Developing a strategic framework in small and medium sized enterprises (SMEs)

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Abstract

Aims: The purpose is to understand the strategy process approach within SMEs to gain a better understanding of how a SME performs the strategy process. The research aims to develop a strategy process framework through the findings of a case study within a SME, by comparing those findings with the existing literature.

Methodology: The research paradigm is moderate constructionism that adopts *first* a deductive approach to obtain the required theoretical knowledge of how strategy process (phases, activities, and tools) function and how they have been used within empirical studies, with a specific focus on case studies in SMEs. This is achieved through the establishment of a conceptual framework of the strategy process including phases and activities. *Second,* an inductive approach is adopted to induce from the research findings how the strategy process of the SME evolves. This mixture of deductive and inductive approaches is known as abductive. The research adopts an abductive approach culminating in a strategy process framework based on the Balanced Scorecard (BSC), the findings of the case study, and the literature. The research strategy is a single case study using semi-structured interviews during which the interviewer conversationally obtained the required information. This was complemented by documentation evidence. The data analysis process used thematic analysis and an enumeration approach.

Results: Whilst the literature lays out a systematic, sequential process, the picture presented by the case study in a SME is somewhat different. The SME was involved in several different aspects of strategy as defined in the literature review, including several phases of the strategy process, and the activities within each of these phases. Some activities were more frequently performed than others, in a very ad-hoc manner. Moreover, The SME did not have a coherent strategy process. The process that the SME uses is messy; it is not systematic; it is not sequential and is not clear. These results are incorporated in *a revised conceptual framework* to reflect the strategy process actuals used within the SME of the present study. The reasons that explain the finding and the need of the framework may be summarized as: Ambiguous communication of information, Inability to manage development, innovation without a flexible approach, a lack of systematic methods for defining strategy, short-term cash flow issues, and high risks in the SME.

Originality/value is contribution to knowledge (theory and empirical): **First**: a comprehensive literature review investigated and extended the strategy process phases and activities literature, by establishment of a conceptual framework of the strategy process including phases and activities. **Second**: this conceptual framework was revised based on these findings to reflect the strategy process actually emplaced within the SME in the present study, this aided an overall understanding of the theory of the strategy process. **Third**: due to the lack of formal strategy the SME had much 'emergent' strategy, which it failed to deal with effectively. Normatively, it should work to overcome this, by implementing a more coherent and formal approach to the strategy process framework (using the BSC framework with support of other strategic tools [QFD and SWOT analysis]. **Fourth**: the methodological implementation of the research paradigm of moderate constructionism and validation through crystallization.

Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

Amina Basiouny Mousa Elshamly

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The Author

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- The developments of the strategy process stages: phases and activities (*Submitted to international journal of management review)*

- A Business Strategy Development Framework for SMEs *(the paper has been accepted in the 6th Annual EuroMed Conference 2013)*

- Developing a strategic framework for the strategy process in small and medium sized enterprises (SMEs).

- The developments evaluation of the Balanced Scorecard generations.

- Integration of the BSC with other strategy management tools (SWOT and QFD).

- Evaluation of strategy process phases and activities in small and medium sized enterprises (SMEs).

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List of Abbreviations

AHP	Analytic hierarchy process
BSC	Balanced scorecard
BSQ framework	A framework for integrating BSC with SWOT analysis and QFD
CI	Continuous improvement
CRM	Customer Relationship Management
EA	Environmental analysis phase
ES	Emergent strategy
HoQ	House of quality
HoS	House of strategy
HR	Human resource
IC	Intellectual capital
IT	Information technology
KFC	Kentucky Fried Chicken
KPIs	Key performance indicators
KTP	Knowledge transfer project
MBNQA	The Malcolm Baldrige National Quality Award education criteria
PDCA	Plan, Do, Check and Action
PEST analysis	Reflecting the Political, Economic, Social, and Technological analysis of an organization
PESTEL analysis	Reflecting the political, economic, social, technological, environmental, and legal components of an organization
PM	Performance measurement
QFD	Quality function deployment
SBU	Strategic business unit
SE	Strategy evaluation phase
SF	Strategy formulation phase
SF framework	Strategic framework
SI	Strategy implementation phase
SLEPT analysis	Reflecting the Social, Legal, Economic, Political, Technical of an organization
SMEs	Small and medium size enterprise organizations
SWOT Analysis	Identifying the strengths, weaknesses, opportunities and threats of an organization
TOC	Theory of constraints,
UK	United Kingdom
VCA	Value chain analysis

Chapter one: Introduction

Introduction

The aim of this research is twofold. It seeks to understand the strategy process within SMEs; and it aims to generate a strategy framework (using the BSC framework with other strategic tools (QFD and SWOT analysis) to support SME management in the creation of a coherent strategy process. This chapter consists of a contextualization of the research. This contextualization provides the required background information on SMEs: the criteria that define what is considered to be a SME within this research are defined, economic importance is highlighted, and the current situation of SMEs within the UK is outlined. A brief overview is provided on the SME investigated within the current study. The investigation looks at the strategy process, including strategic activities and strategy tools.

Based on the aim the research questions are defined and associated with the objectives. This is followed by the thesis structure. The thesis structure consists of the introduction chapter, three literature review chapters, a methodology chapter, analysis and discussion chapter, and a concluding chapter.

Research context (SMEs)
Introduction

This section seeks to contextualize the research in terms of what is investigated. For this research the strategy process within SMEs is critically evaluated and analysed. Some background is provided on what the characteristics of SMEs are and what their importance is in terms of their economic impact. This shows it is worthwhile to investigate how SMEs are conducting strategy, to what extent they are involved in the strategy process

and whether they use strategy management tools to support their strategy procedures.

Criteria for defining SMEs in the present study

It is necessary to understand what the criteria are by which a SME is defined. According to Hauser (2005) SMEs within the European Union are defined by their size, according to three measures. The first is that a SME employs not more than 250 members of staff. The second is that the maximum annual turnover of a SME is fifty million Euro and its balance sheet amounts to less than forty three million Euros. The third criterion is that not more than twenty five per cent of its shares can be owned by another enterprise.

Importance of SMEs

In the UK, SMEs have a significant presence. When measuring the establishment of SMEs in the UK it was found that over the past twenty-five years the total amount has increased by 50 per cent (Beaver & Prince, 2004). Through this large increase, the economy of the UK has become more reliant on SMEs. This increase in reliance is due to two main reasons. In the first instance, the large growth of SMEs in the UK now accounts for more than half of all employment, which is increasingly significant in the middle of the current recession when joblessness is at its highest. Secondly, the increase of SMEs has a significant impact on national revenues as they represent thirty five per cent of the economy (Lou, Lee, & Mathison, 2011)

Reasons for investigating the strategy of SMEs

The importance of investigating strategy in SMEs derives from their economic significance. A limited number of studies have investigated the strategy process within SMEs, but it is uncertain whether improved strategy formulation would have a positive impact on the general economy, "*SMEs are*

socially and economically important to society as they typically represent 99%
of all enterprises in Europe and America." (Burke, 2007, cited by Lou et al.,
2011). However, SMEs are often deficient in strategic planning (Wang,
Walker, & Redmond, 2007), the limited information on the strategy process
within SMEs has indicated that they tend to neglect strategic activities
(Augustine, Bhasi, & Madhu, 2012). It is therefore necessary to understand to
what extent they are involved in strategy and how they perform strategy.

The research uses the theoretical developments that have been made in
strategy known as: *strategy as practice approach*, *processual strategy
approach and post-processual strategy approach*. The study considers the
Modern strategy process stage. In *strategy as practice approach* there are
three factors that can be studied: practitioner, activity and tools (Whittington,
2006). The focus of the study relates to the activities that take place within
each phase of the strategy process and the tools, if any, that are used to
support these activities. By reviewing how a SME performs strategy, as well
as reviewing the strategy process, activities and tools, a suggested novel
strategic framework for the strategy process is developed that can support
SME management in the creation of a coherent strategy process.

Research Aim, Objectives and Questions

The aim of this research is twofold: it seeks to understand the strategy process
within SMEs; and it aims to generate a strategy framework [using the BSC
framework with other strategic tools (QFD and SWOT analysis)] to support
SME management in the creation of a coherent strategy process.

Research objectives

- To identify from the literature what is known about the strategy process, especially in relation to SMEs.
- To utilize a dynamic process view as an approach to clarify activities, strategy tools, techniques and methods in the SME strategy process.
- To developed a framework incorporating BSC and other business tools (SWOT analysis and QFD) to connect and carry out the strategy process.

Research Questions

Research Question 1: What is the strategy process and how does it operate within the SME?

In order to answer this broad research question, the researcher has first to answer two further research questions, which are:

Research Question 1a: what are the key strategic activities in the SME and how are these performed?

Research Question 1b: Which strategic tools are used in the SME during the strategy process?

Research Question 2: How may a normative BSC strategy framework [along with other business tools (QFD and SWOT analysis)] be used to support the strategy process in SMEs?

To address research question two, common weaknesses of SMEs in performing strategy, as found from the literature review, are summarized. The findings of the present study regarding the strategy process are compared with the literature. Differences are highlighted between the actual findings of the research and the literature. Research question two is addressed with the literature from chapters three and four, which discuss the BSC and other business management tools such as SWOT analysis and QFD. How these tools

are used in the literature to overcome the identified weaknesses of the strategy process in SMEs will be presented, based on their merits.

The SME investigated in the present study

The organization that is investigated for this research is a SME established in the UK. This organization has operated for more than twenty years in the South West. They have expanded into other offices throughout the south and midlands, becoming a medium size enterprise. The initial areas in which they operated through contracts were training and development. At the start of the millennium the ownership of the organization changed, and offices in London were established, followed by further sales offices in London in 2006 and in Cardiff in 2008. The organization has continued to develop and take on new innovative projects within the public sector

The SME's involvement in the public sector is through a wide variety of projects. The organization had a turnover of £3.5 million and employed sixty-seven staff members at the time it was investigated. The company wants in the future (5 to 20 years) to attain its vision, which is to look at how its business processes can be implemented in the long-term to deliver a range of customer services more efficiently and more effectively. Its mission is to make itself capable of withstanding adverse business conditions, and to be resilient to changes within its environment. Through the accomplishment of several high profile projects in the public sector this SME seeks to attain its vision (further information on the SME investigated can be found in appendix B, Case Study Report).

Contributions to knowledge

This study makes several contributions to knowledge of strategic process:

First, a comprehensive literature review investigates and extends the strategy process phases and activities literature. A conceptual model of the strategy process, including strategic activities, is developed. The development of this conceptual model of the strategy process detailing the strategic activities as they occur during the evolution of the strategy process is new to the literature and is claimed to be a contribution to knowledge.

Second, this study extends the literature of how the BSC can integrate with other business tools to extend the BSC framework.

Third, this study explores and analyses current management strategy process concerned with the development of strategy; thereby providing in-depth answers to the research questions.

Fourth: The analysis of this research is unique and can be considered a contribution to knowledge, as it has not been seen in any prior literature. This was based on the methodology that was used. Within this research the researcher adopted a *moderate constructionist paradigm*, through which reality is socially constructed during the interviews between each interviewee and interviewer. To validate the results of the interviews the researcher used 'crystallization'. While crystallization is a known method, the method of application through which the results of each interview were categorized, according to the activities of the strategy process, is novel. This allowed a comparison of the interviewees and determined whether they had views which were compatible, or contradictory.

Fifth, BSC for strategic management has addressed the issue of operating a large business (Kaplan & Norton, 1992). However, only minor attempts have

been made to relate developments to small or medium sized businesses. The study has explored how the BSC strategic framework, developed for large business, may apply to small or medium size businesses (Chow, Haddad, & Williamson, 1997) for *strategy process phases and activities*.

Finally, the BSC framework has been well accepted by many organizations since 2000. However, the adoption and use of BSC framework in SMEs for the strategy process is rare, and little research has been carried out. The adoption and use of the BSC framework for the strategy process (as phases and activities) in SMEs is new, with no evidence of research carried out for this purpose. In chapter seven, a *Normative BSC Strategy Framework* based on the previous review of theoretical and empirical literature of strategy processes is developed for SMEs.

Thesis Structure

The thesis structure is provided as an overview and includes a brief description of every section, including all of its chapters. As part of the overview, figure (1.1) has been provided. The overview starts with the introduction chapter, which is the current chapter. The literature review consists of three chapters: one on developments in the strategy process, one on the BSC, and a third on integrated strategy tools. This is followed by the methodology, which describes how the study is performed. The subsequent chapter entails the analysis and discussion of the thesis findings. The final chapter provides the answers to the research questions and the contributions to knowledge. Each of these chapters is described below.

Chapter one: introduction chapter

The chapter consists of a contextualization of the research. The research questions are outlined with the thesis structure.

Literature review (Chapter Two, Three and Four)

Three chapters within the current study constitute the literature review. An extensive literature review is developed to capture both the theoretical and empirical aspects of strategy within SMEs. *Chapter Two* focused on the theoretical developments of strategy for business. This enables the researcher to understand how strategy has developed over time and what changes have taken place and why, up to the point where strategy is studied through an activity based approach. The literature on strategy tools is extended with a specific focus on the Balanced Scorecard. *Chapter Three* reviews the BSC as a strategic Framework/Tool of the Strategy Process. Several generations of the BSC are reviewed to understand its limitations and benefits, and how this strategic tool has been developed as a strategic management tool. *Chapter Four* of the literature review extends the previous chapter in that it investigates the use of other strategy tools with the BSC. While critically evaluating how SWOT analysis and quality function deployment (QFD) have been used to perform strategy, the literature review looks at studies that have suggested (theoretically) integrating these strategy tools with the BSC. It also reviews previous empirical studies to understand how these tools have been used and what their benefits are.

Chapter five: Methodology

The research methodology chapter provides an overview of how the research paradigm is described in relation to its ontology, epistemology, the selected research approach, research strategy employed and a justification of these choices. The more practical aspects of what the research methods are within the described research paradigm follow. This leads to an understanding of how the data for this research was collected and analysed. The final part of this chapter reviews the quality criteria that were used to increase the reliability

and credibility of the research so that the findings of the research may be evaluated as valid knowledge.

Chapter six: Analysis and discussion of the SME data

The data generated was analysed and documented in this chapter. The analysis is divided into five sections, which are: environmental analysis phase (EA); strategy formulation phase (SF); strategy implementation phase (SI); strategy evaluation phase (SE); finally, emergent strategy (ES). This was done by coding of the strategy process. The analysis was performed for each of the actors (interviewees) and was analysed for each strategic activity within the strategy process phases. The findings of each strategy process phase are summarized at the end of each section and include a activity frequently analysis, through which it is determined how often each of the activities was performed and how involved the SME was in each of the activities and strategy process phases.

Chapter Seven: Conclusion

The final chapter within the current study includes answers to the research questions. By answering the research questions, a foundation is established for presenting the ***contribution to knowledge***, which is a proposed novel ***Normative BSC Strategy Framework.*** This strategic framework involves and links the three strategy tools (BSC, SWOT analysis, and QFD) that have been reviewed in the literature, and adapted for strategy processes. The framework is aimed at adding the difficulties that SMEs face with the strategy process based on the empirical results and theoretical studies. This chapter concludes with the limitations of the present study and suggestions for further research.

Figure 1.1 Thesis Structure

Chapter two
- The Stage of Strategy Process
- Conceptual Framework for Strategy Process Phases, Activities and Tools

Chapter three
- BSC as a Strategic Framework/ Tools of Strategy Process
- Evaluation of BSC

Chapter Four
BSC Frameworks (BSC and another Business Tools)

- Familiarising The Research with The Data
  - Electronic Recordings of Interviews Field Notes
- Generating Initial Theme
- Coding According To Conceptual Framework Which Is Developed Based on How The Literature Describes The Strategy Process
  - Level One Coding Strategy Process Phases
  - Level Two Coding Activities For The Strategy Process Activities
- The Overall Interpretation
  - Enumeration determined the frequency that the interviewee mentioned each strategy process phase and activities.
  - Add a Summary and an Overview
- Develop a Report

Thematic analysis using and enumeration

Chapter One: Introduction
- Research Context
- The SME Company
- Research Questions and Objective
- Contribution to Knowledge
- Thesis Structure

Literature review
Chapters Two, Three and Four

Chapter five: Methodology
- Research Paradigm (**Moderate Constructionism**)
- Research Approach (**Abductive Approach**)
- The Conceptual Framework (**Deductive From Theory**)
- Justification for Qualitative Research (**Qualitative Research**)
- Research Strategy(**A Single Case Study**)
- Design of Case Study
- Single Case Study J**ustification**
- Units of Analysis and Case Selection
- Case Study Protocol
- Interview
- **Data Analysis Process(Thematic Analysis)**
- Quality Criteria for Qualitative Approach (Case Study Based Research)

Chapter Six
Analysis and Discussion
First Analyse the Qualitative Data by Using **Thematic Analysis**
Second Discussion,
- Compare/Contrast Research Findings and Theory from The Literature as Defined in the Conceptual Model, and Try to Explain the Differences.
- An Overview of How Involved the SME Is in Every Activity for Each Phase of the Strategy Process.

Chapter Seven : Conclusion
First, Answer the Research Questions
- Empirical Findings about SME(from Answering researcher questions)
- Literature Review Finding
- Justification of BSC Framework for Strategy Process in SME.
- A Suggestion Normative BSC Strategy Framework
Second, Contribution to Knowledge
Third, Limitations of the Present Study and Suggestions for Future Research

Literature review

Chapter Two: Strategy process

Introduction

Strategy has been practiced for centuries, especially within the domain of the military. This is true of civilizations throughout the world. However, during the last fifty years strategy concepts have been adopted in the business world. With the purpose of better understanding how business uses strategy to gain advantages, in the current study, investigation is made into how small and medium size enterprise organizations (SMEs) use strategy. Revising the key ideas behind how SMEs operate does this. Through establishing their characteristics, the strategic procedures of SMEs can be better understood, allowing for theorizing about how strategic tools could be used more effectively.

This investigation was primarily conducted by investigating a SME. Parallel to the current study was a review of the literature to establish how strategy research is performed. The current study has highlighted procedures and how they differ within SMEs. The literature reviews the stages strategy research has developed. This demonstrates that originally, strategy was very formal, and that this later turned into a more interactive process. While strategy research has largely focused on the content of the strategy, research has found that a shift took place in the way strategy is viewed: this shift enabled researchers to understand developments, the phases of the strategy process, and meant that tactical activities could be investigated in more detail.

Origin of strategy

The term "*strategy*" has a long history. Its origins in the west are found in *classical Greek* history. Whipp (1999) noted that strategy originated in the military, and for most of history in the west strategy was thought to have

originated in Greece; however, in the year c.500 BCE Sun Tzu wrote "The Art of War" in China. Other strategic writers soon followed. Throughout history strategy remained mostly a military subject. However, the concept of strategy, as found in business literature (Mintzberg, 1987; Rumelt, Schendel, & Teece, 1994) can be found to date back to the early 1960s, when the body of knowledge known as strategic management was introduced for corporations to 'wage their wars' in business terms.

The beginnings of strategic management go back to the early 1960s, the origin of strategic management is found in three publications of that time. The founders are: Chandler, (1962); Ansoff, (1965); and Andrews and his colleagues, (1965, 1971) . The first publication, 'Strategy and Structure', included the roles of managers in making long-term decisions, assigning resources, and defining plans so that decisions work. Additionally, it was demonstrated that a change in strategic direction could fundamentally change an organization. Ansoff (1965) viewed strategy management in the same way, and discussed current popular concepts such as competitive advantage.

Andrews and his colleagues (Andrews, 1971; Learned, Christensen, Andrews, & Guth, 1965) view was an extension of Chandler's with some additional concepts presented such as 'competitive advantage', as well as the influence of and uncertain environment'. These have become important additions in current strategic management, and the concept of 'uncertain environment' forms the basis of the SWOT analysis. It was also the beginning of using strategic management tools as aids to conducting a strategy process. This implied that strategists had come to terms with what strategy involved and became better at developing a strategy.

Characteristics of SMEs

The characteristics of flexibility in the sense of being able to adapt to current internal and externally changing environments is central to the development of SMEs. SMEs are unable to manage development, growth, and innovation without a flexible approach (Dean, 1986). Moreover, SMEs are more flexible than large organizations. Entrialgo, Fernández, and Vázquez (2000) found that the relationship between SME entrepreneurship and flexibility and other SME characteristics was significant. However, SMEs also have problems with the unambiguous communication of information (Berger & Udell, 2006). While having a more flexible internal structure, the inability to effectively transfer knowledge means that flexibility may diminish, and thus not all SMEs are considered to be flexible. Consideration of SME adaptability as a key success factor implies that SME success depends on information and communication.

Central to the concept of being able to communicate information is the idea of decision-making as a key success factor in terms of being able to survive and be successful in the long-term (McGovern, 2006; Spillan & Ziemnowicz, 2003). One of the key findings of research (see for example Beaver & Prince, 2004; Dean, 1986) is that managers in SMEs do not have systematic methods for defining strategy. This is mostly due to an unorganized approach to the decision-making process conducted by central figures in the organizations, which leads to strategic development according to personal interests. These limitations to the decision-making process cause SMEs to develop poor informal short-term strategies with a limited vision (Brouthers, Andriessen, & Nicolaes, 1998). It is through decision-making that SMEs determine their success, particularly by being flexible in their structures and other characteristics.

SMEs have been recognized for their entrepreneurship; however, it is important for them to find and seize new opportunities. Neshamba (2006)

stated that SMEs are likely to demonstrate a willingness to seize new opportunities. It has been found that the search for new opportunities by SMEs positively impacts performance (Wiklund & Shepherd, 2003). According to Badri, Davis and Davis (2000), only the most successful SMEs are able to take advantage of opportunity by exploiting the organizations internally to take advantage of external factors. Recent studies suggest multiple methods for creating opportunities, such as taking advantage of information, environmental ambiguity and political structures. Nevertheless, these methods can only be brought into action through creative thinking.

It is through innovation that SMEs are able to create opportunities such as those previously mentioned. According to Allocca and Kessler (2006) it is SMEs that stimulate the international economy through innovation. Due to the position of SMEs within the competitive market, they are forced to make careful use of their resources and maximize them creatively, to the extent that they become innovative and inspire larger corporations (Rae, 2007). It is through these daily, informal strategic plans that SMEs are sustained (Aloulou & Fayolle, 2005). The innovation of SMEs goes beyond how they manage their resources, and lies within their approach to solving everyday problems; however management of resources is crucial for success.

The primary limitation of SMEs is their restricted access to short-term cash. As a consequence of minimal liquidity SMEs are often unable to access the resources required to take advantage of opportunities that arise (Alon, 2004; Burke & Gaughran, 2006; Celuch, Murphy, & Callaway, 2007; Hudson-Smith & Smith, 2007; Porter, 2008; P. Savioz & M. Blum, 2002; Spence, 2003; Wesson & De Figueiredo, 2001). Therefore, the main strategies of SMEs are usually based on how resources can be maximized. It is at this level that SMEs are able to internally exploit their resources to take advantage of opportunities. However, the key limitation that comes with resource management is deciding

in which areas to invest. SMEs are unable to research and investigate in depth all aspects of their business (Alon, 2004; Burke & Gaughran, 2006). This implies that they will be unable to make effective decisions with regard to strategic planning in the future and therefore be constrained in terms of adaptability, as uncertainty arises about where the limited available resources should be allocated. This causes SMEs to be exposed to a great deal of risk taking.

Risk is far higher for SMEs as a consequence of their volatility, which is due to their limited availability of resources. According to Aloulou and Fayolle (2005) risk is one of the key characteristics of SMEs: the limited availability of resources means that a limited amount of work can be done. Furthermore, despite limited information, organizations are faced with making choices on which activities they undertake; it is at this stage that risk is introduced. According to the recent study by Rae (2007), risk taking is what defines entrepreneurship and strategic implementation within SMEs. Nevertheless, what some SMEs may view as acceptable risk by allocating their resources to a set of specific activities, other SMEs avoid through dividing their resources. As SMEs are small, and tend to be flexible, decisions are usually made at the operational level of management, rather than the strategic level.

Considering the fact that there is little or no strategic activity going on within SMEs, operational management is significantly different from larger corporations. SMEs tend to respond to operational needs that are defined on a day-to-day basis. SMEs have a reactive rather than preventive approach, during which problems are solved instead of overcome (Jennings & Beaver, 1997). This tends to have a negative impact on the organizations and constrains resources. Furthermore, Cagliano, Blackmon, and Voss, (2001) claim that an absence of strategic management is usually combined with an interest only in exceptional performance, because management effort is

applied to the operational levels of the organizations. While most SMEs are involved in some sort of strategic management practice that is essential to success (Spillan & Ziemnowicz, 2003), its applications are limited. Several authors have stated that more SMEs should adopt a greater range of advanced strategic management practices rather than limit themselves to day-to-day operational reactive solutions (Cagliano et al., 2001; Gilmore, 1966; Jennings & Beaver, 1997; O'Regan & Ghobadian, 2002). This should be done through skills development as well as learning to sustain competitive advantage (Teece, Pisano, & Shuen, 1997). Usually SMEs must simply learn to plan ahead for the future.

The characteristics of the organization define its strategic activities. Key strategic activities have been reviewed in the literature (Knight, 2001; Rantakyro, 2000). In the case of SMEs, strategic activities are usually less formal (Beaver & Prince, 2004): SMEs tend to focus mostly on the implementation of strategy, rather than the other phases, especially its formulation. The literature also reveals that SMEs that spend more time on strategic activities tend to be more successful than those that do not (O'Regan & Ghobadian, 2004). This means that considering the low amount of resources SMEs have available, it is still necessary to allocate more time to the strategic phases of analysis, formulation and evaluation.

Strategy process

The analysis of strategy process in the literature, whether theoretical studies or empirical studies, can be divided into three stages:

Stage 1: Rational (deliberate) strategy approach vs. emergent strategy approach

Stage 2: Rational (deliberate) and emergent strategy approaches (strategy formation)

Stage 3: Strategy process

Stage 1: Rational (deliberate) strategy approach vs. emergent strategy approach

Rational (deliberate) strategy approach

The start of deliberate strategy is found in the emergence of strategic management theory. At the time, the rational view was a revolutionary approach to strategy presented by Chandler (1962). He provided a description of how a large organization is expected to define its strategy with regard to the activities that should be undertaken and how its resources are allocated. He defined this as the responsibility of the executives within the organizations, consisting predominantly of two tasks. These tasks are: defining the long-term planning of the organization and the short-term reactive approach by which immediate problems should be solved. He also expressed concern over SMEs, which he believed to be more strategically active in the short-term, focusing on day-to-day activities, and therefore losing sight of longer-term objectives.

The strong foundational approach to the strategy process from a rationalist perspective allowed for the development of methods of strategic planning. The rationalist concepts of Chandler (1962), Andrews his colleagues (Andrews, 1971; Learned et al., 1965) and later work on corporate strategy by Ansoff (1965) were the key influences on the practical approach of strategy. This led to the development of strategy development frameworks that enabled formal and mechanical processes for formulating a strategy. It was the development of those step-by-step approaches to strategy formulation, and the identified need for measurability, that led to a more quantitative development.

According to Li, Guohui, and Eppler (2008) the success of strategy implementation is achieved by explicit formulation, which they highlighted. Furthermore, several researchers have stated that the internal and external environment is mastered through the quality of planning, and claimed that

strategy is a rational process of deliberate calculations to attain long-term objectives (Porter, 1998; Porter & Millar, 1985). It is during the rational analysis that success or failure is determined (Whittington, 2001). The formulation of a clear rational strategy is thus an essential activity within every organization. There have been further developments in tools to aid in the strategy approach to increase the success of strategies, such as improved analysis of internal and external factors: for example, Proctor (1992) proposed a computerized SWOT analysis that enabled the rational analysis of formal strategy formulation to be completed, and resulted in an improved decision-making process.

Criticism of the deliberate approach

While developments of the strategy process were considered the main approach to strategy formulation, a great deal of criticism with regard to this approach has been made. The leading criticism against a rationalist view of strategy formulation is the idea that the interpretation of the competition is overly simplistic and static (Whittington, 2001), meaning that strategists may view the external environment as static or unchanging. Secondly, the rationalist   approach to strategy formulation requires explicit definition of what the strategy is, with the intention and purpose of what is to be achieved in the decision-making process.

The literature review of the strategic management approach, under the rationalist view, makes a clear distinction between two sequential phases, by distinguishing between 'strategy formulation' and 'strategy execution'. Several researchers have criticized the definitive distinction drawn between both these phases of the strategy process (Mintzberg, 1978, 1987; Mintzberg & Waters, 1985; Quinn, 1978). They believe that there is more of a grey area

between these phases, which are entangled and should be seen sequentially as the strategy process.

Further research in how to view the relationship between the formulation and execution of strategy is mixed. While the rationalist tradition suggests that strategy needs to be formulated prior to execution, Whittington, (2001) reversed this process and suggested that strategy is realized in action. This means that during the execution of strategy the executives of the organizations determining 'what the strategy is like', 'what the long-term objectives will be based on' and 'what the results will be of the strategy that is being executed'. This is because when viewing the strategy from the content perspective there is no clear distinction between the two phases.

Emergent strategy approach

As researchers have questioned the more traditional strategy developments, a new perspective has developed that takes a different view of the strategy process (Eisenhardt & Zbaracki, 1992). The rational concept of relating the means (resources) to ends (outcomes) is questioned in relation to the strategy process. This is a shortcoming in terms of what the strategy process is like in reality. However, other factors have also been found to contribute to the need for a change in the perspective in which the strategy process is viewed.

The factors that are considered unaccounted for in deliberate strategy are matters of 'political agenda', 'conflict', 'intuition', and 'emotion' (Elbanna, 2006). Other researchers have agreed with the idea that the rationalist view is incomplete, especially as they see the need for more strategic indicators and find that the rationalist view does not cover critical non-tangible aspects of a strategy (Boyd & Reuning-Elliot, 1998). One problem with the rationalist view is the conflict between the deliberate strategy and the actual developments that occur in an organization, and because the organization

reacts to unexpected events, not predefined in the deliberate strategy. Therefore, considerations were made about how it could be possible to address the factors that went unaddressed in deliberate strategy.

The strategy process has always been a complex matter for organizations. According to Dent (1990) it is an elusive concept. Mintzberg and subsequent researchers have investigated how strategy is formed in organizations. Several references (Mintzberg, 1978; Mintzberg & Waters, 1982, 1985) have defined strategy as: "a pattern in a stream of decisions". The key finding of Mintzberg (1978) is first that not all of a 'deliberate strategy' is successfully implemented. Furthermore, he found that there are unintended developments that crop up, which he defined as 'emergent strategy' (as shown in figure 2.1). It is this concept that determined a paradigm shift, as anticipated by previous researchers. Mintzberg, (1978) states that:

"Two kinds of strategies were identified: intended and realized. These two, at least in theory, can now be combined in three ways, as shown in Figure 2.1 and listed below:

(1) Intended strategies that get realized; these may be called deliberate strategies.

(2) Intended strategies that do not get realized, perhaps because of unrealistic expectations, misjudgements about the environment, or changes in either during implementation; these may be called unrealized strategies.

(3) Realized strategies that were never intended, perhaps because no strategy was intended at the outset or perhaps because, as in (2), those that were got displaced along the way; these may be called emergent strategies." (p. 945).

Figure 2.1: deliberate and emergent
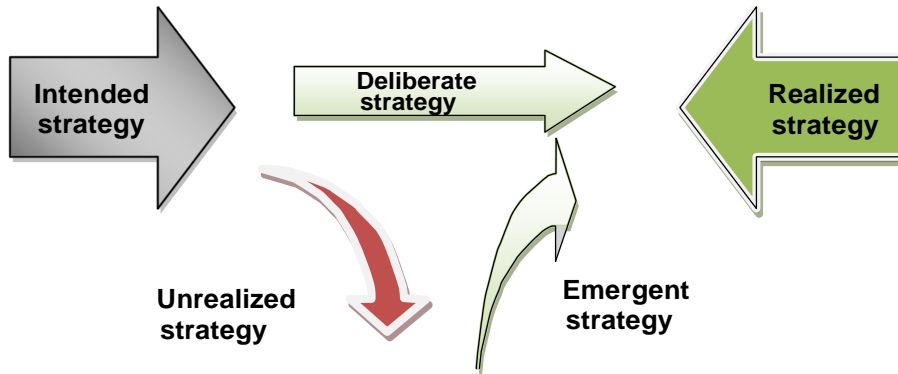
Source: Adapted from Mintzberg, 1978, p. 945.

The developments of this paradigm shift turned what was known as a 'deliberate strategy' into an 'unintended strategy' based on a reactive approach to day-to-day change in the environment. According to Covin, Green, and Slevin, (2006, cited in Titus Jr, Covin, & Slevin, 2011) emergent strategy enables flexibility with regard to entrepreneurial firms. This is a great advantage that allows organizations to attain success not feasible through the formulation of deliberate strategies. There is nevertheless, a risk of implementing an unsuccessful emergent strategy. It is the flexibility and adaptability of emergent strategies that are considered to be virtues; however, the concept that is now described as 'emergent strategy' has developed, since its definition by Mintzberg.

There are several perceptions of the meaning of 'emergent strategy', with no real consensus. To summarize, Mintzberg and Walters, (1985) originally defined the concept of emergent strategy as: *"Emergent strategies are realized despite or in absence of intentions"*. However, it was already proposed before Mintzberg that strategy exists in the mind of the strategists and that the actors distort the decision-making process. Therefore, it was believed that the actions that result from random events are caused by actors who intend to solve problems (Asnar & Giorgini, 2010). Further description of how strategy

emerges is based on the activities that take place in the form of trial and error. In view of this range of opinions, it is understandable that emergent strategy is complicated in nature.

Other views have been presented of how emergent strategy is to be defined. According to Johnson, Scholes, and Whittington (2008) emergent strategies come into existence without the deliberate intention of the strategist. Instead, such strategy is the product of day-to-day operational decision-making. In the view of Mintzberg (1990) these emergent strategies come into existence through the way stakeholders view their environment. According to Weick (1995), it is the actions of stakeholders reacting to immediate events that affect the organizations. It is exactly this process that causes organizations to abandon deliberate strategy, as it has been invalidated by these events and thus becomes unrealizable.

Stage 2: Deliberate and Emergent strategy approaches (strategy formation process)

The different approaches found in the literature and presented above have been suggested to be the strategic approach. The integration between the rational or planned approach and the emergent approach has been identified by Mintzberg and Waters (1985), and fellow researchers. It was also widely adopted in the research community by researchers such as Hart (1992), as well as in current research publications, based on the views originally presented by Mintzberg (see Elbanna, 2006, 2011; Johnson, Melin, & Whittington, 2003). However, the integration of the planned strategy and the emergent strategy is not straightforward.

According to several researchers, for integration to be achieved, it is necessary that a coherent fit be established (Hart, 1992; Mintzberg & Waters, 1985; Weick, 1989). Integration is the vision that enables what has been successfully

realized from the rational strategy, and the additional activities that have taken place in the form of emergent strategy, using resources that were not initially planned. It is therefore essential for realizing a strategy that the dynamic interactions between emergent and planned strategy are understood (Andersen, 2004a, 2004b). This improved understanding has led to significant developments in the strategy process.

The concept of the integration between deliberate and emergent strategy can be represented through figure 2.1 (Christensen & Donovan, 2000). The point at which both strategies come together is resource allocation, with the difference that in one case the usage of these resources is intentional, while with the other this is not the case. Based on the allocation, whether intended or not, the strategy is realized. It is by using this approach that strategic managers can improve strategy formulation, and it is at this level that opportunities arise as emergent strategy.

The development of the strategic process by integrating formal planning with reactive emergent strategy changed the way strategic planning is done. Based on his findings on the strategy process, Mintzberg (1987) was able to develop his '5P' model to improve how strategists develop strategy. This model is based on five definitions: plan, ploy, pattern, position, and perspective. Whittington (2006) further investigated this; however, he only used four perspectives to understand how the outcomes from deliberate and emergent processes were developed.

The concepts that were presented by Mintzberg have been continually developed. Rosén (2011) investigated the relationship between deliberate and emergent strategies: through empirical evidence, he examined the relationship between both deliberate strategies and emergent strategies that have been realized. He presented this concept based on three functions and nine roles, at

three levels between the deliberate strategy and emergent strategy. The relationship between them was described as downward in the case of deliberate and upward for emergent, which potentially relates to the hierarchy within an organization. When top level management do not plan for specific strategic events then these are likely to be integrated into emergent strategy by the 'strategy implementer' lower down the organization.

Strategy formation process

Strategy *formation* is a new term that has been introduced into the strategy management vocabulary. It is used to describe the *integration* between the rational and emergent strategy perspectives. According to Mintzberg, Lampel, Quinn, and Goshal (2003) and Van de Ven (1992) strategy formation is both *the formulation and implementation* of the formation strategy process in the rational perspective. Therefore the strategy formation process has been described as a process in which deliberate and emergent strategies converge. These definitions of what strategy formation are believed to allow a clear distinction between strategy formulation and formation.

As previously defined, the strategy formulation phase in the rational perspective of the strategy process is initiated at the analysis stage. However, during implementation of the planned process of strategy, there is unrealized strategy that is replaced by unintended or emergent strategy. When an organization is involved in emergent strategy processes, the formulation stage is replaced by formation. This is especially true when its strategy process is a purely emergent one. Nevertheless, most organizations have initial intended plans that undergo some form of modification throughout the strategy process, involving emergent strategy. It is during this stage that Mintzberg (1994) expressed preference for the term *formation* rather than *formulation*, due to the nature of the activities that these terms describe.

The strategy formation process that has been defined above is derived from an analysis similar to the formulation of strategy; that is, it is based on internal and external analysis. However, the formation of strategy is based on analysing the different activities and types of work within the organizations (Johnson et al., 2003). Therefore, the strategy formation perspective takes place at the micro level of the organizations. It is at this level that competition, complexity, and dynamics can be observed within the environment. As identified above, organizations tend to have both rational and emergent strategy, rather than only pure emergent strategy, which implies that the strategy process is a mixture of both.

It is important that organizations are able to strike a balance between rational, formal strategic management and emergent opportunities for their organizations. According to the work of Elbanna (2006) the strategy process has an integrative pattern between the emergent and rational strategic perspective. Andersen (2004a, 2004b) states that there is dynamic interaction between both perspectives. Based on the relationships identified by previous researchers, it is confirmed that an integrated strategy formation process is based for both emergent activities and formal planning (Lavarda, Canet-Giner, & Peris-Bonet, 2010). However, the lack of clarity in the literature concerning strategy formation processes and the relationship between formal and emergent perspectives of strategy suggests a need for this area to be further investigated.

The literature that reviews strategy formation generally holds that the most relevant concept is 'involvement' (Hart, 1992; Wooldridge & Floyd, 1990), and this has been confirmed by more recent research into the strategy formation process (Collier, Fishwick, & Floyd, 2004; Currie & Procter, 2005). Several researchers have identified, through observation, how active

participation in the management of daily activities causes strategy formation (Currie & Procter, 2005; Johnson et al., 2003). While there is a plethora of literature that has investigated strategy formation, more in-depth understanding needs to be developed on the relationship between the strategic perspectives on the formation process.

The investigation of how planned and emergent strategy comes together within an organization is a complex study. The work of Rosén (2011) can therefore be praised as it seeks, in detailed steps, to define how both these perspectives relate to each other. It is through the concepts of strategy as practice approach and strategy as process that new insight is revealed, enabling better understanding of the relationship between both perspectives. The findings have been established at three levels within the organizations: at the first level four activities with strategic outcomes have been identified as: *"visionary, prescribed, evaluative, and unrecognised" (p.196).* The second finds how easily basic resources could lead into unintended strategic behaviour, which are: *"top management, strategy task force, corporate staff management, temporary governance, operational middle management, and operational level employees" (p.197).* The third and final is through theorizing about the convergence between both the strategic perspectives that found *"downward implementation, upward recognition and horizontal facilitation" (p.197).*

This research was taken to the next level by investigating strategy formation in relation to firm growth (Titus Jr et al., 2011). Neither long-range objective setting nor forecasting was found to be more effective. There is a lack of long-term vision in pure emergent strategies, and frequent change of the strategy could cause more harm than organizational growth (Parnell, 1994). On the other hand, as Mintzberg (1990) stated, an overly controlled long-term

planned strategy could cause an organization to overlook the most basic operational flaws. Titus Jr , et al., (2011) also found that strategic management should be conservative of operational activities that naturally provide innovation within the organization, confirming the findings of Rudd, Greenley, Beatson, & Lings, (2008), indicating that strategic planning has improved organizational performance through operational flexibility.

