

## CHAPTER 1: INTRODUCTION AND BACKGROUND TO STUDY

### 1.1 INTRODUCTION

As pointed out by Morris, Kuratko and Covin (2008:4), in today's business the external environment is constantly changing. New technologies are developed, regulations and laws change, and competition takes place on a global level. Organisations need to have strategies and practices in place to maintain a competitive advantage and achieve firm performance. "The riskiest strategy of all is simply to pursue business as usual" (Morris *et al.*, 2008:4).

In pursuit of firm performance and staying ahead of the competition, various approaches have been outlined by both the marketing and entrepreneurship disciplines. Starting in 1982, several researchers assessed the commonalities between the two fields of research and how each could benefit from the other. It has been found that both research disciplines share common constructs and concepts. Research at the interface of entrepreneurship and marketing has been termed "entrepreneurial marketing" (Collinson, 2002; Collinson & Shaw, 2001; Davis, Morris & Allen, 1991; Hills, 1994; Hills & LaForge, 1992; Hisrich, 1992). Although a common definition of entrepreneurial marketing has not been established so far, certain key aspects have been identified that bring together concepts of both disciplines (Schindehutte, Morris & Pitt, 2009:29). Various dimensions of entrepreneurial marketing have been described:

- Opportunity focus (Miles & Darroch, 2006; Morris, Schindehutte & LaForge, 2002);
- Proactiveness (Morris & Paul, 1987; Morris *et al.*, 2002);
- Risk-taking (Morris & Paul, 1987; Morris *et al.*, 2002);
- Innovativeness (Morris & Paul, 1987; Morris *et al.*, 2002);
- Resource leveraging (Hisrich, 1994; Morris *et al.*, 2002);
- Customer intimacy (Morris *et al.*, 2002);
- Value creation (Morris *et al.*, 2002) and

- Constantly renewing competitive position (Miles & Darroch, 2006).

Within the field of entrepreneurial marketing, firms can take a market-driven or a market-driving approach. A market-driven approach relates to learning, understanding and responding to customer needs in an existing market (Schindehutte *et al.*, 2009:37). Market driving, on the other hand, has been described as an approach that considers existing and new markets, tries to shape, change, or create the market and/or behaviour of all stakeholders involved (Barlow Hills & Sarin, 2003; Harris & Cai, 2002; Jaworski, Kohli & Sahay, 2000; Kumar, Scheer & Kotler, 2000; Schindehutte *et al.*, 2009).

As will be outlined in chapter three in the literature review, several researchers have been concerned with describing the essential factors of market driving, as well as its antecedents and consequences. However, the construct of market driving is not well understood and requires further research, especially regarding the measurement of market driving, influencing factors on market-driving ability and outcomes of a market-driving approach (Barlow Hills & Sarin, 2001, 2003; Carrillat, Jaramillo & Locander, 2004; Ghauri, Tarnovskaya & Elg, 2008; Harris & Cai, 2002; Jaworski *et al.*, 2000; Kumar *et al.*, 2000; Schindehutte, Morris & Kocak, 2008).

The purpose of this study is to develop a measure for market driving and determine firm-internal factors that influence an organisation's market-driving ability in the South African healthcare industry.

This chapter provides an introduction to the research. It will briefly outline the literature review, the research problem, the purpose of the study, research objectives, hypotheses, research methodology and importance and benefits of the study. An outline of chapter two to seven of this study is presented.

In this study it was found that various terms were used by different authors, such as business, firm, organisation or corporation. These terms are used for businesses that follow a profit-seeking purpose. The study will also describe various constructs and concepts in the field of entrepreneurship and marketing. Diamantopoulos and Schlegelmilch (2000:21) describe a concept as an "... abstraction formed from

observations from numerous particular happenings.” A construct refers to “... concepts that have been consciously and deliberately invented for particular scientific purposes.” It is further noted that “... the terms ‘concept’ and ‘construct’ are often used interchangeably”. Various authors cited in this study use the terms interchangeably. A clear distinction between the terms will be made for the development of the market-driving framework.

## **1.2 LITERATURE REVIEW**

The literature review will present a brief overview of the definitions of entrepreneurship, corporate entrepreneurship, marketing and entrepreneurial marketing. The antecedents and consequences of an entrepreneurial and a market orientation will be outlined in order to establish the conceptual model of market-driving ability in corporate entrepreneurship. This is followed by a discussion of various instruments to measure entrepreneurial and market orientation.

### **1.2.1 Defining entrepreneurship, corporate entrepreneurship, marketing and entrepreneurial marketing**

Researchers have analysed entrepreneurship from a content and process perspective (Churchill & Muzyka, 1994:16). The process of entrepreneurship involves opportunity identification and evaluation, the development of a business plan, assessing the required resources and finally the management of the firm (Hisrich, Peters & Shepherd; 2008:9). One aspect that is considered by various researchers is the value-creation aspect of entrepreneurship (Churchill & Muzyka, 1994; Gartner, 1990; Ireland, Hitt, Camp & Sexton, 2001; Morris, 1998).

For the purpose of this study, entrepreneurship is considered as “... the process through which individuals and teams create value by bringing together unique packages of resource inputs to exploit opportunities in the environment. It can occur in any organisational context and results in a variety of possible outcomes, including new ventures, products, services, processes, markets and technologies.” (Morris, 1998:16).

