said that graduation or post-graduation enhances business success.

Businesses were classified into small, medium and large according to the Amended National Small Business Act 102 of 2004. The bulk of the businesses taking part in the study had between 5 and 25 employees. Therefore, 49% of the participants were classified as small businesses. The range of years in business spanned from start-up to more than 30 years old and most of the companies were either private companies or closed corporations. The annual turnover ranged from a couple of hundred thousand to more than R50 000 000. Most entrepreneurs were satisfied with the infrastructure available.

Through the literary research independent variables were identified in four classifications: *Entrepreneurial abilities*, the *Macro environment*, *Profitability* and *Customer satisfaction*. Through the qualitative research it was found that there is no universal component of business success identified in the market, but that most entrepreneurs believe that human resources and a cohesive team are major contributors to business success. It was also found that there is a lack of awareness of the need for production processes amongst entrepreneurs, but quality has been proven to receive sufficient attention amongst entrepreneurs. It was also found that the correct utilisation of technology is considered a significant contributor to business success.

During the empirical research it was found that strong significant relationships exist between *Leadership abilities*, the *Competitive landscape* and *Perceived business success* and that *Political stability* does not have a significant impact on *Perceived business success*. With regards to *Business management processes* it is *Human resource management* and *Quality control* that will enhance *Perceived business success*. Surprisingly, *Support received* does not have a major impact, but *Marketing* and *Customer relationship management* are important factors. When researching *Business process management*, it is found that *Facility layout*, *Technology utilisation*, *Human resource management*, *Quality control* and *Financial processes* are the most significant.

It was found that both primary and secondary objectives were achieved and that all research questions were answered. It is recommended that future research should include how the significant variables can be applied in order to enhance *business success* and entrepreneurship in general.

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Measurement of the effect of business process management on business success

SME entrepreneurs

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Measurement of the effect of business process management on business success

In Africa entrepreneurship is a means of survival and a major element in the alleviation of poverty. Small to medium-sized businesses have a vital role to play in the South African economy and have become a major contributor to the creation of employment opportunities. It is therefore necessary to increase entrepreneurial success rates in South Africa. In order to do that it is necessary to find elements in business management that will positively affect the sustainability and success ratios of small-to-medium enterprises. One such an element is business process management. The relationship between documented and implemented processes and business success will be determined through this study. Criteria for process development and implementation will be developed to assist entrepreneurs to implement sound processes and, by doing so achieve business success.

By taking part in the survey the respondents will contribute towards creating entrepreneurial sustainability. We believe that through filling in the questionnaire new insights into sound management of your business will be obtained.

Please click on the link to fill in the survey.

GENERAL INSTRUCTIONS

- The questionnaire must be submitted by the business owner, general manager or operations manager.
- Please fill in all the questions
- The key is: **1** = Strongly disagree; **2** = Disagree; **3** = Neutral view; **4** = Agree; **5** = Strongly agree;
- Please select the number which best describes how you feel about the item.

DECLARATION:

I _____ declare that I am taking part in this survey as a voluntary participant. ☐

I am active in the SME market in Gauteng. ☐

I am aware that the study will not involve any sensitive questions. ☐

I am aware that no identification of participants will be supplied to any third party. ☐

I am aware that full confidentiality is ensured. ☐

No financial inducement of any kind was offered to me. ☐

SECTION A

GENERAL INFORMATION

The following information is needed to help us with the statistical analysis of the data for comparisons. All your responses will be treated confidentially.. We appreciate your help in providing this important information.

Business name:

Business address

Respondent name:

Product offered or service rendered:

Mark the applicable block with a cross (X). Complete the applicable information.

A1	In which age group do you fall?	≤ 29	1	30 - 39	2	40 - 49	3	50 - 59	4	60 +	5

A2	Gender?	Male	1	Female	2

A3	What is your marital status?	Single	1	Married	2	Divorced	3	Widow(er)	4

A4	State your highest academic qualification. Mark the applicable block with a cross (X).									
	Lower than matric									1
	Matric									2
	Certificate									3
	Diploma (Technical College or Technicon)									4
	University degree									5
	Post graduate degree									6

A5	How many permanent employees are employed by the business?													
	1-4	1	5 - 10	2	11 - 25	3	26 - 50	4	51 - 100	5	101 - 200	6	201+	7

A6	In which industry does the business operates?									
	Automotive	1	Agriculture	2	Farming	3	Construction	4	Food	5
	Property	6	Retail	7	Wholesale	8	Manufacturing	9	Services	10
	Other: (Specify):									