Stage 3 strategy process

Strategy dimension

The developments of how strategy is performed within organizations have changed by means of more clear characterization and contextualization: For example, strategy can now be observed from three distinct dimensions (Chakravarthy & White, 2002; Pettigrew, 1997). These three dimensions are referred to as the strategy process, strategy content, and strategy context, and refer to how, who, when, what and where the strategy is conducted. Below, the definition of De Wit and Meyer (2010) gives more depth to the meaning of each of these dimensions, and this is followed by a review of the literature on the discussion of whether these dimensions should be viewed as separate or together.

The process through which strategy comes into existence within organization is commonly referred to as the strategy process. According to De Wit and Meyer (2010) this is usually through a set of questions relating to the key words how, who, and when. **'How'** in strategy process questions is the means by which strategy is analysed, formulated, implemented and evaluated. **'Who'** defines the people that are involved at each of these phases during the strategy process, and **'when'** refers to the time-line, with indication of when the activities defined by 'how' will take place. According to Chakravarthy and Doz (1992) the strategy process is involved mostly with effectively shaping

strategies within the organizations. Furthermore, they distinguish strategy *process* from strategy *content*, as it focuses on the strategic positioning of the organizations, based on their strategic context, rather than the process used to influence strategic positioning.

Strategy content is widely regarded as the product of the strategy process throughout the literature. As defined by De Wit and Meyer (2010) strategy content is related to the keyword 'what'. This can be interpreted as what the strategy produces. Chakravarthy and Doz (1992) referred to the characteristics of strategy content, in addition to what is produced through a strategy process. Furthermore, according to Montgomery, Wernerfelt, and Balakrishnan, (1989) it is the product of the strategy process known as strategy content that is used to approach the scope or ways of competing within individual markets. The situation in which the strategy process and content is determined is critical to strategy development.

Strategy context is a significantly different concept compared to the other two dimensions because it dictates the circumstances under which both strategy content and strategy process are determined. As defined by De Wit and Meyer (2010)strategy context is concerned with the key word **'where'**, that refers to both the internal and external environment (Chakravarthy & White, 2002). It seeks to find where the strategy process and strategy content is located within the organization's environment. Therefore, *the application of the strategy process is considered successful when the content is attained, and the context is defined*.

The literature has revealed some criticism with regard to strategy content. The development of topologies for strategic content may provide useful metaphors (Porter, 1998). Nevertheless while this is beneficial for planning what is expected from the strategy as a product, it does not allow strategists to capture

the complexity and dynamics of the relationship between the strategy process and its content (Webb & Pettigrew, 1999). Different views exist within the literature on whether the three strategy dimensions should be separated or not.

While most researchers have separated the dimensions of strategy as described above, according to Vänttinen, and Pyhältö (2009) the division of strategic management into these three dimensions is artificial. Even though the concept of separation has been widely accepted in academia, practical research has found that the idea of separation between these dimensions does not hold in empirical research, which results in a criticism of artificiality, as these dimensions are so interrelated. According to Haugstad (2007) the separation of dimensions is purely theoretical, because in practice this is not meaningful, and the strategy concepts become blurred.

Modern Strategy process: 'processual approach', 'strategy as practice' and 'post-processual strategy approach'.

Strategy research has been actively pursued in the business environment since the middle 1960s, and has undergone much in-depth investigation since then. Originally strategists were interested in the content of strategy, looking at what strategic decisions were. Modern approaches to strategy tend to look more at the process of strategy, and this places the focus on how strategy comes into existence. It was Bourgeois (1980) who distinguished between strategy content and strategy process, while Chakravarthy & Doz (1992) identified that deliberate strategy that developed from the content view on strategy is likely to be based on secondary data: this implies that the quality of the strategy may be disconnected from the actual context.

The research in strategic management has changed its viewpoint of how strategy is actually performed within organizations. Predominantly this has been through restructuring the type of questions used to formulate strategy.

Several authors have demonstrated the difference between deliberate and emergent strategy as opposed to *processual strategy approach*, which focuses on the processes rather than the output of the strategy(Johnson et al., 2008). According to Regnér (2008), the *processual approach* to strategy focuses more on the engagement of actors and the contextual aspect to strategy. The focus on the process of strategy rather than its content has caused a paradigm shift, which is discussed in more detail below.

While previous approaches to strategy initially postulated a sequence of phases that were undertaken within the deliberate approach, the emergent approach is considered to involve more interaction between its phases. The *processual approach* is a mixture of both, adding an experimental and learning approach. Pettigrew (1992) and Pettigrew et al. (2003) identified that the *processual approach* to strategy came into existence during the early 1990s as a consequence of a merging of *Market Based Strategy* (further developed by Porter, 1998) with *Resource Based Strategy* (Barney, 2001). By combining these two concepts of conducting strategy, the *processual approach* took shape.

The concept of *processual strategy approach* was developed based on the idea of aligning internal resources to external factors as a process of formatting the organization. The *processual approach* focuses more on *how this was done* rather than *the results that would be achieved*. Day-to-day activities form patterns that become formalized into practices and business processes (Ackermann, Eden, & Brown, 2005; Whittington, 2006).

When it was introduced, *processual strategy approach* was considered revolutionary as it took a completely different approach to the way it viewed strategy. This naturally attracted an amount of criticism. Whittington (1996) stated that *processual strategy approach* focuses too much on the overall organization, while Johnson et al. (2003) stated that more attention should be

paid to day-to-day activities. Furthermore, there was criticism that the micro level activities were not understood (Regnér, 2003, 2008): it was through the natural investigation of the shortfall of these aspects of the *processual approach* to strategy that *strategy as practice approach* was born.

The strategy as practice perspective of strategy started at the turn of this century. It was through the development of a practice rather than process view to strategy that this concept came into existence, as an extension to a *processual strategy approach* (Jarzabkowski, 2005; Johnson et al., 2003). Whittington (2006) defined strategy as practice approach, theorizing strategy in a framework as **"practitioners"** (strategist, the actors that do things), **"practices"** (*tools* that they use) and **"praxis"** ('micro element of strategy, what they actually do', or *'activities'*). This provides a better overview of what is meant by the idea of strategy as practice approach. Around the same time similar concepts were developed that were not contradictory *to processual strategy approach*, which found that strategy emerges through the interaction between actors and the strategy context (Jarzabkowski, 2003). Furthermore, a third perception of *strategy as practice approach* is that it is more than simply an extension of *processual strategy approach* (Chia & MacKay, 2007). In this perception, strategy is viewed as a practice that emerges in a social context.

Strategy as practice approach is currently the leading viewpoint on how strategy research is conducted. However, Chia & MacKay, (2007) have taken the ideas of strategy as practice approach a step further by distinguishing strategy as practice approach from *processual strategy approach*, describing it as *post-processual strategy approach*. This is based on the idea that practice is the centre of the research, rather than the micro-macro activities conducted by actors. This has led to a distinct approach to strategy that focuses on the field of practices as a way of investigating the emergence of strategy. In this view of practices, events, individuals and doings are all parts of practice complexes.

Initial debate over deliberate and emergent strategy was dismissed by the ideas of focusing strategy research on its process rather than its content. As strategy research became interested in processes it became clear that more investigation was required into the micro level of activities. More recent research has viewed strategy research as a practice rather than a process, based on the same ideas. However, some current researchers are determined to distinguish themselves from *processual approaches* by making strategy practices the centre of investigation. Table 2.1 shows the anatomy of strategy process stages. The next section will provide an explanation of strategy process phases including tool and activity bases.

Table 2.1: The Anatomy of strategy process stages

Strategy process stages	Stage 1		Stage 2	Stage 3		
	Deliberate approach	Stage Emergent approach	Deliberate and Emergent approach	Modern strategy process (activities based view)		
				Processual	Strategy as practice	Post processual
Time period	1960s – 1980s	1970s – 1990s	1980s – 1990s	1990 – 2000	2000s - Current	2007 - Current
Strategy process focused	Deliberate content focused	Emergent content focused	Deliberate and Emergent process focused	Emergent process focused	Extension to emergent process focused	Emergent practice focused
The Main Authors	(Andrews, 1971; Ansoff, 1965; Chandler, 1962; Learned et al., 1965)	(Johnson, Scholes, & Whittington, 1998; Mintzberg, Brunet, & Waters, 1986; Mintzberg & McHugh, 1985; Mintzberg & Waters, 1982, 1985; Porter, 1980)	(Andersen, 2004a, 2004b; Christensen & Donovan, 2000; Hart, 1992; Mintzberg, Lampel, Quinn, & Ghoshal, 1996), (Nonaka, 1988; Shrivastava & Grant, 1985; Wooldridge & Floyd, 1990)	(Mintzberg, Ahlstrand, & Lampel, 1998; Pettigrew, 1992; Pettigrew et al., 2003; Van de Ven, 1992; Whittington, 2001)	(Jarzabkowski, 2003, 2005; Jarzabkowski, Balogun, & Seidl, 2007; Jarzabkowski & Paul Spee, 2009; Jarzabkowski & Whittington, 2008; Jarzabkowski & Wilson, 2002)	(Chia & MacKay, 2007)

Source: The author

Strategy process phases, including activities

Introduction

The strategy process is the stages that an organization goes through when involved with its strategy. The understanding of the individual phases is not a simple matter, because within the literature it has been found that some researchers have identified three stages while others have identified four. There are two groups of researchers who have found that there are three stages: the first group defined three stages based on the idea that the analysis of the internal and external environment is the formulation phase (e.g. Dudzevičiūtė & Peleckienė, 2010). The other group of researchers, who found that there are three phases, based themselves on the idea of integrating the formulation and implementation stage (e.g. Feurer, Chaharbaghi, & Wargin, 1995; Mintzberg, 1994; Mintzberg et al., 2003). However, the mainstream approach of researchers is to view the strategy process as four phases, in which there is a separate phase for analysing the internal and external environment (Acur & Bititci, 2004; Bear & Pawlak, 2010), and distinguishing between the formulation and implementation phase. Each of these is presented in more detail to understand the key differences between the positions that these researchers have assumed about the phases of the strategy process.

The inclusion of analysis in the formulation phase has received interest from within the discipline of marketing. Advocators of this approach include Dudzevičiūtė and Peleckienė (2010), who presented the start of the strategy process with planning and formulation. This phase includes internal and external analysis as well as evaluating goals and developing a plan. The planning and formulation phase is superseded by the implementation and execution phase. This involves the translation of a high level strategy into specific actions through allocating resources and managing change. The final

phase is control and evaluation of the strategy. This phase assesses whether the implementation of the strategy was successful and to what extent. These are the three prescribed phases of the strategy process.

However, some researchers have found that the strategy process consists of three phases based on a combination of the formulation phase and the implementation phase. This is opposed to researchers who included analysis in the formulation phase; more academic debate exists which presents a case for why the formulation or implementation phases should or should not be integrated. One of the key ideas behind the separation between formulation and implementation phase is that it is considered to be artificial. According to Feurer et al., (1995), organizations are constantly analysing the environment; therefore formulation and implementation are done simultaneously.

The argument that, within the strategy process, the phases of formulation and implementation are actually single phase has been strongly supported by Mintzberg (1994), on the basis that formulators implement strategy, and implementers formulate strategy. It has been found that strategy outcomes are a product of the formulation and implementation stage through a two-way relationship in which they affect each other (Feurer et al., 1995). Mintzberg, et al., (2003) described this relationship as 'tangled'. However, not all researchers agree that there are only three phases in the strategy process and that environmental analysis and formulation, or formulation and implementation, are one phase within the strategy process.

As previously identified, the strategy process has been considered to have four phases by the mainstream literature. However, within that literature which presents the strategy process there are some different interpretations. This is only a small difference; some researchers refer to the first phase as the input stage rather than environmental scanning (e.g. Acur & Bititci, 2004),

reforming the input stage in a similar way to other researchers (e.g. Bear & Pawlak, 2010). Therefore, there is little or no difference other than in terminology.

Nevertheless, the separation of the formulation and implementation phase is not settled (Acur & Bititci, 2004; Bear & Pawlak, 2010). Researchers have stated that the formulation and implementation stages should be separate, based on the original and most credible conception presented by Kenneth Andrews in the 1960s (Rumelt et al., 1994). This idea was supported by Chandler (1962) and Ansoff (1965) and this concept of separating both phases is active in more recent research (e.g. Moussetis, 2011).

Several researchers have suggested that improved strategy outcomes are achieved as a consequence of separating formulation and implementation phases. In search of 'good' strategic planning practice, Brews and Hunt (1999) identify the need to separate these phases. Bryant (1997) found that the implementation phase is most critical during the strategy process, implying that it is separate from formulation. Farjoun (2002) stated explicitly that there is a clear separation between these stages in the strategic management process. Kessler and Kelley (2000) have presented a strategy implementation framework that separates the formulation and implementation phase, and several other researchers have proposed that there is a separation between these stages of the strategy process (Barney, 2001; Dooley, Fryxell, & Judge, 2000; Kaplan & Norton, 2001b, 2001c). In this research, an overview for each phase of the strategy process, including activities, will be provided in the next section.

Phase one (environmental analysis)

Environmental analysis has been recognized as the first phase in the strategy process. Even when included in the formulation phase, environmental analysis

cannot be left out of strategic planning, as it is a prerequisite (Beal, 2000; Côté, Vézina, & Sabourin, 2005). Business performance is primarily influenced by environmental change that is outside of the organization's control (Dobni & Luffman, 2003). This depends on whether change is taking place internally or externally to the organizations; in the case of internal change the organization is expected to be in control, while externally organizations can only anticipate these changes. Therefore it is necessary to conduct analysis of the organizations internally and externally for successful strategy formulation. In a survey conducted among CEOs, it was found that environmental analysis was perceived as an important part of their work. Furthermore, there was a significant relationship between an increase in environmental analysis and an increase in organizational performance (Aloulou & Fayolle, 2005; Darnay & Magee, 2007).

A study by Groom and David (2001) investigated internal and external environment analysis. It was found that usually internal analysis was done well, but that external analysis was conducted poorly. In the case of SMEs, Burke and Gaughran (2006) suggested that this is likely to be a consequence of limited resources available to thoroughly investigate the external environment. Furthermore, a great deal of skill is required, and access to external information is not always possible, therefore the process of external analysis is more prone to error. To increase the accuracy of external environmental analysis, it has been suggested that seven types of information must be identified: *'Broad Scope Information', 'Timely Information', 'Current Information', 'Aggregated Information', 'Accurate Information', and 'Personal and Impersonal Information'* (Ashill & Jobber, 2001, p. 53).

External environment analysis looks to investigate the forces that are out of the control of the organization and that are likely to impact the organization.

Its main purpose has been identified as gaining competitive advantage (Analoui & Karami, 2002). Several researchers have identified the key dimensions of external analysis to be: 'political', 'economic', 'social and (Dobni & Luffman, 2003; Hitt, Ireland, & Hoskisson, 2012; Macmillan & Tampoe, 2000), and technological which can be abbreviated into PEST (Dobni & Luffman, 2003; Hitt et al., 2012). Through this analysis it is possible to identify external threats and opportunities. It is through analysing these external factors that organizations may define their position, and environmental analysis is regarded as essential to the success of organizations.

From the literature of external environmental analysis, several researchers have suggested factors to investigate. Ashill and Jobber (2001) suggested that these factors are: "*distributor, competition, end user, suppliers and natural/physical factors, market characteristics*". As part of the external analysis, and analysis of the industry environment, some researchers suggest a five forces model based on: 'Threat of New Entrants', 'Threat of Substitutes' (Hitt, Ireland, & Hoskisson, 2007; Macmillan & Tampoe, 2000; Porter, 2008), 'Bargaining Power of Suppliers' (Macmillan & Tampoe, 2000; Porter, 2008), 'Bargaining Power of Buyer's (Porter, 2008), & 'Industry Rivalry' (Hitt et al., 2007)". Originally, Porter mentioned a sixth force known as 'Government Ideologies and Policies'.

The activity of internal environmental analysis is less complicated for organizations then external analysis (Groom & David, 2001). This is because an organization has information about itself readily available, and if this is not the case then activities can be initiated to obtain that information. However, internal analysis is a strategic activity that organizations must perform to gain maximum competitive advantage. This is done through identifying which activities organizations should perform. Throughout the literature researchers

have emphasized the need for organizations to identify unique ways of using their strengths and competencies to formulate successful strategies (Mintzberg et al., 2003). Therefore the key to organizational success predominantly lies internally; and it is only internally that an organization can gain competitive advantage, because the external environment is the same for all organizations.

A rigorous internal analysis consists of investigating an *organization's resources* (Hitt et al., 2007), *capabilities* (Hitt et al., 2007; Hooley, Broderick, & Möller, 1998) and *core competencies* (Hooley et al., 1998; Hooley, Greenley, Cadogan, & Fahy, 2005a).

The investigation of these three factors is complicated, and their configuration is essential to the success of the organizations. Essentially, organizational resources and capabilities are created throughout the organization's lifetime (Teece, 1992, 2009), a lengthy process when modified according to the organizational strategy. It is on the combination of resources and capabilities that core competencies are defined (Hooley et al., 1998), and through the application of internal analysis an organization can gain a competitive advantage.

An organization may start a strategy process by reviewing how they may take advantage of external opportunities based on internally available resources, capabilities and competencies.

There is not a single correct approach to completing an internal analysis; moreover, different approaches include different factors and methods. However, SWOT (Strengths, Weaknesses, Opportunities, and Threats) is predominantly used to conduct an internal analysis(Porter, 2008) . Alternative approaches to an internal analysis have been suggested by Gică (2011); for example, Value Chain Analysis to investigate support activities to the organization's product or service. Another approach is a resource-based view

to provide a detailed analysis of the resources available within an organization. As there are several approaches available, the organizations must identify its resources, capabilities and competencies that allow it to take advantage of its current situation regardless of the approach used to obtain this information. The following part will indicate the strategic activities of the environmental analysis phase, of which internal analysis is one.

For the first phase of the strategy process, environmental analysis is made up of mainly two activities: **'*internal environmental*'** (Alon, 2004; Aloulou & Fayolle, 2005; Burke & Gaughran, 2006; Celuch et al., 2007; Dean, 1986; Gică, 2011; Hitt et al., 2007; Hooley et al., 1998; Hooley, Greenley, Cadogan, & Fahy, 2005b; Hudson-Smith & Smith, 2007; Johnson et al., 2008; Porter, 2008; P. Savioz & M. Blum, 2002; Spence, 2003; Wesson & De Figueiredo, 2001), and **'*external environment*'** (Analoui & Karami, 2003; Ashill & Jobber, 2001; Dobni & Luffman, 2003; Haberberg & Rieple, 2008; Hitt et al., 2012; Macmillan & Tampoe, 2000). Completion leads to other activities such as **'*Evaluate opportunities*'** (Companys & McMullen, 2007; Gundry & Kickul, 2007; Messeghem, 2003; Neshamba, 2006; Wiklund & Shepherd, 2003). It is during this stage that an organization can take advantage of the external environment, potentially creating value, and it is based on this activity that organizations seek to identify the **'*strategic fit*'** (Andrews, 1971; Beer, Voelpel, Leibold, & Tekie, 2005; Ginsberg & Venkatraman, 1985; Hofer & Schendel, 1978; Lamberg, Tikkanen, Nokelainen, & Suur‐Inkeroinen, 2009; Miles & Snow, 1994; Zajac, Kraatz, & Bresser, 2000). This may enable an organization to adapt itself to the external environment.

Phase two (strategy formulation)

The strategy formulation stage of the strategy process is subsequent to and dependent on environmental analysis. To define a strategy, an environmental

analysis should be completed. O'Regan and Ghobadian (2004) stated that the lack of strategic planning is the main reason why organizations are unsuccessful, while a study in the Netherlands concluded that eighty per cent of SMEs demonstrated weak strategic planning (Waalewijn & Segaar, 1993).

Strategic planning is increasing in importance within the strategy formulation phase. Strategic planning has been suggested to be the main tool during the formulation phase of the strategy process (Barnes, 2002; Côté et al., 2005; Entrialgo et al., 2000; O'Regan & Ghobadian, 2007; O'Regan & Ghobadian, 2002; Pelham & Lieb, 2004). However, the usage of a strategy formulation tool does not guarantee an effective strategy, and it is only possible to know whether a strategy is effective after it has been implemented.

While much research has been devoted to strategic planning in SMEs, most of the studies show weak results with regard to the strategy formulation phase of SMEs; for example, it has been found that only just over half of SMEs are involved on a regular basis in strategic planning (Baker, Addams, & Davis, 1993). These authors associated fast growing SMEs with business plan development and success, as well as profitability. Furthermore, successful SMEs spend more time on strategic planning, approximately two hundred and seven hours as opposed to unsuccessful SMEs, which spend only around eighty-five hours on this strategic activity (Duchesneau & Gartner, 1990).

The literature has found that there are different perceptions of strategic planning. This phase is actually formulation, as Barnes (2002) views it to be made up of a complex process that amalgamates both deliberate and emergent strategy. An alternative view has been presented by Aram and Cowen (1990), who found that SMEs need to involve the operational team. Along the same line of thinking are Baird, Lyles, and Orris, (1994), who suggested that SMEs should adopt more formal strategic planning such that improved decision-

making takes place and financial performance increases. This could enable organizations to attain a competitive advantage. Fortunately, the formulation of strategy is simpler in SMEs (Verreynne, 2006); however, in the view of Banfield, Jennings, & Beaver, (1996), SMEs tend to be formal in strategic planning, making the process bureaucratic, while strategies should be simple and implementable.

The strategy formulation process existing in an organization emerges from defining several key concepts. The output of the strategy formulation stage is the strategy content (Gică, 2011), the elements of which are: "Mission", "Vision" "Objective", "Goals", "Strategies", and "Policy". Each of these components is developed during the strategy formulation stage, based on the findings of the environmental analysis phase. This enables the formulation of the strategy content.

The strategy that is formulated during this phase can involve different types of strategies. Dess and Miller (1993) placed these strategies in a hierarchy. The types of strategies in this hierarchy are: Corporate strategy, Business strategy, Functional strategy, and International strategy. Similarly, Gică (2011) defined categories of *strategies:*

"Focused strategy, Market development strategy, Product development strategy, Horizontal integration strategy, innovation strategy, the strategy of diversification (concentric and conglomerate), collaboration strategies, mergers and acquisition, restructuring strategy, and international strategy" (p. 13)

 There is some basic overlap between both these studies in terms of the kinds of strategies that are presented. This helps top-level management with defining why they are developing a strategy, and with what aim. As there are

many different strategies, it is not possible to say that there is a better one, only that they have different purposes.

The formulation of the strategy can be undertaken for multiple different purposes. The product of the strategy formulation stage is referred to as strategy content. However, the strategy content is the input to the third phase of the strategy process, when a strategy is implemented. As the content is the link for these two strategy process phases, the developments that have been formulated are crucial to the success of the implementation stage. In a similar way, the strategy formulation stage is dependent on the environmental analysis. This is why the formulation phase is one of the main reasons that strategies fail; there is a complicated communication procedure that takes place between the formulators of the strategy and its implementers. Therefore, an effective level of communication is required between the formulators of the strategy and its implementers.

As mentioned above, the second phase in the strategy process is formulation of the strategy. This phase consists of several different activities that have been identified in the literature, and the formulation phase of strategy is strongly related to defining what the future will be. According to the literature the activities during this phase are: *'Developing mission and vision statement', 'Goal setting', and 'Objectives setting (short-term) and tactics* (Badri et al., 2000; Bleistein, Cox, Verner, & Phalp, 2006; Casadesus-Masanell & Ricart, 2010; Chan, Huff, Barclay, & Copeland, 1997; Dvir, Kass, & Shamir, 2004; Gică, 2011; Hodgkinson, 2002; McKeen & Smith, 2003; O'Regan & Ghobadian, 2004; Porter & Millar, 1985; Prasad, Green, & Heales, 2012; Stonehouse & Pemberton, 2002)*, '**Strategic planning'** (Aram & Cowen, 1990; Baird et al., 1994; Jocumsen, 2004; Kohtamäki, Kraus, Mäkelä, & Rönkkö, 2012; Russo & Martins, 2005; Wang et al., 2007), **'Strategic**

choice- Identification of relevant strategic alternatives'(dynamic environment)(Baird et al., 1994; Beer et al., 2005; Carraresi, Mamaqi, Albisu Aguado, & Banterle, 2011; Mole, Hart, Roper, & Saal, 2011; Vos, 2005), and '*Strategy reformulation'*, which arises through emergent strategy, (De Toni, Nonino, & Pivetta, 2011; Dean, 1986; Krzakiewicz & Cyfert, 2012; Sáez-Martínez & González-Moreno, 2011). These activities have not been set in stone and can vary according to the organization and the strategists.

Phase three (strategy implementation)

The process of strategy moves from phase two (formulation) to phase three (implementation). According to Sashittal and Wilemon (1996) this phase has been labelled by various terms such as execution or actualization of goals in addition to implementation. While these synonyms are widely used throughout the literature it was found by Li et al., (2008), who reviewed sixty articles, that little controversy existed over the usage of these terms. Furthermore it has been found that the previous phase of strategy formulation is difficult, however it has been found that implementing or executing strategy is even more difficult (Hrebiniak, 2006). The fact that this phase is so difficult has been confirmed by Thompson and Strickland (2003, cited by Li et al., 2008; Schaap, 2006). Therefore, it can be concluded that it is during the strategy implementation phase that success is determined.

As the concept of strategy implementation is varied, some definitions are used to define what is understood by this strategic phase. According to Li et al. (2008) strategy implementation is a dynamic, interactive and complex process. It is defined by a set of decisions that initiate activities by the staff within organizations at all levels of the hierarchy. These activities affect both external and internal factors with the intent of attaining the strategic objectives of the strategic plan. Hitt et al. (2012) expanded on this definition by stating that this

phase involves the process of initiating organizational practices and policies, as defined in the strategy during the formulation phase.

The critical, key success factors are widely under debate in the contemporary literature of strategy implementation. A successful strategy is achieved when it is well-formulated, according to Gică (2011), and he defined four factors to ensure that strategy implementation will be successful: "Culture, organizations, human resources, control system and tools". Louw and Venter (2006 cited by Koyana, February 2009) defined the drivers of strategy development to be: "Leadership, organizational culture, reward systems, organizational structure and resource allocation". Similarly, Pryor, Taneja, Humphreys, Anderson, and Singleton, (2008) defined the five '5P's' of strategy implementation as Purpose, Principles, Process, People, and Performance. However, the success of strategy implementation goes far beyond simply naming a set of factors.

In addition to the implementation of strategy according to the above factors, the approach is critically important, in particular with regard to the allocation of resources in organizations. According to Raps (2004) it is the alignment of human assets within an organization that is the key to successful strategy implementation. He also found that this is rarely the case within organizations. Nevertheless, strategy formulation provides an overview of how effective people management is to be conducted, and how effective communication is to take place to attain successful strategy implementation. According to Noble (1999) the implementation of strategy depends on a two way communication process for success: this includes the provision of useful feedback and bottom-up messaging (Aaltonen & Ikävalko, 2002; Atkinson, 2006). While these are considered to be the most essential ideas for successfully implementing strategy, it is possible to identify additional possible factors. Out of the

numerous reasons why strategy could fail, the most recurrent in the literature have been summarized.

The concept of implementing strategy consistently has been recognized and associated with the success of organizations. The concept of implementation consistency means the alignment of organizational resources to decisions about the strategic vision (Brauer & Schmidt, 2006) Consistent strategy implementation is achieved through consistent actions towards organizational goals (Harrison & Pelletier, 2001) and this is the case for both emergent and deliberate strategy implementations. However, in the case of emergent strategy it is consistency of actions to the changes in the environment that make emergent changes strategic. Brauer and Schmidt (2006), who studied empirical results of strategic implementations, suggested that organizations whose strategy implementation consistency declines tend to under-perform.

It has also been found that implementation consistency is determined over time according to the organizational budget (Love, Priem, & Lumpkin, 2002). Furthermore, organizations that are able to maintain strategic implementation consistently over time are perceived to over-perform (Li et al., 2008; Slevin & Covin, 1997; Thommen & Blaser, 2003). Therefore it can be concluded that to successfully implement a strategy, consistency is required over time; however, a certain amount of flexibility is also required.

Flexibility of strategy implementation is required to interact with the dynamic environment. For example, it has been found that an organization does not only depend on the time factor to consistently implement strategy, but also the environment in which the organization operates plays a significant role (Slevin & Covin, 1997). In extremely highly dynamic or high velocity environments it may be hard to maintain strategy implementation consistency (Burgelman & Grove, 1996). This is because it is hard to align an organization's strategy to

strategic action in such an environment, where the ability to implement strategy flexibly is paramount.

The above factors are based on the existing literature to review how it may be possible to successfully implement a strategy. With regard to the implementation of strategy within SMEs, this has been found to be similar. The implementation stage is considered the major phase in the strategy process of SMEs (Côté et al., 2005; Hudson-Smith & Smith, 2007; O'Regan, Sims, & Ghobadian, 2005; O'Regan & Ghobadian, 2002; Pelham & Lieb, 2004). Tennant and Tanoren (2005) refer to implementation methodologies such as a Balanced Scorecard (BSC) framework to improve the success rates of the strategy implementation phase.

The literature of the third phase in the strategy process involves a great amount of debate regarding what is considered to be a successful implementation, as this is referred to as the most critical stage. For the implementation of a strategy the following activities are given in the literature: '***Strategy execution***' (Leslie, 2008; Li et al., 2008; Schaap, 2006), '***Implementation of tactics***' (Bleistein et al., 2006; Casadesus-Masanell & Ricart, 2010; Li et al., 2008; Nutt, 2006), '***Communication Strategy***' (Aaltonen & Ikävalko, 2002; Alexander, 1985; Foreman & Argenti, 2005; Heide, Grønhaug, & Johannessen, 2002; Li et al., 2008; Peng & Litteljohn, 2001; Rapert, Velliquette, & Garretson, 2002; Schaap, 2006), '***Allocate resources***', '***alignment of human resources with strategy***', and '***alignment of budget with strategy***'(Alon, 2004; Ates & Bititci, 2011; Brauer & Schmidt, 2006; Burke & Gaughran, 2006; Celuch et al., 2007; Chimhanzi & Morgan, 2005; Gică, 2011; Harrison & Pelletier, 2001; Hooley et al., 2005b; Hudson-Smith & Smith, 2007; Li et al., 2008; Lin & Wu, 2008; Love et al., 2002; Raps, 2004; Pascal Savioz & Manuel Blum, 2002; Spence, 2003; Wesson &

De Figueiredo, 2001), and '***Strategic change management'*** (Johnson et al., 2008; Li et al., 2008; Pryor et al., 2008; Zajac et al., 2000), which arises through emergent strategy. This phase is considered to be critical because the activities involve the practical aspect of applying the strategic fit within the organizations. It is during this stage that internal changes take place, and the organization interacts with the external environment, with the purpose of enacting the strategy.

Phase four (strategy review and control)

The two functions of this phase of the strategy process are review and control. This is to measure the performance of the strategy during the implementation stage, which enables regular monitoring of execution. This phase also has the function of evaluating the strategy itself. Through this evaluation it is possible to understand whether the implementation of the strategy was successful and if the strategy should be reformulated, based on the feedback obtained, to improve strategy implementation. Organizations need to have an effective strategic evaluation and control system in order to be successful in their strategic implementation (Atkinson, 2006).

The notion of needing a strategic control system is crucial to successful strategy implementation. Bowman and Helfat (2001) identified that management tends to fail in selecting appropriate strategic management control systems, and that its failure is damaging to the implementation process. Moreover, usually strategy implementations fail to meet their targets as a consequence of not applying a strategic control system. Strategic control focuses on evaluating the strategy to verify the results, and to determine whether the strategic objectives have been achieved (Dooley et al., 2000). Even when strategy implementation is successful, modifications to the strategy may be made to improve further execution of the strategy.

The strategy evaluation process is performed through an analytical technique. Ultimately the evaluation of the organizations depends on how effectively an organization is able to self-appraise itself, and learn. Single loop learning and double loop learning are two kinds of organizational learning (Argyris & Schon, 1978, cited by Buckmaster, 1999; Greenwood, 1998). According to these authors, single loop learning is the most common approach that involves problem solving based on the measurement of difference between expected and actual results. Therefore single loop learning is considered a method that is concerned with how to measure efficiency and how to most effectively achieve the goals as well as maintain organizational performance in the long-term.

Single loop learning is the simpler of the two methods of organizational learning. Compared to single loop learning, double loop learning seeks to make more profound changes within the organizations through modification of the fundamental structure of the organizations. The double feedback loop seeks to correct errors during the learning cycle. Furthermore, double loop learning enables the use of the errors identified to improve the strategy during reformulation, such that the expected performance can be attained. Single loop learning is insufficient within any organizations; therefore, it is suggested that specific critical variables must be monitored; additionally the control system should be adjusted over time, according to changes of the strategy (Argyris & Schon, 1978, cited by Buckmaster, 1999; Greenwood, 1998).

As the objective of the strategy evaluation process is to identify if the strategy implementation has attained its strategic objective, it is therefore necessary that the evaluation process must be continuous, to keep pace with the changes in the environment. According to Gică (2011) it is the internal and external dynamics that require an on-going strategy evaluation process. In turn, the

changes of this strategy during the reformulation caused by double loop learning require a new evaluation analysis technique that evaluates the strategic implementation based on the new strategic approach. It is during the stage of strategy evaluation that problems can be anticipated, and changes made to the strategy, such that objectives can be attained. During this stage it can also be determined whether strategy implementation was successful.

The strategy evaluation phase in the strategy process of SMEs is considered widely throughout the literature. During the stage of strategy evaluation the strategy of organization should undergo revision and reformulation of "product, services, markets, and technologies" such that the organization is competitive (Bostjan Antoncic & Hisrich, 2001; B. Antoncic & Hisrich, 2004). Specifically geared towards SMEs, Côté et al., (2005) suggested a strategy process in which evaluation of the strategy success is specified. They stated that the strategy should be reviewed after formulation.

Strategy evaluation is mostly related to the implementation phase of the strategy process, and most of the literature considers strategic evaluation to be concerned with regular tracking of the strategy during the implementation phase. This process involves problem detection in an error preventive approach such that changes can be made (Analoui & Karami, 2002). It is through this process that performance measurement is applied to manage the future direction of the organization. However, strategy evaluation also ties in closely with environmental analysis and strategy formulation: for example, environmental analysis can provide the evaluation process with key information for measurement, while the formulation phase becomes the reformulation phase during which changes can be made to the strategy to improve its effectiveness.

Once strategic implementation is completed it may be decided whether that strategy is successful. This process consists of four activities, according to the literature, and it is during this phase that the organization *'Gathering Feedback'* (Aaltonen & Ikävalko, 2002; De Wit & Meyer, 2010; Russo & Martins, 2005) and applies '*revision and learning'* (Argyris & Schon, 1978, cited by Buckmaster, 1999; De Wit & Meyer, 2010; Greenwood, 1998; Hudson, Smart, & Bourne, 2001; Kenny, 2005; Soderberg, Kalagnanam, Sheehan, & Vaidyanathan, 2011). Additionally the organization is involved in the '*control of strategy and organization performance'* (Seborg et al., 2010, Tenhunen et al., 2002) during this phase. Once these activities are performed it is possible to '*Identify corrective actions'* (Argument, Harrison, & Wainwright, 1997 cited by Hudson et al., 2001; Jennings & Beaver, 1997; Murphy & Kielgast, 2008), and '*Identify preventive actions'* (Augustine et al., 2012; Cagliano et al., 2001; Davis, Lundsberg, & Cook, 2008; Gilmore, 1966; Jennings & Beaver, 1997; Karapetrovic & Willborn, 1998; O'Regan & Ghobadian, 2002) such that strategy implementation problems can be overcome and new problems avoided.

The four phases of strategy that have been outlined are slightly different in SMEs, and based on their characteristics the strategy process has been found to be more informal (Beaver & Prince, 2004). The literature identifies that SMEs do not reveal exhaustive strategic analysis, but instead are driven by opportunity, which is implemented through emergent strategy (Burke & Jarratt, 2004). This was confirmed by Dean, (1986) who recognized the need to review strategy implementation with the purpose of reformulation. It is through the activity of reformulating that the organization can adapt itself flexibly to the dynamics of the external environment.

BSC framework and strategy process

A literature review of the strategy process has been completed; the next part of the literature addresses the BSC specifically and subsequently other management tools, and questions how these strategic management tools enable the strategy process to be carried out. The literature reveals that some authors have investigated strategy management tools to find out if or how they actually aid the strategy process (Clark, 1997; Ghamdi, 2005; Webster, Reif, & Bracker, 1989). According to Tapinos, Dyson and Meadows (2011) there is a gap in the existing literature that investigates how strategy management tools aid the strategy process. They investigated this gap through an international survey, and found that the application of a BSC influences all aspects of the strategy process.

The research literature includes a plethora of strategy tools in addition to the BSC. However, according to Jarzabkowski and Wilson (2006) there is no single survey that questions the same set of strategy tools, and it is this inconsistency that makes it very hard to review these conceptual developments. This is important because strategy tools are used to rehearse strategy (Dyson, Bryant, Morecroft, & O'Brien, 2007), and enhance decision-making through the testing of strategic initiatives. This enables an organization to proactively anticipate situations, rather than having to undergo an implementation stage, and have to learn from mistakes.

The BSC supports all phases of the strategy process. It has been found that (Kaplan & Norton, 1992) had originally intended the BSC for the other two phases of the strategy process, which are the formulation and the implementation of the strategy process, as well as part of a framework for managing strategy (Kaplan & Norton, 2001a, 2001b, 2001c; Mendes, Santos, Perna, & Teixeira, 2012). With regard to the formulation of strategy, it has

been found that the BSC has a significant impact. Tapinos et al. (2011) found that organizations that use the BSC approach place more importance on the task of formulating their activities based on their strategic vision and mission. Additionally it was found that the formulated strategy was communicated more effectively throughout organizations that used the BSC.

The implementation phase was found to be significantly different in organizations that did not use BSC (Reed & Buckley, 1988). Furthermore according to Othman (2006) the impact of the application of the BSC is evident mostly in the implementation and communication of strategy. The BSC is a comprehensive management tool that supports the strategy process (Ahn, 2001; Atkinson, 2006), and its contribution to this phase is based on the concept of BSC being a performance management framework. Both strategic and operational management activities are supported through the performance management aspect using numerical evidence (Lawrie & Cobbold, 2004).

The improved implementation of strategy through the BSC comes largely as a consequence of improved and more structured formulation of strategy. With clear definition of the strategic activities, the strategy is easier to implement and greater success is achieved. This is also a consequence of the improved communication between top-level management and operational management (Atkinson, 2006). The organization's resources are aligned with the operational aspects of the strategy through high levels of communication, which are supported by the BSC approach. This demonstrates the importance of effective communication for successful implementation of the formulated strategy.

Two-way communication is essential to successful strategy process implementation(Aaltonen & Ikävalko, 2002). The utilisation of the BSC supports the implementation phase through linking strategy to operational

activities. It is the communication of this strategy that determines successful implementation (Atkinson, 2006). Aaltonen and Ikävalko (2002) found that the BSC allowed actors at all levels of the organizations to be involved in strategy, as well as causing coordination between the four perspectives, which are: financial, customer, internal business processes, and innovation and growth, as a form of alignment towards strategic goals.

While the BSC was developed for formulating and implementing strategy, the main contribution that the BSC brings to the strategy process is the performance measurement aspect, which enables strategy implementation through predictive practices. Furthermore, strategy tools such as the BSC aid in the process of evaluating the implementation of strategy through performance measurement (Henri, 2006; Tapinos et al., 2011). Furthermore, through organizational learning organizations are able to learn from errors in the strategy process and attempt to overcome these in further strategic implementations. The BSC provides an organization with a tool to facilitate double loop learning (Rauffet, Labrousse, da Cunha, & Bernard, 2010; Sisaye & Birnberg, 2010), and this improves the performance management aspect of the BSC, making it possible to implement the evaluative phase of the strategy process.

Most organizations that use the BSC are considered successful, but this is not always the case for SMEs. This is not based on the idea that SME management is incompetent, but based on a lack of opportunity for developing the skills required to learn about the strategy process and implement the BSC (Aoki & Hasebe, 2012).