Sharma and Chrisman (1999:18) describe the difference between “independent entrepreneurship” and “corporate entrepreneurship”. Independent entrepreneurship relates to activities creating a new organisation without any connection to an existing organisation. Corporate entrepreneurship refers to activities in corporate venturing and strategic renewal. Corporate venturing has been described as adding a new business to the corporation. Strategic renewal or strategic entrepreneurship relates to activities and processes that target change in the organisation’s business, its strategy or structure, to create value (Guth & Ginsberg, 1990:6; Morris *et al.*, 2008:80; Sharma & Chrisman, 1999:18).

Kuratko and Morris (2003:26) consider corporate entrepreneurship as a “... framework for the facilitation of ongoing change and innovation in established organisations”.

For the purpose of this study, corporate entrepreneurship is considered as a broader framework in which strategic renewal activities, such as innovation, risk-taking and proactiveness are performed to achieve firm performance and a competitive advantage.

Marketing has a rich history of schools of thought that have been used to describe marketing’s purpose and activities (Sheth, Gardner & Garrett, 1988). While marketing has in the past been strongly associated with consumer behaviour, the strategic focus is becoming more important in order to achieve firm performance and competitive advantage (Barrett, Balloun & Weinstein, 2000:57; Sheth *et al.*, 1988:4).

Kotler and Armstrong (2010:29) state that marketing is “... the process by which companies create value for customers and build strong customer relationships in order to capture value from customers in return”. This perspective is applied to this study.

As outlined in the introduction to this chapter, the study of entrepreneurial marketing is a very young discipline which only started to emerge about thirty years ago. The similarities between entrepreneurship and marketing have been studied to provide a common basis for future research. Although a consistent definition has not been

established so far, a wide variety of constructs, such as strategic orientation, market orientation and entrepreneurial orientation are considered to be relevant for the study of entrepreneurial marketing (Collinson & Shaw, 2001; Hills, Hultman & Miles, 2008; Schindehutte *et al.*, 2009). For the purpose of this study, entrepreneurial marketing is defined as a firm behaviour that is primarily reflected through an entrepreneurial and a market orientation of the organisation.

### **1.2.2 Entrepreneurial marketing: entrepreneurial orientation and market orientation as the core elements**

Various researchers have stated that an entrepreneurial and market orientation are the key elements for entrepreneurial marketing (Hills & LaForge, 1992:34; Hultman, 1999:60; Miles & Darroch, 2006:486; Morris *et al.*, 2002:5).

Entrepreneurial orientation has been described as consisting of three to five dimensions. Lumpkin and Dess (1996) state that the construct includes autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness. However, in most research studies the three dimensions of risk-taking, innovativeness and proactiveness are investigated (Kreiser Marino & Weaver, 2002; Morris, 1998; Rauch, Wiklund, Lumpkin & Frese, 2009).

Various research studies include antecedents and consequences of an entrepreneurial orientation. Covin and Slevin (1991:7-15) describe three different antecedents. First are, external variables, which relate to environmental variables; second, strategic variables, which reflect a firm's posture towards growth and investment; and third, internal variables, such as top management values and philosophies. Internal variables have also been studied by other researchers who have included management style, organisational resources, organisational structure and culture in their studies (Covin & Slevin, 1988:218; Ireland *et al.*, 2001:57; Khandwalla, 1976/77:22).

The outcomes of an entrepreneurial orientation have been measured as improved firm performance assessed by financial and non-financial measures, which can be

measured subjectively or objectively (Covin & Slevin, 1991:17; Lumpkin & Dess, 1996:153).

Corporate entrepreneurship is considered to be a specific strategy that is reflected in the organisation's architecture and the processes that promote entrepreneurship throughout the organisation (Ireland, Covin & Kuratko, 2009:38).

External and internal variables that influence corporate entrepreneurship have been discussed by various researchers (Guth & Ginsberg, 1990; Khandwalla, 1987; Schindehutte, Morris & Kuratko, 2000; Zahra, 1991). Internal factors that have most often been studied are management support, work discretion, rewards/reinforcement, resources and time availability and organisational boundaries (Holt, Rutherford & Clohessy, 2007; Hornsby, Naffziger, Kuratko & Montagno, 1993; Kuratko, Hornsby & Goldsby, 2004; Kuratko, Hornsby, Naffziger & Montagno, 1993).

Outcomes of corporate entrepreneurship relate to individual and organisational outcomes (Kuratko *et al.*, 2004:83).

The market orientation of a firm has been described by Kohli and Jaworski (1990), Jaworski and Kohli (1993), Kohli, Jaworski and Kumar (1993) and Narver and Slater (1990). The first three groups of researchers consider a firm's activities towards information generation, information dissemination and responsiveness to information. Narver and Slater (1990) build the market orientation construct around customer orientation, competitor orientation and interfunctional coordination. A long-term focus and profitability have also been considered.

Antecedents for market orientation are very similar to those of an entrepreneurial orientation. Management focus and willingness to take risks and innovativeness are considered to be important. Furthermore, organisational structures can either enhance or diminish the effectiveness of information generation and dissemination activities (Jaworski & Kohli, 1993; Kirca, Jayachandran & Bearden, 2005; Kohli & Jaworski, 1990).

The consequences of a market orientation approach are also in line with the outcomes of an entrepreneurial orientation. Firm performance and competitive advantage are investigated, as well as customer loyalty (Grinstein, 2008a; Jaworski & Kohli, 1993; Kohli & Jaworski, 1990; Kirca *et al.*, 2005).