A7	How many years have you been in business?									
	≤ 1	1	1 - 2	2	3 -5	3	6 - 10	4	11 - 15	5
	16 - 20	6	21 - 25	7	26 - 30	8	31+	9		

A8	What is the legal status of the business?							
	Proprietorship	1	Partnership	2	Company (private)	3	Company (public)	4
	Close Corporation	5	Co-operative	6	Business Trust	7	Franchise	8

A9	Please state the annual turnover of the business													
	≤1	1	2 - 5m	2	5.1-10m	3	10.1- 15m	4	15.1-25m	5	25.1m-50m	6	50m +	7

A10	Do you believe the following infrastructure is adequate for your business								Yes	No
	Electricity								1	2
	Water								1	2
	Roads infrastructure								1	2
	Telephones								1	2
	Broadband connectivity								1	2

SECTION B

VARIABLES IMPACTING ON BUSINESS SUCCESS

Please indicate to what extent do you agree or disagree with the statements. Click on the applicable block.

		Strongly disagree	Disagree	Neutral view	Agree	Strongly agree
B1	I have formal entrepreneurial training	1	2	3	4	5
B2	I have done managerial training	1	2	3	4	5
B3	I often find new business opportunities	1	2	3	4	5
B4	I have many years' experience in being an entrepreneur	1	2	3	4	5
B5	I am motivated to make a success of my business.	1	2	3	4	5
B6	I find it easy to delegate	1	2	3	4	5
B7	I am a risk taker and often take risks in my business	1	2	3	4	5
B8	I have the ability to handle stressful situations	1	2	3	4	5
B9	I have the ability to make sound decisions	1	2	3	4	5
B10	I find it easy to lead others to share in my vision for the company	1	2	3	4	5
B11	Strategic management comes naturally to me as business leader.	1	2	3	4	5
B12	My team form a cohesive team, all working towards one goal.	1	2	3	4	5
B13	I have the ability to execute strategy.	1	2	3	4	5

B14	Employees have bought into my objectives for the business	1	2	3	4	5
B15	I can easily lead my employees through change in the business	1	2	3	4	5
B16	A growth plan has been developed and all employees have bought into it	1	2	3	4	5
B17	I have an exit strategy for when I want to retire	1	2	3	4	5
B18	I have operational training	1	2	3	4	5
B19	I consider the business environment politically stable	1	2	3	4	5
B20	The politics of the country impacts on my business	1	2	3	4	5
B21	My business is affected by the economic situation in the country	1	2	3	4	5
B22	Government compliance requirements impacts negatively on my ability to run my business	1	2	3	4	5
B23	The market is highly receptive towards my product or service	1	2	3	4	5
B24	I fully understand the competitive landscape impacting on my business	1	2	3	4	5
B25	I compare favourably to my competitors	1	2	3	4	5
B26	The competitive position of our business has improved over the last couple of years	1	2	3	4	5
B27	I have a documented recruitment process in place	1	2	3	4	5
B28	My employees have documented job descriptions and role definitions	1	2	3	4	5
B29	The performance of each employee is measured in a formal manner	1	2	3	4	5
B30	There are formal internal communications channels in place	1	2	3	4	5
B31	We are a company free of racial tension	1	2	3	4	5
B32	There are documented service level agreements with suppliers	1	2	3	4	5
B33	Dispatch works well and orders are delivered according to client requirements	1	2	3	4	5
B34	Scheduling of orders are well managed	1	2	3	4	5
B35	There are documented quality policies in place	1	2	3	4	5
B36	Employees are aware of quality requirements	1	2	3	4	5
B37	Quality is a focus throughout the organisation	1	2	3	4	5
B38	All employees understand their role in providing quality	1	2	3	4	5
B39	The business received enough financial support from financial institutions	1	2	3	4	5
B40	I have, in the past received external financial support	1	2	3	4	5
B41	At the start-up phase we were successful in raising venture	1	2	3	4	5

	capital					
B42	I have received non-financial support while running the business	1	2	3	4	5
B43	Cash management is a focus area in business management	1	2	3	4	5
B44	Our financial records are up to date and readily available	1	2	3	4	5
B45	Our books are regularly audited	1	2	3	4	5
B46	We know exactly who our target market is	1	2	3	4	5
B47	We regularly communicate with decision makers in our target market	1	2	3	4	5
B48	The business regularly appear in the media	1	2	3	4	5
B49	We regularly advertise our product or service	1	2	3	4	5
B50	We have an experienced sales team	1	2	3	4	5
B51	We often attend networking events	1	2	3	4	5
B52	We have good customer relationships	1	2	3	4	5
B53	We have high customer retention	1	2	3	4	5
B54	We hardly ever receive complaints from customers	1	2	3	4	5
B55	We spend time to understand what our customers want	1	2	3	4	5
B56	We have documented processes in place	1	2	3	4	5
B57	We regularly test customer satisfaction levels	1	2	3	4	5
B58	All employees are committed to service customers efficiently	1	2	3	4	5
B59	Productivity is measured and controlled	1	2	3	4	5
B60	We use technology to enforce processes	1	2	3	4	5