As identified in the literature of the strategy process, the evaluation of strategy implementation should not be viewed as an isolated phase. This is because it is a means of driving strategy implementation in terms of alignment (Tapinos et al., 2011). This is done through strategic control based on performance

management. It has been found that a less obvious benefit of the BSC, effective diagnostic control, is enabled by the performance measurement aspect of the BSC, which integrates the monitoring of financial and nonfinancial indicators (Atkinson, 2006; Robert Simons, 1990; R. Simons, 1994).

The strategy process tends to be different in SMEs, as opposed to large corporations. This is a consequence of top management involvement in daily operations, giving them more flexibility but less strategic control (Garengo, 2009; Garengo, Biazzo, & Bititci, 2005; Spence & Essoussi, 2010). Although the BSC facilitates the phases of the strategy process, some problems arise when dealing with emergent strategy. This is especially so for those SMEs focus on every-day management, and lose sight of overall long-term deliberate strategy. This is not so much of a problem until the organization attempts to integrate new emergent strategy into the existing emergent strategy, which can create unforeseen problems leading to untimely changes as a consequence of lacking a long-term vision. The BSC does not offer a solution for this type of strategy development, other than the benefit of a good strategy practice as a consequence of using it.

To gain a better understanding of how the BSC supports the strategic process, it is necessary to review the evaluation of BSC (table 2.2). This table clarifies what the functions of the BSC are and how they complement the strategy process. Performance measurement was the initial purpose for which the BSC was developed; this then lead to a method of strategic management through linking this perspective to overall strategic goals. The final developments of the BSC strategy evaluation enhanced the BSC into a framework for managing organizational change. It is at this point that strategic management is conducted based on performance measurement to change the direction of the organization. Over these three generations of the BSC an improved

method was developed for conducting the strategic process: details are provided in the next chapter.

Table 2.2: the evaluation of BSC

Type	Characteristics
Type I BSC or The1st Generation Balanced Scorecards	Financial and/or non-financial measures Grouped into perspectives
Type II BSC or The 2nd Generation Balanced Scorecards, a strategic management system"	**Type I BSC** with cause-and-effect relationships and some or all of the following characteristics: • Strategic objectives or strategic measures • Targets and action plans • Linkage between measures and organization's reward system • Linkage between strategy and the budgeting process and the scorecard used as a basis for evaluating potential investments and initiatives
Type III BSC The final is "the 3rd Generation Balanced Scorecard which started which is known as framework for a strategic management system and organizational change".	**Type II BSC** and some or all of the following **characteristics**: • An analytic and information system designed to support strategy review • A process for learning and adapting the strategy in which managers validate (determine whether new strategic opportunities have emerged) and refine strategy

Source: Adapted from: Cobbold and Lawrie (2002); Guthrie and Yongvanich (2009); Lawrie, Andersen, and Cobbold (2006); Lawrie and Cobbold (2004); Morisawa (2002); Soderberg et al. (2011); Speckbacher, Bischof, and Pfeiffer (2003).

Within the literature review of the strategy process, a better understanding has been developed of both what the strategy process is, and how organizations may conduct the strategy process. There are many factors that can cause the strategy process to fail, and the implementation phase is most prone to failure, while the success of the implementation of the strategy process is largely determined by the formulation and how effectively it is communicated. In the long-term, strategy success depends on continuous monitoring of strategy control procedures. Furthermore, several references have found that strategy management tools improve the strategy process and ultimately the success of organizations. Based on these findings further investigation will be made of the BSC and other strategic management tools to understand how they aid in conducting the strategy process and overcome the limitations of BSC.

Chapter Three: BSC and the strategy process

Introduction

The literature review of the previous chapter revolved around the strategy process. In chapter two the literature review of the strategy process was presented chronologically to help understanding of its development, and through this revision of the stages of development a clear pattern of the strategy process emerged. According to the literature this pattern of strategy consists of multiple phases, with some disagreement about where the boundaries lie between these phases. Predominantly, the literature found four stages that have been explained in detail to understand the strategy formation process that an organization undergoes during the phases of the strategy process. With a clearer understanding of the strategy process, a framework for the strategy formation phase (including activities) was introduced. This chapter presents a literature review of the BSC to understand how the BSC framework is used to format strategy according to the four phases described in chapter two. To develop a better understanding of the BSC an overview of this chapter is provided.

Throughout this chapter the BSC framework is introduced as a tool to format strategy according to the four phases identified in the literature review of the strategy process. A brief introduction of the BSC framework is followed by a review of how the BSC is applied within organizations, and especially in relation to SMEs. Through this review it is possible to identify the benefits of using the BSC framework and the limitations for strategy formation. Based on positive and negative evaluations, the literature is examined to understand how the BSC framework has developed. Through this review it is shown how developments of the BSC are used to overcome previously identified

limitations of how the BSC supports the four stages of the strategy formation process identified in chapter two.

Introduction and background to the BSC (origin)

Kaplan and Norton introduce the balanced scorecard (BSC) in the early 1990s to provide a new approach to developing strategy (Eilat, Golany, & Shtub, 2006). At that time strategy was largely dependent on financial measurement techniques to implement performance measurement. Through the implementation of the BSC as described by Kaplan and Norton (1996c), an array of financial as well as non-financial measurement factors were used to define a plan for implementing a strategy, its mission, and ultimate vision (Sim & Koh, 2001; Wongrassamee, Simmons, & Gardiner, 2003). By changing the approach to strategic planning in organizations to look at other non-financial factors in addition to financial factors, it became possible to make changes within organizations (Ritter, 2003). The developments of Kaplan and Norton can be considered as a steering wheel to drive the organization, taking account of all perspectives.

In (1996a), Kaplan and Norton wrote "The Balanced Scorecard: Translating Strategy into Action", which set forth a system advocating an analysis of business effectiveness that considered goals from four perspectives: (1) financial, (2) customer, (3) internal business processes, and (4) innovation and growth. Tracking progress in each of these areas provides a "scorecard" that enables organizations to link short-term financial measures with long-term strategic objectives. The BSC is designed to keep a score of a set of measures that maintain a balance between short- and long-term objectives, between financial and non-financial measures, between lagging and leading indicators, and between internal and external performance perspectives (Bhagwat &

Sharma, 2007; Hasan & Tibbits, 2000; Kaplan & Norton, 1992, 1996a, 1996b, 1996c; Ritter, 2003).

Financial measurement variables that indicate past performance can be complemented by non-financial indicators to drive future performance within organizations to meet their strategic objectives and long-term vision (Bhagwat & Sharma, 2007; Ritter, 2003). It supplements traditional financial measures by integrating non-financial measures with three additional perspectives - customer, internal process and learning & innovation (Cullen, Joyce, Hassall, & Broadbent, 2003; Marr & Schiuma, 2003). Kaplan and Norton proposed the BSC as a performance measurement tool (Cobbold & Lawrie, 2002; Lawrie & Cobbold, 2004; Ray, 2011).

Over the years the BSC has evolved. Originally it was a performance measurement tool aimed at revealing problem areas within organizations by pointing out areas for improvement, and implementing strategies (Eilat et al., 2006; Hasan & Tibbits, 2000; Kaplan & Norton, 1992, 1996a, 1996b, 1996c; Ritter, 2003); subsequently, it has changed into a framework for determining strategy. This is for the alignment of resources such as an organization's workforce, and information and organizational capital, with its strategy, as a tool for aligning and communicating strategy (Kaplan & Norton, 2004).

Another perspective of the BSC was provided by Chow, Ganulin, Haddad, and Williamson (1998) who demonstrated that BSC is:

"An integral part of the mission identification, strategy formulation, and execution processes, with a focus on translating strategy into an integrated set of financial and non-financial measures. As such, the balanced scorecard plays a major role in communicating the organizational strategy to the members and providing feedback to guide actions towards the attainment of objectives. (p. 265)"

Argyris and Schon's ideas were developed by Kaplan and Norton (1996) as supporting their concepts for the use of the BSC, stating that:

"Improving existing operations to achieve pre-specified strategic goals is a good example of single-loop learning. But companies are starting to use the Balanced Scorecard to extend their operational and management review processes into a strategic learning process, which extends single-loop operational learning to double-loop strategic learning at the management team and SBU level" (p. 43)

Developments of the BSC were mainly from Kaplan and Norton, and the feedback of case study researchers using the BSC has played a vital role in its development.

Overall, the above review indicates that the BSC may become a comprehensive strategic management system (Barnabè, 2011; Cobbold & Lawrie, 2002; Lawrie et al., 2006; Lawrie & Cobbold, 2004; Pongatichat & Johnston, 2008; Ray, 2011; Shulver & Lawrie, 2009). It can translate an organization's mission, strategic objectives, measures, targets, initiatives and strategy into a comprehensive set of performance measures that provide the framework for implementation of a strategic process in support of **how the strategy process can be achieved**. Moreover, the BSC technique may be used in strategic management as a strategic learning process. It extends single-loop (operational learning) to double-loop strategic learning at the management team and Strategic Business Unit (SBU) level. Finally it may help in a planning and improvement process system aimed at focusing and driving an organization's change process.

Application of the BSC

Marr and Schiuma (2003) stated that the BSC has become recognized industry wide; while De Geuser, Mooraj, and Oyon (2009) found that the BSC is

considered a significant management tool. A study found that 57% of 960 international executives reported the BSC as one of their main strategic management tools (Rigby & Bilodeau, 2005). During a later study in 2006, this per cent age increased to 66% out of a sample of 1221 organizations (Rigby & Bilodeau, 2007). However, in 2008 this per cent age fell to 53% (Rigby & Bilodeau, 2009). Moreover, in 2010 a further per cent age decrease was recorded, to 47%. Nevertheless, it changed again during 2011, increasing by 16% to reach 63% out of a sample of organizations (Rigby & Bilodeau, 2009). This shows how actively the BSC has been used over a period of time and is still gaining momentum, even after a possible slowdown (see table 3.1).

Table 3.1: The per cent age of usage of BSC

Source	Year	Percentage use of BSC as a key strategic management tool during the last 10 years
Rigby and Bilodeau (2005)	2003	57%
Rigby and Bilodeau (2007)	2006	66%
Rigby and Bilodeau (2007)	2008	53%
Rigby and Bilodeau (2007)	2010	47%,
Rigby and Bilodeau (2007)	2011	63%

Application of the BSC in SMEs

Introduction

While the BSC approach has received a great deal of attention over the past decade, this has not been the case within SMEs. According to Lawrie et al. (2006) there are few or no documented cases of BSC implementation in SMEs, even though many larger organizations use the BSC throughout the world (Rompho, 2011). Most SMEs do not know of the existence of the BSC

(Tennant & Tanoren, 2005) and most BSC implementations documented have taken place in large corporations (Fernandes, Raja, & Whalley, 2006).

Fernandes et al. (2006) stated that Kaplan and Norton do not propose solutions to help in implementing BSCs in SMEs. They said that:

"Kaplan and Norton (2001) have developed a framework for the implementation of the BSC strategy. The balanced scorecard, originally seen by Kaplan and Norton as a measurement tool, is now presented as a means for implementing strategy by creating alignment and focus. The presented approach is extremely detailed and complex. It requires a major commitment and effort from the implementer (company). Though Kaplan and Norton claim that this framework can be adopted by smaller organizations, they offer no practical solution to implement BSC within a SME environment, where limited resource and expertise are a key issue." (p. 624)

Shulver and Lawrie (2009) reviewed 133 research papers on different areas of strategy development by SMEs for competitiveness. They concluded that:

"It has been observed that all over the world, SMEs are considered as major source for economic growth. SMEs have not given due attention for developing their effective strategies in the past. The reviewed literature reveals that most of the strategies have been formulated for short-term goals as most of them are localized in their functioning. On the export front, they are facing many constraints due to their limited resources and lack of innovation in capability development. Major problems are related with knowledge loss, product design and development capability, training infrastructure and networking. SMEs are also not following any comprehensive framework for developing their strategies and quantifying their competitiveness. Present paper has tried to identify different areas of strategy development by them. On the basis of gaps identified, further study

need to be carried out to develop a holistic approach, i.e. considering all aspects of organization functioning for strategy development. This framework should also enable them in benchmarking of their processes and performance for continuous improvement." p539

BSC in SMEs and large organizations

An in-depth study of how SMEs differ from large corporations is beyond this review. There are significant differences that require different approaches at the strategic level. McAdam (2000) stated that the BSC was designed mainly for large corporations with high levels of complexity and formality that have access to large amounts of resources. However, Lawrie et al. (2006) found that a BSC is equally beneficial in SMEs as to large corporations, and they used the BSC to address a series of fundamental issues in both SMEs and large corporations. Andersen, Cobbold, and Lawrie (2001); Kaplan and Norton (2001b, 2001c); McAdam (2000) have stated the BSC approach may be as beneficial within SMEs as for larger corporations.

According to Rompho (2011), studies have taken place during the multiple generations of the BSC (Aidemark, 2001; Butler , Letza, & Neale, 1997; Dinesh & Palmer, 1998; Epstein & Manzoni, 1998; Kennerley & Neely, 2002; Norreklit, 2000; Schneiderman, 1999). Rompho (2011) concluded that only a small number of studies review the limitations of the BSC approach in SMEs. In this light, the conclusion of the BSC being equally beneficial to SMEs as to large corporations may not be justified.

Limitations of the BSC for SMEs

Considering the reviews that have been completed on the implementation of the BSC approach, it can be questioned how much is known with regard to the limitations of the BSC in SMEs. Out of the few studies conducted, McAdam (2000) found that SMEs have several strategic and financial constraints as

well as limitations in human resources and IT. SMEs tend to focus on financial rather than non-financial, and quantitative as opposed to qualitative information. It is argued that it is difficult to involve SMEs in performance measurement projects as they have insufficient time and availability (Tenhunen, Ukko, Markus, & Rantanen, 2002).

SMEs that implement a performance measurement system focus on operational and financial metrics, neglecting other aspects of the organizations, as they have frequently changing strategies (Rompho, 2011). It is suggested that it is not the only limitation of SMEs; they also suffer from insufficient knowledge of how to use strategic management tools, which can lead to poor practice (Luu, Kim, Cao, & Park, 2008).

Why SMEs fail when using BSC

The BSC involves more than simply monitoring the performance of an organization; it is about using this information in driving the organization forward. The implementation of the BSC is far more complex for SMEs, because SMEs that are struggling for survival need to balance longer-term strategy with shorter-term requirements, and are constrained by limited resources (Jennings & Beaver, 1997). Applications of the BSC can help close this gap for SMEs by helping to develop a strategy that is coherent.

A case study within a SME to fill the gap in knowledge by investigating the limitations of implementing the BSC Rompho (2011) found that application of the BSC was not a safe haven that guaranteed success. He continued by identifying two key areas in the BSC that lead SMEs to poor application. During the design phase either too many indicators, or too few indicators, are specified that are not linked to organizational strategy. It is most common to identify failure at this operational stage. Failure is usually due to a lack of commitment of senior management and insufficient staff maintaining the BSC

such that it becomes a onetime exercise rather than a continuous development cycle.

The benefits of using BSC

SMEs that have overcome BSC limitations have been able to realize its benefits. It has been found that SMEs are poor at addressing strategic destination and strategic objectives and priorities (Jennings & Beaver, 1997). Lawrie et al., (2006) have suggested that the usage of a BSC approach enables SMEs to overcome these strategic problems. Moreover, SMEs that use the BSC approach can use the destination statement and strategic objectives to evaluate added value and find new opportunities. Contrary to previous findings, it was stated in this study that implementation of the BSC approach did not require intensive administrative resources. They emphasized that SMEs can be successful when applying the BSC approach, addressing the challenges of strategy formulation through an arguably more simple approach.

BSC in SMEs in different countries

Researchers have reviewed the implementation of the BSC in SMEs in different countries. According to Bergeron (2000) SMEs in Canada use financial information in their decision-making process by relying on financial indicators or customer analysis: this causes them to neglect long-term visions based on internal innovation and organizational learning. Another study by Russo and Martins (2005) found that SMEs tend to use accounting information for fiscal purposes. However, they found that there was a positive correlation between the increase in size of the organization from small to medium size and the level of formal knowledge the organization has that is used in organizational learning.

In the USA, according to Chow, Haddad and Williamson (1997), who completed empirical studies in different sectors, SMEs have adopted a BSC

approach with several indicators to measure performance in the four defined perspectives. Each SME has its own approach to applying the BSC as they all have their own targets, goals and strategies, which are unique.

In the UK mixed findings have been revealed with regard to the usage of the BSC approach in SMEs. According to Saindis et al., (2001, cited by Russo & Martins, 2005) the University of Middlesex in the UK conducted a study that found SMEs to be rather informal with regard to documenting their strategies, and have limited or no use of strategic tools. They found that it was not a matter of SMEs not having strategic plans, but rather that SMEs have especially short-term plans with a great deal of flexibility to adapt to the fast changing external environment. Later literature by Fernandes et al. (2006) stated that UK companies are increasingly adopting the usage of the BSC approach, and suggested that this could make a difference in terms of survival. It is through being able to clarify their vision and by transforming a high level strategy into detailed operational activities that SMEs are attaining more success.

Findings have indicated that the BSC was not developed for SMEs, and SMEs have difficulties in implementing the BSC approach as it stands, and believe that it should be modified. According to Fernandes et al. (2006), Kaplan and Norton did not introduce the BSC for the use of SMEs. Instead it is geared towards large corporations. They should have presented an empirical study to help with the implementation of the BSC in SMEs, during which issues such as limited resources could be discussed. Fernandes et al. (2006) developed an adaptation of the BSC to address the limited resources of SMEs, and found that the need to constantly improve through matching internal and external factors can be attained through the BSC approach, which can bring success to SMEs.

The benefits and limitations of BSC

For the past twenty years the BSC has seen numerous applications. During the evaluation of usage a great amount of feedback has been received stating how the implementation of BSC within organizations has enabled them to excel. Naturally it was found that this was not always the case. Therefore a great amount of arguably negative feedback came into existence, referred to as the limitations of the BSC. The results of applications of the BSC are scattered throughout the literature. In an attempt to weigh the benefits, as opposed to the drawbacks, of this strategic management tool, the literature is reviewed starting with a summary of the positive accounts, followed by cases where problems were encountered during implementation.

Positive accounts of BSC

A number of accounts have stated that BSC is an effective strategic management tool. The first statements came from Kaplan and Norton (1993), in which the use of financial and non-financial metrics enabled more detailed information on the organization, and increased informed decision-making. Additionally they stated that the BSC was not a template that could be applied in general terms within organizations (Kaplan & Norton, 1992). Instead they stated that the BSC needed to be adapted according to the market situation, product strategy, and competitive environment. This demonstrates the flexibility of the BSC. Later on, Kaplan and Norton (1996c) intended historic financial information together with non-financial factors (drivers of future performance) to be the advantage of applying the balanced scorecard over other strategic management tools.

An early study by Anderson, Rungtusanatham, and Schroeder (1994) commented on Kaplan and Norton (1992), arguing that the BSC was adaptable according to organizational requirements. A later study by Frigo and Kip

(1998, cited by Hwang & Rau, 2007) stated that Motorola had improved in three key areas after using the BSC. These areas were vision systemization, quality improvement, and strategy execution. A study around the same time by McCunn (1998) reported an application in a UK retail bank. It was found that the BSC was widely used within the organization by management and led to improved management for the network of branches. Furthermore, BSC is an effective method providing corporations with a decision-making process (Hong & Suh, 2005). Through the concept introduced by Kaplan and Norton (1993) it is possible to relate financial and non-financial measures of past performance to address specific problems related to future performance. MacStravic (1999) found that the usage of BSC improved customer relationships, increased customer loyalty, and stakeholder satisfaction.

During the year 2000 a series of publications discussed the merits of using the BSC for formulating and implementing strategy. Andersen, Cobbold, and Lawrie (2000) stated that success was attained in driving change within an organization that was aligned with strategy. Around the same time Denton and White (2000) found that the different perspective introduced in the BSC approach as a consequence of using non-financial indicators meant that multiple stakeholders would have to contribute towards the overall strategy. This approach has the advantage of being able to address the individual needs of stakeholders. Meanwhile, implementation of the BSC had found its way into the eastern business world where Chia and Hoon (2000) reported results from two companies within the logistics sector. Their findings can be summarized as: *"aiding senior management in understanding the company vision and strategy", and "provisioning of a measurement system to track the strategy implementation".*

Subsequent findings have advocated the BSC approach to be more than simply a method for applying performance management (Kaplan & Norton, 2001b, 2001c). The knowledge of the results obtained through performance management can drive change, increase effectiveness, productivity, and competitive advantage. Other positive findings were that the BSC is an effective tool in developing, communicating and implementing strategy (Malina & Selto, 2001). They came to these findings through examining data of different divisions in a multinational manufacturing organization. Furthermore, Andersen et al. (2001) stated that methical use of BSC throughout the several phases of the strategy process could improve management through tackling day-to-day operational tasks.

Later developments have enabled management teams to clarify what the actual high-level strategy is McAdam and Bailie (2002). This is usually through specifying the vision and mission. They also believed it to provide a method to translate a high level strategy into business objectives. Moreover, Zinger (2002) supported the view that the BSC approach enables management teams to focus their strategy. Additionally, Wongrassamee et al. (2003) stated that one of the key strengths of the BSC is the fact that it links performance measurement factors with organizational strategy. The process of applying the method is believed to be testable for validity based on its transparency (Wongrassamee et al., 2003); by reviewing the measurement factors it should be possible for any observer to understand a business and its strategy.

As more implementation was made, and more researchers adopted the BSC approach to the strategy process, further advantages were identified. Keyes (2005) established that the BSC was a method to manage change and increase productivity, competitive advantage, and company effectiveness. Wang (2006, cited by Koo, Koo, & Luk, 2008, p130), emphasized that the benefits of the

BSC approach had become widely recognized: *"enabling action oriented plans", "determining strategic links",* and *"coordination between organizational units".* They pointed out that the approach could lead to the construction of strategic objectives, and how to measure progress. They added that organizational responsiveness could be increased in response to changes of the external environment, as a consequence of closer monitoring of the strategic performance of organizations.

Negative accounts of BSC

It has also been found that there are drawbacks and limitations to the BSC that have been extensively reported in the literature. The design of the BSC is complex, as it has to reflect strategic goals. The complexity of its approach can make it increasingly difficult for managers to produce a coherent strategy. There are differences between organizations using the BSC approach in the strategy process, even within the same sector, as a consequence of each organization having different priorities; this makes it difficult to compare the strategy process between organizations (Cobbold & Lawrie, 2002).

Some limitations were identified by Kaplan and Norton (1992). However, one of the most significant limitations they identified was the causality problem, with regard to being able to see the impact of the four perspectives within the BSC. It is uncertain whether other researchers had problems with implementing the causality problem due to the fact that Kaplan and Norton had not provided a clear definition, or conveyed a clear message of how to implement the BSC (Lawrie & Cobbold, 2004). A series of problems were found with regard to measurement selection, for example, it was found that when performance measures are poorly applied strategic outcomes are negatively influenced (Ray, 2011).

Kaplan and Norton (1996a, 1996b, 1996c) stated that the BSC was the foundation for developing strategies and needed to be adapted to the individual requirements of organizations. Chow et al. (1997) found this was not well understood by SMEs who had difficulties in adapting the method to organizational requirements. Furthermore, Chow et al. found that the BSC approach has been demonstrated to fail in 70% of SMEs, and they argued that this was due to poor management behaviour. As the BSC approach is intended to influence management behaviour, some managers have not wanted to adopt it, because they fear being placed 'on the spot', and as a result internal inconsistencies that would reveal bad management practice may be avoided by management (Epstein, Manzoni, & Insead, 1997).

A common reason for BSC projects to fail is due to the use of too many performance indicators. A lack of regular review of the indicators can mean that indicators creep in over time without having any relation to the current strategy. This has a tendency to weaken the BSC approach. It has also been argued that the four perspectives do not account for all stakeholders within the organizations, nor are external factors such as competitors, technological developments, or unexpected events (natural disaster) considered. The BSC is a very static approach that should be more dynamic in responding to business change (Norreklit, 2000).

The method is expected to have cause-effect relationships between performance indicators of the four perspectives, so it becomes clear why financial indicators oscillate and as a consequence of what. However, Norreklit (2000) argued that this is not always true. The cause-effect relationship link between customer satisfaction and good financial results may be weak. Based on the empirical evidence, Norreklit (2000) has contested the existence of causal links between indicators of the four perspectives. Kueng

(2000) identified that BSC theory strengthens business units but neglects the business processes. He concluded that the BSC does not go beyond business processes related to customer satisfaction and financial objectives.

Mair (2002) identified a series of limitations to the BSC. The most prevalent were: *"failure to communicate and train, no accountability, measures that do not focus on strategy, does not empower employees, to many initiatives" (p.26-27).* Among BSC sceptics it is believed that the BSC fails to achieve its goal when attempting to balance conflicts between stakeholder interests. Further criticism has been made regarding the difficulty of selecting appropriate strategic goals and relevant measures for the evaluation of organizational performance (Cobbold & Lawrie, 2002). BSC has been criticized, but on different grounds, concerned with methodological deficiencies and with the process of consolidating the BSC perspectives and performance indicators. Findings suggest that there is a lack of ability to amalgamate the quantitative values, to enable the contribution of each perspective to be quantified (Abran & Buglione, 2003).

Milis and Mercken (2004) found that there were no generic measures or perspectives for all organizations and business units, and Pun and White (2005) stated additionally that the BSC was not sufficiently concerned with specific stakeholders internally and externally. Furthermore it is considered a strategic management tool for large corporations, where top management can use it for overall performance measurement that does not take place in smaller organizations.

Criticism of the BSC has continued throughout its development. Lee, Chen, and Chang (2008) reiterated the problem of the BSC failing to consolidate its various performance indicators. Dror (2008) added to this that BSC does not provide a set method with guidelines that can be used for defining the

performance factors used to measure organizational performance, and found that the feedback was complex, and that there was no consideration of the time lag between what happened and the consequences. Yüksel and Dağdeviren (2010) summarized the points of researchers, stating that the BSC was a deficient method.

Evaluating the BSC Approach
Introduction

In the previous section a review of the benefits and shortcomings of the BSC was presented. Numerous positive as well as negative accounts were reviewed. According to Morisawa (2002) interest in applications of the BSC has increased since the 1990s. The method has been proved functional both in theoretical and empirical terms by different groups, including managers in different sectors, and management scholars. As the findings were so diverse over a long period of time it is not easy to conclude how effective the BSC actually is in aiding the strategy formation process.

The process of evolution has led researchers to rethink the way BSC works. The evolution of the BSC can be divided into three stages, which are referred to as 'generations' in the literature[1](Cobbold & Lawrie, 2002; Lawrie et al., 2006; Lawrie & Cobbold, 2004; Morisawa, 2002), or to three types of BSC

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[1] About 2GC

2GC is a research led consultancy expert in addressing the strategic control and performance management issues faced by organizations in today's era of rapid change and intense competition. Central to much of 2GC's work is the application of the widely acknowledged 3rd Generation Balanced Scorecard approach to strategic implementation, strategy management and performance measurement.

according to Speckbacher et al. (2003). These classifications of the developments of the BSC have in common the same fundamental concept originally described by Kaplan and Norton (1992). However they are different from each other in that over time changes have been applied to the workings of the approach to overcome identified limitations, and to take full advantage of the benefits.

Morisawa (2002, p.4-6) states that the three generations of the BSC have been defined in the literature through dates that determine when the generations started and ended:

- *"The 1st Generation Balanced Scorecards started in the early 1990 to 1996"* and was known as "*performance measurement system*"

- *The 2nd Generation Balanced Scorecards were developed in 1996, as a "strategic management system",*

- *The final is "the 3rd Generation Balanced Scorecard" which started around 2000s* and which is known as a "*framework for a strategic management system and organizational change*".

The generations of the BSC allow a categorical evolution. Figure (3.1) shows a pictorial overview of the BSC's evolution, by Morisawa (2002).

Figure 3.1: Overview of the BSC evolution
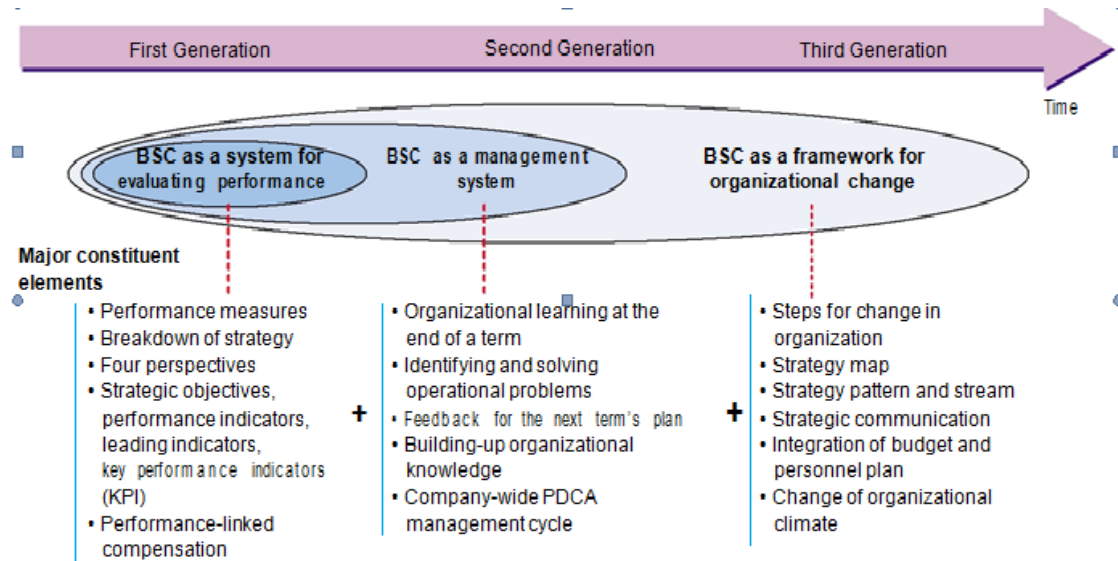
Note: PDCA = Plan, Do, Check and Action.
Source: Nomura Research Institute (citied by Morisawa, 2002).

A general consensus has been achieved on where the boundaries lie between the three generations of the BSC; this is especially true for the first generation. However there is a misconception between what is believed to be the second and third generation of the BSC, as strategy map is often referred to as belonging to the first or second generation(Zhang & Wang, 2010), despite it not having been introduced until the third generation (Ray, 2011). Cobbold and Lawrie (2002) contended that the second generation includes the strategy map. However, several publications subsequently defined the strategy map to be part of the third generation, as shown in figure 3.1 (Barnabè, 2011; Pongatichat & Johnston, 2008; Shulver & Lawrie, 2009).

The classification of the BSC approach according to generations puts the findings in the previous section about the limitations and the benefits into perspective. Now it can be understood what limitations existed during which generation of the BSC. It can now also be understood why the BSC has evolved the way it has, and which limitations the researchers were attempting to overcome and how they were attempting to take advantage of the benefits.

Based on this overview the development of the BSC can be evaluated according to its stages of evolution.

First generation

Kaplan and Norton created the first generation of the BSC in 1992 (Barnabè, 2011; Cobbold & Lawrie, 2002; Lawrie et al., 2006; Lawrie & Cobbold, 2004; Morisawa, 2002; Pongatichat & Johnston, 2008; Shulver & Lawrie, 2009) and therefore the characteristics of the BSC in its first generation have been attributed to them. The purpose of the BSC during the first generation was to measure and evaluate the performance of an organization. The method was unique in its own right as it provided the possibility to evaluate performance based on both financial and non-financial factors. However at the time of the development of the BSC there was no clear definition. Instead a great emphasis was placed on practical usage (Lawrie & Cobbold, 2004). The consideration of BSC during the first generation depended on how researchers applied it.

As suggested by Kaplan and Norton, the BSC framework was created in such a way that the mission and vision would be surrounded by all the strategic objectives of the organization. These strategic objectives would be divided according to the four perspectives. When strategic planning was performed, the BSC approach ensured that all strategic objectives were defined coherently with the organizational vision, such that all the organizational resources were allocated. Once the mission and vision were clearly defined the strategic objectives or goals could be determined.

Strategic objectives could be determined at an overall level. However, with the BSC approach it was possible to set goals within the business perspective, which was how Kaplan and Norton (1992) defined the existence of an organization at the most broad level. This view is formed out of four

perspectives known as: '*Customer perspective*' (how does the customer view the organizations)*, 'financial perspective*' (what does the organization provide its shareholders)*, 'internal business perspective*' (what action needs to be performed)*, 'innovation and learning perspective*' (how can organizations remain successful). These perspectives reflect the purpose for which the BSC was first developed: to combine the measurement of financial and non-financial factors.

Key performance indicators are the building blocks of the BSC. It is through the definition of the key performance indicators that the strategic plan is defined, which will determine how organizations will attain their overall vision and mission. The key performance indicators are measures, which are used to determine if strategic objectives are achieved. Once the four perspectives have been defined according to measurable strategic objectives that work towards the mission and vision, links may be identified between the four perspectives.

The links are the cause-effect relationships between the four perspectives in figure (3.2). It is through this concept, which was published by Kaplan and Norton during the first generation, that there is some reference to a 'strategy map' (Ray, 2011). However, at this point Kaplan and Norton had not referred to a 'strategy map', or considered how the cause-effect relationships would function. There must have been some notion of what it meant, but there was no clear explanation of how it should be applied.

Figure 3.2: Basic Concept of the BSC
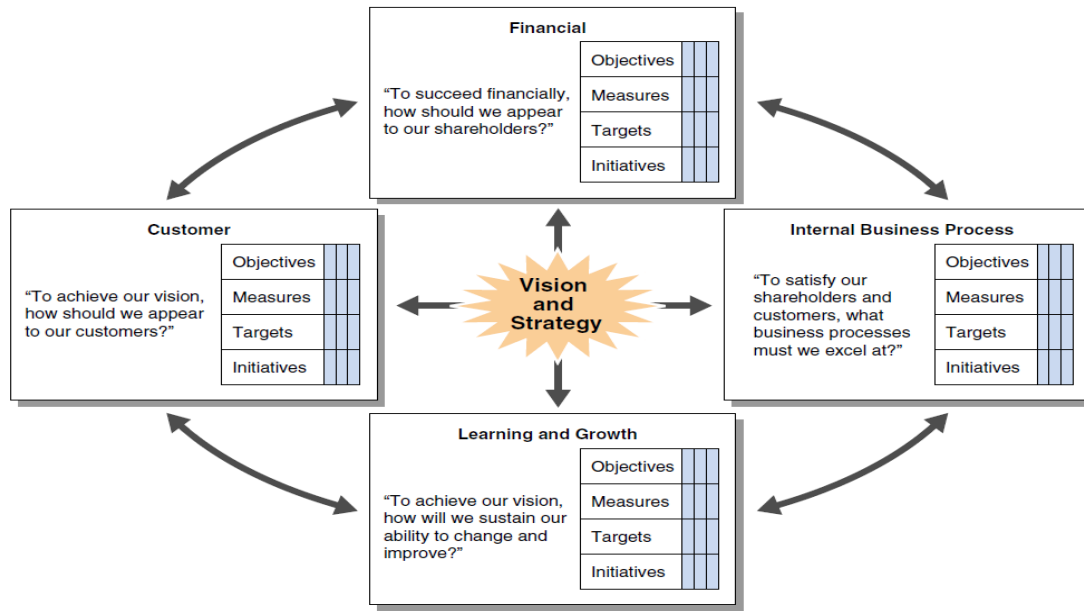
Source: (Morisawa, 2002). (Prepared by NRI based on Robert S. Kaplan & David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," Harvard Business Review, January and February 1996).

It was during the development of the first generation of the BSC that it was found that a number of benefits with regards to the strategy process had been identified. The flexible approach of the BSC was reported, together with increased information for improved decision-making by defining the vision and improving quality and strategy execution. Benefits were found in terms of managing large corporations and addressing future performance, as well as improving customer relations and loyalty externally, while retaining stakeholder satisfaction. The benefits were largely found to have been reported in the area of the strategy process, but the validity of the stated benefits seemed superficial.

In its early days, developments were made to improve the BSC. Initial investigations demonstrated that there were benefits, but also found that the limitations were very fundamental. Functioning with regard to how

information was derived, and how BSC should be applied within organizations undermined the positive feedback.

Second generation

The second generation of the BSC has been described as a strategic management tool, in response to the limitations that were reported in studies of the first generation. The most significant transition that took place between the first and second generation was the change of purpose for which the BSC was used (Cobbold & Lawrie, 2002): to implement the BSC for 'strategic management' rather than 'performance measurement'. In essence the BSC remained a performance measurement tool, with additional functionality that enabled managers to use it to tie in performance measurement with managing organizations.

One of the most fundamental limitations that were encountered during the feedback of the first generation was that Kaplan and Norton had remained distinctly vague about the working of the BSC. During the second generation of the BSC an improved definition was elicited (Lawrie & Cobbold, 2004).

What was considered a severe limitation of the BSC during the first generation was eliminated through some simple changes in how the BSC should be applied. To overcome the measurement problem it was suggested that no more than twenty to twenty-five strategic objectives be defined. Each of these objectives must be attached to one of the four perspectives, such that one or more measures could be assigned to the strategic objective. By clearly defining the strategic objectives, measurements could be put in place to measure performance towards these objectives, and monitor for performance evaluation.

Within the first generation there was no explanation of how the strategic linkage model was expected to operate, other than a diagram. However,

through measurement based linkage it was suggested that it would be possible to demonstrate causality. The key objective of the strategic linkage model was to demonstrate visually the major causal relationships between strategic objectives, rather than simply using numbers to demonstrate the cause-effect relationship between the strategic objectives.

Describing how the BSC approach should be implemented in more detail did not necessarily mean that the complexity would be reduced. On the contrary, its true complexity had only started to be described. Furthermore, it is not surprising that there were no changes to the BSC approach with regard to the limitation, which described BSC implementations as being hard to compare. It could be that by having a clearer picture of how the BSC is expected to be applied, that increased uniformity results, and therefore this limitation would have been overcome. No evidence of this has been found in the literature.

The BSC did not evolve only as a consequence of the limitation of the first generation; there were other developments in the BSC that turned the performance measurement approach into a strategic management system. Performance measurement could be applied throughout organizations through the 'plan-do-check-act' (PDCA) cycle, in addition to the causality linkage model that used the measurement results to strategically manage the organization (Morisawa, 2002). The BSC became a strategic framework that enabled action: this was because the formulated strategy of the BSC could be implemented, tested, monitored and evaluated.

Figure 3.3: Managing Strategy: Four Processes
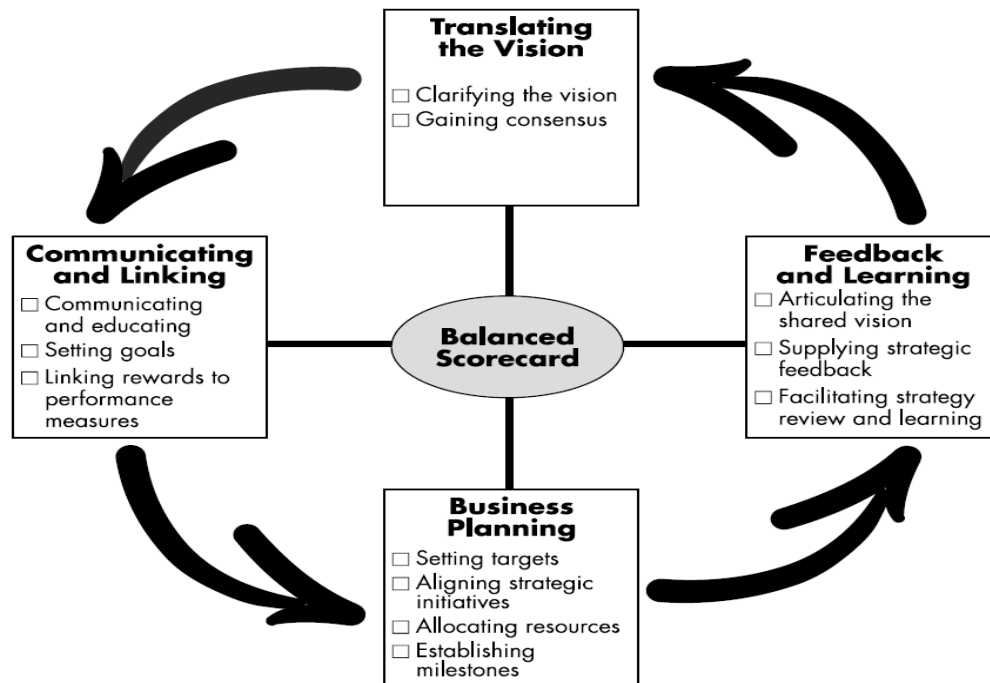
Source:Kaplan and Norton (1996c, p.77)

The developments of the BSC during the second generation, designed to overcome previous limitations, were shown to bring benefits. These benefits are largely associated with the idea of being able to implement BSC without fundamental flaws. The implementation of performance measurement within the strategic management framework allowed the BSC approach to be more coherent and robust.