### **1.2.3 Conceptual model of market-driving ability in corporate entrepreneurship**

Within the research into entrepreneurial marketing, a market-driven and a market-driving approach have been studied.

Market-driven firms try to understand and learn from stakeholders in an existing market (Jaworski *et al.*, 2000; Schindehutte *et al.*, 2008). Market-driven firms also focus on a reactive or proactive approach to market orientation. A reactive approach is reflected in learning from customers through information generation. A proactive approach tries to uncover latent customer needs to serve customers better in future (Day, 1998; Narver, Slater & MacLachlan, 2004; Slater & Narver, 1998; Tuominen, Rajala & Möller, 2004).

Various researchers have studied market driving and its influencing factors. It is argued that exceptional performance cannot be assessed with the current understanding of market-driven organisations. Exceptional performance has been associated with a firm's ability to achieve market driving (Kumar *et al.*, 2000; Schindehutte *et al.*, 2008). A market-driving approach is characterised by shaping, changing and creating markets and/or behaviour of all stakeholders involved in the process. Furthermore, market-driving firms are characterised by an entrepreneurial, market and technology orientation (Barlow Hills & Sarin, 2003; Harris & Cai, 2002; Jaworski *et al.*, 2000; Kumar *et al.*, 2000; Narver *et al.* 2004; Schindehutte *et al.*, 2008).

Researchers point out that there is a need for the measurement of market driving, as well as a measurement of influencing factors that facilitate or hinder market driving (Barlow Hills & Sarin, 2003; Carrillat *et al.*, 2004; Ghauri *et al.*, 2008; Harris & Cai, 2002; Jaworski *et al.*, 2000; Kumar *et al.*, 2000; Narver *et al.* 2004; Schindehutte *et*

*al.*, 2008). Previous studies that followed a qualitative research approach to studying market driving provide a good basis for the development of a conceptual model that can further be statistically tested.

For the development of the conceptual model of market-driving ability in a corporate context, three parts were considered:

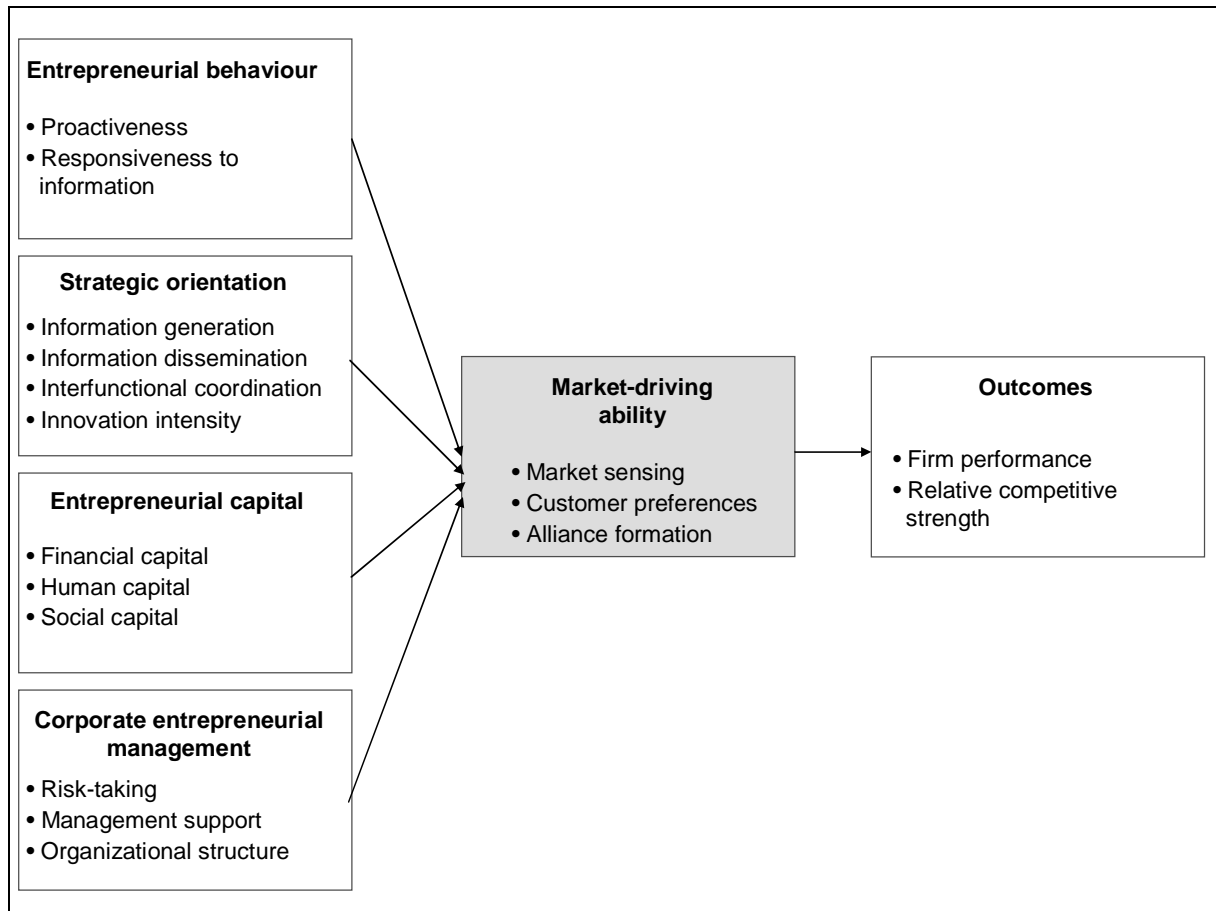
- Measurement of market driving
- Firm-internal influencing factors on market-driving ability
- Outcomes of a market-driving ability