SECTION C BUSINESS SUCCESS

C1	The turnover of the business increases year on year	1	2	3	4	5
C2	Our employee count grow year on year.	1	2	3	4	5
C3	We regularly appoint new employees to keep up with the demand	1	2	3	4	5
C4	Our organisation experienced growth in profits over the past few years	1	2	3	4	5
C5	We are happy with our gross profit margin, which is in line with industry standards.	1	2	3	4	5
C6	Our net profit margins are in line with industry standards	1	2	3	4	5

C7	We show acceptable net profit	1	2	3	4	5
C8	The financial well-being of our business is secure	1	2	3	4	5
C9	Our customers are happy with our service/product	1	2	3	4	5
C10	Customer retention is high	1	2	3	4	5
C11	We don't have many returns and when we do we handle it to the satisfaction of the customer	1	2	3	4	5
C12	The competitive position of our organisation has improved over the last few years	1	2	3	4	5
C13	Our organisation experienced growth in market share over the last few years	1	2	3	4	5
C14	Our brand has strengthened in relation to our competition	1	2	3	4	5
C15	I see the business continuing into the future	1	2	3	4	5
C16	I see the business as a legacy handed to the next generation	1	2	3	4	5
C17	The business is creating wealth for stakeholders	1	2	3	4	5
C18	The business is continuously creating more employment opportunities	1	2	3	4	5
C19	Employees are committed to the business	1	2	3	4	5
C20	The business remained stable during difficult market conditions	1	2	3	4	5
C21	Our financial ratios have improved over time	1	2	3	4	5
C22	Productivity and efficiency has improved over the last couple of years	1	2	3	4	5

SECTION D

BUSINESS PROCESS MANAGEMENT

D1	Our production facility is situated close to the labour supply	1	2	3	4	5
D2	Our business is close to suppliers	1	2	3	4	5
D3	We operate in close proximity to most of our customers	1	2	3	4	5
D4	Our current location fulfil our capacity needs	1	2	3	4	5
D5	We do not experience transport or traffic problems at our current location	1	2	3	4	5
D6	Our facility layout is planned for maximum productivity	1	2	3	4	5
D7	Our production plant has been assessed by a professional operations consultant	1	2	3	4	5
D8	Down time in the production facility is at a minimum	1	2	3	4	5
D9	Raw materials flow efficiently through the plant	1	2	3	4	5
D10	Material handling cost is at a minimum	1	2	3	4	5

D11	The facility layout is conducive to creating the shortest cycle time possible	1	2	3	4	5
D12	Everybody in the organisation are aware of which processes to follow in order to deliver the product/service	1	2	3	4	5
D13	Organisational processes are mapped	1	2	3	4	5
D14	Organisational processes are mapped and followed	1	2	3	4	5
D15	Adherence to processes is incorporated into the performance management system	1	2	3	4	5
D16	Duplications and bottlenecks have been eliminated out of the production process	1	2	3	4	5
D17	We have formal maintenance processes on all machinery	1	2	3	4	5
D18	There are formal maintenance processes in production facilities	1	2	3	4	5
D19	A critical path analysis has been done on all processes	1	2	3	4	5
D20	Quality control processes are mapped into the production processes	1	2	3	4	5
D21	Every employee is aware of his/her role in providing a quality product or service	1	2	3	4	5
D22	Delivery is at a standardised level	1	2	3	4	5
D23	There is a continuous improvement plan in place	1	2	3	4	5
D24	The business delivers a standardised product and service	1	2	3	4	5
D25	All invoices are sent out timeously	1	2	3	4	5
D26	Money is collected in a processed and standardised manner	1	2	3	4	5
D27	Financial systems are working well	1	2	3	4	5
D28	Financial records are accurate and accessible	1	2	3	4	5
D29	New employees are immediately introduced to policies and procedures	1	2	3	4	5
D30	Human resource administration is well managed and data is up to date	1	2	3	4	5
D31	There are formal disciplinary procedures in place and employees are aware of them	1	2	3	4	5
D32	Processes and technology assist employees in achieving maximum productivity	1	2	3	4	5
D33	Adherence to processes from part of the performance management system	1	2	3	4	5
D34	Processes are mapped across the supply chain	1	2	3	4	5
D35	Supply chain relationships are well managed	1	2	3	4	5
D36	We hardly ever experience problems with suppliers	1	2	3	4	5