However, there were further limitations that were identified during the second generation, despite a great deal of work devoted to resolving the most fundamental problems. Andersen, Lawrie and Savic (2004) presented a potential weakness concerned with strategic objectives selection. While there was no feedback about any problems with the measurement process, Cobbold and Lawrie (2002) reported that there were problems with regard to management defining priorities within the strategic objectives. Target setting was considered to be difficult, and management resisted the BSC as it would

make their management practices more transparent, and reveal hidden agendas (Epstein et al., 1997). Moreover, it was found too complex for SMEs to adopt despite the increased definition of how BSC was to work (Chow et al., 1997).

It was suggested that a consultancy team be present when the strategic objectives were defined, to have very clearly determined strategic objectives (Cobbold & Lawrie, 2002; Lawrie & Cobbold, 2004). There was nevertheless a limitation with regards to the methodological approach, because the causality links could not always be justified. In such cases, it was not only unclear where the links existed, but it could also not be explained why there was a link observed at later stages in the strategy process. This had consequences on the validity of the information that could be communicated through the linkage model.

Third generation

Limitations identified during the second generation of the BSC caused the research community to further develop and evolve the BSC approach into a third generation. Organizations were unable to go through the BSC approach because of its high degree of complexity, particularly SMEs. The difficulty of strategic thinking required by the management team to define the strategic objectives meant that an aligned strategy could not be formulated consistently.

Another problem identified was the limited understanding of how the causality model should be defined as part of management responsibility, and the reliability of the information that could realistically be considered as an output from the causal strategic linkage model. The complexity of being able to model an organization is very subjective, which causes several different views on how the organization works; consequently the linkage model is very prone to error.

The evolution from the second generation to the third generation implied a change of purpose. The first generation changed from a performance measurement system to a strategic management system. The third generation had the purpose of driving organizational changes (Morisawa, 2002). The third generation still implies performance measurement and strategic management, with the additional purpose of changing the organization. It is the addition of the destination statement and the strategy map that defines the third generation and makes the BSC approach therefore a framework for managing organizational change.

There is a clear distinction between what is known as the 'vision statement' and the 'destination statement' (Guidoum, 2000 cited by Lawrie & Cobbold, 2004). The 'vision statement' defined what organizations were trying to do while the 'destination statement' involves a process of target setting from which the measures could be selected, and broken down into categories. The advantage was that the destination statement allowed the process of strategy formulation. Therefore, high-level views of what the senior management team believes the organizations should turn into are integrated into the strategic formulation process of the BSC approach.

For an organization, defining a destination statement is a complex process. It is considered to be the greater part of the work when formulating a strategy and usually requires an organization to start from scratch if there is no pre-existing documentation available. A destination statement describes, in as much detail as possible, what the organization is expected to become by a specified date (Shulver et al., 2000). The destination statement details what the organization is trying to achieve such that strategic management can make rational decisions about the targets of organizational activity (Kotter, 1995),

and provides some form of quantitative detail of the categories defined in the destination statement (Lawrie & Cobbold, 2004).

The addition of the destination statement is believed by both empirical and theoretical researchers to have resolved the methodological problems of the second generation of the BSC. Management should be involved in the process of defining a destination statement, such that knowledge of each category is available. When the whole management team is involved it is easier to achieve a consensus on the destination statement that everyone agrees upon. Subsequently, the management team can more easily identify the priorities of the strategic objectives, and target setting is simplified and more clearly defined (through quantification). The destination statement has improved the BSC approach significantly during the third generation and enabled researchers to overcome major limitations with regard to the formulation of the strategy process.

In the second generation the concept of putting strategy into action came alive, and was maximized during the third generation. However, the destination statement only describes where management aims the organizations to be at some point in the future; it does not facilitate how the organizations will change. The selected strategic objectives should be represented through the "strategic linkage model", and demonstrated through causality between the objectives of the four perspectives, and how the organization is to be transformed from its current position into the description provided by the destination statement.

Between the second generation and the third, the strategic linkage models were replaced by the strategy map (Morisawa, 2002). The strategy map describes the strategic system of an organization through a map that is used to communicate its objectives, from the strategic management team to the

operational levels of the organizations, with the aim of activating supervisors and general staff to initiate the process of organizational change. The strategy map thus becomes a communication tool, so that anyone within the organizations can understand their role and increasingly contribute to the strategic objectives.

Originally the strategy map was specified to work in a cascading way. The strategy map method, as defined by Kaplan and Norton in the 2000s, was very much founded on the concept of the four perspectives of the BSC. It starts with the internal business perspective, and the belief that by making the required changes internally organizations could grow and expand. Growth and expansion would consequently attract the right mix of customers and therefore increase customer satisfaction. As a knock on effect it is possible that the organizational financial objectives would be fulfilled. Cobbold and Lawrie (2002) presented a simplification of the strategic model based on the concept of organizational activity and organizational outcomes. The BSC perspective 'internal business processes' and the 'learning and growth' perspective determine organizational activity. The outcomes are what the organizations hopes to achieve, based on the customer and financial perspectives.

A clearer definition of how the BSC is used to formulate strategy has been attained through the destination statement, and what was originally considered a limitation of the BSC approach may not be the case. The destination statement has addressed the previously existing limitations with regard to the formulation of the strategy. However, the problem of putting the strategy into action is still perceived as a complex matter. With a strategy map the step to attain organizational change has become more transparent. The simplification of the strategy map from four perspectives to activities and outcomes has made BSC easier to implement and understand throughout organizations.

Characteristics of the third generation BSC

Introduction

Throughout the evolution of the BSC approach the reports from within industry demonstrated the benefits of using the BSC. However, two key problems arose: firstly, of management not being sure of how to use the BSC due to its complexity, and secondly, the practical obstacles in the methodology. To overcome these problems the BSC approach had been reviewed multiple times and changes were made to improve its working such that the benefits perceived by the users could be realized. It is questionable whether these benefits were justified considering the fundamental methodological problems and the complexity of the application, and whether the benefits achieved during the early generations resulted from using a new strategic tool and not because of its approach. Further development over three generations of the BSC saw changes that directly addressed its limitations, so that these organizations that apply the BSC may be able to enjoy its benefits.

The developments of the BSC have been reviewed over three generations. While developments have been presented up to the third generation, an expansion is included on the key underpinning concepts of what the BSC approach has evolved into. Two sets of elements are discussed below, known as 'coherency and balance' and 'cause-effect relationships and quantification' according to Abe (2006). The principles that underpin the strategy map are demonstrated to be the key for strategy focused organizations. This section is finalized with a description of how performance measurement is applied in the third generation to aid an organization to undergo change. Further details on performance measurement are then presented through the Key performance indicators (KPIs).

Coherency and balance

The first set of elements in the BSC approach of the third generation is coherence and balance as 'management processes must be continuous'. It is vital that the activities within organizations are maintained, and it is by continuing these actions that the individuals within the organizations materialize the strategy. It is through this process that an organization moves from the formulation of a high-level vision statement to the practical work performed by staff and support staff. It is vital to the success of implementing a strategy that the BSC approach is implemented coherently.

Coherence and balance are qualities with which the management team must implement the BSC to attain success. However, applying coherency and balance to the BSC approach is not a straightforward matter. It is usual that faulty strategies are formulated at this stage, and that unforeseen problems arise at later stages of the strategy implementation. All phases and components of the BSC are linked together through a coherent approach to the formulation of strategy using the BSC. Furthermore it is essential that a balanced approach be applied, in that all parts of the organizations grow equally and resources are allocated accordingly for attaining long-term objectives (Kaplan & Norton, 2001b, 2001c).

The concept of a balanced strategy has its roots in the four perspectives of the BSC approach. As the term suggests it means that an organization should establish balance over the four perspectives. The balance lies not only in allocating the resources as effectively as possible according to the predefined destination statement, but also appropriately allocating the strategic objectives within the organization, such that according to the allocated objective the required resources are assigned for strategic purposes. For a balanced

approach to be successful it must be coherent; there is therefore an intrinsic relationship between coherence and balance in applying the BSC approach.

Coherence and balance in the BSC approach are interdependent. This can be described as being like two sides of the same coin. This is because without coherency within an organization it would not be possible to establish balance. In figure (3.4) a strategy is depicted which is both coherent and balanced according to the description of Kaplan and Norton (2001b, 2001c). Both must be carefully considered when formulating an organizational strategy. During the revision of a strategy it is necessary to return to the concept of coherence and balance to determine where the strategy was wrong, so that a resolution can be determined.

Figure 3.4: Translating a Mission into Personal Objectives
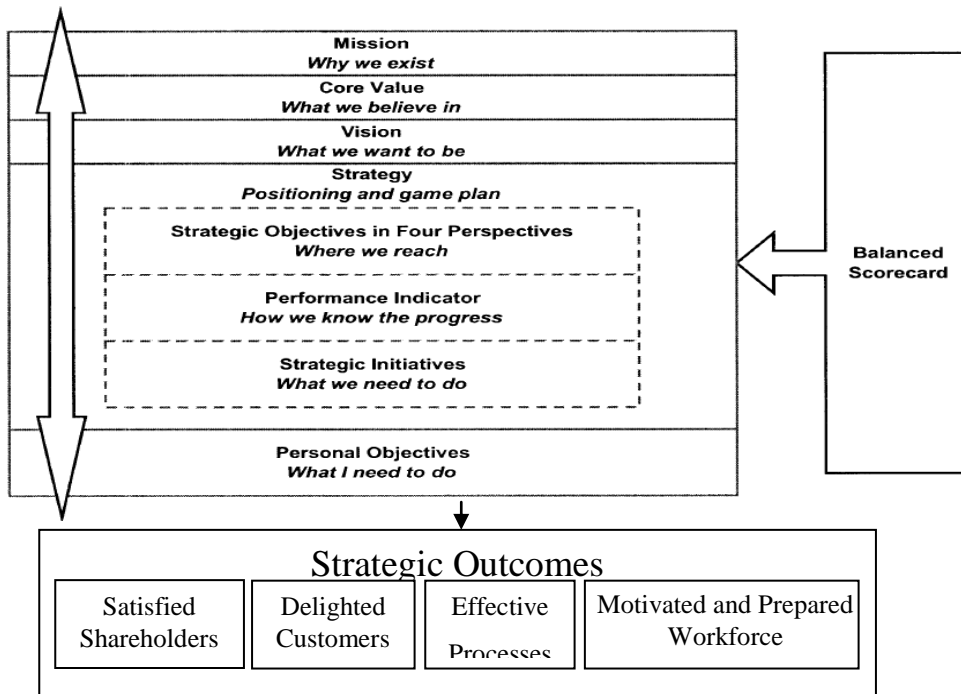
Source: Kaplan and Norton (2001a, p. 73)

Cause-effect relationship and quantification

For the successful implementation of a formulated strategy, the cause-effect relationships between the four perspectives and quantification must be

considered, through the balanced allocation of both strategic objectives and resources. This depends on the balanced formulation and coherent continuity of the management process; as a result the cause-effect relationships are brought into action. However, careful planning must be considered as part of the balancing of the strategy to determine the impact the activities will have throughout the organizations. It is thus critically important to understand cause-effect relationships.

Throughout the BSC approach several cause-effect relationships have been found to exist. Sakurai, (2003 cited by Morisawa & Kurosaki, 2003) distinguished between two types of cause-effect relationships that are believed to exist between the components of the BSC. This is because the four perspectives are typically seen as the relationship between the means and the outcomes. In the case of horizontal cause-effect relationships, this refers to organizations or departments that share in common strategic objectives. 'Horizontal' cause-effect relationships are usually found at the level of strategic objectives, indicators and initiatives. 'Vertical' cause-effect relationships, on the other hand, are these that are determined by the lower levels in the organization to attain its strategic objectives. Contrary to the horizontal levels it has been found that the vertical levels are actually between the four perspectives of the BSC and the strategic objectives.

In addition to cause-effect relationships for implementing strategy, quantification is applied, mainly for performance measurement. It is also applied within organizations for the purpose of validating cause-effect relationships: Through quantitative information cause-effect relationships may be demonstrated numerically. This enables further strategic formulation by improving coherency and balance where causal impact was insufficient or

unexpected negative causality needs to be avoided, so that implementation of the strategy produces improvements.

Strategy map

The strategy map is one of the key additions to the third generation, to make the approach a unique management tool. The strategy map was originally introduced by Kaplan and Norton (2000), and later refined in a 2001 publication that made the BSC approach a strategic management system for organizational change. Morisawa (2002) later described the BSC to be a two dimensional depiction of the formulated strategy of an organization. The map shows the strategic process of how the organization is to work towards the overall 'destination statement', by means of learning and the growth of internal processes, and the customer perspective. Each of these perspectives in the strategy map is linked by cause-effect relationships.

Figure 4.5: The Four Perspectives of The BSC Linked to a Strategic Vision.
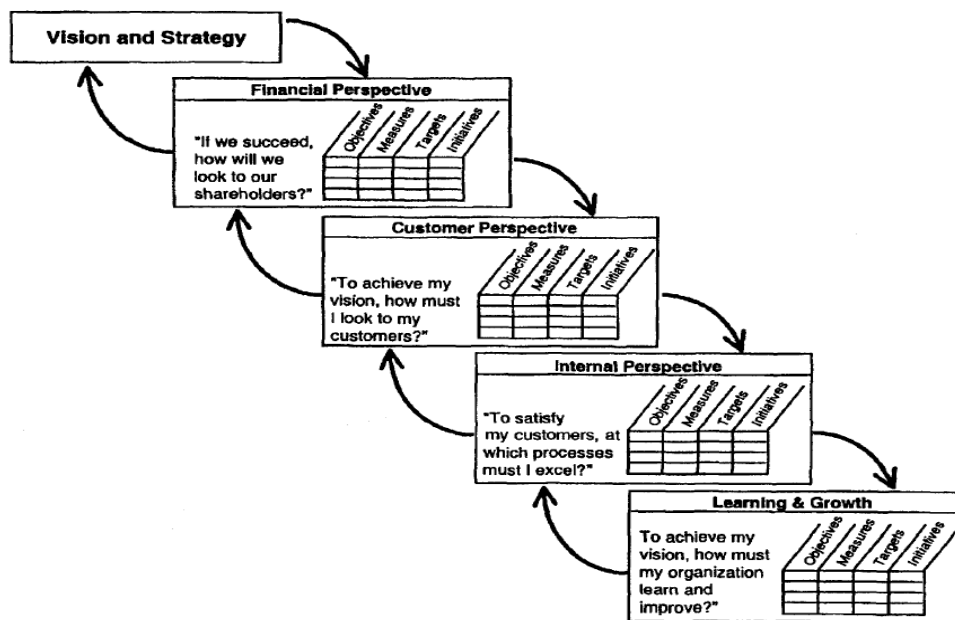
Source: Kaplan and Norton (2001b, p. 91)

Figure 3.6: Image of Strategy Map
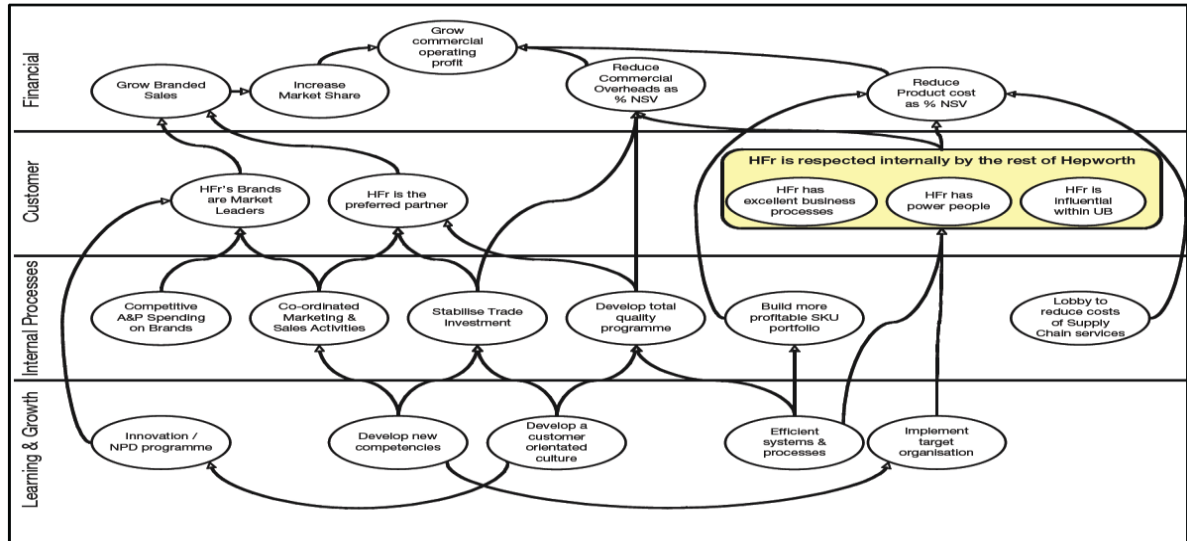
Source: Shulver and Lawrie (2009, p. 6)

A strategy map is created through customization after the strategy is defined. Definition of the objectives within an organization is followed by the means by which the organization is to attain its objectives, linking intangible assets with value creating processes (Kaplan & Norton, 2004). The design of the strategy map demonstrates how the organization seeks to become successful, and whether during the process of strategy implementation, it is achieving success (Olve, Roy, Roy, & Petri, 2003). Early feedback on implementations has been reported by (2001), who found that the design of the BSC strategy map was a complicated matter, complex in nature, but believed to be rewarding.

Strategy focused organizations

The creation of the strategy map is based on five principles known as 'the strategy focused organization' (Kaplan & Norton, 2004). This is the difference between the first generation of the BSC, which was a performance measurement system, and the second generation that was a strategic management system. It is strategy-focused organizations that reflect the link

between the strategy process phases. To fully understand 'strategy focused organization' an overview of the principles on which it is based is required. The five principles provide a set of stages that the strategy process must undergo to develop an effective strategy.

According to Kaplan and Norton (2004) the implementation of the strategy map according to the five principles is as shown in Figure (3.7). The first principle involves the clarifying and translating of the strategy into operational terms. The second principle is to align an organization to its strategy. The third principle is to make strategy everyone's day-to-day job, and cope with the related practical issues. The fourth principle is to make strategy a continual process. The final principle is to mobilize and change through executive leadership. Based on these principles an improved strategy map can be formulated.

Figure 3.7: The Five Principles of a Strategy-Focused Organization

Source: Kaplan and Norton (2001a, p. 9)

Performance measurement

For an organization to successfully implement a strategy, performance measurement must be applied. Performance measurement is the foundation of the BSC, from which it evolved. Waring (2000) stated that performance measurement is concerned with what an organization has done and how it was accomplished, and is a mechanism for organizational feedback and strategic planning. While there are numerous definitions, performance measurement is important for keeping a company on track in achieving its objectives (Armstrong & Seng, 2000; Kaplan & Norton, 1992).

However there is some concern about the implementation of a performance measurement system, and alternative performance measurement systems have been developed over the years (Keegan, Eiler, & Jones, 1989). Instead of using performance measurement as a method of controlling organizations, a more integrated and holistic approach may be used that links the measures to the organizational strategy, so that change is driven through organizations, rather than through the performance of employees. This is how the BSC approach evolved in comparison to other performance measurement approaches.

For any performance measurement system to be successful it is essential that it is properly defined. Performance measurement systems are defined through the metrics used to measure organizations. A specific process of four steps must be implemented to select the performance measurement indicators (Euske, Lebas, & McNair, 1993; McKenzie & Shilling, 1998). The first step is to base selection of indicators on the strategy so that a linkage is formed between the business unit, action, and strategic plans. This is followed by a hierarchical and integrated business approach. The indicators must also be

supportive of the organization's multidimensional environment, and must be based on a thorough understanding of cost relationships and cost behaviour.

Key performance indicator

The key performance indicators are the building blocks of a performance measurement system. For successful implementation performance metrics must be carefully selected to represent the strategy. According to Bauer (2004) an organization's performance should be systematically tracked and interpreted though the key performance indicators. It is through these indicators that it is possible to access the performance of organizations and make it possible to provide decision makers with reliable information. The key performance indicators firmly link to the performance management system, arguing that useful information can be obtained through accurate measurement.

Key performance indicators are the main source of obtaining feedback from the strategy process. The use of performance indices as an indicator to obtain quantified information, as well as qualitative written descriptions is proposed by Duqrette & Stowe, (1993, cited by Wu, Lin, & Chang, 2011). It is important to note that while there is no limit to the number of key performance indicators that can be selected, Keebler, Manradt, Durtsche, and Ledyard (1999) suggested that around three to five indicators are allocated per perspective to have a clear understanding and overview of developments.

The nature of the BSC approach, as developed by Kaplan and Norton, was to join financial and non-financial indicators to determine the strategic position of an organization. It has been found that traditional financial measures are limited in their ability to provide predictive information. On the other hand non-financial information can be used to provide some information (Neely, Richards, Mills, Platts, & Bourne, 1997). Although not necessarily directly an

indication of performance, non-financial indicators can be used to inform managers how to increase performance.

Despite the success stories in the application of the BSC approach, and the selection of key performance indicators, it has been found, as Neely (1998) stated:

"An excessive focus on operation and financial measures, the majority of which are tactical and merely report history; a tendency to measure too much, which often results in the wrong things being measured because they are easy to measure; and a lack of integration between measures and strategy"(p. 50).

As there are so many reasons why the strategy could fail, based on its indicators, this is considered a critical process. Furthermore, it is essential that any strategic decisions be based on the information provided by the key performance indicators (KPIs). KPIs are not activities, but outcomes, and should be treated as such. This is done through reflecting on how the strategic objectives can be measured (Bauer, 2004). Additionally, Neely (1997) and Ritter (2003) provided a set of rules that KPIs should meet:

- Developed from strategy and relate specifically to goals,

- Will produce outcomes,

- Should stretch organizations,

- Be realistic and achievable,

- Should be clear concise and simple to understand,

- Provide timely and accurate feedback,

- Must be quantifiable, with a predefined measurement frequency,

- Should not be copied

Summary

The development of the BSC framework in the early nineties changed in a revolutionary way that organizations addressed strategy. The framework caused organizations to adopt a certain mode of strategic planning. Throughout its wide usage over the years, the BSC has been applied in a range of organizations, although mostly by large organizations, with some application in SMEs. As conflict has been found over the usage of the BSC in SMEs, researchers suggested an adapted framework. Accordingly, the BSC has evolved over time, as limitations have been reported from cases. The first generation of the BSC framework was considered developed as a performance measurement framework. While most literature has highly praised the use of the BSC it has questioned to what extent this could be effective. One of the main limitations was that no clear definition of the BSC was available. It became a priority to define how the BSC would work in the second generation, around five years after it had been created.

The development of the BSC during the second generation was more than simply defining its workings. By that time the purpose of the BSC had changed from being a performance measurement tool into a strategic management system that enabled organizations to manage and strategically direct organizations based on the performance measurement system that was defined during the first generation. Again, great success was attained using the BSC, albeit with some reported limitations. These were based on the methodological approach of the BSC, and the incoherence of the strategic linkage model. The complexity of applying the BSC is the reason for both the methodological and linkage problems of the BSC.

The development of the BSC in the third generation involved a fundamental change of purpose, to organizational change. This means that the organization

seeks to change to a predefined vision through strategic management using performance measurement. Among the developments of the third generation was the addition of the 'destination statement', which overcame the methodological problems encountered in the second generation. Furthermore, the third generation saw the development of the 'strategy map', which originally was the linkage model. Moreover, in the third generation the function of the strategy map was clearly defined.

Throughout the third generation, success has been reported from usage of the BSC framework (Cobbold & Lawrie, 2002; Lawrie & Cobbold, 2004; Morisawa, 2002; Morisawa & Kurosaki, 2003; Ray, 2011). However, further development to the BSC must be considered; within the third generation of the BSC some limitations have been identified, such as a limited ability to translate strategy into action through implementation of the BSC. As this limitation exists, it is questionable to what extent the BSC framework can be applied with reasonable success in organizations, especially in SMEs?

Based on the literature of the previous chapter it has been found that the strategy process consists of four phases. As the BSC framework is a tool to implement the strategic process, the problem that has been identified in the third generation of the BSC is to transform formulation to implementation of the strategy. It appears that the BSC does not consider emergent strategy within its approach in formatting strategy. Based on the understanding that has been developed on how the strategy process develops, and how the BSC is used to implement the strategy process, the following chapter looks at how other strategic management tools can be used such that the process of strategy formulation can more easily be transferred into implementation.

Chapter Four: Integration of the BSC with other strategy management tools (SWOT and QFD)

Introduction

This chapter is a continuation of the literature review as it looks at other business management tools with the purpose of identifying potentially suitable tools to conduct the strategy process according to the literature in the previous two chapters. This is done through a general overview of strategic management tools, and then a more detailed evaluation of the tools that are of interest to this study. An evaluation of SWOT analysis and the Quality Function Deployment (QFD) approaches include a literature review to understand how previous research explored these tools. The literature that demonstrates integration of these tools is evaluated for integration between SWOT analysis and BSC, as well as for QFD and BSC are divided into two sections: section one for large organization, and section two for SMEs organization. This chapter concludes with a review of these studies that integrate SWOT, QFD and BSC, which will be referred to in this chapter as BSQ.

Overview of strategic tools

Strategic tools have been used within the business environment since the early 1950s when strategy was more formally adopted into organizations. Several recent surveys have found that strategy tools are used for the purpose of strategy development (Aldehayyat & Anchor, 2008; Clark, 1997; Ghamdi, 2005; Stenfors, Tanner, Syrjänen, Seppälä, & Haapalinna, 2007). These surveys have demonstrated that the most common of these strategy tools is "SWOT" and "PESTLE". These tools are used within organizations for the purpose of fulfilling the strategic activity of environmental scanning.

Abrahamson and Fairchild (1999) found that the popularity of strategy management tools is strongly related to strategic management styles.

Even though strategy tools are widely used for the purpose of developing strategy, it may be questioned how effective the utilization of these tools is. A primary finding mentioned by several influential authors is the very distinct definitions of what strategy tools are (Fiol & Huff, 1992; Jarzabkowski & Wilson, 2006; Mintzberg et al., 1998; K. H. Tan & Platts, 2003). Because the meaning of how they define strategy tools is so different, for in many cases the same tools, it is likely that misconceptions exist. Different strategic tools are used for different specific phases of the strategy process (Tapinos et al., 2011).

While there are different views within the literature regarding strategic tools, work has been done to overcome these differences. Some researchers are working towards the development of models and frameworks that represent the strategic process (Drozdow & Carroll, 1997; Frost, 2003; Jarzabkowski & Wilson, 2006; Wright, Cairns, & Goodwin, 2009; Wright, van der Heijden, Burt, Bradfield, & Cairns, 2008). It is through these developments that a better understanding is developing of the functioning of strategy and how this process takes place.

Throughout the literature researchers refer to the usage of their strategic tools for a specific purpose. Each phase in the strategic process can be performed with one or more tools. These different tools usually overlap each other in functionality, based on the study of Jarzabkowski and Giulietti (2007) who have completed a survey on the adoption of strategic tools in the UK.

One of the main problems for organizations during the strategy process is the boundaries within organizations. A study by Spee and Jarzabkowski (2009) investigated in detail how it was possible to overcome boundaries within

organizations by using strategy tools. It has been stated that there is a significant boundary between senior and middle managers (Floyd & Lane, 2000; Mantere, 2005). There is also a boundary between strategic, divisional and corporate business unit levels. These boundaries exist within organization because there is a misconception about what strategy tools are, but in spite of these boundaries, strategic participants communicate between organizational levels through strategy tools (Ketokivi & Castañer, 2004).

Through the evaluation of the existing literature on strategy tools with regard to SMEs (Rigby, 2003; Rigby & Bilodeau, 2005, 2007; Rigby & Bilodeau, 2009; Tapinos, Dyson, & Meadows, 2005), it has been found that large organizations use strategy tools and planning more than SMEs. Even though this is the case, the managers of SMEs do get involved with strategy tools; however the variety of tools that they use is far less than for large organizations. Amongst these most commonly used are: SWOT analysis, Scenario Planning, Key Success Factors, budgeting, and PEST (Drozdow & Carroll, 1997; Frost, 2003).

The findings within the literature have revealed that there is limited usage of strategy and strategy tools by SMEs, largely due to the misconceptions presented earlier. For SMEs to be able to conduct strategy more effectively, they need not only to develop a better understanding of strategic tools, but also to develop a wider tool set as well. However, this does not mean that the most commonly used strategic tools should be neglected; instead a better understanding of their purpose should be defined. This will enable managers to select the right tools for the specific strategic management tasks that they are working on (Frost, 2003).

SWOT analysis

Many references are made to SWOT analysis for both SMEs and large organizations. According to several surveys, it has been found that SWOT analysis is the most commonly used tool (Clark, 1997; Frost, 2003; Jarzabkowski & Giulietti, 2007; Stenfors et al., 2007), while Dyson (2004); Hill and Westbrook (1997); Pickton and Wright (1998) praised SWOT analysis for being easy to use. This demonstrates the importance of SWOT analysis for the conduct of strategy. However it is important that the functionality and purpose is very well understood, to be able to use the strategy map effectively.

A SWOT analysis should not only be used for the purpose of environmental scanning. As its name suggests, SWOT analysis aids the process of identifying the strengths, weaknesses, opportunities and threats of an organization. It is by finding the strategic fit between these four concepts that an organization may be able to gain a competitive advantage (Grant, 2010). The concepts of strengths and weaknesses are known as internal analysis, while the external analysis is done through identification of opportunities and threats.

It is recognized that SWOT is one of the key strategy management tools, because it mostly forms a starting point for developing a strategy. There are some disadvantages to its usage: for example, a SWOT analysis is unable to factor in the concept of time (Ahlstedt, 2007). This is a very important concept for strategists who are searching for strategic fit, to the extent that timeliness cannot go unnoticed. This is because the match between internal strengths with external opportunities that are out-dated forms the basis for poor strategic planning.

As mentioned before, it is fairly easy to get started with environmental scanning using a SWOT analysis. However, most studies and active users are

not aware of the full power of SWOT analysis as a strategic planning tool (Chermack & Kasshanna, 2007; Lordkipanidze, Brezet, & Backman, 2005). SWOT analysis may rate the factors that are identified such that it becomes clear, for example, which are the more valuable opportunities identified. Furthermore, the key to an effective SWOT analysis is being able to identify the factors and so enable the strategic fit between the factors that may determine successful strategies.

A SWOT analysis has been found to be the key tool for conducting strategy, as strategy starts with searching for an opportunity. SWOT analysis is very capable of providing all the required functionality. While SWOT analysis is very simple in its approach, users tend to use only its most basic qualitative features and overlook its quantitative features, which ultimately results in poorly formulated strategies that may lead to problems during implementation.

Quality Function Deployment (QFD)
Introduction

QFD is a complex method to establish quality within a design; however, its complexity is an obstacle in determining a standard definition of the method. Consequently there is no single definition of the QFD method. Initially its creator established a definition; however a process of evaluation and change has allowed other authors to have different perceptions of the QFD method, with their own definitions. With a better understanding of the various definitions of the QFD and the purposes for which QFD has been used, a more detailed overview is provided of how the QFD works.

Definition

QFD is a well-known quality management tool, originally created in 1966 by Akao (Duru, Huang, Bulut, & Yoshida, 2011; Sireli, Kauffmann, & Ozan,

2007). Since its creation it has been widely adopted but interpreted differently within the literature. There is no clear consensus on how QFD operates, which makes it hard for managers to adopt such a complicated management tool. One definition is given by Akao, (1992, cited by Sharma, Rawani, & Barahate, 2008):

"A method for developing a design quality aimed at satisfying the customer and then translating the customer's demands into design targets and major quality assurance points to be used throughout the production phase" (p. 79). Another definition is:

"QFD is an investment in people and information. It uses a cross functional team to determine customer requirements. QFD is a systematic and analytical technique for meeting customer expectation. QFD is a planning process for translating customer requirements (voice of the customer) into the appropriate technical requirements for each stage of product development and production (i.e. marketing strategies, planning, product design and engineering, prototype evaluation, production process development, production, sales)" (Zaim & Sevkli, 2002, p.28).

"QFD is a visual connective process that helps teams focus on the needs of the customers throughout the total development cycle. It provides the means for translating customer needs into appropriate technical requirements for each stage of a product development life cycle." (Zaim & Sevkli, 2002, p.29).

"In general, it provides a framework in which all participants can communicate their thoughts about a product. More specifically, QFD is often used to identify the relationships between requirements based on different viewpoints." (Zaim & Sevkli, 2002, p.30).

A third definition is:

"QFD is an overall concept that provides a means of translating customer requirements into the appropriate technical requirements for each stage of product development and production (i.e. marketing strategies, planning, product design and engineering, prototype evaluation, production process development, production, and sales." (Parthiban & Goh, 2011, p.264).

However, QFD has been redefined by several authors:Chen, Chang, and Chou (2008); González, Quesada, Urrutia, and Gavidia (2006); Lee and Dale (1998); Martins and Aspinwall (2001). This demonstrates that QFD is a tool that continues to evolve.

While QFD is primarily known as a quality management tool, its method has been used for a number of different management purposes. Several examples of its applications have been provided: for example the QFD has been used in marketing strategies, planning, product design and engineering, prototype evaluation, production process development, production, sales (Chan & Wu, 2002; Parthiban & Goh, 2011). Because it has been adopted for a wide variety of applications, it may be questioned how the QFD can facilitate all these activities. With the purpose of better understanding the QFD, an overview is provided of its individual components, how it functions and integrates; to achieve a clear understanding of how the QFD is used within this research, regardless of the definitions that have come into existence within the literature.

Quality function deployment process

The QFD process consists of a set of procedures known as the 'house of quality'. Each of these houses of quality has a set of inputs and outputs, and each house has a specific function during the QFD process. An overview of the QFD and its individual house of quality functioning is presented by

Delgado-Hernandez (2006); Marjudi, Sulaiman, and Amran (2012); Tapke, Muller, Johnson, and Sleck (2009) and Zaim and Sevkli (2002). The primary purpose of the house of quality (HoQ) is to translate customer needs and requirements into services or products that have 'quality' as their main characteristic. House of quality contains several parts, rooms, or steps. Figure (3.1) displays the contents of the house of quality (HoQ).

The process of defining how the 'best' product or service can be provided to the customer is based on six steps. **The first step** is to collect what is known as the voice of the customer. This is done through a questionnaire, and/or other enquiry method(s). This information is the primary input into the house of quality and is recorded on the left hand side. As part of the information collection method, a numeric number on a scale that reflects the clients' perception of importance is recorded. Once the first step is completed and it is known what the customer wants, it can be decided how this will be achieved.

Step two, is to define how the customer requirements are to be achieved. This step is an internal process during which the organizational resources are reviewed. These resources are recorded at the top of the matrix, known as the roof in the house of quality, otherwise known as **'technical requirements'** (Radharamanan & Godoy, 1996). Once all the technical requirements have been established with the purpose of defining how to attain the 'voice of the customer', **step three** is to identify the co-relationship between all the technical requirements. This is done by assigning a value from two to minus two. In the case of the value being zero no relationship exists while when a negative or positive relationship is established with the minus sign and the strength is determined by the value where one is a weak relationship and two is a strong relationship. Having defined the "what" and "how", a strategic fit

between both of these aspects is established. These calculations of *The Correlation matrix* can be expressed in the following forms:

Strong positive = (+ 2)

Positive = (+1)

No relationship = zero

Negative = (-1)

Strong negative = (-2)

Step four is to identify the strategic fit between the voice of the customer and its technical requirement, considered central to the house of quality. During this fourth stage, the relationship between all factors is recorded in the relationship matrix (Zaim & Sevkli, 2002). The process of establishing these relationships is based on specialist knowledge that can involve a focus group or a meeting with specialists. During this process the relationships are rated. Should there be no relationship between some factors of the voice of the customer and the technical requirements, the cell is left blank or filled with a zero; three other values can be allocated to represent a weak, medium or strong relationship. Once the relationship matrix is completed the planning and target matrix are developed.

Step five is the planning matrix. It provides more detailed numerical information on the quality level of the development of the service or product such that the appropriate results are achieved during planning. **Step six** is the target matrix that is located at the bottom of the house of quality. This provides further output in addition to the planning matrix on the left hand side; this information is processed in the subsequent house of quality. The target matrix is based on the co-relationship matrix of the technical requirements and

the relationship matrix taken together. The six steps that make up the HoQ are illustrated in figure (4.1).

In this study there are three houses of quality of the strategy process. The first house shows the relationship between the environmental phase and the formulation phase, the second house shows the relationship between the formulation phase and the implementation phase, and the third house shows the relationship between the implementation phase and the evaluation phase. The output from the first house is then the input for the second house and this pattern continues until the third house. Further explanation of this framework will be provided in the concluding chapter.

Figure 4.1: The Contents of House of Quality
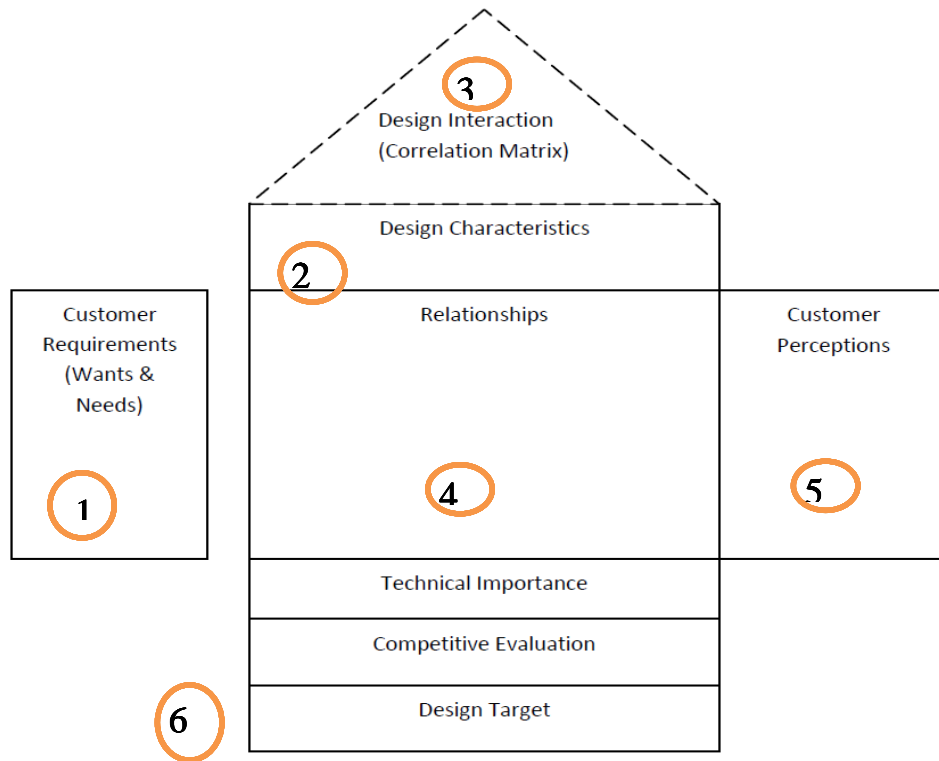
Resource: adopted from Marjudi et al. (2012, p.17).

House of strategy (HoS)

A study in the literature has demonstrated the usage of the house of quality that is originally a product-oriented tool in strategy.S Dror and Barad (2006) defined the house of strategy through adaptation. The key differences are that the house of strategy is directed at internal stakeholders rather than external customers, the strategic objectives in the 'WHATs' of the house of strategy are predefined, the calculations of the planning matrix are calculated differently for strategic purposes, the relationship matrix is defined by strategic managers, or field specialists, and the correlation matrix known as the roof is not essential. Dror and Barad have tested the house of strategy in different industrial sectors such as pharmaceuticals, plastics and printing. The findings of those studies demonstrate that through the house of strategy it was possible to improve prioritisation such that the organization may become more competitive in their target markets.

Section One: Integration overview for large organization

Introduction

The literature review of strategy management tools has demonstrated that each of these tools has a specific purpose. It is required to use several of these strategy tools in conjunction such that the strategy process can be implemented. The final part of this chapter is dedicated to an evaluation of how the previously identified strategy management tools integrate according to the a literature review, which can provide a better understanding of the use of strategy management tools within the strategy process of SMEs.