For the purpose of this study, market driving will be measured by using three concepts, namely market sensing, influencing customer preferences and alliance formation. The influencing factors are divided into four aspects. First, corporate entrepreneurial management consists of risk-taking, management support and organisational structure. Second, entrepreneurial capital covers financial, human and social capital. Third, strategic orientation covers information generation, information dissemination, interfunctional coordination and innovation intensity. The last construct is entrepreneurial behaviour, which relates to proactiveness and responsiveness to information. The outcome parameters of a market-driving ability are measured by firm performance and relative competitive strength.

The following figure summarises the conceptual model of market-driving ability in corporate entrepreneurship.



**FIGURE 1.1: Conceptual model of market-driving ability in corporate entrepreneurship**



**Source:** Author's own compilation

#### 1.2.4 Measuring instruments and statistical model of market-driving ability

Measuring instruments for market driving have so far not been specifically developed. However, several related measures can be identified which were partly used for the measurement in this study. Barringer and Bluedorn (1999:423) developed the environmental scanning scale, which measures efforts towards scanning activities. Narver *et al.* (2004:336) developed the proactive market orientation (MOPRO) scale, which measures activities towards monitoring customer behaviour and exceeding customer expectations. Alliance formation has been measured by the absolute number of alliances as well as the concept of trust (Gulati, 1999:405; Kale, Singh & Perlmutter, 2000:220; Rothaermel & Deeds, 2006:441).

A number of measuring instruments are available for entrepreneurial and market orientation. The following paragraphs present a selected number of measuring

instruments that have been applied in this study. As will be outlined later in this study, a specific scale development process by Rossiter (2002) has been followed to arrive at these measures.

Corporate entrepreneurial management considers measures for risk-taking, management support and organisational structure. Risk-taking measures have been described by Miller and Friesen (1982:7-10) and have been used in many previous studies (Kreiser *et al.*, 2002; Miles & Arnold, 1991; Morris & Sexton, 1996; Smart & Conant, 1994). Management support consists of measures adapted from Hornsby, Kuratko and Zahra (2002). Organisational structure employs measures that were derived from Khandwalla (1977).

Entrepreneurial capital consists of three concepts: financial, social and human capital. Measures for financial capital are partly self-constructed, and one measure is adapted from Miller and Friesen (1982). Social capital consists of self-constructed measures for which ideas were taken from Baron and Markman (2000). Human capital is also a self-constructed concept, taking into consideration ideas from Rauch, Frese and Utsch (2005) and Unger, Rauch, Frese and Rosenbusch (2011).

Strategic orientation consists of four concepts. Measures for information generation and information dissemination have used items from Jaworski and Kohli (1993). Those for interfunctional coordination considered measures developed by Narver and Slater (1990). Finally, those for innovation intensity took into consideration items from the study by Miller and Friesen (1982).

Entrepreneurial behaviour considers proactiveness and responsiveness to information. Proactiveness measures were derived from Lumpkin and Dess (2001). Items related to responsiveness to information were adapted from Jaworski and Kohli (1993) and Kohli *et al.* (1993).

Finally, the outcomes parameters are firm performance and relative competitive strength. Both concepts have been extensively studied within the entrepreneurship and marketing field. As outlined by Moorman and Rust (1999:187), managers of organisations are often unwilling to give objective information about the financial

performance. Therefore subjective measures that assess the perception of the respondents have been used in previous research. These items were self-constructed. Relative competitive strength was influenced by some measures from Burke (1984).

In statistical modelling, causal modelling is considered to be the most prominent approach for theory development (Jaccard & Jacoby, 2010:137). Within the field of causal modelling, structural equation modelling (SEM) is used to assess cause and effect relationships (Pearl, 2007:135). Since the focus of this study is to explore the influence of firm-internal factors on market-driving ability, a structural equation approach is most appropriate. SEM consists of two parts, a measurement model and a structural model.

The measurement model considers the concepts and their relationship with the indicators. In order to produce good measures, a scale development process needs to take place. Rossiter (2002:306,308) describes the process of generating and selecting items to measure a construct. The process will be further outlined in chapter four.

The structural model refers to the relationships between latent variables. Latent variables have been described as variables that cannot directly be observed. Latent variables require a set of observable variables to define them (Bollen, 1989:11; Diamantopoulos, Riefler & Roth, 2008:1204).

Multidimensional constructs can have different measurement models. On the first level the relationship can be formative and on the second level reflective, or vice versa (Burke Jarvis, MacKenzie & Podsakoff, 2003:204). For formative models, the dimensions cause the construct; they make the construct appear. Formative models do not require the dimensions to be correlated, as they represent distinct causes of the construct. In the reflective model the causality flows from the construct to the dimensions. Therefore the dimensions need to be positively correlated, since they reflect the same construct (Bollen & Lennox, 1991:308; Diamantopoulos *et al.*, 2008:1204; Edwards, 2001:147; Law, Wong & Mobley, 1998:745; Law & Wong, 1999:146; MacCallum & Browne, 1993:533).