D37	Inventory is managed across the supply chain	1	2	3	4	5
D38	We have implemented business process management software	1	2	3	4	5
D39	We are happy with the technology in the factory	1	2	3	4	5
D40	All users are well trained on the necessary software	1	2	3	4	5
D41	Technology- and line managers share knowledge throughout the organisation	1	2	3	4	5

THANK YOU FOR YOUR TIME.

Appendix 2

THE INFLUENCE OF SELECTED PROCESS RELATED FACTORS ON BUSINESS SUCCESS

Qualitative research questions:

E1	Do you consider your business successful?
E2	What do you think contributes mostly to your success in business?
E3	Did your business grow over the last year? In which way?
E4	Do you consider yourself an entrepreneur?
E5	Did you have any entrepreneurial training?
E6	Do you consider yourself a strategist?
E7	Did you show leadership capabilities from a young age?
E8	Do you consider your team to be cohesive?
E9	Please stipulate the percentage staff turnover you had in the past year

E10	Please explain how suppliers are chosen
E11	How is quality measured throughout the production process?
E12	Is quality control a focus of the company?
E13	How much support did you receive and did it contribute to your success?
E14	Do you have financial management training?
E15	How important is marketing
E16	How are sales being handled?
E17	How is contact with customers established and maintained?
E18	What percentage of customer retention do you have?
E19	Please state what technology is utilised within the organisation

Appendix 3: Items measuring the dependent variables

Item	Statement
BUSINESS GROWTH	
Growth1	The turnover of the business increases year on year
Growth2	Our employee count grow year on year.
Growth3	We regularly appoint new employees to keep up with the demand
Growth4	Our organisation experienced growth in profits over the past few years
PROFITABILITY	
Profit1	We are happy with our gross profit margin, which is in line with industry standards.
Profit2	Our net profit margins are in line with industry standards
Profit3	We show acceptable net profit
Profit4	The financial well-being of our business is secure
CUSTOMER SATISFACTION	
Custs1	Our customers are happy with our service/product
Custs2	Customer retention is high
Custs3	We don't have many returns and when we do we handle it to the satisfaction of the customer
MARKET POSITION	
Mark1	The competitive position of our organisation has improved over the last few years
Mark2	Our organisation experienced growth in market share over the last few years
Mark3	Our brand has strengthened in relation to our competition
SUSTAINABILITY	
Sus1	I see the business continuing into the future
Sus2	I see the business as a legacy handed to the next generation
Sus3	The business is creating wealth for stakeholders
Sus4	The business is continuously creating more employment opportunities
Sus5	Employees are committed to the business
Sus6	The business remained stable during difficult market conditions
Sus7	Our financial ratios have improved over time
Sus8	Productivity and efficiency has improved over the last couple of years

Appendix 4: Items measuring the independent variables

Item	Statement
ENTREPRENEURIAL ABILITIES	
ENTREPRENEURIAL ATTRIBUTES	
Att1	Motivated to make a success
Att2	I am a risk taker and often take risks
Att3	Highest qualification
Att4	Has entrepreneurial training
Att5	Have done managerial training
Att6	Have done operational training
Att7	I find it easy to find new opportunities
Att8	Years of experience
Att9	How many years in business?
Att10	I have the ability to delegate
Att11	I have the ability to handle stressful situations
Att12	I have the ability to make sound decisions
LEADERSHIP ABILITIES	
Lead1	I find it easy to lead others to share my vision
Lead2	My team form a cohesive team
Lead3	Employees have bought into my objectives
Lead4	I can easily lead my employees through change
STRATEGIC ABILITIES	
Strat1	Strategic management comes easy to me
Strat2	I have the ability to execute strategy
Strat3	I have a growth plan and employees have bought into it
Strat4	In have an exit strategy for when I want to retire