Throughout the literature, every strategy management tool is shown to have some strengths and limitations for implementing the strategy process. The strategy process is better conducted using multiple tools, and the following section reviews the literature that integrates the BSC and SWOT analysis, and

the literature that integrates the BSC and QFD. This is followed by a review of the BSQ covering the integration of the BSC, SWOT analysis and QFD. This will provide an understanding of the development of integrated strategy management tools within a SME.

The Integration of BSC and SWOT

Papalexandris, Ioannou, and Prastacos (2004) present a modified version of the BSC as a new framework. They use it for both strategic management and performance measurement and control, and demonstrate an empirical implementation of the BSC within the software industry in Greece. This is to evaluate the main obstacles, shortcomings and critical success factors; in addition, a manager overview is provided so that this strategic performance management framework can be replicated.

Following a brief introduction to Greece describing the existing usage of the BSC and its relationship with the software development industry, a company case study is described, which provides the setting to explain the steps for implementing the BSC model. The methodology has seven phases that are described one at a time. The first phase involves project planning during which a vision for the project is specified. This is followed by a detailed description of phase two during which a SWOT analysis is described, including its use in clarifying the organization's vision. In the third phase both the internal and external environment were assessed with the intention of synthesising this with the strategy. The strategic management team used a SWOT analysis to focus on the strategy. In the fourth phase the strategic objectives were identified and prioritised, with quantifiable measures. During the fifth phase the target was set and placed within a timeframe. From here on in phase six the strategic initiatives were defined and the implementation plan was formulated.

Within the same study, the performance indicators of the BSC model were reviewed following implementation. It was found that knowledge management was important for achieving targets, and that results depend heavily on the staff within the organization. Therefore a staff satisfaction questionnaire was developed which provided a measurement index that was used for performance measurement. The findings indicate that the BSC model brought many benefits and incremental improvements; however, this does not imply that strategic goals have been attained, rather that it aided in objective attainment. The involvement of staff in the project also provided an intangible benefit and stimulated the relationships between staff.

On the other hand some shortcomings were found: for example, the relationships within the strategy map were time consuming. Papalexandris et al. (2004) identified that it was hard to measure overall performance and to prioritise, thus making it difficult to decide which area should be improved. Leading and lagging indicators caused confusion for managers, in attaining overall objectives. The main weakness of the BSC is its complexity and the time it takes to formulate the framework.

Papalexandris, Ioannou, Prastacos, and Eric Soderquist (2005) later developed a compact and integrated methodological framework for BSC synthesis and implementation addressing activities related to: Strategy, Project Management, Change Management, Risk Management, Quality Assurance and Information Technology. They state that the first task for implementing the BSC is to assess the mission, vision and strategy of the organization. This is done through a SWOT analysis that provides a better understanding of the internal and external environment and that clarifies the strategic direction driving the organization's strategic priorities. The strategy map is developed from the strategic objective derived from the SWOT analysis. For each

strategic objective in the strategy map one or two KPIs are defined to measure performance over a period of time. The KPI can be fully defined through specifying a target, measurement frequency, initiatives and the budget. Through the implementation of this framework organizations have achieved better performance management, attained the ability to anticipate change, increased communication, and better-managed deadlines and budgets (Papalexandris et al., 2005).

In (2005), Wu carried out a strategic management study. Strategic management referred to issues related to the creation, formation, measurement, reporting and management of intellectual capital (IC). To formulate strategy, a framework of the BSC was modified for IC. This framework was implemented and improved through the usage of a SWOT analysis to provide strategic direction. The justification for using IC and BSC is based on the idea that BSC is static and IC is dynamically more flexible, and that while BSC is a proven tool, IC is a novel one: overall both add value to the process of performance management. With regard to performance management it has been confirmed that BSC is an appropriate tool to measure IC. Given the gap in the literature in terms of how to actually do this, Wu's study contributes towards closing that gap.

Within Wu's study, strategy is formulated through a case study, enabling a company to evaluate the effectiveness of the strategy. The model follows the following logical steps:

- The company identifies the current strategy.
- A SWOT analysis is performed on the existing strategy.
- The outcome of the SWOT analysis is placed in the BSC.
- After the application of the BSC, the strategy map of strategic IC is applied.
- As an outcome the positioning strategy is produced.

Overall, Wu (2005) stated that the implementation of this case study was considered successful, in that the application of IC in the strategic management framework provided an important contribution. This was because it aided uniquely in providing values in the formulation of strategy. This study is a significant contribution towards maturing IC, as it demonstrates integration with BSC. This integration is through providing methods of measuring key aspects of the strategy defined by IC and improved reporting; additionally the four perspectives of the BSC improved the management of IC. A subsequent publication, Kaplan, Norton, and Barrows (2008) focused on the execution of strategy based on the assumption that the organization already has a strategy in place. This article reviewed the four key steps to formulating strategy. These four phases were based on the two management tools, BSC and SWOT analysis. It was only in the last phase that the results produced at the end of the third phase are used, and the SWOT analysis is implemented. The authors refer to the strategy development process model that is used by most companies, which includes the four phases.

The first phase is crafting the mission, vision and value statements. This can be a lengthy process. The mission is short, usually one-sentence, and explains why the organization is founded and its purpose. It is a key statement that provides the overall goal of the organization. The value statements are additional and provide more in-depth information that can present the behaviour, character, and culture of the organization. The final part is the vision, which defines the goals more clearly, both in the long and short-term; this can be anywhere between three and ten years. The vision is different from mission and value statements in that it is external and market oriented. It also describes the organization's direction and does not necessarily represent where it is at the present time.

Kaplan et al. (2008) state that it is essential for a vision to be measurable, and not ambiguous or unclear, therefore, the objectives become clearer and a better sense of attainment can be established. In most cases these objectives are simply measured through financial success, for example an increased income statement. In addition, the vision can be translated into action.

As the first step of crafting is completed, the second step is commenced during which the strategic goals are established through defining the value gap *"the executive team defines a value gap—the difference between the desired outcome and what could be achieved by maintaining the status quo with the existing strategy. The value gap represents the difference between aspiration and reality; it becomes the goal for the new strategy to fulfil"* (Kaplan et al., 2008, p.5). The vision defines how the organization can become successful, and using the measurable success factors of the vision the target is defined. This could be that for a specific objective the organization needs to improve to become competitive in its market.

The third step is completed through an internal and external analysis. This refers mostly to the organization's impact within its industry, its performance, and its position relative to other organizations. The macroeconomic environment can be assessed through a PESTEL analysis (a PESTEL analysis, reflecting its political, economic, social, technological, environmental, and legal components), and an industry level analysis can be completed with Porter's five forces. The internal analysis on the other hand refers to the organization, its performance and capability. This is usually achieved through financial information; however a BSC is a good tool to conduct a performance analysis. Additionally a value chain analysis is used to evaluate the organization's processes, to identify how it could perform functions more efficiently, and which processes it would want to change. The fourth and final

step is to undertake a SWOT analysis by reviewing both the internal and external factors of the organization. SWOT analyses help review and conclude information into a brief list that helps the executive team understand the key issues for formulating its strategy, and to set objectives critical to the organization's future success.

The researchers Luu et al. (2008) identified that developing countries, especially Vietnam, are lacking an effective method to measure performance and have no management tools to define strategic direction. For the purpose of illustrating a management framework a case study was made of a Vietnamese construction company for the formulation of long and short-term strategies. This was done through the integration of the BSC with the SWOT analysis. The implementation of this strategic management framework consisted of three steps: firstly, the implementation of a SWOT analysis to formulate strategies for the organization; secondly, this was followed by identification and validation of the key performance indicators such that the organization could be monitored and evaluated; the final step was to measure the strategies defined through the SWOT analysis based on the KPIs identified during the second phase. Each of these phases went through a detailed process so that the organizational short and long-term objectives could be achieved.

Within the study of Lu et al. (2008) the corporate strategy formulation stage is the first part during which the internal and external factors were identified. These were placed in context by defining the vision and corporate strategy. As a final step of the SWOT analysis the results were transferred into the BSC. This step demonstrates how both tools may be integrated with each other, and enabled identification of key performance indicators, sorting the KPIs into four perspectives and developing the strategy map. These KPIs were communicated with stakeholders throughout the organization.

In particular this study found that the four perspectives enabled the company to perform well, except from a finance perspective that was considered to be at a poor level. Based on the extensive experience of the CEO, identification of the factors and the overall data obtained were considered reliable. As a conclusion, Luu et al. (2008) found that strategic management affords solutions with regard to the construction industry. However the lack of knowledge of how to use these tools, or ignorance of their existence has caused severe damage in this industry within developing countries. The researchers developed their paper as a contribution towards overcoming these obstacles as a form of education, such that companies in developing countries within the construction industry may implement strategic management tools.

Stewart (2008) quite correctly identified the problem of organizational IT where, for multiple reasons, IT can become an obstacle to a business rather than a driver of success. As a solution Stewart believes that a structured approach is required so that accurate planning of carefully selected IT projects can be implemented. The overall objective for the researcher is to develop an IT project management software tool that will help project managers in the future with the selection, implementation, and monitoring of IT projects.

Initially Stewart's study focused on a framework for implementing IT projects. The framework is made up of three main phases during which IT projects are selected, implemented, and lastly monitored. Each of these phases consists of a defined set of steps. These individual steps are briefly summarized to provide an overview of the framework.

The first phase contains five steps, which identify the monetary and non-monetary factors of the IT project. The second step is defining 'possibility distributions' upon which the benefits and risks of the IT project can be calculated through 'fuzzy logic'. During step three the financial benefits are

outweighed against IT benefits, and the fourth step weighs tangible value against intangible value and risk. The fifth and final step of the final phase is the ranking of IT projects according to the results of the previous steps, so that one IT project can be selected for implementation.

After selecting the appropriate IT project, the second phase involves implementation and monitoring, which is done through sequential steps. These are: application of SWOT factors; the diffusion of IT strategy through 'story telling', followed by operational strategy; action plans; and finally the development of monitoring of implementation.

IT performance measurements are defined. For each of these indicators a weighting must be applied that shows its importance. Overall this is a very lengthy process and has not been demonstrated as a successful project management technique. However the software could be helpful for project managers who do not really have to go into the detail of how the framework functions, but use it.

Quezada, Cordova, Palominos, Godoy, and Ross (2009) developed a simple tool for identifying strategic objectives using a strategy map and KPIs of the BSC in conjunction with SWOT analysis. Studying the processes used by 12 companies to implement a BSC created the tool. These tools have been used comparatively in multiple companies to evaluate their benefits and drawbacks. Quezada et al. implemented these tools through a clear definition of the vision and mission, from which they define global objectives through the creation of themes. Additionally, internal and external perspectives were analysed through a SWOT analysis from which the results (specific objectives) were placed in the strategy map linking the individual objectives between the BSC perspectives. Comparison of the companies found that 65% focus on reducing cost, 57% on increase of sales, 50% on increased return on investment and

existing use of assets, 100% on operations management process and organizational and human management.

Overall, the implementation of these case studies was considered successful, while BSC was presented as a tool for strategic management. The use of a SWOT analysis supported BSC in overcoming one of its main limitations. This, as mentioned before in chapter 3, is that **BSC cannot decide strategy or make strategic direction**. SWOT analysis provides a better understanding of the internal and external environment of the organization, which clarifies the strategic direction. Moreover, SWOT analysis helps the organization to understand the strengths and weaknesses that drive its strategic priorities (Papalexandris et al., 2005; Papalexandris et al., 2004; Stewart, 2008; Wu, 2005). The implementation of SWOT analysis helps to formulate strategies for the organization (Fernandes et al., 2006; Kaplan et al., 2008; Luu et al., 2008). The internal and external perspectives are analysed by a SWOT analysis from which the results (specific objectives) are placed in the strategy map, thus linking individual objectives into the BSC perspectives (Quezada et al., 2009).

The Integration of BSC and QFD

The study of Koo (1998) was one of the first studies that integrated the BSC with QFD. A case study of a Belgian bank in Hong Kong demonstrated that the strategic planning process could be improved (Koo, 1998). Integrating strategic management of the BSC with strategic planning of QFD did this. Throughout the article the author suggested that there are two approaches to the integration of these tools, which indicates that it is possible to apply novel thinking to find improved methods of strategy development.

Koo (1998) started with the QFD as the framework of the approach. The first phase was to determine what the customer wanted by interviewing senior managers. These "WHATs" were collected in the BSC framework. The

second phase was to find the "HOWs" of the QFD, which determine the drivers of the "WHATs" to obtain the desired business results. A further short step was to determine through ranking from one to ten the importance of the "WHATs". This was followed by an optional step that correlates the "HOWs" variables; the outcome of this step showed a negative, positive or neutral correlation. The next step was the relationship matrix that demonstrated the relationship between "WHATs" and "HOWs", where the strength was rated from one to five. The subsequent step determined the absolute and relative weight. The absolute weight was the product of importance rating and relationship strength, through division of the largest absolute weight. The following step then related back to the measurement of the BSC. A final step was to perform a benchmark with competitors in the same sector. This was done through market positioning and determining where the organization was at the time, and where it wanted to go in the foreseeable future in relation to its competitors.

Koo (1998) state that there are two approaches to link BSC and QFD. The first, and according to the author the less preferred, approach is hierarchical. This is done through implementation of three houses of quality where the perspectives of the BSC are divided over the four houses. Through this process moving the output to the next house, where the "WHATs" becomes the "HOWs", connects the three houses. The second, and the preferred, is non-hierarchical method that works according to levels within the organization. This is from corporate level to functional level to individual level. Each of those encompasses a house of quality. Each house is integrated with the BSC through placing the financial perspective in the "WHATs" and the other perspective in the "HOWs" of QFD. This approach was preferred because it allows for integration between financial perspectives and all other perspectives in the QFD structure, which is not feasible in the hierarchical

approach. The author summarized that QFD makes the BSC more effective. He also advised to use 'structural equation modelling' to validate the relationship matrix; this is because it forms one of the key concepts of the strategy map.

A later study by Barad and Dror (2008) developed integration between BSC and QFD. This integration focused on how the strategy map could be brought into action through QFD. Additionally, a framework of the strategic management system was proposed: BSC, QFD, MBNQA, and the European foundation for quality management (EFQM). The current study focuses on BSC and QFD and how they are integrated rather than other management tools. For Barad and Dror's particular case study, which was completed in the pharmaceutical industry, the strategy map was used to represent operations within the organization. The strategy map showed a bottom up cause-effect and attained its strategic objectives.

The methodology compassed three phases, divided through the three houses of quality. During the first phase the house of strategy is used to determine the relative importance of improving each competitive priority. The second house is based on the output of the first. This defines which competitive priorities need to be improved, the expected target and the core process. For the final house the core processes are considered for improvement towards the overall organizational profile. The data is collected through interview and questionnaire. A final step is to form the strategy map which becomes the action plan.

With regard to the implementation of the case study, Barad and Dror (2008) found that the BSC is the key tool in the framework. The BSC was placed into action though QFD that allowed for implementation through the strategy map. Implementation of the framework provided an advantage during the strategy

formulation process. However a drawback was also perceived. This can be summarized as a low level of detail, there is no clear direction of how improvement can be made and the model does not consider interaction between system elements. Thus they found that the model implementation was successful but not coherent, as there was discontinuity within the path of the strategy map, due to a lack of knowledge about the company and or the complexity. This does not necessarily render the study void as several validation processes were completed successfully. Further study might involve how the components interact with each other and what the limitations are.

In another study, Dror (2008) identified the problem during the 1980's to 1990's: an increased criticism of organizations which use (almost exclusively) financial by based measurement techniques. In response several other organizational management techniques have been developed.

Initially, Dror (2008) presented the three main business management tools. These are the MBNQA, the EFQM and the BSC. He found that the BSC had significant advantages over the other tools. These can be summarized as*: "sequential objectives, the capability to direct long-term programs, the potential to select relevant performance measures, measurement which is based on truth data, and two levels of feedback."(p.583).* Despite these clear advantages, several limitations were identified in the usage of the BSC, these are: *"no guidelines in selecting performance measures, and complex feedback from the financial perspective to the customer and process perspectives" (p. 583).*

To overcome these limitations the author suggested the use of QFD as a tool for structured product planning based on customer requirements. There are five houses of quality (5 matrices): **The first one** translates the desired improvement in financial performance into the relative importance of the

customer perspective. The output of this matrix serves for the input of both matrices *'2 and 4'*. The **second house** relates the output of the first house with the relative weight of the customers in regards to the product, to become the input of the **third house,** related to the quality/service performance of the internal processes. The **fourth house** is based on the output of the first house, and the output of the third and fourth house to become the input for **the fifth**. The role of Matrix 5 is to translate this integrated input to represent the relative importance of quality, cost, time and response-oriented performance measures of the internal processes, to develop learning-oriented performance measures.

Dror (2008) concluded that of the three investigated tools BSC was the better tool, despite having some deficiencies. To overcome these limitations the BSC was integrated with QFD: *"The QFD matrices ensure that every financial performance defined by the enterprise's strategy is linked to a set of performance measures in the relevant perspective, which may eventually influence future results. Through QFD, priorities for improving performance measures in each of the three other perspectives are determined. The QFD matrices indicate that proposed learning actions are consistent with eventual financial results. The QFD systematic approach assists in organising the BSC, thus promoting continuous improvement for achieving strategic goals."* *(p.592)*

Wang, Lin, and Huang (2010) looked at performance-oriented management for innovative R&D projects. To enhance the approach of managing these projects, the authors suggested a framework based on the BSC and QFD: BSC was to identify major performance measures, and QFD was to translate the measurement metrics into systematic procedures for efficient management.

Wang et al. applied this framework in the pharmaceutical industry on a drug development project.

Central to the management framework was the concept of risk to reduce the uncertainty in the project. This was done through organising the integration of the BSC with QFD in a top-down approach by placing the measures of the BSC in the 'WHATs'. The second step was to determine their relative importance, followed by the stages of the R&D project that are placed in the 'HOWs'. The next step calculated, the relationship between the 'WHATs' and 'HOWs', which are the measurements in the BSC and the stages of the R&D project. Then the risk was prioritised; this precludes the development of action plans to minimise the critical risk. The final step is to monitor and control the risk.

Wang et al., (2010) concluded that the usage of QFD and BSC with the purpose of managing risk within R&D projects is positive in terms of success. Additionally this framework enabled the monitoring team to identify forms of risk that pose may a threat. The final point is that a higher success rate is established.

In summary, the literature review on the integration of the BSC and QFD indicate that it is possible to overcome the main limitations of the BSC through its integration with QFD, by using QFD to translate BSC into action. By placing the four perspectives of the strategy map into the 'WHATs' and 'HOWs' of the houses of the QFD it is possible to attain the causality links between each perspective. This approach to integrating the BSC and QFD has been demonstrated by Barad and Dror (2008). Throughout the following section of this chapter, this concept is further explored, not only through the integration of BSC and QFD, but also through the inclusion of SWOT analysis.

BSQ (integrating BSC with SWOT and QFD)

The first three studies on integrating BSC with SWOT and QFD were developed in 2000. The first study was by Lee and Ko in 2000; this is a theoretical study which presents a model that can be customised for companies to develop and implement into their corporate business strategic plan. The model combines a SWOT analysis, BSC and QFD approaches. The SWOT analysis is used to identify the critical success factors and provide a structured approach to the BSC. Additionally the QFD approach is used to identify the KPIs instead of 'brainstorming' them. Sun Tzu's A*rt of War* is used as the "HOWs" of the BSC. The authors completed a case study in the Hong Kong special administration region.

 Lee and Ko (2000) explained that the integration between SWOT analysis and BSC was achieved through identifying a set of strategies; these strategies then become implemented through the BSC. The BSC in turn is then linked into the QFD approach through using it to populate the 'WHATs', while Sun Tzu's *Art of War* is used based on the '13 business management strategies' of the "HOWs" side.

Lee and Ko (2000) conclude that there are two main stages in the development of the strategic management system. Initially SWOT is integrated with the BSC to identify the KPIs within the four perspectives. This is followed by the integration of the BSC with the QFD approach to identify the KPIs which are related to Sun Tzu's strategies. This model can be applied in any organization to develop a holistic strategy. Additionally they found that QFD is efficient in ranking the weaknesses of an organization to help it improve its position. Furthermore, they found the Sun Tzu's strategies must be well understood and that accurate and up to date information is required.

The second study by Ko & Lee in 2000, applied a new strategy formulation framework for the Chinese Asian market. They developed a strategy for the ABC Bank in Hong Kong. The aim was to develop a set of strategies for this bank based on the suggested framework explained within their article. The framework was made up of SWOT analysis, BSC, QFD methodology and an approach to business management in strategic planning influenced by Sun Tzu.

They concluded that the strategic management framework is very effective. However the implementation of such a framework depends on experience. They recommended implementing the framework in other organizations. This should make the approach more flexible and inter-applicable between different kinds of organization and sectors.

The third study relevant to this discussion, by Lee, Lo, Leung, and Ko (2000), implemented a strategy formulation framework in Hong Kong, at the Training Council Institute for Vocational Training. The framework was made up of SWOT analysis, BSC, QFD, and MBNQA. The objective of the paper was to develop a strategy through implementing the framework to improve performance. The tools were integrated through placing the results of the SWOT analysis in the four perspectives of the BSC, which was then placed in the QFD methodology. Within this phase the BSC was related to the MBNQA to develop the most suitable results such that the quality of the educational experience in Hong Kong could be improved.

The researcher concludes from three studies which have integrated SWOT, BSC and QFD Ko and Lee (2000); Lee and Ko (2000); Lee et al. (2000) that the first suggestion was the SF (Strategic Framework) framework with Sun Tzu's The Art of Business Management Strategies on QFD methodology, then they applied the SF framework in two different areas, a bank (*Sun Tzu's The*

Art of Business Management Strategies as 'HOWs'), and education (MBNQA as 'HOWs'). It is considered as evidence that this framework has a flexible methodology which can be applied to any other sectors with a change in the 'HOWs' or 'WHATs', for example they use MBNQA as 'HOWs', and another time *Sun Tzu's The Art of Business Management Strategies* as 'HOWs' on QFD methodology. However, they point out that "*due to the flexibility of the SF framework, more research can be done on its implementation in other organizations and industries*" (Ko & Lee, 2000, p.475).

Ko and Lee (2000) states that, *"It is believed that first implementing the SWOT analysis to develop a set of strategies that make sense will serve as a stepping-stone toward the actual implementation of the balanced scorecard. The balanced scorecard has been widely applied in corporate performance management and can easily be extended to strategic planning of an organization."* (p.470)

Later, Lee and Lo (2003) presented an illustration in the strategic planning of a new curriculum by making use of a proposed framework, made up of the integration of the following three tools: 'SWOT analysis', 'BSC', 'QFD' with the educational criteria adopted from the MBNQA. The implementation of this strategic framework was aimed at developing a better curriculum that will enable a new generation to deal more effectively with the digital age. Each individual tool is outlined in the context of the purpose. The link between the BSC and QFD is that BSC is a very high level-planning tool that serves the decision makers within the organization. However it is necessary to formulate the strategy, what can be done by applying QFD. The BSC is built on the SWOT analysis in that the results are placed in the individual perspectives of the BSC. The BSC is placed in the QFD approach as the "WHATs", then the

MBNQA is used as the 'HOWs' in the QFD approach to implement the 'customer voice' as defined by the BSC, and analysed by SWOT. It was concluded that the methodology of the proposed SF framework is effective and useful in strategic planning, and has generated several solutions.

Ip and Koo (2004) presented a theoretical framework as a pragmatic approach for managerial and consultant practitioners to convert vague strategies into practical action plans. This framework comprises SWOT analysis, BSC and QFD. Sun Tzu's *Art of War* is added to improve the structure of the framework. An example of framework implementation is presented as a case study at a professional institute in Hong Kong.

The implementation of the model consists of five steps, the **first step** being to identify the predominant external factors through factorisation. This is done through a SWOT and STEP analysis. The perception of the participants is requested by asking them to rate the factors on a ten point Likert-based scale. This is done for three perspectives of the variables: "success probability, attractiveness, importance ranking", for both the opportunities and threats. The **second step** then focuses on the internal factors identified as strengths and weaknesses, which are divided into the four perspectives of the BSC. The participants then rate the importance of the internal factors, the performance score is defined through 'Six Sigma' and the 'performance gap' is the difference between the two; the greater the difference the higher the need for improvement. The **third step** is to combine the internal factors with the external factors to define strategic direction. The **fourth step** is to implement the QFD process based on the cause-effect relationships of the strategy map. The final step is to review the developed strategies that have been produced by the framework to find which strategies require more attention.

Ip and Koo (2004) concluded that the application of Sun Tzu's *Art of War* is an impressive approach to developing strategy. However it is a difficult approach for the average business manager. They found that despite the tool being effective it takes a long time to implement and requires expert knowledge for implementation. The model can develop effective strategies, provided that sensible input data is provided. The researchers warn of politics within the organization that could distort the outcome of the implementation of the BSQ model when developing a strategy.

Chen and Chou (2006) proposed a novel procedure for designing air cargo terminals. Through a case study the BSC was used to establish the design requirements, while the HoQ method was used to build a concurrent design. A SWOT analysis was performed to set the strategic direction of the overall long-term vision of the organization.

The implementation of the BSC and QFD frameworks in Chen and Chou's case study starts with BSC, which is the determination of the mission, the core values, and the vision of the organization. This information was obtained through investigating the organization by means of interviewing stakeholders, reviewing documentation, planning proposals and research reports. At the same time questionnaires were submitted throughout the organization to target stakeholders.

The BSC was developed with a strategic orientation using SWOT analysis, and then integrated with the QFD method. The four perspectives were placed in the 'WHATs' part of the HoQ and the design requirements were placed in the 'HOWs'. The results of the survey become the KPIs and the importance rating of the customer requirements. The relationship matrix was defined through the cause-effect diagram. This implementation of the QFD method integrated with the BSC concluded with some simple calculations of the

design, customer and relationship requirements to populate the planning and target matrix. This process demonstrated how the strategic objectives may be attained.

Chen and Chou (2006) concluded that they had implemented a design framework based on the BSC method. This method was integrated with the QFD method as a preventive approach to avoid future problems in the operation, financial or post sales service during the design stage. Financial indicators within the model were considered the most important during the design stage despite being lagging indicators. The key input data in the design framework was from the questionnaires, which were used to compute the rest of the strategy and define the KPIs. They suggested that technical evaluation and benchmarking of design requirements should be evaluated in the future.

Chen et al. (2008) suggested a new approach to design the service process through 'fuzzy logic', in a study of air cargo transportation. In addition to fuzzy set theory, the BSC, the theory of constraints and the QFD approach make up the model used to attain their objective. The aforementioned tools have been integrated into one model to ensure that the service process design simultaneously meets the needs of the employee, shareholders and customers. In addition to these tools, the standard function of the BSC is used to populate the design requirements of the QFD. The theory of constraints is then used to overcome the physical and policy constraints, divided according to the thinking process: *"how to change, what to change, what to change to" (p.665).*

Chen et al., (2008) found that the implementation of the model of designing service processes was successful and an innovative approach. Nevertheless a limitation was identified. For future studies, they suggested that quantitative factors might be considered to improve the model.

In 2009, Chen and Cheng applied a method to improve operational quality and to reduce the number of accidents to flights at the international airport of Taiwan. A quality improvement framework was developed based on the Six Sigma, BSC, TOC (theory of constraints), QFD, and continuous improvement. The framework was divided into a five-step process of defining, measuring, analysing, improving, and controlling.

The first two steps are covered by the BSC, where the **first step** is the mission and vision defined into strategic themes, **followed** by the development of KPIs to measure the strategy. The analysis phase is done through the implementation of constraints theory. The QFD is used to capture the voice of the customer. Throughout the implementation of the operational quality improvement framework, Chen and Cheng (2009) defined 23 KPIs, from which, through the theory of constraints, 40 initiators were deployed. These were then implemented in the HoQ. Chen and Cheng pointed out that the framework improves the operation results and provides decision-making facilities for process quality improvement.

A case study by Garefalakis, Sariannidis, Zopounidis, and Zisis (2009) introduced a significant effort to build an appropriate BSC for a Gas company in Greece. This was done through adding several management tools for strategic planning. The authors focused on how innovative performance measurement is provided through reviewing older Greek measurement tools in comparison to others suggested in the literature. They applied the strategic tool in the Greek companies developing two BSC, one for the public and another for the private sector. The objective of implementing the BSC here was to improve the strategic objectives of the companies.

The implementation of the management tool started with a set of interviews and questionnaires to obtain critical information such as vision, mission, and

strategy. The data collection included 30 questionnaires and 11 interviews. Additionally secondary data was collected from achieves, reports and other documentation. The analysis of the collected data started with finding the opinion of the customers in relation to the current situation but also with respect to how improvements could be made. Having collected and sampled the data, the SWOT analysis was applied followed by the BSC, and subsequently Analytic Hierarchy Process (AHP). The AHP method was used to structure the BSC and consists of the following three steps. The first is to make a pair wise comparison to find which KPIs in the BSC are more significant. This is followed by normalising comparisons through the application of the geometrical mean. Lastly a calculation is made with the performance score, consistency measures and consistency ratio.

A second method of implementing the strategic framework was the AHP-smart method. The same data was used, as collected from the first experiment. However this time the first step was to define and list all the KPIs, followed by the selection of the critical KPIs through smart methods, and lastly its calculation. The final implementations of QFD required three managers to rank and correlate each strategy pair with 9, 3, 1, and 0 in the event that there was no correlation. QFD was then used to identify the five most important KPIs to implement customers' satisfaction. SWOT analysis was applied to the KPIs in the BSC. These KPIs were the 'WHATs' of the QFD, while the 'HOWs' of the QFD were Sun Tzu's *Art of War*.

Garefalakis et al., (2009) found that the strategic tools were considered useful, especially the BSC, however, these tools should not be used as a definite approach but as a template that may be adapted. Furthermore, they concluded that the success of a company depends on effective management. Therefore,

the solutions presented above were demonstrated to enable an organization to perform better, as strategy development lies at the heart of business success.

Section Two: Integration overview for SMEs

This section explains from the literature review how SWOT, QFD, or BSC operates specifically in SMEs or any combinations of the above as following:

- Operating SWOT analysis in SMEs

- Operating QFD in SMEs

- Operating BSC in SMEs

- The integration between BSC and SWOT analysis in SMEs

- The integration between BSC and QFD in SMEs

- The integration between BSC and QFD and SWOT analysis in SMEs

Operating SWOT analysis in SMEs

Apak, Erol, and Atmaca (2012) reviewed accounting measures of SMEs during tough economic times. As a means for reducing the impact of a crisis the SWOT analysis is suggested to evaluate the situation before and during the crisis such that the impact can be assessed. Through a better understanding of the current crisis that a SME undergoes, SMEs are able to better position themselves to take measures with the purpose of overcoming economic struggle. As part of this study it was found through a survey that 59% of respondents within the enterprise believe that SWOT should be used in times of crisis, 31% responded undecided, while 10 % disagreed.

A recent study by Szabo (2012) demonstrated the usage of SWOT analysis as a strategic diagnostic within a SME that operates in the automotive sector. The SWOT analysis was used to analyse the complexities of combining the internal and external diagnostics. This enabled the SME to better understand

its position within the market and determine how this position could be enforced. The results of the SWOT analysis concluded that the appropriate strategy for the SME is diversification. The diversification strategy consisted of two aspects which are to increase its services and to change its customers. For consistency this study compared its results with a grand strategy matrix and had a positive outcome.

The study of Hai (2008) demonstrates a quantitative SWOT analysis application. For the usage of SWOT analysis for strategy selection a four level model was created. The implementation of a SWOT analysis was performed through a procedure of six steps. The first step is the SWOT analysis. The second step is establishing the priorities of each factor. In the third step a weight is calculated for every criteria. The fourth step is the scoring of every competitive strategy. Foe the fifth step total weighted scores are calculated. During the sixth step the competitive strategies are assessed. The implementation of the SWOT analysis was successful within the Taiwanese SME and resulted in two competitive strategies.

Ruiz-Vanoye, Díaz-Parra, and Zavala-Díaz (2012) were the first to adapt a SWOT analysis in the SME sector for the purpose of evaluating IT security risk. Based on the original SWOT analysis the '*VRTM matrix*' was developed. Similar to the SWOT analysis internal and external factors were considered. The *'RT'* part of the matrix refers to *Recommendations and Threats* and accounts for the external factors, while '*MV'* stands for *Mechanism* and *Vulnerability* that evaluates internal factors. The study concluded with a positive outcome for implementing the modified SWOT analysis model for strategic planning within SMEs.

Nijland (2012) implemented a SWOT analysis in a thesis in business administration for the integration and development of a cross border

subsidiary. A regular implementation of SWOT analysis was applied consisting of an allocation of factors for strengths, weaknesses, opportunities and threats. This research distinguishes itself by the means through which it matches the internal factors to the external factors. Referred to as a '*Confrontation Matrix*', it is used to perform this matching by determining the relationship strength with a plus or minus. In the case that the relation is very strong or weak, a double plus or minus was used. The implementation of a SWOT analysis was found to be beneficial as it enabled the establishment of strategic recommendations.

Operating QFD in SMEs

QFD has been associated with prioritization. Miryam Barad and Gien (2001) developed a methodology based on QFD to improve prioritization, and used it in their research to formulate manufacturing strategy. The methodology consists of a two phase deployment process. In the first phase the strategic improvement needs are linked to operating concerns to define operating improvement needs. These are linked in the second phase with potential improvement actions and result in improvement actions. The research was implemented across 21 SMEs through data collection of a questionnaire. The research findings of this research are interesting as it demonstrates potential problems within the SME, for example: limited resources and under skilled staff. Also this study demonstrated that QFD is up to the task of prioritisation by allocating the mist suitable tasks according to immediate necessity. Furthermore, as part of this study, it was analysed how effective the staff within the SME are in being able to access the improvements required, with a relatively positive result. Lastly, the key improvements where summarised as: '*time reduction*', '*flexibility of improve quality*', '*improve quality oriented organization*', '*time reduction of vendor relations and maintenance*', '*improve*

quality techniques'. Further research should look at how QFD matrices can be used.

Shanmugaraja, Nataraj, and Gunasekaran (2012) performed a study within a SME organization in India to evaluate how QFD enables *Six-Sigma* in strategy. The methodology of this research is based on a QFD and *Six-Sigma* interface model. *Six-Sigma* is used to enhance QFD to measure, analyse, improve and control also referred to as the '*QFDMAIC framework'*. The methodological steps that the model goes through are clearly outlined including the formulation of the long term vision. Objectives are specified to attain this vision. For each of these objectives a strategy is defined. To implement the strategies a project plan is defined for each objective. The findings of the study were positive for strategy formulation for the SME, particularly because the strategy framework enabled close alignment of day to day activities with the overall vision. The key strategic contribution found for the QFD tool was that it enabled the prioritisation of projects. Further research was suggested by looking at the relation between the prioritised projects.

It was identified by Germani, Mengoni, and Peruzzini (2012) that supporting a supply chain within the SME sector can be a challenging task. Generally co-design software seems to be used for this purpose. This study used QFD to correlate processing metrics with the functionality of the software and collaboration requirements. The structured method for identification and evaluation of co-design systems was applied in 21 organizations. The method enables the following key functions: *'measure tools performance for collaborative dimensions, verify benchmarking process, review metrics, evaluate and improve system, and compare co-design tools'*. QFD plays a central role in this process by breaking down the whole process and implementing a 'house of quality' to correlate the different factors.

Operating BSC in SMEs

Tapinos et al. (2011) performed a study to evaluate the impact the BSC has on the strategy process. The research started from the view point that the BSC does have an impact on all phases. The research involved a questionnaire directed to 4000 members of the research institution. Each of the questions tried to identify if there is a significant impact for organizations that use the BSC, and whether this impact extends over each of the phases of the strategy process. The findings of the research concluded that strategy tools being used extensively for performing the strategy process of which 35% use the BSC. This was confirmed by a survey of Arena and Azzone (2005). Significantly, is the fact that 22% of those that use BSC are SMEs, particularly, in the automotive and telecoms sectors. With regards to the impact on the strategy development process it was found that the BSC users have improved strategic planning activities over other studies. Therefore, it was concluded that for to effectively perform all phases of the strategy process compound strategy tools are required.

According to Rompho (2011) only limited studies have implemented the BSC in SMEs. His study focuses on a case study to implement the BSC within a SME setting. Data was collected through in depth questionnaires with key stakeholders and participant observation. Throughout this study, Rompho suggested a series of design failures when implementing the BSC: *"too few measures in each perspective which leads to imbalance between leading and lagging indicators or financial and non-financial indicators, To many non-critical indicators unfocused the organization and makes linking between factors harder, failure to KPIs that reflect organization its strategy which result in the strategy not being translated into action"(p.40)* .He also identified a series of BSC process failures such as: *"lack of senior management commitment, keeping scorecard at the top, overly long*

development process, one time project, involving inexperienced consultants"(p.40). The findings of the research concluded that the implementation of BSC within SMEs is more prone to failure than in a large organization. This is because the market response is far higher and therefore factors change more frequently. This means that long term tracking cannot be performed which interferes with the linking within the BSC.

You (2012) investigated the BSC implementation within a SME organization. This was achieved through a case study Kentucky Fried Chicken (KFC) that was implemented successfully. The implementation within KFC found that there was extensive focus on financial metrics compared with the original design of Kaplan and Norton. Rompho (2011) identified this as a potential reason why a BSC implementation could fail. Several factors for which the SME potentially fail in implementing BSC were identified in the case study, however, the researcher found that the case study was successful, and concluded that it is possible to implement the BSC in SMEs.

Gwangwava, Mhlanga, and Goriwondo (2013) performed a case study within a SME in Zimbabwe in the manufacturing sector. The study described a software implementation of the BSC to integrate with existing software systems within the organization. The software design included a wide range of strategic indicators, and functionality of the BSC such as linking KPIs and implementing the strategy map. This enabled the SME to work towards the strategic vision and objectives by developing priorities. It was concluded that for such a software project to be successful, the critical success factor is having continued management involvement such that the required organizational changes are effective.

The integration between BSC and SWOT analysis in SMEs

Fernandes et al. (2006) reported a series of lessons from implementing the BSC in a SME in the UK manufacturing sector. These lessons include but are not limited to SMEs having lack of resources to implement projects such as the BSC, which is constantly interrupted by other priorities within the organization. SMEs are poorly informed about the BSC and experienced consultants provide low value for money as they usually have no industrial knowledge. Staff within the SME hold negative views towards the implementation of the BSC, and managers are sceptical. To overcome all these barriers within SMEs, the authors of this study devised an eight step methodology to implement the BSC. These steps are: *'project initiation', 'strategy clarification', 'strategy analysis', 'KPI analysis', 'measurement analysis', 'strategy initiation', 'implementation plan', 'formal review'.* BSC is implemented during these eight steps and integrates with the SWOT analysis during the second step of strategy clarification. This enables identification of very specific strategic issues and priorities. The study is a significant contribution, because it details a methodology for how SWOT analysis and BSC can be implemented within a SME setting, which can be easily adapted to other SME settings.

Another demonstration of the integration of SWOT analysis with BSC was performed by Sripaipan (2006) who completed a case study with a non-profit organization classified as a SME. A SWOT analysis played a crucial role in empowering the SME to become more competitive in the market it operates in. Through the BSC a five year strategic plan was outlined with key mile posts in its strategic map. The output of the SWOT analysis became the input of the BSC. The author concluded with a successful implementation of strategic tools within a SME. The success of this implementation was put down to the organization having effective leaders, who recognised the need to

move the organization forward, as well as all participants being fully committed.

The integration between BSC and QFD in SMEs

A study by Tan, Tang, and Forrester (2004) proposed an e-business planning framework that enables SMEs to transform their E-potential into E-implementations. This framework is based on links between QFD and BSC by setting objectives and defining initiatives that are aligned to the completion of an organization's vision. These concepts were implemented through a case study, in an attempt to convert customer needs into e-business plans. To achieve this target the framework was implemented through relating the BSC in the "WHATs", of the quality function deployment matrix with the value chain analysis in the "HOWs". The output of the first house was transferred to the second house, which became the "WHATs" and related e-business applications to the "WHATs". The implementation took place according to the functioning of the QFD method. The overall process of developing strategy was managed through placing the four perspectives of the BSC in the strategy map. The research based on this framework resulted in a list of prioritised e-business applications. Tan et al. (2004) suggested that vital business processes were identified for the implementation of the e-business applications, enabling the establishment of a clear road map to formulate strategies. Future research was undertaken of additional applications of this framework, to test and reassess its applicability, leading to customisations and redesigning of the framework to meet case requirements.