Model misspecification can have serious effects which can lead to misleading conclusions about relationships between constructs. Furthermore, it has been noted that goodness of fit indices are not always in a position to detect misspecification (Burke Jarvis *et al.*, 2003:207; MacKenzie, 2003:324). Therefore it is important to follow the steps outlined by Rossiter (2002) for scale development.

The statistical model for market-driving ability in corporate entrepreneurship is derived from the conceptual model. Moderating variables such as the industry focus and management level will also be considered.

### **1.3 RESEARCH PROBLEM**

The literature review shows that entrepreneurship and marketing research share a substantial amount of commonality. Various concepts relating to innovation, flexibility, change and opportunities, as well as managerial and organisational principles, are commonly used in both disciplines. One of the goals of both disciplines is to create value and understand and describe firm performance and relative competitive strength. Research at the interface is especially concerned with the explanation of exceptional performance, which cannot be explained with the current understanding of a market-driven organisation. Exceptional performance has been associated with a firm's ability to achieve market driving (Kumar *et al.*, 2000; Schindehutte *et al.*, 2008).

It has been argued that market driving is a specific organisational ability that requires several activities to be able to shape, change and create the market structure and/or the behaviour of market players. It has also been stated that in order to pursue market driving, certain firm-internal capabilities need to be demonstrated, and the outcomes of a market-driving approach relate to firm performance and relative competitive strength (Barlow Hills & Sarin, 2003; Harris & Cai, 2002; Jaworski *et al.* 2000, Kumar *et al.*, 2000; Schindehutte *et al.*, 2008).

The purpose of this study is to measure market driving and determine firm-internal factors that influence an organisation's market-driving ability in the South African healthcare industry.

The management question that follows is: Can market driving and market-driving ability and its influencing factors be assessed in the South African healthcare industry?

From the management question the following more specific research questions can be formulated (Cooper & Schindler, 2008:118):

- Can market driving be measured by assessing a firm's activities in market sensing, influencing customer preferences and alliance formation?
- Can internal factors such as a firm's orientation towards corporate entrepreneurial management; entrepreneurial capital; strategic orientation, and entrepreneurial behaviour predict market-driving ability?
- Can firm performance and relative competitive strength be related to the market-driving ability of a firm?
- Do moderating factors such as management level and industry focus influence the strength of the relationship between the internal factors and market-driving ability?

The construct of market driving, its influencing factors and outcomes, is currently not well understood. So far no formal study has been conducted in South Africa that addresses the measurement of market driving and determines influencing factors on market-driving ability and its consequences.

#### **1.4 PURPOSE OF THE STUDY**

The purpose of the study is fourfold. First, the study aims to give an understanding of the measurement of market driving in corporate entrepreneurship. Second, firm-internal influencing factors on market-driving ability are determined. Third, moderating effects such as the management level and the industry focus, on the relationship between firm-internal factors and market-driving ability can be identified. Finally, the outcomes of a market-driving ability are assessed considering firm performance and relative competitive strength.

The study will provide organisations that wish to assess and increase their level of market driving in their business with suggestions and hence provide a starting point for their internal analysis.

## **1.5 RESEARCH OBJECTIVES**

The primary research objective is to measure market driving and determine firm-internal factors that influence an organisation's market-driving ability in the South African healthcare industry.

The primary research objective is supported by secondary objectives which are classified into objectives that can be achieved by means of a literature study and by means of an empirical study focusing on the case of the healthcare industry.

The literature study determines:

- The link between entrepreneurship and marketing research at the interface;
- The constructs and concepts that are common to the disciplines of marketing and entrepreneurship;
- Various research studies that have investigated market-driving activities in firms;
- Constructs and concepts that have been taken from the marketing and entrepreneurship field to explain market driving; and
- Constructs and concepts from both disciplines that are considered to impact on market-driving ability.

On the grounds of the literature study, a conceptual model of market-driving ability in corporate entrepreneurship was developed. Statistical modelling by means of a case study was used to determine the predictive quality of the model.

The empirical study determines:

- Whether market driving can be measured by market sensing, influencing customer preferences and alliance formation;
- Which firm-internal factors influence market-driving ability;
- Whether market-driving ability influences various outcome parameters; and

- Whether moderating variables influence the relationship between firm-internal factors and market-driving ability.

The scope of the research is the South African healthcare industry, which comprises four different segments such as the pharmaceutical industry, medical device manufacturers, wholesalers and distributors of pharmaceuticals and open medical schemes. The research does not consider environmental factors that might influence a firm's decision making, such as the current development of a national health insurance system in South Africa.

## **1.6 HYPOTHESES**

The following hypotheses are formulated for this study:

H<sub>0</sub>1: Market driving cannot be measured by market-sensing activities.

H<sub>0</sub>2: Market driving cannot be measured by activities related to influencing customer preferences.

H<sub>0</sub>3: Market driving cannot be measured by alliance formation activities.

H<sub>0</sub>4: Corporate entrepreneurial management cannot be measured by risk-taking activities.

H<sub>0</sub>5: Corporate entrepreneurial management cannot be measured by management support.

H<sub>0</sub>6: Corporate entrepreneurial management cannot be measured by organisational structure.

H<sub>0</sub>7: Entrepreneurial capital does not reflect financial capital.

H<sub>0</sub>8: Entrepreneurial capital does not reflect human capital.

H<sub>0</sub>9: Entrepreneurial capital does not reflect social capital.

H<sub>0</sub>10: Strategic orientation cannot be measured by information generation.