MACRO ENVIRONMENT	
POLITICAL STABILITY	
Stab1	My business environment is politically stable
Stab2	The politics in the country impacts on my business
Stab3	The business is affected by the economic situation in the country
Stab4	Governmental compliancy requirements impacts negatively on my ability to run my business
COMPETITIVE LANDSCAPE	
Land1	The market is highly receptive towards my product or service
Land2	I fully understand the competitive landscape impacting on my business
Land3	I compare favourably to my competitors and seldom loose business to them
Land4	The competitive position of our business has improved over the last couple of years
MICRO ENVIRONMENT	
HUMAN RESOURCE MANAGEMENT	
Human1	I have a documented recruitment process in place
Human2	My employees have documented job descriptions and role definitions
Human3	The performance of each employee is measured in a formal manner
Human4	There are formal internal communications channels in place
Human5	We are a company free of racial tension
SUPPLY CHAIN MANAGEMENT	
Supply1	There are documented service level agreements with suppliers
Supply2	Dispatch works well and orders are delivered according to client requirements
Supply3	Scheduling of orders are well managed
Supply4	Please explain how suppliers are chosen
QUALITY MANAGEMENT	
Qual1	There are documented quality policies in place
Qual2	Employees are aware of quality requirements

Qual3	Quality a focus throughout the organisation
Qual4	All employees understand their role in providing quality
SUPPORT	
Supp1	I have, in the past received external financial support
Supp2	At the start-up phase we were successful in raising venture capital support
Supp3	I have received non-financial support while running the business
FINANCIAL MANAGEMENT	
Fin1	Cash management is a focus area in business management
Fin2	Our financial records are up to date and readily available
Fin3	Our books are regularly audited
MARKET INTERACTION	
Marketing	
Mark1	We know exactly who our target market is
Mark2	We regularly communicate with decision makers in our target market
Mark3	The business regularly appear in the media
Mark4	We regularly advertise our product or service
Mark5	We have an experienced sales team
Mark6	We often attend networking events
Customer relationship management	
Cus1	Customers are treated as important stakeholders
Cus2	We have high customer retention
Cus3	We hardly ever receive complaints from customers
Cus4	We spend time to understand what our customers want
Cus5	We regularly test customer satisfaction levels
BUSINESS PROCESS MANAGEMENT	
BUSINESS PROCESS INFRASTRUCTURE	
Business Location	
Loc1	Our production facility is situated close to the labour supply
Loc2	Our business is close to suppliers
Loc3	We operate in close proximity to most of our customers

Loc4	Our current location fulfil our capacity needs
Loc5	We do not experience transport or traffic problems at our current location
Facility layout	
Fac1	Our facility layout is planned for maximum productivity
Fac2	Our production plant has been assessed by a professional operations consultant
Fac3	Down time in the production facility is at a minimum
Fac4	Raw materials flow efficiently through the plant
Fac5	Material handling cost is at a minimum
Fac6	The facility layout is conducive to creating the shortest cycle time possible
BUSINESS PROCESS MANAGEMENT	
Production processes	
Prod1	Everybody in the organisation are aware of which processes to follow in order to deliver the product/service
Prod2	Organisational processes are mapped
Prod3	Organisational processes are mapped and followed
Prod4	Adherence to processes are incorporated into the performance management system
Prod5	Duplications and bottlenecks have been eliminated out of the production process
Prod6	We have formal maintenance processes on all machinery
Prod7	There are formal maintenance processes in production facilities
Prod8	A critical path analysis has been done on all processes
Quality control processes	
Con1	Quality control processes are mapped into the production processes
Con2	Every employee is aware of his/her role in providing a quality product or service
Con3	Delivery is of a standardised manner according to processes
Con4	There is a continuous improvement plan in place

Con5	The business delivers a standardised product and service
Financial management processes	
Finance1	All invoices are sent out timeously
Finance2	Money is collected in a processes and standardised manner
Finance3	Financial systems are working well
Finance4	Financial records are accurate and accessible
Human resource processes	
HR1	New employees are immediately introduced to policies and procedures
HR2	Human resource administration is well managed and data is up to date
HR3	There are formal disciplinary procedures in place and employees are aware of them
HR4	Processes and technology assist employees in achieving maximum productivity
HR5	Adherence to processes from part of the performance management system
Supply chain processes	
SC1	Processes are mapped across the supply chain
SC2	Supply chain relationships are well managed
SC3	We hardly ever experience problems with suppliers
SC4	Inventory is managed across the supply chain
Technology utilisation	
Tech1	We have implemented business process management software
Tech2	We are happy with the technology in the factory
Tech3	All users are well trained on the necessary software
Tech4	Technology- and line managers share knowledge throughout the organisation