A subsequent study by Tan and Bennett (2007) identified the difficulty for SMEs to manage, plan, and prioritise effectively the use of technology within its organizational strategy. The constant evaluation of technology brings the dilemma and requirement of developing a detailed plan for the BSC, Value

Chain Analysis (VCA) and QFD framework. A single SME case study in Singapore was undertaken to demonstrate its effectiveness.

Tan and Bennett argued that the QFD method was no longer sufficient to implement the planning process, because the voice of customers is ambiguous, can have multiple meanings and is considered to be qualitative. BSC is a complementary tool that closes the gap between customer and organizational performance and fulfils a missing function, its main purpose being to set clear strategic objectives and an overall vision. In Tan et al., (2004) and Tan and Bennett (2007), the BSC framework was used to develop a strategic plan according to the strategy map. Overall, the implementation of the framework was found to be positive. BSC provides simplicity and structure when collecting the voice of customers and making the QFD process more robust. On the other hand QFD provides integration between top-level objectives and operational level activities, which the BSC lacks. The implementation of the strategy development framework was considered successful, and for future research its implementation in different contexts to further test and investigate the practicability in the real world environment, is indicated. Tan and Bennett (2007) suggested that the framework should be tested in other industries, in addition to the printing industry, which should have the effect of improving the framework.

A later study, Clegg and Tan (2007), implemented a structured strategic planning and analysis framework for micro-sized enterprises to build their E-business capabilities. The framework designed in previous research is based on the BSC, VCA, and QFD. A brief comparison with existing strategic planning frameworks demonstrated that 'good ones' should guide managers to a method or solution that is suitable for the case in hand. Clegg and Tan found that the framework was becoming mature, as it had been successfully applied

several times in different settings. This demonstrates that the framework is a strong approach to implement strategy, independent of the context in which it is applied. It is the flexibility of the framework that allowed the researcher to adapt to the environment and changing customer requirements. Thus the integration of the business tools (the framework) enables a link between competitive advantage and a clearly defined business vision.

The integration between BSC and QFD and SWOT analysis in SMEs

Tao, Ng, and Koo (2009) were early adopters of the strategic tools BSC, SWOT analysis and QFD as an integrated tool, and potentially the first to implement it within a SME. They reviewed each of the strategic tools and explained how they are complementary. The researchers suggested this framework to be used for assessing and evaluating SMEs for investment purposes. For the SME to be assessed, a set of questionnaires have to be completed. It was concluded that the criteria are mainly financial, and this contradicts with the BSC, as excessive financial indicators unbalances it.

Kreuzer, Schäfer, and Aschbacher (2011) demonstrated how the BSC can be adapted to aid strategic service management. Based on an earlier study in which the strategy scorecard was introduced a six phase process is presented as follows: 'strategic analysis, idea generating and idea assessment, business case description, service concept, concept testing and test marketing, service management'. The process steps are performed using data from customer surveys and market research. During the strategic analysis a SWOT analysis is used. After refining the strategic objectives of a SWOT analysis the BSC strategy map is created. This demonstrates how the output of the SWOT analysis is crucial to a successful strategy map implementation of the BSC. With the first phase completed, it is possible to link the perspectives in the strategy map followed by determining defining KPIs in the next phase. The

KPIs are crucial to the success of the fourth phase which is continuous improvement; the author suggests the usage of quality function deployment. This model was implemented within SMEs as lean development projects. The research concluded that this framework is the starting point and should be further researched within SMEs in the form of case studies.

Summary

During the first chapter of the current study the strategy process was reviewed to understand how it was conducted within organizations. This was followed by revision of the BSC, which is one of the main strategy tools in the strategy process. The researcher found through this evaluation of the strategy process that several limitations existed. Therefore, this chapter reviewed other strategy management tools and focused on SWOT analysis and the QFD approach with the intention to improve BSC, with the aim of helping to overcome the limitations identified in the BSC. The literature review showed that these tools may be able to improve the BSC and this would help to overcome those limitations. Therefore, research was conducted into how these strategy management tools can be integrated to perform the strategy process.

To find out whether it could overcome any of the BSC's limitations in terms of the strategy process, SWOT analysis was the first additional strategy management tool to be investigated. The literature review indicates that SWOT analysis supports the strategy process, because BSC does not define strategic direction, which is considered one of its main limitations. Moreover, SWOT analysis is considered to be a strategic management tool that does define strategic direction, and through identification of the internal and external environment it is possible to define a strategic direction.

Another important limitation of the BSC was found in its linkage model, the strategy map. Strategy map shows a bottom up cause-effect and how an

organization attains its strategic objectives, or considers how cause-effect relationships would function. However, there was no clear explanation of how it should be applied or the detailed steps of the methodology. Based on the literature review, the QFD approach could make the strategy map more robust and reliable; a strategy map can be brought into action through QFD. On the other hand QFD provides integration between top-level objectives and operational level activities, which the BSC lacks. This would enable a strategy plan produced by the BSC to be more effective, and therefore the strategy process would be implemented more efficiently by including the QFD strategy management tool in addition of the BSC.

Table (4.1) shows the conclusion of the analysis of the previous literature review of the applications of SWOT analysis, QFD, and BSC in SMEs, and then the integration of BSC with SWOT analysis and/or QFD for both large organizations and SMEs.

In this table seven columns are used to represent the main findings. The first column indicates authors who have published studies in this field. The second column indicates studies that related to apply SWOT analysis, QFD, or BSC, as individual tools, in SMEs, and/or the integration between BSC, SWOT and QFD. The third column shows whether the study was conducted on large organizations. The forth column shows whether the study was conducted on SME(s). The fifth column refers to whether the studies include a Strategy Process or not. The sixth column refers to whether the studies used a Strategy Map or not. The final column determines whether a study is Empirical or Theoretical. These findings can be used for justification of the proposed strategic framework of the current study.

Table 4.1: Overview of the literature review of strategic tool integration

Studies	BSC& SWOT BSC&QFD BSQ	Large Org.	SME	Strategy Process	Strategy Map	Theoretical or Empirical
Apak et al. (2012); Hai (2008); Nijland (2012); Ruiz-Vanoye et al. (2012); Szabo (2012)	SWOT		SME		NO Strategy Map	Empirical
Miryam Barad and Gien (2001); Germani et al. (2012); Shanmugaraja et al. (2012)	QFD		SME		NO Strategy Map	Empirical
Gwangwava et al. (2013); Rompho (2011); Tapinos et al. (2011); You (2012)	BSC		SME		Strategy Map	Empirical
Kaplan et al. (2008); Papalexandris et al. (2005); Papalexandris et al. (2004); Quezada et al. (2009); Stewart (2008); Wu (2005)	BSC& SWOT	✓			Strategy Map	Empirical
Fernandes et al. (2006) Sripaipan (2006)	BSC& SWOT		SME	✓	Strategy Map	Empirical
Koo (1998)	BSC&QFD	✓			NO Strategy Map	Empirical
Barad and Dror (2008); Wang et al. (2010)	BSC&QFD	✓			Strategy Map	Empirical
Clegg and Tan (2007); Tan and Bennett (2007); Tan et al. (2004)	BSC&QFD		SME; micro-sized		Strategy Map	Empirical
Dror (2008)	BSC&QFD				NO Strategy Map	Theoretical
Lee and Ko (2000)	BSQ	✓			Strategy Map	Theoretical
Ko and Lee (2000); Lee and Lo (2003); Lee et al. (2000)	BSQ	✓			NO Strategy Map	Empirical
Chen et al. (2008); Chen and Cheng (2009); Chen and Chou (2006); Garefalakis et al. (2009); Ip and Koo (2004)	BSQ	✓			Strategy Map	Empirical
Kreuzer et al. (2011); Tao et al. (2009)	BSQ		SME		Strategy Map	Empirical

According to the analysis of the previous literature review in table (4.1), the literature review shows that BSC has been integrated with QFD since 1998 (Koo, 1998). Then the BSC was integrated with QFD and SWOT analysis as the BSQ framework in 2000. The BSC was then integrated with the SWOT analysis alone in 2004.

There are in total *38 studies*. Five are related to apply SWOT analysis in SMEs, three are related to apply QFD in SMEs, and four are related to apply BSC in SMEs. For the part of the integration tools, eight are related to the integration between BSC and SWOT, seven are related to the integration between BSC and QFD, while eleven are related to the BSQ framework. Moreover, these elven studies that related to the BSQ framework, two of these studies are theoretical, while 9 out of 11 studies are empirical applications and take place mainly in large organizations. Conversely, only a small number of studies have been carried out in SMEs, which are related to the integration between BSC and SWOT and QFD. Only 2 out of 11 studies are empirical applications and take place of SMEs (Kreuzer et al., 2011; Tao et al., 2009).

For the BSC studies, thirty studies show BSC as a second or third generation strategic management system, and these studies involve a strategy map of BSC (Barnabè, 2011; Cobbold & Lawrie, 2002; Lawrie et al., 2006; Lawrie & Cobbold, 2004; Pongatichat & Johnston, 2008; Shulver & Lawrie, 2009). There are five studies which did not use a strategy map of BSC, the reason behind this is that four of them Ko and Lee (2000); Koo (1998); Lee and Ko (2000);   Lee et al. (2000) were carried out before Kaplan and Norton developed a strategy map in 2000, while the last study from Dror (2008) was a theoretical study.

 Interestingly there is only one study of the strategy development process Fernandes et al. (2006), but the integration was only between BSC and SWOT.

Finally, as mentioned before, the BSC framework has been well accepted by many organizations since 2000. However, the adoption and use of BSC framework (with support of other strategic tools QFD and SWOT analysis) in SMEs for the strategy process is relatively new, and little research has been carried out. Consequently, the adoption and use of the BSC framework for the strategy process (as phases including activities) in SMEs is new, with little evidence of research carried out for this purpose. In chapter seven, a BSC framework based on the previous review of theoretical and empirical literature of strategy processes in SMEs is developed.

Chapter Five: Methodology

Introduction

The research methodology is concerned with selecting an approach to the study that can address the research question. A research methodology starts with laying out a research paradigm. The research paradigm is selected as a description of the way in which the researcher views the world under observation, also known as its ontology. This is linked with an epistemology that identifies what the researcher regards as valid knowledge. To understand how the researcher in this study interacts with the world to derive knowledge about the world the research approach of abduction is used, through/h which theory is deduced from the literature and compared against the findings of the study.

The researcher interacts with the world under observation to derive knowledge through a set of methods. These methods are outlined within a methodology. The research method of this study is a single case study approach, involving design, a unit of analysis, and a case study protocol. It is important that the research strategy is consistent with the selected paradigm. For the collection of the data, semi-structured interviews are used, which enables the researcher to collect in-depth information that is then analysed and compared through thematic analysis against the conceptual framework derived from the literature. This research is then completed through a set of data quality procedures that take place during the several stages of this research methodology, which validate the reliability of the research findings in terms of credibility, transferability, dependability and conformability (Kultgen, 2010; Riege, 2003). Figure 5.1 highlights the structure of the methodology chapter.

Figure 5.1: The structure of the methodology chapter

- Familiarising The Researcher with The Data
  - Electronic Recordings of Interviews Field Notes
- Generating Initial Theme
- Coding According To Conceptual Framework Which Is Developed Based on How The Literature Describes The Strategy Process
  - Level One Coding Strategy Process Phases
  - Level Two Coding Activities For The Strategy Process Phase
- The Overall Interpretation
  - Enumeration determined the frequency that the interviewee mentioned each strategy process phase and activities.
  - Add a summary and an overview of how involved SME is in every activity for each phase of the Strategy Process
- Develop a Report

Thematic analysis using and enumeration

Chapter one
Introduction

Chapter two, three and four
Literature review

Chapter five
Methodology
- Research Paradigm (**Moderate Constructionism**)
- Research Approach (**Abductive Approach**)
- The Conceptual Framework (**Deductive From Theory**)
- Justification for Qualitative Research (**Qualitative Research**)
- Research Strategy(**A Single Case Study**)
- Design of Case Study
- Single Case Study J**ustification**
- Units of Analysis and Case Selection
- Case Study Protocol
- **Interview**
- **Data Analysis Process(Thematic Analysis)**
- Quality Criteria for Qualitative Approach (Case Study Based Research)

Chapter six
Analysis and Discussion

Chapter seven
Conclusion

Research paradigm

Numerous paradigms exist in the research literature. The positions most often adopted by researchers have been reviewed to develop a better understanding of how the research questions can be addressed most effectively through the selection of an appropriate approach. A review of research paradigms can result in a set of compatible paradigms, such as: "Positivist /Post positivist; Interpretivist/Constructivist. These paradigms represent the extreme ends of the continuum, between which are other paradigms such as Transformativist and Pragmatist" (John W. Creswell, 2012; Mackenzie & Knipe, 2006; Mertens, 2010; Pansiri, 2005). Through revision of the individual characteristics, the constructionist paradigm was selected for this research, in order to gain a better understanding of how the strategy process takes place in a SME. Moreover, this paradigm represents most clearly the researcher's belief about the nature of knowledge, methodology and the validity of the study.

The selection process for the identification of an appropriate paradigm was based on its suitability for the research. The most decisive factor was whether the paradigm enabled the research to address the research questions and whether it leveraged appropriate research methods for obtaining data, analysing data, and interpreting the results. With regard to addressing the research questions, a transformative paradigm was found to be less suitable, based on the notion that it is mostly used to address matters of social justice and involves politics, which is beyond the scope of this thesis (Creswell, Plano Clark, Gutmann, & Hanson, 2003). When further reviewing the positivist paradigm it was found that it was not suitable to answer the research questions, because the positivist paradigm is generally involves quantitative methods (Mertens, 2010) and that would not have enabled the research to

obtain sufficient in-depth information, which is necessary for constructing reality in the constructionist paradigm. While a pragmatist paradigm does not conflict in any aspect with this research, neither does it embrace the specified ontology (Powell, 2003), which is central to the approach of the current study as this forms the basis for answering the research question, therefore it was not the choice of preference.

The constructivist paradigm provides a better indication of how the research was addressed. As the research focuses on the sociological aspect, which is about how the strategy process is conducted within SMEs, an ontological view was necessary; therefore social constructionism was preferred (Jones, 2002; Owen, 1995). Social constructionism implies that its ontological view is that "reality is knowable and has external validity", and furthermore there are three types of social constructionism (Penney, 2007). These can be viewed on a spectrum according to the level of sociality. Of these, symbolic interaction has been identified as the least social, while sociocultural constructionism is seen as the most social; social constructionism lays between these two (Järvensivu & Törnroos, 2010; Penney, 2007),

Social constructionism is of the same nature as constructivism. To be more specific, social constructionism is based on the theory of constructivism. While the purpose of constructivism is to determine how individuals view the world under investigation (Burr, 2003), in comparison, social constructionism seeks to construct the world from a social perspective rather than from an individual view. Furthermore, it seeks to find out how individuals socially interact with the purpose of gaining a consensus with regard to the world under construction (Young & Collin, 2004). Through this view of social constructionism and general constructionism the content of the research (knowledge and findings) is created rather than discovered (Schwandt, 1998).

This process reflects how this research seeks to generate a better understanding of strategy in SMEs such that appropriate strategic tools can be applied.

Within social constructionism several variants can be identified based on ontological and epistemological differences: however, essentially it is relativistic because it asserts that reality can be known. This would imply that ontologically there is a single world (Jones, 2002). This viewpoint of a social constructionist paradigm has however been criticized, because in relativism all claims of knowledge are acceptable (Kwan & Tsang, 2001; Reed, 2005). Other academics have rejected social constructionism based on the idea that it is not possible to define reality as it is constructed during the process, because this implies that when knowledge changes, reality changes accordingly (Gandy, 1996). To add to the confusion, social constructionism is frequently misinterpreted. There is an assumption that no reality exists rather than remaining sceptical about the nature of reality (Burningham & Cooper, 1999). While initially it was thought that social constructionism was a good fit for the present study, an alternative interpretation was found to be more suitable.

An alternative research paradigm to social constructionism is moderate constructionism. This paradigm could be situated on the continuum between symbolic constructionism and social constructionism based on the level of sociological involvement. Furthermore, epistemologically moderate constructionism (Milton, 2013) also known as contextual constructionism (Hannigan, 1995) accepts the relativist view of the world, holding that it is not possible to know reality exactly. Interpretations of the world under investigation are a meaning rather than explicit truth (Milton, 2013). This essentially means that ontologically, a high level of subjectivity exists, while

critical realists argue that conceptualisations are only a way of knowing *'reality'*.

As an alternative to moderate constructionism, it has been found that critical realism is a very closely related research paradigm that shares similar objectives and is ontologically and epistemologically of the same nature (Järvensivu & Törnroos, 2010). The main differences are in the approach to collecting data, the way they view the world under investigation, and how the information is interpreted. Critical realism is even more objective on the scale than moderate constructionism in terms of its ontological view, with the necessary epistemological consequences (Järvensivu & Törnroos, 2010).

The decisive factor that determined that the current study should follow the moderate constructionism paradigm was because it does not seek one universal truth; rather it is open to multiple community-based views. It also implies that the researcher engages with the participant to mutually construct knowledge rather than forming an interrogative process. Figure 5.2 shows ontological and epistemological dimensions of critical realism, moderate constructionism, realism, and relativism according to Järvensivu and Törnroos (2010), and highlights the research paradigm of this research.

Figure 5.2: Ontological and epistemological dimensions of CR, MC, realism, and relativism
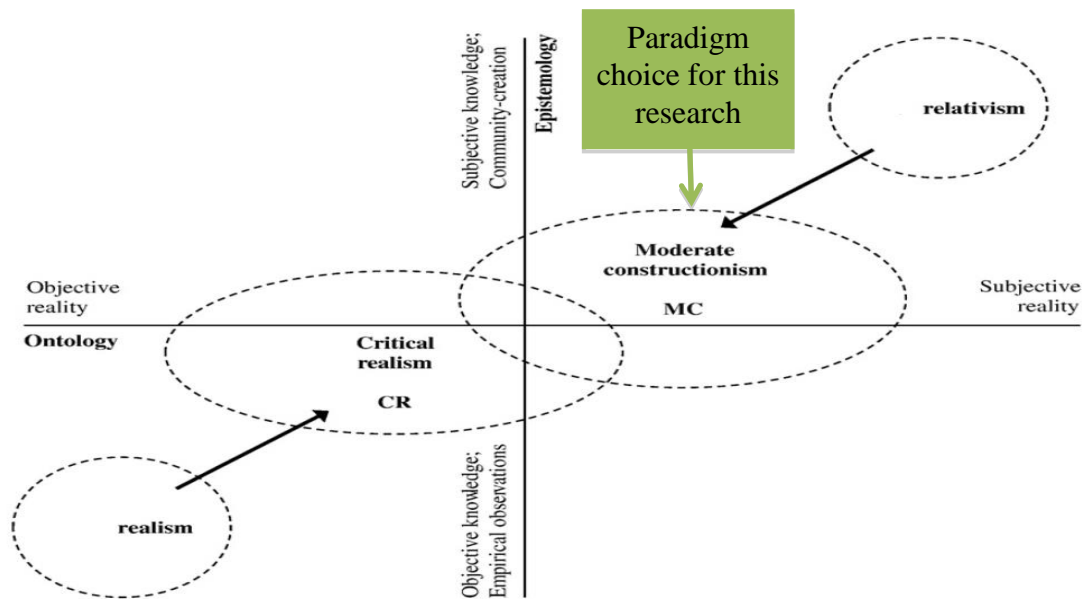
Source: Adapted from Järvensivu and Törnroos (2010)

Research approach

With a clear view of the ontological and epistemological boundaries of the research paradigm, it is possible to define the research process. Within the literature there are three kinds of research processes, which are: 'deductive', 'inductive', or 'abductive'. Abductive is considered to include both deductive and inductive approaches with different levels of induction and deduction (Dubois & Gadde, 2002; Järvensivu & Törnroos, 2010), as shown in figure 5.3.

Figure 5.3: Abductive research process as a mix of inductive and deductive

(Illustrative example, different phases may apply to different studies).
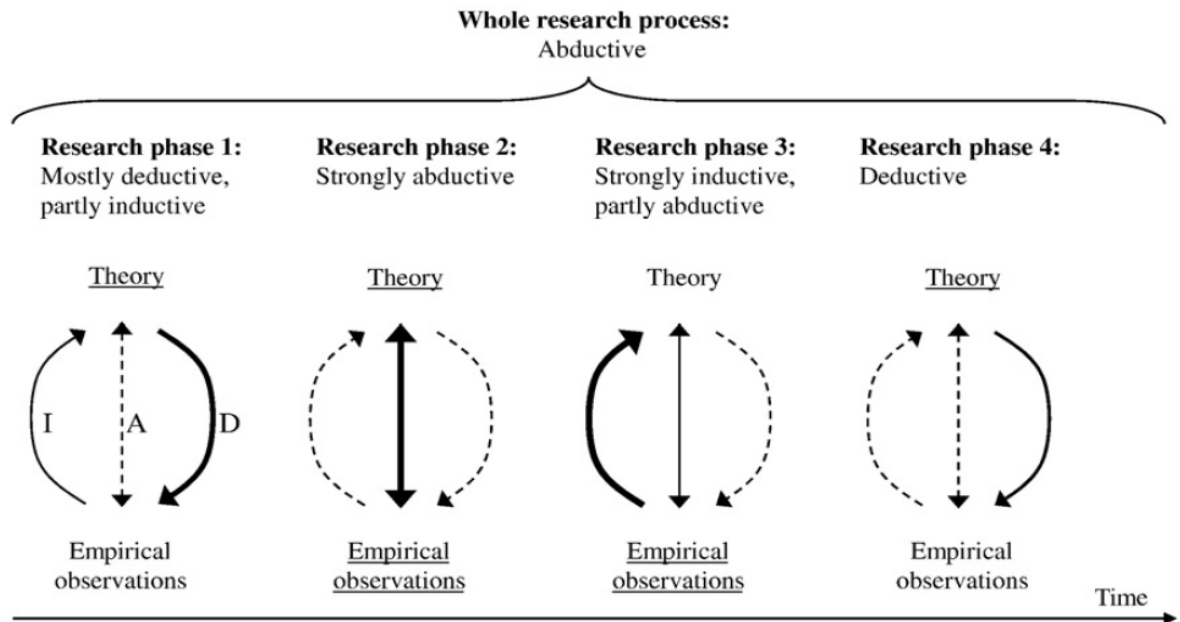
Source: Järvensivu and Törnroos (2010)

A research process type that starts with identification of the existing theory and looks at how it is possible to verify this theory is also known as deductive research (Elo & Kyngäs, 2008). The alternative approach to this research process is when the researcher's objective is to generate theory, based on the findings that have been produced through the research strategy, which is also known as inductive research (Elo & Kyngäs, 2008). The present study actually involves both these approaches, which combine to form the abductive approach. The study adopts a deductive approach, which is the production of theory through the development of a conceptual framework based on the literature (presented in figure 5.4), as well as an inductive approach, consolidating the empirical findings of the research and using them to generate a framework to aid SMEs throughout the strategy process.

Studies that use both deductive and inductive logic are actually abductive in their research approach (Dubois & Gadde, 2002; Järvensivu & Törnroos,

2010). This implies that during certain stages either deductive, inductive, or both approaches are used (see figure 5.3). The use of an abductive research approach does not however focus as intensively on the generation of theory as the inductive process. Instead it seeks to develop a theoretical framework (Dubois & Gadde, 2002) through findings that can be used to sustain an argument. This approach is strongly linked with the research paradigm moderate constructionism, as applied throughout the current study (Järvensivu & Törnroos, 2010). Furthermore, Dubois and Gadde (2002) have stated that abduction is especially suitable for case study research, which is the research strategy of the current study, as discussed at a later stage of this chapter.

The research process of this study begins with a literature review of both the theoretical aspects of strategy process (phases, activities, and tools) as well as empirical studies. It is through these studies that deduction is applied to obtain the required theoretical knowledge of how strategy process tools function and how they have been used within empirical studies, with a specific focus on SME case studies. The second phase of the research applies inductive logic to induce from the research findings how the strategy process of SMEs evolves. As mentioned previously this is not to generate any theory, but rather to develop a better understanding of how SMEs perform strategy. It is the process of consolidating the findings of data collection with existing literature that enables a confirmation of existing theory through matching or falsification. This phase of the research process is a mixture of deductive and inductive approaches (abductive). Once the findings are confirmed, a clear view is established about what the strategy research approach in SMEs is. The research adopts an abductive approach that enables justification of the use of the strategy process framework (BSC framework) according to the findings of the strategy process within SMEs and the findings of the literature (Dubois & Gadde, 2002).

The conceptual framework (deducted from theory)

Introduction

With a clearer understanding of the ontological nature of the world under investigation, defined as constructionist, it is possible to provide an overview of what that ontology actually is and how it operates. This is done by presenting several critical aspects identified in the literature that have been debated by scholars in the field of strategic management, whilst presenting their views on how they believe that the strategy process comes about. Below, these key concepts are clarified with regard to how the strategy process is believed to come into existence. This is done through the establishment of a conceptual framework of strategy. Henceforth, the research will consider this view of the strategy process to investigate how the strategy process takes place within SMEs. Figure 5.4 shows a conceptual framework of the strategy process

Figure 5.4: The conceptual framework of strategy process

Environmental analysis activities

- Analysis of external environment
- Analysis of internal environment
- Evaluate opportunities
- Strategic fit

Environmental analysis

Strategy Formulation

Strategy formulation activities

- Developing mission, vision statement
- Goal setting and identification of strategic directions and overall strategy
- Objectives setting (short-term) and tactic
- Strategic choice- Identification of relevant strategic alternatives(dynamic environment)
- Strategic planning

Conceptual Framework of Strategy Process Phases Including Activity

Emergent strategy

Emergent strategy activities

- Strategy reformulation
- Strategic change management
- Apply corrective action
- Apply preventive action

Strategy Evaluation

Strategy Implementation

Strategy evaluation and control activities

- Gathering Feedback
- Revision and learning
- Control of strategy and organization performance
- Identify corrective action
- Identify preventive action

Strategy implementation activities

- Strategy execution
- Implementation of tactics
- Communication Strategy
- Allocate resources
- Alignment of budget with strategy
- Alignment of human resources with strategy

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Content, context, and process

The research focuses on the strategy process. Throughout the literature, there are three focus points on which research has focused, 'content', 'context', and 'process'. The traditional focus point has been on strategy content research. This approach refers to what is achieved through the strategy. This is done with regards to the contextual aspects of the strategy, which looks at the environment in which the organization is located. More recent literature has looked at the process aspect of strategy rather than the content of strategy, but still with regard to the contextual aspects of the individual organization. The difference here is that the researcher does not focus on the outcomes of the strategy per se; instead she is more interested in the processes that are pursued. The conceptual framework presented in Figure 5.4 is primarily concerned with the process aspects of the strategy, while taking into account contextual aspects as well as its content. This is based on the idea that these concepts are inter-related and all of them need to be considered during the strategy process. Nevertheless, the focus is placed on processes, as this is the only aspect that can be controlled when conducting strategy.

Sequential/interactive

The research investigates the strategy process as its primary perspective, with regard to its internal and external environment. The process of strategy has been found throughout the literature to be made up of four key phases: 'Environmental analysis', 'Strategy formulation', 'Strategy implementation', and 'Strategy evaluation and control'. In the conceptual framework (figure 5.4) these four phases have been clearly presented. Key to understanding the conceptual framework is the idea of how these phases inter-relate. Again in the literature several different approaches have been identified, with two main streams: these streams relate to the strategy process being either sequential or

interactive and dynamic. The conceptual framework for this research is part of both of these streams, because in its very nature the natural sequence of events is followed throughout the process. However, the framework retains the idea that it is essential to be able to move between these phases as required, as the strategy evolves and several strategy process iterations are completed.

Emergent/deliberate strategy approach (and how emergent works)

In the literature, research seems to have made a division between the sequential and dynamic strategic approach. This study does not draw a formal line between these approaches. Similarly the research literature states that the strategy process should be either a deliberate formal process associated with a sequential approach, or instead an emergent process closely related to a dynamic approach. As the conceptual framework does not conform to either of these two views but is both sequential and dynamic, it can be understood that the conceptual framework is, in its nature, deliberate as well as emergent.

Within the conceptual framework, deliberate strategy is performed through a sequential approach. This is based on the fact that the four phases are indicated to take place after each other in a formal process from the beginning to the end. This process starts with environmental analysis, followed by formulation and implementation, and finishes with the evaluation and control of the strategy. It is at this stage that the strategy process restarts by implementing a new strategy that may be related to the previous one. While in principle the conceptual framework follows this process, this is only half of the picture.

The conceptual framework presented in figure 5.4 is, as previously explained, by its very nature a sequential and deliberate representation of the strategy process. However, when closely investigating the strategy process empirically, in most cases it is not formal and rigid. This is because obstacles are identified

during the implementation phases that were not predefined in the strategy formulation. The emergent view is that there is no formal boundary between strategy formulation and strategy implementation. In the conceptual framework, (figure 5.4), these two phases are viewed as strategy formation. It could be that during this iterative process, most time is spent in the strategy formation stage, and environmental analysis is only conducted when required. Moreover, the evaluation and control then becomes a function that takes place when the strategy process is made, such that it can be evaluated, rather than a procedure that has to take place, as with a deliberate strategy.

Micro/macro view

The strategy process as it is illustrated in the conceptual framework is presented as consisting of two aspects. On the one hand there is a formal deliberate sequential process, and on the other hand a more relaxed emergent dynamic process of strategy. A further aspect to this is the level at which strategy operates within the organization, which is based on the macro-micro view. The macro view has been closely associated with how deliberate strategy is made, and micro refers more to emergent strategy. This is based on the idea that macro strategy consists of a formal strategy description based on a vision that is then communicated throughout the organization. On the other hand the micro view is based more on day-to-day operation and the processes that need to be performed within the organization. This leads to the conclusion that deliberate strategy is more concerned with the overall outcomes of the strategy, rather than with the more in-depth processes that take place within the organization.

As the conceptual framework includes the deliberate approach to strategy it is ultimately interested in the outcomes of the strategy process. However, the conceptual framework is more focused on the processes that the strategy must

undergo so that successful strategy can be conducted. Ultimately this process involves a macro view. However, the conceptual framework emphasises the micro view of the strategy process, by allocating specific activities that each phase within the strategy process is required to undergo. Like the previous concepts presented, which are subject to debate within the strategy literature, the conceptual framework seeks to bring the different views together in a coherent approach, as both are required for a sustainable strategy process.

Activities

The conceptual framework presents the ontological view of how the researcher observes strategy, and focuses on the activities that underlie the strategy process phases. With the purpose of validating the strategy process within the case study against the conceptual framework identified within the literature, a set of activities is described according to the phases during which they take place. These activities reflect the purpose of each phase. In the phase of environmental scanning both the internal and external environment are investigated. Furthermore, the strategic fit between the internal and external environment is reviewed during this investigation.

In the conceptual framework, the strategy process phase includes a set of activities that are related to the process of formulating strategy. These activities mostly involve defining what the organization will seek to attain, while the phase of implementation contains activities related to executing the strategy. This is the more practical aspect, including the communication of strategy. The final stage is that of evaluation and control, which involves collecting the results of the strategy, conducting performance management and improving the strategy. These phases have been associated with deliberate strategy and can be considered to be macro activities. On the other hand, the concept of an emergent strategy, depicted in the conceptual framework as

strategy formation, includes activities related to formulation and implementation, such as reformulation, strategic change management, and applying corrective or preventive actions. These are considered as micro activities that take place within the organization, which drive the overall objectives forward through small strategically formatted steps.

Qualitative or quantitative

The concept of addressing research through a qualitative or quantitative research has become one of the most widely debated issues in academia (Kohlbacher, 2006). Selection of the appropriate approach determines the quality of the research, and this selection process is determined by the context of the study. The research questions establish whether the answers should be provided in a quantitative or qualitative form (Patton, 2002). However, research need not necessarily be seen as strictly one or the other, rather it has been found that quantitative and qualitative research complement each other by providing different views.

In the process of determining the most appropriate research approach, it is necessary to understand how each research approach functions. The most superficial difference is the fact that the quantitative research approach is based on numbers and charts, as opposed to the qualitative approach that is based on pictures, objects and words (Neuman, 2011). With quantitative research, the researcher is interested in finding a result in a context that is predefined, and rules out external influences, as opposed to a qualitative study in which the researcher does not control the environment and is interested in understanding the complexity of the context (Kultgen, 2010).

These different approaches make it possible for different findings to be complementary or contradictory to researching a context. In the case of the quantitative research, it is important that the information be measurable, valid

and reliable (A. Bryman, 2012), and represents a large population. With a qualitative study, observation, interview and document analysis approaches are used rather than survey or questionnaire; these provide in-depth understanding of a context through limiting the participants under observation (Neuman, 2011). Through the qualitative approach the researcher is able to answer a broader question, and adapt the research process to obtain more information. In contrast, quantitative research simply looks at hypothesis testing, which in most cases entails finding whether a particular statement holds true.

Justification for Qualitative research

Throughout the current study a qualitative research is adopted. It has been found that a quantitative research is distinctly different from a qualitative one in the way it addresses research. Qualitative research is subjective by its very nature, and because of this the results can become unreliable; it is therefore important that the researcher is reflective in the validation of such research (Roshan & Deeptee, 2009). The research context of this study is subjective because the researcher explores the organization through qualitative interaction between the researcher and its managers in an attempt to explore the strategy process and its procedures.

During the process of exploring the strategy process procedures a qualitative approach can be used to answer the research questions about what the strategic activities are, and which tools are used to conduct the strategy process. A qualitative approach is appropriate to develop an in-depth understanding of the strategic activity within an organization (A. Bryman, 2012). This is done through studying a small population within the organization without controlling the environment, to make the data collection process as rich as possible. Through this approach it can be understood what activities and tools

are used within the organization during the strategy process, and more importantly why they are used.

During the research process careful attention was given to avoiding subjectivism influencing the research findings, based on the culture and personality of the individuals involved in the research. In addition to the weaknesses of research, there are strengths that justify this qualitative research. These strengths are: a qualitative research gives a realistic feel of the world under observation, more flexibility in the collection and interpretation of data and information, and a rich description of the world through primary, unstructured, data (Roshan & Deeptee, 2009). Based on these merits it has been found that the qualitative research approach was most suitable for this study.

Research strategy

The research methods are based on the research process. Widely available research strategies are: experiment, survey, histories and analysis of achievement, and case study. The case study strategy was selected here because this approach enables the determination of certainty about the findings, which is critical (Yin, 1994). Furthermore, the advantages of using a case study are that it enables the researcher to investigate, in detail, predefined phenomena within their own context. This is different from an experiment, which seeks to study phenomena out of context. Through the research strategy of a case study, it is possible to identify which type of case study should be used. During the planning process the context of the case study was defined, and how the data was to be collected. Based on this design it was possible to prepare the case study, then collect the data and conduct the analysis. Once the data was analysed, conclusions were drawn based upon inferences about whether the theories existing in the literature about the strategy process of

SMEs were supported. This enabled definition of what would be a suitable tool that could aid the strategy process.

Design of Case study

The design of a case study is a straightforward task that involves a set of choices with regard to the type of case study that is to be applied within the research. According to Yin (1994) it is necessary to define the approach (type) for the case study, which can be: "Exploratory, Descriptive, or Explanatory". Through the definition of approach, the research issues can be anticipated, and the approach also defines how the researcher interacts with theory. Additionally, Yin (2003) states that there are two factors that should be defined: the number of cases involved in the case study, and the number of units of analysis. However, Stake (2006) stated that there are three types of case studies based on the factors: "Intrinsic (unique), instrumental (improve theory), collective (for generalisation)", referred to as the nature of the case study.

For this research the case study type was exploratory. This is because the approach involved a prior knowledge that was obtained through the literature review by deduction (Glaser & Strauss, 1967; Hyde, 2000; Leonard & McAdam, 2002). Through this prior knowledge derived from the literature the researcher was able to refine the case study during its design. The design of a case study enables a researcher to anticipate what the research problems will be, and this study seeks to broaden its scope such that an in-depth case study can be performed to explore strategy within the SME in as much detail as possible. The exploratory type of case study involves the researcher having prior knowledge based on theory, and how the researcher interacts with the theory. Ultimately the research seeks to find out whether this theory holds true.

The very nature of an exploratory case study implies that it is a single case study. The research unit for this case study is a single holistic unit, as it treats the SME under observation as one unit. This characteristic of the case study is confirmed through its nature, which is intrinsic, as the study is a unique case that investigates the strategy process within one SME. Only a small number of studies have investigated the strategy process within SMEs. A view of the strategy process is constructed within this research and its use to investigate SMEs is novel.

This research is trying to answer the following research questions:

Research Question 1: What is the strategy process and how does it operate within the SME?

In order to answer this broad research question, the researcher has first to answer two further research questions that are:

  Research Question 1a: what are the key strategic activities and how are these performed in the SME?

  Research Question 1b: Which strategic tools are used in the SME during the strategy process?

Research Question 2: How may a normative BSC strategy framework [along with other business tools (QFD and SWOT analysis)] be used to support the strategy process in SMEs?

The aim of this research is twofold. It seeks to understand the strategy process approach within SMEs. It also aims to generate a strategy framework [using the BSC framework with support of other businesses tools (QFD and SWOT analysis)] to support SME management in the creation of a coherent strategy process.

Research objective

- To identify from the literature what is known about the strategy process, especially in relation to SMEs?

- To utilize a dynamic process view as an approach to clarify activities, strategy tools, techniques and methods in the SME strategy process.

- To generate a framework incorporating BSC and other business tools (SWOT analysis and QFD) to connect and carryout the strategy process.

Single case study justification

For this research it has been decided that a single case study should be used. Yin (2003) suggested five reasons *why a single case study could be used.* The **first** is known as a *critical case*. This is when the research seeks to invalidate existing theory, which means that the findings of the case would be critical to the theory that is tested. This is also known as *testing existing theory*. The **second** is a *unique case*. This is when the research seeks to investigate a case that has not previously been researched. The **third** type of single case study is *a typical/common case* that investigates a common every day situation. The **fourth** case is when new findings are searched for; this is known as a *revelatory case*. The **final** one is a *longitudinal case,* when the researcher investigates a case over time.

While it has been suggested that case studies should contain multiple cases so that the results can be validated, each of the above reasons presents a situation in which other methods of validation can be applied, instead of triangulating the results between the different cases. In any of the above situations, it is possible to obtain data from multiple sources within a single case study and then apply triangulation between these sources. For several of the situations suggested above, the validity of the findings is determined through the wide amount of research that has already been performed. For example, when

invalidating an existing theory it is not necessary to have multiple findings to make sure that these finding are correct. This is because at this stage in the research a coherent method is well described in the literature; if a single result is false this is sufficient to invalidate the theory.

A unique case and *a typical/common case* are opposites in terms of the context that they seek to investigate. In the event of a unique case the research findings could be validated only as previously described. However, with a common case it is possible to validate the findings on what is known about the case, as this is re-occurring and well known, which is not true of a unique case study. However, the use of some form of triangulation to sustain the findings based on data from multiple sources would strengthen the findings of the case. The following situation, *a revelatory case*, is similar to a unique case in that it does not have a specific method to validate its findings, however when a longitudinal case is used it is possible to validate the findings based on a validation procedure that performs some form of triangulation through the data that was collected at different stages during the research.

This study uses *a unique case* study, for multiple reasons. The literature indicates that when a case study is exploratory then a single case study is an obvious choice, as previously mentioned in the section above. Furthermore, the research looks at a unique situation; and investigates the detail of the case. Borch and Arthur (1995) question the use of multiple case studies; their view is that this would require a semi-quantitative approach. This implies that the research will entail looking at higher-level findings rather than in-depth details, which is one reason for selecting a single case study.

The primary reason why the use of a single case study has been criticized in the literature is because it is hard to validate and generalise the findings and therefore the conclusions are questionable, and it can be difficult to generate

theory. However, when using a single case study the purpose is not to generate theories (Dubois & Gadde, 2002; Halinen & Törnroos, 2005), instead a single case study seeks to form a better understanding of the complexity within the context under observation. In this research the case study investigates a SME with the purpose of understanding how the strategy process takes place, and which activities are most commonly used during each phase of the strategy process.