H<sub>0</sub>11: Strategic orientation cannot be measured by information dissemination.

H<sub>0</sub>12: Strategic orientation cannot be measured by interfunctional coordination.

H<sub>0</sub>13: Strategic orientation cannot be measured by innovation intensity.

H<sub>0</sub>14: Entrepreneurial behaviour cannot be measured by proactiveness.

H<sub>0</sub>15: Entrepreneurial behaviour cannot be measured by responsiveness to information.

H<sub>0</sub>16: Corporate entrepreneurial management does not positively influence market-driving ability.

H<sub>0</sub>17: Entrepreneurial capital does not positively influence market-driving ability.

H<sub>0</sub>18: Strategic orientation does not positively influence market-driving ability.

H<sub>0</sub>19: Entrepreneurial behaviour does not positively influence market-driving ability.

H<sub>0</sub>20: Market-driving ability does not positively influence firm performance.

H<sub>0</sub>21: Market-driving ability does not positively influence relative competitive strength.

H<sub>0</sub>22: The path between **corporate entrepreneurial management** and market-driving ability will not be different between various levels of management.



- H<sub>0</sub>22a: The path between corporate entrepreneurial management and market-driving ability will not differ between top management (level 1) and middle management (level 2).
- H<sub>0</sub>22b: The path between corporate entrepreneurial management and market-driving ability will not differ between middle management (level 2) and junior management (level 3).
- H<sub>0</sub>22c: The path between corporate entrepreneurial management and market-driving ability will not differ between top management (level 1) and junior management (level 3).
- H<sub>0</sub>23: The path between **entrepreneurial capital** and market-driving ability will not differ between various levels of management.
- H<sub>0</sub>23a: The path between entrepreneurial capital and market-driving ability will not differ between top management (level 1) and middle management (level 2).
- H<sub>0</sub>23b: The path between entrepreneurial capital and market-driving ability will not differ between middle management (level 2) and junior management (level 3).
- H<sub>0</sub>23c: The path between entrepreneurial capital and market-driving ability will not differ between top management (level 1) and junior management (level 3).
- H<sub>0</sub>24: The path between **strategic orientation** and market-driving ability will not differ between various levels of management.
- H<sub>0</sub>24a: The path between strategic orientation and market-driving ability will not differ between top management (level 1) and middle management (level 2).

- H<sub>0</sub>24b: The path between strategic orientation and market-driving ability will not differ between middle management (level 2) and junior management (level 3).
- H<sub>0</sub>24c: The path between strategic orientation and market-driving ability will not differ between top management (level 1) and junior management (level 3).
- H<sub>0</sub>25: The path between **entrepreneurial behaviour** and market-driving ability will not differ for various management levels.
- H<sub>0</sub>25a: The path between entrepreneurial behaviour and market-driving ability will not differ between top management (level 1) and middle management (level 2).
- H<sub>0</sub>25b: The path between entrepreneurial behaviour and market-driving ability will not differ between middle management (level 2) and junior management (level 3).
- H<sub>0</sub>25c: The path between entrepreneurial behaviour and market-driving ability will not differ between top management (level 1) and junior management (level 3).
- H<sub>0</sub>26: The path between **corporate entrepreneurial management** and market-driving ability will not differ for various industries.
- H<sub>0</sub>26a: The path between corporate entrepreneurial management and market-driving ability will not differ between pharmaceutical manufacturers and medical device manufacturers.
- H<sub>0</sub>26b: The path between corporate entrepreneurial management and market-driving ability will not differ between medical device manufacturers and pharmaceutical distributors/wholesalers.

- H<sub>0</sub>26c: The path between corporate entrepreneurial management and market-driving ability will not differ between pharmaceutical manufacturers and pharmaceutical distributors/wholesalers.
- H<sub>0</sub>26d: The path between corporate entrepreneurial management and market-driving ability will not differ between pharmaceutical manufacturers and medical schemes.
- H<sub>0</sub>26e: The path between corporate entrepreneurial management and market-driving ability will not differ between medical device manufacturers and medical schemes.
- H<sub>0</sub>26f: The path between corporate entrepreneurial management and market-driving ability will not differ between pharmaceutical distributors/wholesalers and medical schemes.
- H<sub>0</sub>27: The path between **entrepreneurial capital** and market-driving ability will not differ for various industries.
- H<sub>0</sub>27a: The path between entrepreneurial capital and market-driving ability will not differ between pharmaceutical manufacturers and medical device manufacturers.
- H<sub>0</sub>27b: The path between entrepreneurial capital and market-driving ability will not differ between medical device manufacturers and pharmaceutical distributors/wholesalers.
- H<sub>0</sub>27c: The path between entrepreneurial capital and market-driving ability will not differ between pharmaceutical manufacturers and pharmaceutical distributors/wholesalers.
- H<sub>0</sub>27d: The path between entrepreneurial capital and market-driving ability will not differ between pharmaceutical manufacturers and medical schemes.