Moreover, the usage of a single case study is coherent within the research paradigm, in which a single case study is often used. It is, however, not essential within this paradigm (Moderate Constructionism) that a single case study is used (Järvensivu & Törnroos, 2010). It was decided that a single case study would be appropriate based on the type of case study (exploratory), its very nature (intrinsic) and the purpose for which the case study is applied (to understand the phenomena). The findings derived from the research actors are jointly constructed, which implies they are subject to context and the actors' community view. This is the reason why it is not possible to establish a universal truth or a theory, while it is possible to develop a context-specific understanding. Multiple case studies would not contribute to this study.

The findings of a single case study may not be used to establish a theory, but can be used as valid knowledge that is applicable in similar contexts. Through analytical generalizability or transferability it is possible to apply findings within a different context (Lincoln & Guba, 1985; Yin, 2003). To be able to reuse the findings of this research, it is necessary that some sort of justification of validation be applied. A single case study that is unique in its own right can only be triangulated based on the use of multiple data sources; it is possible to do this based on the results of the eight interviews that have been collected. However, Järvensivu and Törnroos (2010) have suggested that it is possible to

crystallise the findings, rather than triangulating them. This is a more reliable because the subjectivity between the findings from the multiple sources within the case studies is based on the subjective views of the participants. Further justification of the quality of the research is discussed in a subsequent section of this chapter.

Units of analysis and case selection

The concept of what a 'unit of analysis' means in the literature has been widely discussed (Grünbaum, 2007), to the extent that its meaning has become obscured. Most researchers have started to treat the unit of analysis as a case (Patton, 2002), while Yin (2003) seems to have provided a better overview of what a unit of analysis is, in contrast to the case within which it is applied. He suggested that the type of unit of analysis depends on the purpose and nature of the case study. This will lead the researcher to understand how to design the case study in a valid and consistent way.

In order to answer the research questions, a medium-size service organization was chosen. There were 67 employees working at this company, and the organization was an active partner in a KTP (Knowledge Transfer Project) with the researcher's university. The researcher through e-mails and telephone calls contacted the organization, and permission to collect data through interviews was granted.

 The study's aim had already been specified as developing an understanding of the strategy process within a SME, based on the intrinsic uniqueness of its case. For this research a single SME was the unit of analysis (one unit). The fact that the case was intrinsic meant that there was only one case study; however it could have been possible to have multiple units under analysis within this case. This research was concerned with a holistic unit of analysis, because this seeks to learn more about the activities of the strategy process

rather than the multiple facets of strategy such as its IT, human resources, etc. The investigation of these aspects would imply that multiple units of analysis were under investigation.

Case study protocol

In this section, the plan for collecting the data, and the procedures used are presented. The actual case study protocol is included in an external appendix (see appendix A) to the thesis. In the case study protocol an overview is provided of all the steps that took place during the research. The following sections provide an understanding of how the research methods were used and how the process was coherent in answering the research question.

As the type of case study is explorative, the research sought to find out how the SME under investigation conducted strategy. Any form of strategy should be identified, and then the process of its activities can be investigated. To be able to find this level of intricate organizational information, a method of interrogating the organization at this level was required. It was decided that the case study would primarily use interviews, then document analysis, and lastly observation. The research started off with an informal interview to learn more about the organization and its operations, so that further investigation could be better targeted to investigate the key areas of interest, as well as the potential participants.

Once the requested documentation was obtained and some basic observation was completed, the interviews were conducted: these were the key data sources. Because it was found that observation provided limited information of how the SME conducted its strategy, it was decided that the interviews would be used to gain a better understanding of the strategy process in the sense that the interviewees were not interrogated, but rather encouraged to share their views as fully as possible. It was at this stage that the level of

subjectivity increased, and this is the reason why the research paradigm is moderate constructionism rather than critical realism. This can be considered a disadvantage due to the level of subjectivity, but the findings were richer and enabled the research to further explore the organization.

When the main method of data collection is interviews, which are prone to a high level of subjectivity, it has been suggested that bias may need to be addressed (Voss, Tsikriktsis, & Frohlich, 2002): This can be done through triangulation (Jick, 1979). Out of the four possible types of triangulation: "data, investigator, theory and methodological", in this study only theory triangulation is possible within the analysis, using validation against the theory of the process of strategy derived from the literature. The lack of a sufficient variety of findings from other data sources (observation and documentation) made it impossible to perform either methodological or data triangulation. Investigator triangulation was not feasible, as this research was conducted by a single researcher.

While triangulation has been criticized throughout the research community, its value in developing a coherent conceptual framework based on multiple-views is recognised in the literature. Triangulation has the potential to improve the reliability of the conceptual framework. However, in this study triangulation of the data from interviews, organizational documents and observation was deliberately avoided. Based on the criticism of Janesick (2001); Tobin and Begley (2004) and Järvensivu and Törnroos (2010) triangulation is not considered a suitable method to validate the findings of this research, as it is community based and constructed. Therefore the research is subjective and triangulation has no means of dealing with it. Instead crystallization was found to be suitable for the research paradigm of this study, based on (Järvensivu & Törnroos, 2010).

Crystallization enables the researcher to validate findings within a single case study, and seeks to obtain all the dimensions of the research in a similar way to a crystal, that is able to reflect light in all directions simultaneously. Crystallization helped the researcher to understand the multiple dimensions of the case study.

This was done through different strategies of obtaining information from the interviewees. This included the interview questions, asking the interviewees to participate in a strategy formulation exercise, observing the participants during the strategy process, and obtaining comments from the participants on the organizational documentation. Through these different approaches information about the strategy process was collected from multiple dimensions. This approach enabled the researcher to understand the findings differently than through more traditional research methods. This may appear as a weak structure in terms of validity, but crystallization takes into consideration that there is no universal truth. It was achieved through a multi-dimension exploration of the data, based on the knowledge that the findings were subjective, and in this way a form of validity was established.

Interview

There are three types of interview; the unstructured interview, the semi-structured interview, and the structured interview. A semi-structured approach was used for this study. A semi-structured interview is a suitable method of data collection when using a case study strategy (Yin, 2003). This is compatible with the research aims and objectives, to gain detailed feedback from the interviewees on the topic of the strategy process, to enable the researcher to develop a better understanding of how the SME conducts strategy, and what activities were involved.

A semi-structured interview usually takes place with the guidance of the interviewer, who directs the interviewee to gain the information required for the research. However, the interviews of this study were nevertheless guided by the researcher, and took the form of a 'guided conversation' (Patton, 1980) to enable collection of the data (Guba & Lincoln, 1981). This is consistent with the research paradigm, which defines the research findings as being socially constructed between the researcher and the participants. Through this approach the researcher was able to obtain comprehensive and rich data.

The preparation of the interview was based on the initial interview about the organization and the documentation obtained, as well as the findings of the participant observation and the direct observation. From this preliminary information the researcher was able to prepare a specific interview, including points to be discussed during the interview, so that the required information was obtained. This approach enabled the researcher to understand a different perspective with regard to the strategy process, which could not have been derived from existing theory.

Once the interviews were planned, two mock interviews were completed with colleagues at the researcher's university (Gillham, 2000; Yin, 2003). This enabled the researcher to prepare better. Unfortunately there was no opportunity for the researcher to conduct a field test prior to the interviews. Once the preparation was done the interviewees were contacted by email to agree a time and place for the interview. Five out of eight were conducted as face to face interviews while the other three were telephone interviews, due to difficulties in synchronising schedules (Wilkinson & Young, 2004). At the end of the interview process a final follow-up interview was completed with each participant to confirm certain information collected during the first interview.

All the interviews were successful and provided a wealth of information on the organization under investigation. In terms of the face-to-face interviews, it was noted that the planned time of one hour per interview was usually exceeded, up to a maximum of an hour and half, due to some interviewees providing such a comprehensive description of the subjects that were prompted. The telephone interviews were less satisfactory and more difficult to conduct, and were only around thirty minutes long. This was largely because this method of conversation is not as communicative (Hesse-Biber, 2010a). However, the results of these interviews were beneficial as complementary findings to the face-to-face interviews. The interviews were recorded so that the researcher did not have to be distracted taking notes (Patton, 1980). Nevertheless, it was necessary for the researcher to write up the transcripts of the interviews on the day following each of the interviews.

The interview process itself followed a 'diamond structure', as the interview was divided into phases. The first phase was introductory, during which both the interviewer and interviewee had a chance to chat and to conduct some small talk. The second phase went into the core of the data collection, during which the researcher sought to obtain as much information as possible. It was important that the first phase was completed appropriately, so that the interviewees gained confidence in the interview process. The interview was completed with a closing phase, which was equivalent to the diamond structure narrowing. The researcher closed the interview by asking the final questions. This was done sensitively because the researcher wanted to leave open the possibility of conducting a follow-up interview at a later stage.

Data analysis process

Introduction

This research focuses primarily on qualitative data to investigate the extent to which SMEs are involved in the strategy process. As most data is provided through semi-structured interviews, complemented by documentation, participant observation, and lastly direct observation, an appropriate method to analyse data was required. The data analysis process for the current study was based on a thematic analysis using an enumeration approach, which both was used jointly to construct the findings. The *thematic analysis,* which was used to organise the data based on predetermined codes specified in the literature, after the initial emergent themes had been generated. The codes were provided in a conceptual framework, and analysed through this framework. This method involved enumerate (count out*)* the activities in each of the phases. The results were used to gain an understanding of how the strategy process works in the SME. More details will be provided about the overall data analysis process below.

In contrast to quantitative research, qualitative research aim to provide richer contextual findings to research questions. This enables the researcher to more than simply affirm, it enables the researcher to understand why something is the way it is, or how something has become as it is. There are many different qualitative methods available to the researcher. Each of them has its own advantages and disadvantages (Holloway & Todres, 2003). These methods can be summarized according to two groups based on the research paradigm in which they can be used. The methods of conversation analysis (Hutchby & Wooffitt, 2008) and interpretative phenomenological analysis (Smith & Osborn, 2003) are used within the interpretivist paradigm. On the other hand, methods such as grounded theory (Glaser & Strauss, 1967; Healy & Perry,

2000; Strauss & Corbin, 1994), discourse analysis (Burman & Parker, 1993) and narrative analysis (Murray & Smith 2003) can be used more generally, and are often attributed to the realist paradigm (Roulston, 2001).

In this study the approach taken was one of enumeration; this approach does have advantages. Enumeration can be of themes or of content. A content analysis and thematic analysis using an enumeration approach, for example, is made possible by the existence of pre-defined content categories (coding). In thematic analysis the concept of themes is central (Braun & Clarke, 2006), and the categories are, as here, typically drawn from key variables identified from prior research or existing literature. They serve as the 'initial themes'. As Hsieh and Shannon (2005) observe, where there is confidence that initial coding will not skew the identification of relevant text (interview transcripts in this case), then coding can commence straight away. Rank order comparisons of frequency of coding can then be used to offer evidence (Curtis, Wenrich, Carline, Shannon, Ambrozy, & Ramsey, 2001).

This approach (called the 'directed approach' by Hsieh & Shannon, 2005) does offer what they call *"challenges to the naturalistic paradigm"* (p.1283). To guard against the dangers inherent in this (research bias resting in prior knowledge; participants' language of response; over emphasis on existing theory) attention was paid to the qualitative aspects of what respondents said (such as tone, pitch, etc.) and a search for elements that were outside the initial framework. The situated (case) nature of this study meant that attention to these factors was possible in a way difficult to sustain, perhaps, in a series of sequential interview with 'unconnected' responders. The current study is adopted a thematic analysis using an enumeration approach.

Thematic analysis is not necessarily attributed to a single research paradigm, and is widely used and accredited. Throughout the literature, thematic analysis

is not referred to as a method; instead, it is viewed as a tool which is used within qualitative methods (Boyatzis, 1998). This view was supported by Ryan and Bernard (2000) who stated that thematic coding is part of the method of grounded theory. However, Braun and Clarke (2006) developed a paper to establish thematic analysis as a method to conduct qualitative analysis in its own right. They defined thematic analysis as a method for identifying, analysing and reporting themes of the data. Furthermore, in their view it is different from other qualitative methods which seek patterns in the data such as discourse analysis, interpretative phenomenological analysis and grounded theory.

The concept of themes is central to thematic analysis. Essentially it enables the researcher to limit the total amount of information related to the research questions. This enables the researcher to focus on the key aspects relevant to the research and to organise and classify the data. The critical aspect within thematic analysis is about size and content (Braun & Clarke, 2006). Therefore, this study is based on the themes of the conceptual framework. All data items related to these themes were categorized for further analysis, and this categorisation was used to provide a rich overview of the data. As an alternative, specific themes could have been focused upon.

As stated in the previous section, the research adopted an abductive approach. This was based on the idea that both deductive and inductive approaches were used at some stage. Thematic analysis could therefore take either form or shape, in the event that an inductive approach was employed, or when the themes were linked to the data (Alhojailan, 2012; Hesse-Biber, Howling, Leavy, & Lovejoy, 2004; Patton, 2001). This approach is usually used when the data has an unclear relationship to the research questions, which primarily data driven. It is this that makes it distinct from the deductive approach. The

deductive approach (Boyatzis, 1998) uses a pre-existing coding framework '*codebook*' (Fereday & Muir-Cochrane, 2008) or the researcher's viewpoint to identify the themes.

In addition to determining whether the findings should be induced or deduced it was necessary to define the level at which interpretation took place (Boyatzis, 1998). Usually a single level is analysed, and most commonly the researcher tries to find the results according to key themes. This means that the results are described, summarized and interpreted: this level of interpretation is known as semantic. When the researcher is looking for a more profound interpretation of the subject under observation, a latent approach is applied. This allows the researcher to study underlying conceptions, assumptions and ideas. Through this level of interpretation, it is possible to understand the concepts that identify the superficial understanding derived through semantic interpretation.

The latent level of interpretation was used within this study primarily because it enabled the researcher to obtain a better view of the research process based on the activities that were identified. Furthermore, this level of interpretation was used with the constructionist research paradigm (Burr, 2003). This enables the researcher to theorise about motivation and experiences in a rationalist view, which is more objective. For this research the findings were socially constructed from the interviews, and meaning was derived and thematically analysed through a latent interpretation.

The research method of the current study is known as latent, deductive thematic analysis. The researcher also used an enumeration technique, which represents the quantitative aspect of this thesis (Alan Bryman & Bell, 2007; Hesse-Biber et al., 2004). Through this enumeration it was possible to quantify various aspects within the findings of the research based on the

coding of the thematic analysis. Enumeration was used to determine how far the SME under observation was involved in the phases of the strategy process. This was done through identifying in which activities the SME was involved, and then counting how often respondents referred to coded categories, determined by the researcher in advance, throughout the interview; in this way conclusions were derived about the company's level of involvement in each strategy process phase, including their strategic activities.

The procedure through which the research methods were applied to analyse the data consisted of five steps adapted from Braun and Clarke (2006), and each had a distinct function. The following section describes these steps such that the reader of the research is able to understand how the findings were produced. This allows readers to weigh the validity of the findings, and potentially compare it against other studies, as well as replicate the study to validate the findings in confirmatory studies.

Steps of the coding process

The **first step:** *'familiarizing the researcher with the data'*

This step had the effect of allowing the researcher to get to know the data better so that it became easier to apply the research methods. In this research this was done through listening to the recorded interviews twice, so that it could be confirmed that every answer and explanation provided by the interviewees was understood and clear. In one of the recorded interviews this was not the case, and after re-contacting the interviewee one answer was changed. When the recordings had been checked they were transcribed and a better understanding of the data was developed. The final part of the first step was simply to double-check the transcript against the recording to retain the highest level of data quality.

The **second step:** *'generating initial themes'*

The transcript was prepared for thematic analysis, and emergent (initial) themes were generated from the transcripts. This was preferred over a less linear approach, and at this stage the phase units were created. Through individual phases it was possible to obtain a clearer understanding of the independent meaning of different parts of the transcripts and how they could be interpreted.

The **third step:** '*coding according to conceptual framework (codebook)'*

Through the deductive approach a conceptual model of the strategy process was formed based on the literature. The coding was preformed through the pre-existing conceptual model. The '*codebook'* steps of this research were two levels of coding based on a conceptual framework that is presented in figure 5.4(P.173), which is based on descriptions of the strategy process from the literature.

Level One Coding: it is the four phases of the strategy process were described in the conceptual framework, as following:

Environmental Analysis (EA) phase

Strategy formulation (SF) phase

Strategy implementation (SI) phase

Strategy evaluation (SE) phase

Level Two Coding: the activities within the strategy process phases were categorized. After the categorisation into the strategy process phases was completed, the research sought to understand which activities took place within each of the phases, and they were coded according to the activities that were identified in the literature and demonstrated in the conceptual

framework. Through these two levels of coding it was possible to conduct the overall interpretation (see Appendix C: An example of SME coding process).

The **fourth step**: *'The overall interpretation'*

This step included the quantitative aspects of the analysis. Enumeration determined the frequency with which each code phase and code activity for the strategy process was mentioned by a respondent. Through the results of this Enumeration phase certain findings were sought: firstly, a confirmation of which phases of the strategy process the SME was involved in; and secondly, which activities were used most frequently. Moreover, an overview was added of how involved the SME was in every activity for each phase of the strategy process (see tables 6.1-6.5).

The **final step:** *'developing a report'*

This step was based on the findings, in which it was possible to develop a report on the level of involvement of the SME in the strategy process. More detailed findings could then be presented on the strategic activities used. During the final stage the researcher sought to present these findings to the reader. Through interpreting the findings the researcher sought to understand why the findings produced the results they did, through providing an explanation based on the original data from the transcription. The findings were validated and justified for a deeper understanding of how the SME conducted strategy.

In conclusion; for this study, data was collected using primarily semi-structured in-depth interviews. Data was analysed through thematic analysis that was consistent with the research paradigm (moderate constructionism). The thematic analysis method employed was concerned with categorising the data according to a conceptual framework. This process allowed for analysis to include enumeration of the findings to develop the results. Finally the

research produced a report of the findings with an explanation based on the organizational data such that the reader is able to contextualize the findings and understand the results. Figure 5.5 shows the data analysis process summary.

Figure 5.5: Data analysis process summary

Thematic analysis using an enumeration approach

The first step: *'familiarizing the researcher with the data'*

- Electronic Recordings of Interviews.

The second step: *'generating initial themes'*

The third step: *'coding according to conceptual framework (Codebook)'*

- Coding according to a Conceptual framework **'codebook'** which was developed based on how the literature describes the strategy process:
  - Level one coding strategy process **phases**
  - Level two coding **activities** for the strategy process phase

The fourth step: *'The overall interpretation'*

- Enumeration determined the frequency that the interviewee mentioned each strategy process phase and activities.
- An overview of how involved the SME was in every activity for each phase of the strategy process

The final step: *'developing a report'*

Quality criteria for a qualitative approach (case study based research)

Introduction

When the research methods were applied and the data had been collected, the data was analysed as described above. At this stage it was necessary to interpret the findings. There is often criticism towards research findings based on their quality, and whether they can be considered trustworthy (Erlandson, Harris, Skipper, & Allen, 1993; Guba & Lincoln, 1994; Halldórsson & Aastrup, 2003). This is because many studies have been found to be lacking in their understanding of research methodology (Seale, 1999). In order to establish findings that are valid and which add knowledge, it is necessary to ensure that the research paradigm is well understood and correctly applied. Furthermore there is much literature in existence in which the procedures produce high quality results (Riege, 2003).

Factors for consideration

How quality issues of the research are addressed depends on the research paradigm, and the nature of the data is considered the most important factor. The most prevalent paradigm is positivist, which has received a large amount of attention in the literature for its trustworthiness (Guba & Lincoln, 1994; Miles & Snow, 1994). Within this paradigm four quality assurance measures are used: "construct validity, internal validity, external validity, and reliability" (Yin, 2008). Riege (2003) extended these design tests for the realism paradigm, renaming them: "credibility, transferability, dependability, conformability": this was further extended in terms of a research paradigm, stating that it can be a constructivist/interpretivist paradigm. The main distinction lies between the interpretative and positivist paradigm (Bradley, 1993). A more in-depth study on interpretative paradigms demonstrated that

the moderate constructionist paradigm used for this research enables the application of quality tests (Järvensivu & Törnroos, 2010).

The research paradigm determines whether the quality of the results can be tested. It is the type of data collected during the research that will determine what quality tests can be applied, and the criteria within the research paradigm determine the types of tests that can be used for quality purpose. It is not possible to address qualitative research in terms of quality in the same way as is possible in quantitative research (Erlandson et al., 1993). Babbie and Mouton (2002) demonstrated how this could be done for qualitative research findings, demonstrating the importance of high quality standards and the need to be objective in terms of the methods of testing the quality of the research findings.

The nature of a case study is different from other studies (Yin, 2008). Therefore it is required to have other quality criteria: these criteria enable the development of new knowledge during the process of the case study Gammelgaard (2004). Furthermore, as case studies are open to both quantitative and qualitative research, the consideration with a case study approach is to develop findings that are unique to the case study, rather than a generalisation of a population (Halldórsson & Aastrup, 2003). Yin (2003) suggested that the best method to validate a case study is to apply case replication. However, this is impossible for this research because a unique case, a SME, was identified to test the validity of the theory surrounding the strategy process. Therefore, the different types of quality assurance of findings relevant to this research are reviewed according to the literature. The purpose of identifying a set of procedures is to ensure high quality standards for the research findings. These quality criteria are: *Credibility, Transferability* (external), *Dependability* (reliability), *and Conformability* (objectivity).

Furthermore, it has been demonstrated that these tests of quality can be applied to a single case study (Kultgen, 2010).

Credibility

Credibility is the equivalent of internal validity in quantitative research. It is primarily concerned with obtaining approval by those who have been interviewed, and who have subject knowledge (Riege, 2003). Alan Bryman and Bell (2007) extended this idea by stating that credible validity could be established by mapping the observed findings against the theoretical concepts already established. Bradley (1993) took a more ontologically consistent approach by terming credibility as how adequate a representation of the constructions of the social world is. Several methods have been suggested to do this, which are known as negative case analysis, persistent observation, checking against raw data, and triangulation (Guba & Lincoln, 1994). The credibility test takes place during the data analysis stage (Yin, 2003).

This research addresses credibility at several levels. The researcher worked towards demonstrating the highest level of belief in the findings through applying pattern matching, comparing against existing theory and using logical models. Pattern matching was applied by comparing specific themes within the transcripts of the recordings of the interviews. This was followed by usage of existing theory and the conceptual framework that was derived from the theory. Therefore, the research sought to validate the credibility of the findings through evaluating whether the theoretical concepts of the literature matched the findings. Additionally, the researcher looked to find if logical progression existed, as defined in the four phases of the strategy process, according to the conceptual framework.

Transferability (external)

Transferability refers to the level of applicability of the findings to an alternative context (Halldórsson & Aastrup, 2003) McCutcheon & Meredith, 1993). It is complementary to credibility, which is known as external validity when using quantitative approaches (Marshall & Rossman, 2010). Its test is to be able to observe the same findings within multiple studies of the same nature (Riege, 2003). Transferability has been linked closely to the concept of generalizability (Yin, 2003), which implies that multiple cases have to be used. However, it is possible to generalise between two contexts, as in the study of Waters and Marzano (2006) in which theory is used which strengthens the transferability of the research. While transferability has been criticized based on the concept of changes over time (Erlandson et al., 1993), following the procedure outlined by Yin (2003) may enable reliable transferability.

Clearly, transferability is geared towards a positivist paradigm (Ruddin, 2006). As discussed, transferability can be achieved through using multiple cases in qualitative research when using an interpretivist paradigm. As Hesse-Biber (2010b) demonstrated, it is possible to perform theme analysis to attain analytical generalizability. However since this research is based on a single case study, it is not possible to perform generalization through multiple cases. As a single case study is used to better understand a particular situation rather than produce a theory, therefore crystallization was used. This research was involved in transferability in a limited way, because transferability has been criticized in the terms mentioned above. Therefore this research evaluated transferability based on the level of similarity that was attained between the research findings and the conceptual model (Järvensivu & Törnroos, 2010).

Dependability (reliability)

Dependability in qualitative research or reliability in quantitative research is a test of quality that enables the reader of the research to exactly replicate the research and determine whether the findings are consistent throughout (Bloor & Wood, 2006; Guba & Lincoln, 1994). To be able to replicate an existing study the research methodology needs to be clearly outlined at the start of the research design. Next, the interview questions and their procedure need to be defined (Flick, 2009). This is followed by the data collection method (Daniels & Cannice, 2004; Wilkinson & Young, 2004). The final part required to be able to reproduce a study is an overview of how the data analysis is performed (Alan Bryman & Bell, 2007). It is through the clear outline of the research process that coherence of the internal processes and the way the findings are constructed can be evaluated (Bradley, 1993).

This research has sought to attain the highest level of dependability, such that the findings of the research can be relied upon and be considered valid. The researcher invites the reader to re-evaluate the findings by outlining the research methodology to the extent that it can be (almost exactly) replicated. This was done through the production of the case study protocol, which contains all the information required to conduct the case study. As a single case study was implemented for this research, its dependability is based on providing the transparency for further research to be conducted, so that criticism of the findings can be presented as a result of this research, and dependability can increase over time. In addition dependability was achieved by applying an internally coherent approach to attain the findings of this study.

Conformability (objectivity)

Conformability (objectivity) is a test of quality for validating the research findings in terms of objectivity from a quantitative approach. In the qualitative approach conformability is achieved by providing a clear logical thinking process of how the research starts with the research questions, to the conclusion of its findings (Yin, 1994). Riege (2003) suggested that reviewing the original data against the findings could do this. Patton (2002) and Yin (2003) suggested that it is possible to apply conformability. This can be achieved: firstly, through a pilot study which enables the researcher to gain invaluable experience in applying the research to better understand the methodological issues, secondly, through a draft review of the case study pointing out strengths and weaknesses. Thirdly, (and perhaps providing the highest level of conformability), is triangulation. Alan Bryman and Bell (2007) defined triangulation as a method of joining data sources to increase consistency. Triangulation can be applied at three levels within the research, which are at data level, methodological level, and theory level (Thomas, 2003).

This research involved two tests of conformability. Conducting a pilot case study proved impossible, because the case study was a unique subject. With regard to having a draft review of the case study, both first and second supervisors as well as an external professor were asked to review the case study to increase conformability. In terms of the third method of conformability, triangulation was also impossible for this research. According to Järvensivu and Törnroos, (2010) triangulation should be achieved through multiple case studies, which was impossible for this research for the same reason as the first method of conformability. Instead they suggested crystallization, which was used in this research to increase the level of conformability: this was done by crystallization of multiple aspects within a

single case study. Crystallization does not depend on a the use of a single case study or a multiple case study, rather its usage is dependent on the type of knowledge the researcher seeks to attain from the research findings, which for this research was consistent with the research paradigm of moderate constructionism.

Ethical consideration

The respondents in interviews were treated in a way that was consistent with meeting all of the MRS ethical standards. This included permission to participate, the right to withdraw, and informed consent, with adherence to the data protection act 1998, and with the right to anonymity and confidentiality.

Summary

The research paradigm of current study was moderate constructionism. This was ontologically and epistemologically suitable for the research based on the fact that the researcher had a slightly subjective view of the world under observation, but also tried to limit this subjectivity where possible. This subjectivity was a result of the nature by which knowledge was produced within this research. Epistemologically this research constructs 'reality' socially, during interaction within a community. The research approach enabled this process through abduction: the research's deductive approach sought to use a conceptual model of the strategy process based on the literature, which represents the theory of the strategy process. Then, through induction the findings of the research were analysed against the theory, through which the strategy process in a SME was determined. This research process was based on qualitative data, which was consistent with the research paradigm and allowed the theory to be contrasted with the findings observed within the SME.

The strategy for conducting this research was based on a case study. Its design was based on one unit of analysis, which was the managers within the SME;

the case study was explorative and intrinsic in nature. Because a single case study was employed for this research, justification for this approach has been provided. This justification was necessary because this study identified the research of strategy process in the manner chosen to be a unique situation, which had not been previously investigated. Furthermore the research of this thesis was a single case study because it sought to test theory based on the existing literature regarding the strategy process within the setting of a SME. The case study steps and procedures are outlined in the case study protocol, enabling the researcher to refer to them during the case study, and to provide the reader with a clear overview of the research to enable replication, and to test and validate the findings.

The data collected in this research was acquired through a series of semi-structured interviews. It was through this process that the researcher was able to obtain wide and in-depth information about the strategy process that took place within the SME under observation. Through semi-structured interviews, the researcher constructed a 'reality' regarding the strategy process. In addition, the interviews, by asking about certain aspects of the strategy process, enabled the interviewees to provide the required information. The information collected was analysed through a data analysis technique known as 'thematic analysis'. The categorizations of the themes according to the theory of the strategy process in the conceptual model enabled the researcher to count the number of occurrences of those strategic activities conducted, and thus develop a set of findings. It was at the stage of interpretation of this research that the quality of the findings was presented, such that the reader may accept these findings as valid, using concepts of credibility, transferability, dependability and conformability.

Chapter Six: Analysis and discussion

Chapter Six: Analysis and discussion

Introduction

In the literature chapters it was identified that SMEs are ineffective in performing strategy, usually due to the lack of an appropriate approach. The literature on the strategy process has revealed that it consists of *four phases*, each in turn consisting of *a set of activities*. The strategy process is depicted in figure 5.4. In this chapter an analysis is performed as described in chapter five (methodology of the study). The analysis is divided *into five sections* that represent the strategy process (see figure 5.4), and the activities are analysed within each phase:

- Section one: Environmental analysis (EA) phase
- Section two: Strategy formulation (SF) phase
- Section three: Strategy implementation (SI) phase
- Section four: Strategy evaluation (SE) phase
- Section five: Emergent strategy

The coding process was managed through a Spreadsheet for every strategic phase. The Transcript of the quotations was inserted into the main Spreadsheet, and then the initial emergent themes were generated through interpretation of the quotations. The initially identified methodological themes are categorized by the strategy process phase in the appropriate sheets accordingly. This is followed by the application of the **'codebook'** according to the conceptual framework (figure 5.4). The coding process identified *Level one coding* in which strategic phases takes place, and '*Level two coding'* under in which strategic activities the interviews quote is categorized. This main Spreadsheet, the researcher broken down this main spread into 5 Spreadsheet as follows:

- Spreadsheet one: Environmental analysis (EA) phase
- Spreadsheet two: Strategy formulation (SF) phase
- Spreadsheet three: Strategy implementation (SI) phase
- Spreadsheet four: Strategy evaluation (SE) phase

- Spreadsheet five: Emergent strategy

The quotations on each Spreadsheet where numbered during the evaluation of the emergent themes. The numbering was performed sequentially including a letter for every phase for example: Spreadsheet one: Environmental analysis (EA) phase, EA1 and EA2, EA3, etc. These represent the quotations number 1, 2 and 3 in this Spreadsheet respectively. This is done for all the five sheets. Once the quotations were coded according to the activities within the phases the numbering system remained. The numbering system is used for referencing purposes during the analysis and discussion of the quotations. This allows the reader to easily refer back to the original quotation when the author mentioned a series of reference and contrasts it against the original findings in the literature, and it enabled the researcher to conduct the overall interpretations of how involved the SME was in every activity for each phase of the strategy process.

For each section quotations are organised firstly according to the activities, and secondly the actors. These quotations summarise the views of the five actors (*Operations and Board Director, Business Development Director, Marketing and Communications Manager, Business Manager, and IT Manager*), and then these summaries are contrasted between actors to gain an overall picture of the organization in order that inconsistencies can be identified. The summary of the quotations is then used to determine whether the SME was performing the activities identified in figure 5.4 (deduced from the literature). Comparing the findings of the analysis with how the literature describes these activities has allowed examination of whether the SME in the present study was performing these activities, or generally underperforming. Additionally, a count is made of each quotation per actor for the activity to provide a numerical overview of how involved the SME was in each activity. Based on these findings conclusions are drawn on how the SME could use the BSC and related business management tools to improve how the strategy process is operated.

Section one: Environmental Analysis (EA) phase

Section one: Environmental Analysis (EA) phase

Introduction

The first section in this chapter of environmental analysis looks at the information collected during the interviews. This first section contains the four activities identified in the literature review for this phase of the strategy process: *Analysis of External Environment Activity, Analysis of Internal Environment Activity, Evaluation of Opportunities Activity, and Strategic Fit Activity*. This enabled the researcher to analyse the findings categorically by organising them according to the activities and actors. The quotations are analysed for each of the activities within this phase and compared against the literature, to inform an understanding of how involved the SME was within this strategic phase.

Activity one: Analysis of External Environment

Introduction

During the interview with the *Operations and Board Director* several quotations were obtained that demonstrate that the SME under observation was involved in the activity of external analysis within the phase of environmental analysis. The quotations below summarize the views of the *Operations and Board Director*:

"Understanding the supply and demand of our target markets is essential for success. We aim to attain the highest levels of customer satisfaction through increasing communications with both customers and suppliers. We find that this has a positive impact on customer satisfaction in the long-term" (EA4)

"We analyse the feedback from our communications to improve our internal operations and services. The external analysis is important for us as it enables us first to gain a better understanding of the external environment, and second

to act upon changes in the environment accordingly. Through the analysis of the external environment we can plan how we use our internal resources. This is important because as a SME we cannot leverage large amounts of resources. Through this analysis we can pick which of our resources are used to increase our benefits." (EA14)

"The economic aspects of the environment are important for our business, especially in terms of technology. As we have been forced to cut back during the global economic crisis it became harder to compete in our markets. The limited availability of liquidity means that we are unable to keep up with the pace of fast changing technology. This technology is important to remain competitive. Our external analysis focuses on which technology we should acquire and how we can maximize its benefit." (EA23)

"We do not formally use any tools. In a certain sense we do apply the concepts of SWOT analysis and cost benefit analysis when reviewing the feedback of the external environment. This is through a mental process. We don't document these processes." (EA34)

"We are very frequently involved in environmental analysis. We see it as an on-going activity that takes place every time we obtain feedback" (EA7)

The quotations obtained from the *Operations and Board Director* revealed that she was actively involved in developing a better understanding of the external environment. The primary method of doing this was through obtaining feedback from suppliers and customers such that a better understanding of supply and demand was attained (see quotation EA4). Based on the information obtained through communications the SME sought to effectively apply the available resources to take advantage of its external opportunities (EA14). The key focus was on technological changes as they were harder to keep up with in times of economic hardship (EA23). The

process of analysis was done informally, aided by two tools; SWOT and cost benefit analysis (EA34). Furthermore, environmental analysis was performed continuously as information on the external environment was updated (EA7). These quotations provide an overview of how the process of external environmental analysis was performed and allows for contextualization.

Several quotations were obtained from the *Business Development Director* illustrating her involvement within the organization, related to the activity of external analysis. The quotations that summarize the views of the *Business Development Director* are given below:

"*We are actively in communication with customers through formal and informal channels to enable us to plan ahead*" *(EA5)*

"*We work to get a better understanding of customer demand. This enables us to develop marketing strategies.*" *(EA10)*

"*We have identified several factors in the external environment that influence our day-to-day operations. These are market conditions that affect competition, the financial crisis that determines our top management policy and high level decisions that we make on a daily basis.*" *(EA19)*

"*We are very much influenced by technological developments. We actively review technological developments and seek to understand how these can be used to take advantage in terms of competition. The adoption of the right technology is crucial to our success.*" *(EA25)*

The view of the *Business Development Director* can be summarized as follows: The SME sought to obtain as much information as possible to effectively manage its organizational operations (EA5). The key focus was on customer demand, which they addressed through marketing strategies (EA10). Furthermore they closely monitored market conditions and financial

circumstances, and reacted to them through policy and decision-making (EA25). This provides an insight into the SME with regard to external environment analysis. These quotations provide information on how the organization monitors the external environment and more importantly the key factors that are monitored, as well as the actions performed as a consequence.

It was found that the *Marketing and Communications Manager* was most involved in external analysis, based on the quotations below that summarize the *views of the Marketing and Communications Manager:*

"We implement strategy to increase organizational performance. This is done through external and internal analysis. We perform this analysis through internal discussions. Our external analysis is mostly based on government regulations and legislation as well as market developments." (EA11)

"For analysis we tend to discuss the results in terms of SWOT and apply weighting to determine what is more important." (EA36)

"We have observed the need for strategic management to increase organizational performance. As competition gets more fierce in the current economic conditions, we search for opportunities through environmental analysis. This enables us to anticipate the fast changing environment. We must be flexible to adapt accordingly to seize market opportunities" (EA31)

"Our external analysis is based on the collection of data from several sources such as research, the internet, newspapers, government publications, etc. The analysis is not performed according to formal procedures but according to each department, who implement their own method." (EA21)

"Our strategic decisions are made based on external factors, which allow us to respond to market threats and opportunities. This is our main approach to being competitive in our target market." (EA26)

"We do not implement special methods to analyse the external environment. We very much apply an intuitive approach to our analysis based on SWOT." (EA28)

The *Marketing and Communications Manager* stated that strategy was an integral part of increasing organizational performance, which was achieved through analysis of external factors such as regulations, legislation and market developments (EA11). These factors were analysed according to SWOT and weighted in term of their importance (EA36). Data is collected from research, the Internet, newspapers, the government, etc. (EA21). This analysis was performed to increase organizational performance and be competitive in increasingly hard economic times through searching for opportunities (EA31). This helped the SME to make strategic decisions (EA26).

The *Business Manager* provided only limited reference to the concept of performing an external analysis. The quotation related to this action is provided below:

"*Within the organization we tend to focus more on internal analysis as opposed to external analysis. This is because we have full control over what happens within the organization and have data available to monitor organizational change. We cannot achieve this for the external environment to the same extent. For external analysis we focus on the aspects that we can obtain information about through research on customer requirements, customer satisfaction and the market environment*" *(EA17)*

The quotation provided by the *Business Manager* is an indication that the SME was involved in external analysis to the extent that this was possible. Furthermore, the main key performance indicators were provided such that an understanding of how the external environment was analysed can be formed (EA17).

Review of Actors' data

Based on a significant number of quotations, as identified, it can be concluded that the SME was actively involved in environmental analysis activity. Strong evidence for this was found in the quotations that refer to external data sources that were consulted to obtain as much information as possible to analyse the external environment. The *Operations and Board Director* stated that they used feedback from customers and suppliers (EA4), and from technological change (EA23). The *Business Development Manager* focused on customer demand (EA10), market conditions, and financial circumstances (EA25). The *Marketing and Communications Manager* identified external factors such as regulations, legislation, market developments, (EA10) and also indicated that this information was collected from sources such as research, the Internet, newspapers, and the government (EA21). The *Business Manager* stated that factors such as customer requirements and satisfaction as well as the market environment were investigated, as far as practicable for the external environment (EA17). Several of the actors discussed which particular key factors they considered during their external analysis. Some of them were similar, such as information about customers and the market. These factors were mentioned more frequently because the organization was actively engaged in collecting data for these factors, while other factors mentioned, such as regulations and legislation, were used less frequently although they were still important to the organization. Two quotations indicated from where the data was collected, namely from feedback, which the SME used whilst actively working on its marketing strategy, as well as research through the Internet as a secondary source.

Some understanding has been developed of the process of external analysis that was performed within the SME. This indicated that an external environmental analysis was an on-going process that was performed on a

regular basis (EA7). Active research was conducted through a marketing strategy to better understand the market and in particular customers and suppliers, based on the feedback that they provide and for which monitoring can be performed. The *Marketing and Communications Manager* stated that this analysis enabled the organization to be more competitive in its environment and identify opportunities in the external environment (EA31). The *Business Development Manager* stated that monitoring of the external environment determined how they operated internally, which was defined through the policies and decisions that were made (EA25). The *Marketing and Communications Manager* confirmed the importance of external environmental analysis in strategic decision-making (EA26).

Within the quotations obtained from the actors related to external analysis some references were made to the actual tools that were used to perform the analysis of the external environment. The *Operations Manager* mentioned that this analysis was performed through a SWOT analysis and a cost benefit analysis (EA34). The *Marketing and Communications Manager* confirmed the use of a SWOT analysis and provided information on weighting the results to determine their importance (EA36). No documentation existed on the use of these tools, and it was stated that the process was *informal and verbal.*

Discussion of the External Environmental Analysis Activity

A sound understanding of the external environment is a key success factor for every organization. According to the literature, the higher this understanding about the external environment, the greater a competitive advantage an organization can gain (Analoui & Karami, 2002). Although the literature does not explicitly state what the best sources to consult are to develop an understanding about the external environment, during the interviews clear reference was made to these sources (EA14). On the other hand several

sources in the literature have identified the key dimensions in the external environment that should be analysed (Dobni & Luffman, 2003; Hitt et al., 2012; Macmillan & Tampoe, 2000). These factors are: political, economic, social, cultural and technology.