- H<sub>0</sub>27e: The path between entrepreneurial capital and market-driving ability will not differ between medical device manufacturers and medical schemes.
- H<sub>0</sub>27f: The path between entrepreneurial capital and market-driving ability will not differ between pharmaceutical distributors/wholesalers and medical schemes.
- H<sub>0</sub>28: The path between **strategic orientation** and market-driving ability will not differ for various industries.
- H<sub>0</sub>28a: The path between strategic orientation and market-driving ability will not differ between pharmaceutical manufacturers and medical device manufacturers.
- H<sub>0</sub>28b: The path between strategic orientation and market-driving ability will not differ between medical device manufacturers and pharmaceutical distributors/wholesalers.
- H<sub>0</sub>28c: The path between strategic orientation and market-driving ability will not differ between pharmaceutical manufacturers and pharmaceutical distributors/wholesalers.
- H<sub>0</sub>28d: The path between strategic orientation and market-driving ability will not differ between pharmaceutical manufacturers and medical schemes.
- H<sub>0</sub>28e: The path between strategic orientation and market-driving ability will not differ between medical device manufacturers and medical schemes.
- H<sub>0</sub>28f: The path between strategic orientation and market-driving ability will not differ between pharmaceutical distributors/wholesalers and medical schemes.

H<sub>0</sub>29: The path between **entrepreneurial behaviour** and market-driving ability will not differ for various industries.

H<sub>0</sub>29a: The path between entrepreneurial behaviour and market-driving ability will not differ between pharmaceutical manufacturers and medical device manufacturers.

H<sub>0</sub>29b: The path between entrepreneurial behaviour and market-driving ability will not differ between medical device manufacturers and pharmaceutical distributors/wholesalers.

H<sub>0</sub>29c: The path between entrepreneurial behaviour and market-driving ability will not differ between pharmaceutical manufacturers and pharmaceutical distributors/wholesalers.

H<sub>0</sub>29d: The path between entrepreneurial behaviour and market-driving ability will not differ between pharmaceutical manufacturers and medical schemes.

H<sub>0</sub>29e: The path between entrepreneurial behaviour and market-driving ability will not differ between medical device manufacturers and medical schemes.

H<sub>0</sub>29f: The path between entrepreneurial behaviour and market-driving ability will not differ between pharmaceutical distributors/wholesalers and medical schemes.

## **1.7 RESEARCH METHODOLOGY**

The following section outlines the research design, sampling, data collection and data analysis.

### **1.7.1 Research design**

The study is designed as a formal study in the South African healthcare industry. The study consists of a literature review and an empirical study. The literature review provides insights into the field of entrepreneurial marketing, and identifies relevant constructs and concepts that are used to formulate the conceptual model of market-driving ability in corporate entrepreneurship.

The empirical study considers the conceptual framework which consists of measures of market-driving as well as firm-internal influencing factors, moderators and outcomes of market-driving ability. The conceptual framework is transformed into a statistical model. The generated data give information about the measure of market driving. Furthermore, firm-internal factors that influence market-driving ability are determined. Moderating effects on the relationship between firm-internal factors and market-driving ability are identified. Finally, the influence of market-driving ability on outcomes parameters is established.

### **1.7.2 Sampling**

The target population for this study is organisations in the South African healthcare industry, specifically pharmaceutical manufacturers, medical device manufacturers, pharmaceutical distributors/wholesalers and open medical schemes. The respondents need to be in junior, middle or top management positions in their organisation.

The study uses a non-probability sample employing purposive sampling and snowball sampling. Non-probability sampling and specifically snowball sampling is useful in research situations where respondents are difficult to identify and contact (Babbie, 2010:193; Cooper & Schindler, 2008:397-399).

### **1.7.3 Data collection**

The data for the literature study were gathered from books, journals and reports. Electronic databases which provide access to full text articles in electronic format were used (Bryman & Bell, 2007:107-108).

The empirical data were collected using a fully structured questionnaire which was administered telephonically. Respondents were guaranteed anonymity and their responses were treated as confidential.

The measuring instrument captures the constructs and concepts outlined in the conceptual framework. The following independent constructs are used in the study: Corporate entrepreneurial management is measured as a formative construct which consists of three concepts: risk-taking, management support and organisational structure. Entrepreneurial capital is measured as a reflective construct consisting of human, social and financial capital. Strategic orientation is measured as a formative construct consisting of information generation, information dissemination, interfunctional coordination and innovation intensity. Entrepreneurial behaviour is measured as a formative construct comprising proactiveness and responsiveness to information.

The dependent construct in the model is market-driving ability. Market-driving ability represents the structural part of the model, which is influenced by the independent constructs. Market driving represents the measurement part and considers activities relating to market sensing, influencing customer preferences and alliance formation. The impact of market-driving ability on two reflective outcomes parameters is determined. The outcomes parameters are represented by firm performance and relative competitive strength.

### **1.7.4 Data analysis**

The study uses a structural equation modelling approach. The aim of structural equation modelling is to explain the structure among latent variables, which are measured by observed variables (Diamantopoulos, 1994:105). The advantage of

structural equation modelling over first-generation techniques such as principal component analysis, discriminant analysis or multiple regression is the greater flexibility between data and theory. Relationships can be modelled between multiple independent and multiple dependent variables; latent variables can be used and measurement errors considered, and theoretical assumptions can be tested against empirical data (Chin, 1998:297; Chin & Newsted, 1999:308).

Structural equation modelling comprises two approaches. A covariance-based approach focuses on the theory confirmation aspect, whereas a partial least squares approach is useful in situations where theory is not well developed (Chin, 1998:296; Diamantopoulos, 1994:106; Jöreskog & Wold, 1982:270; Rigdon, 1998:260).

The specifics of the two approaches and the reasoning for using a partial least squares approach will be outlined in detail in chapter five.

## **1.8 IMPORTANCE AND BENEFITS OF THE STUDY**

The research contributes to science and management practice in various ways.

The study provides a reliable and valid measurement for market driving and demonstrates the impact of firm-internal influencing factors on market-driving ability. Future researchers could benefit from the study, as it provides a basis for further research on measurement properties and influencing factors.

The findings of the study could assist managers in the South African healthcare industry with the analysis of their current market-driving activities. Furthermore, the study outlines the firm-internal factors that influence market-driving ability the most. Managers who want to pursue a more market-driving approach within selected business units or within the overall organisation can reflect on their strategic orientation, their entrepreneurial behaviour and the entrepreneurial capital. These areas can be assessed in order to identify areas for improvement. Finally, the study could help managers to realise that a market-driving ability positively influences the firm's performance and its relative competitive strength.



## **1.9 OUTLINE OF THE STUDY**

The study starts with a literature review of the fields of entrepreneurship, corporate entrepreneurship, marketing and entrepreneurial marketing. Based on the findings from the literature review a conceptual model of market-driving ability is presented, which is transferred into a statistical model for testing the specified hypotheses. The research methodology is outlined, findings are presented and conclusions and recommendations are given.

### **Chapter 1: Introduction**

Chapter one gives an overview of the study.

### **Chapter 2: Entrepreneurial marketing**

Chapter two gives a literature review on the field of entrepreneurship, corporate entrepreneurship and marketing. It discusses the overlaps between the fields of research which resulted in research at the interface of entrepreneurship and marketing, which is termed “entrepreneurial marketing”. It outlines the concepts and frameworks of entrepreneurial marketing. Lastly, it describes the core elements of an entrepreneurial marketing approach: entrepreneurial and market orientation. The antecedents and consequences of these two approaches are discussed.

### **Chapter 3: Entrepreneurship and marketing: value creation as the link**

Chapter three further describes the field of entrepreneurial marketing. The difference between a market-driven and a market-driving approach is outlined. This is followed by a selected number of studies that investigate market-driving activities. Based on these studies, the conceptual model of market-driving ability in corporate entrepreneurship is developed. The core elements of the model, its influencing factors and consequences are described.

## **Chapter 4: Developing a statistical model of market-driving ability in corporate entrepreneurship**

Chapter four addresses the various measuring instruments that have been used to assess entrepreneurial and market orientation. Next, it presents a literature review on statistical modelling. In a final step the conceptual model developed in chapter three is operationalised for statistical testing.

## **Chapter 5: Research design and methodology of the study**

Chapter five outlines the research problem, the research objectives, hypotheses and research methodology. The research methodology addresses the research design, sampling, data collection and data analysis. The data analysis is conducted with structural equation modelling. A detailed description of the approach followed in this study is given.

## **Chapter 6: Data analysis and findings**

Chapter six presents the research findings. First, a descriptive analysis of biographical information is given. Second, the results of the data analysis with partial-least squares path modelling is presented for the measurement and the structural models.

## **Chapter 7: Summary, conclusions and recommendations**

Chapter seven reflects on the theory of market driving and puts it into perspective with the findings of this study. Contributions to science as well as directions for future research are outlined. Managerial implications and limitations of the study are discussed.

## 1.10 REFERENCING TECHNIQUE

The Harvard referencing technique is used in this study. Guidelines on citation by the Faculty of Economic and Management Science, Department of Business Management, University of Pretoria, are followed (Kotzé, 2006).

## 1.11 ABBREVIATIONS

ADF	Asymptotically distribution free
AGFI	Adjusted goodness-of-fit
ALL	Alliance formation
AVE	Average variance extracted
BE	Entrepreneurial behaviour
CA	Entrepreneurial capital
CBSEM	Covariance-based structural equation modelling
CE	Corporate entrepreneurial management
CEAI	Corporate entrepreneurship assessment instrument
CFI	Comparative fit index
COMP	Relative competitive strength
COO	Interfunctional coordination
CUST	Customer preferences
DIS	Information dissemination
EMO	Extended market orientation scale
ENTRESCALE	Entrepreneurial orientation scale
FIN	Financial capital
$f^2$	Effect size
GEN	Information generation
GFI	Goodness-of-fit index
GLS	Generalised least squares
HUM	Human capital
IAI	Intrapreneurial assessment instrument
INN	Innovation intensity
LISREL	Linear structural relationships software
MARKOR	Market orientation scale by Kohli <i>et al.</i> (1993)

MD	Market driving
MD-ability	Market-driving ability
MGT	Management support
MOPRO	Proactive market orientation scale
MORTN	Market orientation scale by Deshpandé and Farley (1998)
ML	Maximum-likelihood
PERF	Firm performance
PLS	Partial least squares
PLS-MGA	Partial least squares multiple group analysis
PLS-PM	Partial least squares path modelling
PRO	Proactiveness
Q <sup>2</sup>	Stone-Geisser test
RESP	Responsiveness to information
RISK	Risk-taking
RMSEA	Root mean square error of approximation
RMSR	Root mean squared residual
R <sup>2</sup>	Coefficient of determination
SEM	Structural equation modelling
SENS	Market sensing
SMEs	Small and medium enterprises
SO	Strategic orientation
SOC	Social capital
SSI	Social skills inventory
STRU	Organisational structure
ULS	Unweighted least squares
VIF	Variance inflation factor
WLS	Weighted least squares
ZAR	South African Rand
4P	Marketing mix described by product, price, place, promotion
χ <sup>2</sup>	Chi-square statistic