Throughout the interview with the *Business Development Director* it was found that the technological dimension was especially important (EA23). This was because technology changes very frequently, and to remain competitive within their target market the SME required the latest technology. While the other factors were not explicitly referred to as described within the literature, they were related in a certain sense. In terms of the political dimension, the *Marketing and Communications Manager* was involved in the analysis of regulations and legislation (EA10). These factors were products of politics that could constrain an organization or enable an opportunity.

Several actors stated that they considered economic factors. For example, the *Operations and Board Director* considered market conditions, and financial circumstances (EA25). *The Business Manager* confirmed this by stating that the company analysed the market environment, which was considered an economic factor (EA21).

In contrast to the previously mentioned factors (economic, technological, political); **no one** demonstrated a consideration of social or cultural dimensions.

The quotations from the actors therefore do not fully accord with the external environment factors identified in the literature. For example, Ashill & Jobber, (2001) set out several factors of the external environment: distributor, competition, end user, supplier, natural and physical factors, market characteristics, whereas only some of these factors were mentioned by the actors. It was found that they focused particularly on the customer and

supplier (EA4). They collected feedback of these factors to understand levels of satisfaction and requirements (EA17). The other factors in the literature that were not identified in the data of the actors were related to 'external analysis activity' - for example, social or cultural dimensions.

Based on completion of the interviews, it was possible for the researcher to form a picture of the process that senior employees of the SME went through, during the activity of environmental scanning. The level of understanding obtained by the researcher is an overview that would be hard to obtain from another methodology: the reason is largely due to the fact that the literature focuses on specific aspects of strategy, unlike the present study which investigates how the activity of external scanning is performed. This focus on strategy has enabled the researcher to understand the data that was collected (EA7), how that information was used to perform analysis on the external environment to identify opportunities (EA31), and how the SME used it to make decisions (EA25, EA26).

Tools, according to the literature, aid the process that the external analysis of the environment undergoes where possible. The literature identifies within the environmental scanning phase of strategy that a SWOT analysis and Porter's five forces are the most commonly used tools for external analysis. The findings based on the quotations obtained from the interviews were partially in agreement with the literature with regard to the use of SWOT to analyse the external environment (EA34, EA36). The quotations of the *Operations and Board Manager* indicated that in addition to SWOT analysis, cost benefit analysis was used to help evaluate whether the opportunities identified in the external environment were feasible and worthwhile. The use of SWOT and cost benefit analysis is not considered as the most suitable in the literature, and although indispensable, they should not be the only tools used during external

environmental analysis. Instead, the use of Porter's five forces has been identified in the literature to be more suitable. A further point with regard to the use of strategic tools is that the organization under observation used these tools informally and produced no documentation.

Activity Two: Analysis of Internal Environment Activity

Below are quotations from the *Operations and Board Director* about analysis of the internal environment:

"We are very frequently involved in an environmental analysis. We see it as an on-going activity that takes place every time we obtain feedback" (EA8)

"We analyse the feedback from our communications to improve our internal operations and services. External analysis is important for us as it enables us first to gain a better understanding of the external environment, and second to act upon changes in the environment accordingly. Through the analysis of the external environment we can plan how we use our internal resources. This is important because as a SME we cannot leverage large resources. Through this analysis we can pick what our resources are used for to increase our benefit." (EA15)

"We do not formally use any tools. In a certain sense we do apply the concepts of the SWOT analysis and cost benefit analysis when reviewing the feedback of the external environment. This is through a mental process. We don't document these processes." (EA35)

The *Operations and Board Director* (EA8) said that environmental analysis was an activity that her organization was involved in on a frequent basis. Based on new information received through external sources of information, this SME was working towards improving internal operations. This is considered important as the limited resources available within the SME meant

that not all opportunities identified in the external analysis could be seized (EA15). Some additional details were provided about how the internal analysis was performed. They use the ideas behind a SWOT analysis and cost benefit analysis informally, and did not document these approaches (EA35). This provides some insight into how the organization related the external analysis to the internal analysis and the importance of managing the internal environment within the SME in terms of limited availability of resources, as well as the more practical aspect of analytic tools.

The *Marketing and Communications Manager* referred extensively to the analysis of the internal environment. These quotations are presented below:

"We implement strategy to increase organizational performance. This is done through external and internal analysis. We perform this analysis through internal discussions. Our external analysis is mostly based on government regulations and legislation, as well as market developments." (EA12)

"We base our internal analysis on data collected through the lifetime of the organization. The internal analysis follows a set of internal procedures" (EA22)

"Our strategic decisions are made based on external factors which allow us to respond to market threats and opportunities. This is our main approach to being competitive in our target market." (EA27)

"We do not implement special methods to analyse the external environment. We very much apply an intuitive approach to our analysis, based on SWOT." (EA29)

"Top management decision-making is based on internal analysis. Most of the collected information comes from the internal communication between

directors, managers and other staff. This means that it is very much influenced by human judgment, such as staff likes and dislikes." (EA30)

"For the analysis we tend to discuss the results in terms of SWOT and apply weighting to determine what is more important." (EA37)

According to the *Marketing and Communications Manager,* most of the internal analysis was performed through discussions (EA12). As the internal analysis depends on internal communication between staff, it is often influenced by their opinions (EA30). They had a set of procedures to perform internal analysis, based on data collected since the founding of the organization (EA12). Decisions about internal operations were made in response to changes in the external environment (EA27). The analysis itself was very intuitive and performed in a similar way to a SWOT analysis (EA29). Furthermore, it was mentioned that the results of the analysis through SWOT are weighted to enable a vision of what the 'better' opportunities were (EA37). Based on the responses, it is possible to form an understanding of the SME's external analysis and how it was performed.

The *Business Manager* is briefly quoted below with regard to internal analysis:

"Within the organization we tend to focus more on internal analysis as opposed to external analysis. This is because we have full control over what happens within the organization and have data available to monitor organizational change. We cannot achieve this for the external environment to the same extent. For the external analysis we focus on the aspects that we can obtain information about through research on customer requirements, customer satisfaction and the market environment" (EA18)

The quotation obtained from the *Business Manager* is important because she emphasized the difference between internal and external analysis within the

organization, stating that the SME was more involved in internal analysis (EA18). This was a direct consequence of being in control of internal operations, but only being able to adapt to the external environment.

Review of Actors' data

The quotations obtained from the actors demonstrate that internal analysis was very closely related to external analysis and that internal decisions very much depended on it (EA18). The *Communications Manager* confirmed what the *Operations Board of Director* stated, that the organization under observation was very often involved in this analysis (EA8). Internal analysis was found to be performed through discussion (EA12), and this was found to involve weak internal communication (EA30).

The organization was found to be more involved in internal analysis (EA18), because it was not able to obtain the same level of information about its external environment. It had been collecting information on the internal environment since the founding of the organization (EA12), and the decisions about the internal environment were determined by external analysis (EA27). Decisions regarding the internal environment represented how the organization reacted strategically to the changes in its external environment. The *Operations and Board Director* explained that this reaction was an opportunity to increase competitiveness: However, it was very hard for the company to react due to its limited resources (EA15).

Although the notion of internal analysis was discussed, it was found that the actors were more focused on analysis of the balance between the internal and external environment. The *Operations and Board Director* stated that the ideas behind a SWOT analysis and cost benefit analysis were used (EA29). Similarly the *Marketing and Communications Manager* provided information about the use of SWOT analysis (EA29, EA37), which only demonstrated a

limited internal analysis, mostly concerned with the strengths and weaknesses of the organization.

Discussion of the Internal Environmental Analysis Activity

The findings reveal a lack of detail on how internal analysis was conducted, and especially the factors under consideration. Nevertheless, in the literature it has been found that there were two main factors of importance to the analysis of the internal environment, which are: the organizational structure and the organization's leadership. In contrast to this, it was found that the organization under observation was more concerned with managing internal resources in relation to its external environment (EA15). This can, in certain aspects, be a form of organizational structure, and in the case of human resources and training this can be referred to as leadership. As identified in the literature an internal analysis should involve analysis of organizational resources (Hitt et al., 2007), an organization's capability (Hitt et al., 2007; Hooley et al., 1998), and its core competencies (Hooley et al., 1998; Hooley et al., 2005a). The SME was especially involved in resource management internally, and it may be concluded that this organization (and possibly other SMEs) should conduct internal analysis more thoroughly.

The references made by the actors with regard to resource management indicate that they were very involved in this activity (EA18). Furthermore, it was difficult to allocate limited resources to gain a competitive advantage (EA15), a fact confirmed in the literature as a particular characteristic of SMEs, and considered one of the primary obstacles to becoming successful (Alon, 2004; Burke & Gaughran, 2006; Celuch et al., 2007; Hudson-Smith & Smith, 2007; P. Savioz & M. Blum, 2002; Spence, 2003; Wesson & De Figueiredo, 2001). The literature also suggests that SMEs should be highly flexible with regard to resources and work towards optimizing them (Dean,

1986). Even though there was no direct quotation obtained about resource optimization, it was observed that the organization had resources at its disposal. It has also been noted in the literature that the notion of SMEs having limited resources involves a risk factor (Aloulou & Fayolle, 2005), nevertheless there were **no** related observation or quotations obtained regarding this aspect. However, this may have been considered during the environmental analysis in the form of threats when using the SWOT analysis.

The actors, *Operations Board Director* and *Marketing Communications Manager*, indicated the use of SWOT analysis for internal analysis, as well as cost benefit analysis (EA29, EA37). According to the literature SWOT analysis is extensively used in this phase (Porter, 2008). An alternative is value chain analysis, taking a resource-based view (Gică, 2011). The SME under observation could use a wider range of specific tools for internal analysis, as identified in the literature, in addition to SWOT analysis.

Activity Three: Evaluation of opportunities Activity

One quotation was obtained from the *Business Development Director* with regard to evaluating opportunities:

"*We have found that it is essential to work towards meeting customer requirements. This enables us to seize new opportunities. Through this approach we are able to increase our profitability*" *(EA32)*

In this quotation the *Business Development Manager* emphasized the importance of understanding the external environment (customer requirements) and how to work towards this external environment internally (EA32). It was through this process that the SME sought to innovate and maintain its competitiveness, and identify new opportunities.

The *Marketing and Communications Manager* reported the use of some specific tools to evaluate opportunities:

"The main tools we use to analyse new opportunities are 'What if scenarios' and 'risk analysis'"(EA38)

This indicates that the identification of new opportunities was very much a marketing activity. Although limited information was provided on their usage, two tools were mentioned during the interview.

Review of Actors' data

The limited number of quotations identified for the activity of 'evaluating opportunities' makes it harder to form a picture of how the SME performed this activity. However in conjunction with what was understood about the SME during the previous two activities it became clear that finding opportunities depended mostly on external analysis and how the SME was able to take advantage of these opportunities (EA32). Furthermore, the *Business Development Manager* stated that he was looking into diversification of the client base and a move into the private sector to gain a competitive advantage. Additionally the *Marketing and Communications Manager* provided some insight into the tools used to evaluate opportunities (EA38).

Discussion of the 'Evaluation of Opportunities Activity'

The evaluation of opportunities during the environmental analysis phase of the strategy process has been recognized within the literature by several authors (Companys & McMullen, 2007; Messeghem, 2003). This activity involves revision of the external environment and an evaluation of whether there are any opportunities from which the organization can benefit. According to the *Business Manager* the SME was consciously involved in the evaluation of new opportunities (EA32). Two tools were identified which were in use to perform this activity (EA38). While other tools and approaches have been

identified in the literature (Gundry & Kickul, 2007), the SME was nonetheless already comprehensively involved in this activity. Research suggests that this is natural for a SME, as they are more likely to seek new opportunities (Neshamba, 2006). The ability of a SME to correctly identify new opportunities has a positive impact on their performance (Wiklund, Patzelt, & Shepherd, 2009; Wiklund & Shepherd, 2003).

Activity Four: Strategic fit Activity

Some information on this topic was obtained from the *Operations and Board Director*. Quotations pertaining are presented below.

"We analyse the feedback from our communications to improve our internal operations and services. External analysis is important for us as it enables us first to gain a better understanding of the external environment and second to act upon changes in the environment accordingly. Through the analysis of the external environment we can plan how we use our internal resources. This is important because as a SME we cannot leverage a large amount of resources. Through this analysis we can pick what our resources are used for to increase our benefit." (EA16)

"The economic aspects of the environment are important for our business especially in terms of technology. As we have been forced to cut back during the global economic crisis it has become harder to compete in our markets. The limited availability of liquidity means that we are unable to follow the pace of fast changing technology. This technology is important to remain competitive. Our external analysis focuses on which technology we should acquire and how we can maximize its benefit." (EA24)

Within these quotations the *Operations and Board Director* summarized the whole process that the SME went through during the environmental scanning phase. Specifically, it focused on how its internal resources could be used to

take advantage of external opportunities (EA16), known as 'identifying strategic fit'. Once the external opportunities were evaluated then internal competencies were mapped against these opportunities. It was found that for the SME, a limited availability of resources made this activity both very important, and very difficult, especially from economic and technologic perspectives (EA24).

Related quotations to strategic fit by the *Business Development Director* are recorded below:

"We are working towards increasing our services and actively searching for new opportunities. A recent example is the work we have done towards obtaining the ISO27001 accreditation. This enables us to bid for a wider range of projects with higher levels of security clearance." (EA1)

"We are actively in communication with customers through formal and informal channels to enable us to plan ahead" (EA6)

"We have identified several factors in the external environment that influence our day-to-day operations. These are market conditions that affect competition, the financial crisis that determines our top management policy and high level decisions that we make on a daily basis." (EA20)

"We have found that it is essential to work towards meeting the customer requirements. This enables us to seize new opportunities. Through this approach we are able to increase our profitability" (EA33)

The *Business Development Director* presented some good examples of how the SME under observation achieved strategic fit. One recent example given was when the company was working towards an ISO accreditation, which was an internal strength. They were working towards maximizing this strength, for it was a part of their strategy to take advantage of an opportunity that was

identified externally. Through obtaining accreditation a new target market of projects would become available to them (EA1). In a more general sense the SME was very involved in finding strategic fit based on the feedback it received, and this was used to plan ahead the allocation of internal resources according to the external environment (EA6). This demonstrates a strong awareness of the external environment (EA20), to which they worked to adapt their internal environment (EA33).

The *Marketing and Communications Manager* demonstrated involvement in the activity of strategic fit:

"*When the organization took steps to diversify its customer base in order to find customers that were a better fit with its strategic direction, a major part of the customer management role evolved to staying close to the customer in order to identify further business opportunities*" *(EA3)*

"*We recently started to increase our customer base by searching for new customers. Through more closely targeting our customers it is possible to achieve a more precise strategic fit. This involves customer management through which we aim to maintain our relationship with customers to increase business opportunities*" *(EA13)*

According to the *Marketing and Communications Manager,* the SME worked actively to find the appropriate customers for their services through a diversification program (EA3). This enabled the SME to align internal strengths with external opportunities; thus, the strategic fit was achieved through actively targeting customers (EA13).

Review of Actors' data

The SME was involved in the activity of finding strategic fit (EA16). The *Operations and Board Director* described strategic fit as a complex matter, especially for SMEs, which face increased difficulty with fast changing

technology and economic hardship externally, as well as internally due to limited available resources (EA24). This was demonstrated through some examples given by the *Business Development Director* (EA1, EA6). An understanding of the external environment (EA20) and an ability to manage the internal environment (EA33) demonstrated that finding the appropriate customers in the external environment (EA3) to meet the SME's internal capabilities supported establishing strategic fit.

Discussion of the Strategic fit Activity

The most critical part of strategy formulation is whether the strategy is appropriate. Strategic fit helps to identify whether a strategy is suitable or not (Andrews, 1971). Furthermore, organizational performance is closely related to strategic fit (Ginsberg & Venkatraman, 1985; Miles & Snow, 1994). According to Zajac et al. (2000) strategic fit is underreported in the literature. Moreover, the problem identified in the literature is significantly different from that found within the SME under observation. Strategic fit is a complex concept, as it is a moving target, however, the actors did not mention this problem (EA16). However, they did attempt to track the changing external environment through continuous analysis. During this process they worked towards finding opportunities that met the strengths of the organization. The primary problem that was identified was one of limited resources (EA24).

Unlike all previous activities within the phase of environmental scanning, the findings show that the quotations related to strategic fit did not mention a specific tool for performing this activity. According to Zajac et al. (2000) strategic change and strategic fit investigation provides the means for the organization to plan for a changing environment. They stated that *"Neither strategic fit nor strategic change research has offered the conceptual or methodological tools needed to predict and assess whether an organization's strategy will fit with changing environmental and organizational*

circumstances" (p.430), which could explain why no indication of the use of a strategic tool for performing this activity was mentioned. Although it is known that the SME was involved in using tools such as SWOT analysis, competitive analysis, and a resource-based view, these tools do not provide a sufficient resolution of the problem (Zajac et al., 2000).

The overall interpretation

The SME was predominantly involved in analysis of the external environment, which may have been a consequence of external analysis being harder than internal analysis, because there is much less control over the external environment. Internal analysis was also very active in the SME. Notably it was found that there was only a limited response to the activity of 'evaluating opportunities' and although this may have been undervalued, it is noteworthy that the SME was involved in this activity. This was partially included in the external analysis during which the organization was seeking opportunities in the external environment, as well as analysis of it. Furthermore roughly a quarter of the actors' quotations were devoted to the fit of the strategy between the internal resources of the organization and the changing external environment (see table 6.1).

Table 6.1: An overview of how involved the SME is in every activity for environment analysis phase

	Operations and Board Director	Business Development Director	Business Manager	Marketing and Communications Manager	IT Manager	Percentage
Analysis of External Environment	• Improved communication increase customer satisfaction (EA4) • Identify external opportunities (EA14) • Technological change is key external factor (EA23) • SWOT and CBA used informally (EA34) • Environmental analysis is an on-going activity (EA7) — **5**	• Planning ahead through customer communications (EA5) • Use of customer demand for marketing strategies (EA10) • Key external factors that affect day-to-day operations (EA19) • Importance of technological developments (EA25) — **4**	• Analysis of regulations, legislations and market developments (EA11) • Increased competitiveness through environmental analysis (EA31) • Data collection strategies (EA21) • Decision-making based on market threats and opportunities (EA26) • Intuitive usage of SWOT (EA28) — **5**	• Key external analysis factors (EA17) — **1**	**0**	44%
Analysis of Internal Environment	• Environmental analysis is started every time data is collected (EA8) • Limited resources means that opportunities must be selected carefully (EA15) • SWOT is used informally (EA35) — **3**	**0**	• Internal analysis through discussion (EA12) • Data has been collected for internal analysis since the company started (EA22) • Internal decision are based on external changes (EA27) • Intuitive SWOT analysis is performed (EA29) • The analysis results are weighted to determine their importance — **5**	• Explanation of why they are more involved in the internal analysis (EA18) — **1**	**0**	26%

Evaluate opportunities		0	• Understanding customer requirements and adapt internally towards the external environment (EA32)	1		0
(cont.)

Category							%/Total
Evaluate opportunities		0	• Understanding customer requirements and adapt internally towards the external environment (EA32)	1		0	• What if scenarios and risk analysis are used to evaluate opportunities (EA38)	1		0	6%
Strategic fit	• Apply internal resource to external opportunities (EA16) • Limited economic and technological resources (EA24)	2	• Searching for new opportunities based on internal competencies (EA1) • Communication with customers to plan ahead (EA6) • External changes affect decision-making process (EA20) • Increase profit through new opportunities (EA33)	4		0	• Increase customer base (EA3) • Strategic fit by targeting customers (EA13)	2		0	23%
Total	10		9		10		5				100% 34

Summary

Based on the results of the environmental analysis phase it was found that most efforts were focused on external and internal strategic activities. Hence, less work has been done on the other strategic activities that depend on the internal and external environment. However, the questions were focused on how the SME under observation performed the four activities and the level of involvement in each of these activities, in addition to how thoroughly they were done (based on what is known from the literature). In addition, the tools used for each of the activities were reviewed, in terms of appropriateness and effectiveness.

A different opinion was formulated, which was that in the quotations it was stated that the SME was more involved with analysing the internal environment as opposed to the external environment (EA15), as they had greater control over the internal environment. However, more emphasis was put on the external environment. It would appear therefore that the SME may spend a great deal of time on the internal environment, however subconsciously it was more involved with the external environment, as this was not under their control.

To perform an external analysis it is necessary to have a strong understanding of the key information that needs to be analysed. During the interviews a series of different factors have been quoted which the stakeholders investigate as part of their external analysis. The factors that relate to the technological aspects in the external environment, as well as to economic hardship, were found to be the most important, and actively reviewed.

Several sources have indicated that SMEs have limited resources at their disposal. The SME under observation was no different in this respect. Considering the limited available resources, it is important that the time

available to perform external analysis is used effectively. Ideally this would be simultaneous to the internal analysis such that any new findings in the external environment can immediately be identified as an opportunity, or threat.

The primary tool mentioned during the environmental scanning phase was the SWOT analysis, as this tool uses an external and internal analysis simultaneously. To perform an external analysis the Porters five forces tool would enable an explicit focus on the external environment, and aid the SME to perform the external analysis more thoroughly.

It was found that the SME was involved in performing an internal analysis. Claims were made about having a greater control over the internal environment, which allows for relevant data to be captured. However, based on the interviews the SME was more focused on the external environment, concerned with identifying an opportunity. Once they had found a suitable opportunity they checked whether they had the available internal resources, and put forward a proposal.

This means that the main concern of the SME is its internal resources and especially the lack of these resources when they identify an opportunity: they then spend a great deal of time focusing on how to gather the required resources. The emphasis on resources is a well-known problem in SME strategy.

It was found that the SME looked at most relevant factors to some degree, as it may be that they have identified an opportunity but then are not able to deliver on it due to poor internal analysis. Some factors that existed in the literature that were not mentioned were leadership and organizational structure. However these are not factors investigated within the present study because these points were not explored during the interviews.

It has been found that SWOT analysis is a very generic tool used by the SME to perform environmental scanning, because it involves multiple activities. It has been found in the literature that there are other tools available that could be used, and are more focused on the internal aspects of the organization, such as a resource based view and value chain analysis.

Based on the summarized views of Actors, it appeared that the SME largely ignored the activity of 'evaluating opportunities'. However, on the contrary, it has been found that they are actually very involved in this activity. As they use a SWOT analysis approach to environmental scanning, the activities are performed at the same time and during the external analysis of opportunities. At a later stage these opportunities were then reviewed to make sure that they are really opportunities, and confirmed by the directors in the organization.

Strategic fit was performed as part of the internal and external analysis, and considered the most critical aspect of the environmental scanning phase, because the external environment was constantly changing. This strategic fit implies that the SME especially considered this changing external environment and adapted itself accordingly. The SME was actively involved in seeking feedback from customer and suppliers to improve their internal operations. When there was a misfit between the internal and external environment the SME sought to adapt to the external environment to the extent that this was possible, a delicate matter for SMEs that have to deal with limited resources.

Section two: Strategy formulation (SF) phase

Section two: Strategy formulation (SF) phase

Introduction

The analysis of the strategy formulation phase of the strategy process consists of five activities that have been identified in the literature and documented in the conceptual framework. These activities are: *'Development of mission and vision statements, setting goals, setting objectives, strategic choice, and strategic planning'.* All the quotations given by the actors are summarized and categorized based on these activities. The consistency between the summarized quotations of different actors is checked to gain a better understanding of how the SME performs strategy formulation as a whole, and especially to understand how each individual activity is performed. The findings are then compared against the literature to enable the development of an understanding that determines whether the SME was performing each of the activities, draw conclusions on how effective the formulation of strategy is performed as part of the strategy process.

Developing Mission, Vision Statement Activity / Goal Setting Activity / Objective Setting Activity

Although there are five activities in the formulation of strategy, the present analysis part is divided into three sections, because the first section includes three activities. These activities are *the Development of the Mission and Vision Statement, The Setting of Goals, and the Setting of Objectives*. These three activities have been grouped together as they are so closely related and usually organizations perform them simultaneously for this reason. Furthermore, it has been found that there are limited quotations from some of the actors for some of the three activities, so that grouping them would make it more analytic. Furthermore, these three activities are closely related in the literature, which makes it easier to compare the quotations of the actors against the literature.

The *Operations and Board Director*'s quotations for Goal Setting:

"During decision-making we carefully consider the cost and the benefits that we get out of the investment. This is done with the overall goal vision. So we decide on the best solution which will enable us to attain the goal and at the same time provide greatest financial benefit and reduce risk." (SF8)

The *Operations and Board Director*'s quotations for Setting of Objectives:

"We work towards a fast decision-making process during which we are able to present results within a minimal time. This involves a preparation stage during which an action plan is defined, in which the objectives are outlined. This plan includes a set of business cases which enables final decisions by senior directors." (SF15)

According to the *Operations and Board Director* the clear establishment of the goal and vision is imperative. The goal and vision are used during the decision-making process, to help identify whether the return on investment is on target as part of the decision-making process. Each business case is presented to demonstrate how the goals can be achieved (SF8), and has an action plan in which the objectives are defined (SF15). To find which the most suitable business case is, the objectives of the case were compared against the goals of the organization so that this can be checked against the long-term vision.

The *Business Development Director's* quotations related to the development of the mission and vision statement.

"We have outlined a vision that indicates where we want to be in the next five to twenty years. The main action toward attaining this vision is, identifying how business processes can be implemented in the long-term to deliver customer services more efficiently and more effectively" (SF39)

"For the IT aspect, we seek to be bomb proof and resilient. It works out as more cost-efficient to spend more on IT infrastructure such that it is reliable, than to have undetermined down time through which the organization is stopped and loses too much money." (SF40)

Business Development Director - goal setting

"We make strategic decisions based dependent on environmental circumstances and conditions. Immediate decisions are focus more on SWOT analysis and for longer-term decisions, cost benefit analysis. At the current time our main strategies reflect decisions about our company resources and company priorities. These decisions are mostly related to how we will spend our resources on a project and how great a benefit we are able to get out of it." (SF9)

"Our projects are managed centrally. The main KPI is finance. To get approval for a business case several stages must be completed, with rigorous checking of the cost setting, benefits, and spending." (SF31)

"The main services that we provide on behalf of the public sector are to provide working skills to reduce unemployment and stimulate the local economy, as well as SMEs" (SF43)

"The main purpose of our IT system is to deliver our services to customers at the highest possible standard." (SF44)

Business Development Director - objective setting

"Our strategy requires that the plan needs to be confirmed by the department of finance prior to approval" (SF10)

"We are seeking to use strategy tools to enable quicker decision-making. Through the use of quantitative and qualitative data which is easily available from Internet and internal systems or external agencies we seek to improve

decision-making. Our difficulty is not accessing information, but clearly defining our goals such that we can identify appropriate tools and data that can aid us in decision-making." (SF11)

"We have experienced cases during which we had to take decisions before all data was collected. In such situations we try to determine what the key factors are and make decisions that are considered least risky." (SF13)

The *Business Development Director* explained the organization's vision and stated that it was for the following five to twenty years. A key action in attaining their vision is to develop business processes that enable the company to provide customer services more efficiently and more effectively (SF39). The required information is collected as identified in the section on external analysis in the previous part of the chapter. More specifically, with regards to IT, the mission was that the IT infrastructure was reliable, and as cost efficient as possible (SF40).

The *Business Development Director* did not explicitly mention goal setting. However, it was discussed indirectly through the company's approach to cost setting, which is an objective regarding expenditure on the projects that were managed (SF31). An example of a goal was given when he stated that their goal was to provide services to the public sector (SF43). The setting of short and long-term objectives was performed through the use of SWOT analysis (SF9).

The SME was actively involved in setting objectives, of which several examples were found; for example, it was involved in setting strict financial objectives that had to be checked for every project (SF10). Another objective was to overcome problems in goal setting, which they sought to achieve in terms of finding the right tools and data (SF11). Furthermore, it was found

that an objective was to reduce risk, especially during adverse circumstances (SF13).

Business Manager- goal and objective setting

"It is our directors who define long-term strategies: for example, which strategic partnerships to invest in. The shorter term strategy is done by senior managers in agreement with directors." (SF17)

"We encourage our team leaders to pay increasing attention to the short-term results. This is a recent long-term strategic decision that we have implemented. We are testing to find out whether the team leaders need extra time to get used to this strategy, or specific training must be provided. We are expecting that this will have a significant impact on daily operations and increase efficiency." (SF33)

"For me personally, I view IT as a tool which aids me in my day-to-day work activities and enables me, especially with marketing. (SF36)

According to the *Business Manager,* it is the directors who define long-term strategy, which includes the mission and vision statements as well as the goals (SF17). She provided an example of a goal, and stated that goals make team leaders aware of the short-term objectives such that they are able to work towards targets. This demonstrated how they were involved in setting short-term objectives and the importance of these short-term objectives in the operations of the SME to meet its long-term goals (SF33). As an example it was stated that the objective of IT is to enable the day-to-day operations (SF36).

The Marketing and Communications Manager –goal setting

"We develop strategy to take advantage of key opportunities, but perhaps more importantly to develop an understanding of the main ideas that drive our business forward." (SF21)

The *Marketing and Communications Manager* – objectives setting

"We work towards gaining competitive advantage in terms of IT by aligning IT support with business requirements" (SF45)

The *Marketing and Communications Manager* stated that long-term strategy is an essential aspect of being successful. The key part of long-term strategy is the mission and vision statement that is referred to as the ideas that drive the business forward (SF21). Furthermore, she stated that one of the key objectives was to align IT with business requirements, which are both long-term goals and short-term objectives (SF45).

The *IT Manager*'s quotations related to the development of the IT vision and mission statement.

IT vision

"Stay updated with Microsoft (update to Win7)" (SF24)

IT mission

"Keep our IT systems up to date" (SF25)

The IT Manage – **Goal Setting**

"The directors need to put forth recommendations about the projects to senior directors. But decisions on the project once approved are down to the directors" (SF22)

The *IT Manager* –Objective Setting

"Our objectives are not concerned with environmental matters; we focus our day-to-day operations of key business activities to better understand how IT can support those functions of the business." (SF7)

"…Just meet the work requirements of the users." (SF26)

"Ensure that users are able to complete their work…by providing e-mail service, shared folders...etc." (SF27)

"Economically… Lease computers rather than purchase computers…Look at long-term purchasing" (SF28)

As IT plays a very crucial role within the SME it was questioned what the long-term goals and short-term objectives were. The main area of focus according to the *IT Manager* was to keep the IT system up to date, IT vision, especially for Windows (SF24, SF25). Short to medium term objectives of IT depended on the projects that the SME was involved in (SF22). It was hard for this organization to determine long-term IT goals as the requirements were too varied and changed on a regular basis; however, it was mentioned that the SME was interested in leasing rather than purchasing computers to become more flexible to project requirements (SF28). However, the main short-term objectives in IT related to day-to-day operations to ensure that there was no IT downtime (SF7), so that the users of the IT system could perform their job functions (SF26, SF27).

Review of Actors' data

Several references were made with regard to high level strategic planning. The *Operations and Board Director* made clear its importance and how the vision was used in the decision-making process. It was stated that the vision is defined for a period of twenty years. The vision was closely related to day-to-day operations through actions that reflected how the vision was to be attained (SF39). The vision and mission were the key aspects of the long-term strategy (SF21). Notably, the long-term strategy was defined by the directors of the organization through the vision and mission (SF33).

The long-term actions designed, to attain the overall vision and mission, were defined by the goals. Some explanation was provided on how these goals were used in the decision-making process. Based on the presentation of business cases it was shown how the goal effectively achieved the mission (SF8). The task of goal setting is a complicated matter and was identified as a problem area (SF11). Findings indicate that the success of goals depends on how clearly the objectives are set and defined, as well as achieved, which they seek to do by making team leaders aware of the long-term goals (SF33).

The objectives are part of every business case. Through these objectives the business case demonstrates how the long-term goals are attained in pursuit of the vision (SF15). According to the *Business Development Manager* cost setting was an important aspect of setting the objectives and was based on the outputs of the environmental analysis through the use of SWOT analysis. Examples of objectives were the setting of financial objectives (SF10) and ensuring that goals were attained (SF11) as well as reducing risk where required (SF13). The *Business Manager* stated that they sought to attain goals by informing who were performing the short-term objectives, so that the goals would be attained with higher precision (SF17). Furthermore, the importance of IT as an objective to align business operations with the overall goal was identified during the interview with the *Marketing and Communications Manager* (SF45). This was confirmed by the *IT Manager*, who also stated that it was important to achieve the highest levels of uptime (SF7) so that staff could perform their day-to-day operations (SF26, SF27).

Discussion

Although the literature is very clear on the point that SMEs do not undertake strategic planning (Wang et al., 2007), the SME under observation was found to be involved in the strategy process. Within the phase of strategy

formulation the three key activities that define the strategy are its mission and vision, goals, and objectives. These are known as the content of the strategy (Gică, 2011). The vision defines how an organization views itself, while the mission determines the actions the organization will take to attain the vision. The SME under observation provided limited information on how it actually formulated its vision and mission, other than that it was for a period of twenty years. According to Mazur (1998) it can be hard for organizations to articulate these high level aspects of their strategy and should include concepts such as profit, cost, market share, improved customer satisfaction, etc. Furthermore, Mazur states that the use of a fishbone diagram is useful in determining the vision and mission. The SME did not have a specific approach to the formulation of its vision and mission; however they did clearly state the importance of these elements to enable improved decision-making through the use of business cases to check whether their goals were coherent with the mission and vision.

Once an organization has defined its vision and mission it is possible to define the goals through which the vision will be attained in the long-term. According to the literature goals are set through the allocation of resources (O'Regan & Ghobadian, 2004; Stonehouse & Pemberton, 2002). Within the SME under observation it was found that they had difficulties with setting goals (SF11). The actors suggested that team leaders must be carefully informed about the goals so that when they implemented the shorter term objective they should be actively working towards attaining the longer term goals: for example, *The Business Manager* believed that an understanding of how individual teams should be operated would increase (SF33). However, it is probable that the problem here is greater than simply a matter of communication: as previously identified in the previous phase of the strategy

process, one of the greatest hardships of SMEs is their lack of resources, which makes it hard to perform the strategic activity of goal setting.

It has been observed that the SME in the present study was actively involved in working on its short-term objectives. It is based on several examples, such as the cost setting of projects (SF31), reduction of risk (SF13), improving how the goals were attained (SF34), to mention only a few. Probably one of the more important aspects was how IT was used to meet short-term objectives. The importance of strategic alignment of IT is also an area of active research in the literature (McKeen & Smith, 2003). The alignment of IT will increase both IT effectiveness and organizational performance (Chan et al., 1997; Prasad et al., 2012). In particular the marketing manager emphasized the importance of IT in day-to-day operations (SF45), and the importance of maintaining high IT uptime (SF7).

Strategic choice- Identification of relevant strategic alternatives (dynamic environment) Activity

The second activity identified in the literature for the strategy phase formulation was *Strategic Choice*. Throughout the following section the quotations of the actors that demonstrate involvement in strategic choice are reviewed. The quotations for each actor are summarized. These summaries are used to develop a rich picture of how the SME performs strategic choice. This is done through joining together the different views of each interviewer. The final aspect is to compare the findings in the literature regarding strategic choice against how the SME is perceived by the actors to be involved in the Strategic Choice activity.

The *Operations and Board Director's* quotations were:

"We formulate our strategy based on current market conditions. This means that we cannot develop an ideal strategy but are really trying to survive in the

current market conditions. This reflects mostly in the allocation of our resources, which are scarce. The actual formulation of those strategies is both formal and informal. Informally we have meetings with the responsible managers, especially when tendering for projects. Formal strategy usually starts when we have successfully obtained a project, throughout the project and when evaluating the project. This is done by meeting with the key stakeholders." (SF4)

It was noted that the SME was limited in terms of the choices that they had to take advantage of opportunities. With actively changing market conditions there was even limited scope for strategy. Although the options were actively discussed, the SME only became involved in formal strategy once a project had been accepted (SF4). This involved business cases being presented on how the project was to be addressed, and it was at this stage that strategic choice became clear.

The *Business Development Director's* quotations related to strategic choice were:

"We are seeking to use strategy tools to enable quicker decision-making. Through the use of quantitative and qualitative data, which is easily available from Internet and internal systems or external agencies, we seek to improve decision-making. Our difficulty is not accessing information, but clearly defining our goal such that we can identify appropriate tools and data that can aid us in decision-making." (SF12)

"We have experienced cases during which we had to take decisions before all the data was collected. In such situations we try to determine what the key factors are and make decisions that are considered least risky." (SF14)

The *Business Development Director* worked to increase the options for strategic choice, because during the environmental scanning phase a great

emphasis was placed on gaining as much information as possible so that improved decision-making could take place (SF12). He observed that the SME's strategic choice was aimed in particular at reducing risk (SF14).

The *Marketing and Communications Manager's* quotations were:

"We see developing strategy as a means to take advantage of market opportunities, develop a better understanding of our business and how we can advance." (SF20)

"Based on the different business cases put forward in a strategy the managing director implements the best fit, which is tested during a period of three to six weeks. During this period we collect metrics from the main KPIs through which we can determine how effectively the strategy was implemented. This will lead to a decision of whether the strategy can continue." (SF37)

According to the *Marketing and Communications Manager*, the question of choice was not about what the choices were in terms of strategy, but simply how the organization could take advantage of the external environment (SF20). However she acknowledged that each project involved business case proposals, based upon which strategic choices were made (SF37).

Review of Actors' data

Both the *Operations and Board Director* and *Marketing and Communications Director* stated that they were involved in strategic choice, at the stage of having obtained a bid for a project. The strategy was developed once the business cases had been presented. It was through the business cases that the SME was able to practice strategic choice and increase the effectiveness of its decision-making (SF12). However, *Operations and the Board of Directors* stated that there was limited choice as the external environment was always changing (SF4). Similarly, the *Marketing and Communications Manager* said

that it was not about strategic choice but more about how the SME was able to take advantage of identified opportunities in the external environment (SF20).

Discussion

The findings indicate that the SME was involved in strategic choice. It was mainly at the stage of successfully obtaining a bid and when it was necessary to decide how the project would be approached. The strategic choice was attained through business cases that were presented as a solution to the project. The Directors then decided on what was the most suitable business case according to how effectively it would enable the project, as well as the organizational vision (SF12). In the literature, it has been found that strategic choice is predominantly defined by the resources of the organization(Carraresi et al., 2011). It was found in the environmental analysis phase of the strategy process that internal analysis focuses on the resources of the organization, and that is one of the key limitations of SMEs. Therefore, it is questionable to what extent the SME under observation had strategic choice. Instead the choice was more with regard to the external environment, from which it was possible to pick and choose which projects they would undertake.

According to the findings of the interview there are limited opportunities externally due to the limited resources internally (SF4). Therefore, the SME was not about making choices, but instead about seeking opportunities in the external environment and trying to take advantage of them (SF20). Although the SME has demonstrated the use of strategic tools such as business cases for the accomplishment of strategic activity choice, according to the literature business cases are limited as a means of making strategic choice can. In this context, Vos (2005) presented a model in which strategic choice is divided into six perspectives (The Business Choice, The Vision Choice, The Tactics Choice, The Competence Choice, The Assets Choice, The Performance

Choice). Through this model all aspects of the strategy formulation are contextualized towards strategic choice, which demonstrates that the concept of strategic choice goes beyond simply laying out a set of business cases. Strategic choice is achieved by choosing all levels of the strategy as defined by these six perspectives. Through the application of this model it is possible to increase flexibility even though the SME has limited internal resources that constrain the possibility of taking advantage of the external environment.

Strategic planning Activity

The final activity under discussion for the formulation phase of the strategy process is *Strategic Planning*. According to the literature strategic planning is a key aspect of strategy formulation. The absence of it has been identified as the root cause of why organizations are unsuccessful, and that SMEs in particular lack the activity of strategic planning. Based on the interviews, the present study seeks to understand whether the SME was involved in the activity of strategic planning, to determine how this was done and what tools were used. *The Operations and Board Director's* quotations related to strategic planning

"We work towards a fast decision-making process during which we are able to present results within minimal time. This involves a preparation stage during which an action plan is defined. This plan includes a set of business cases which enables final decisions by senior directors." (SF16)

The *Operations and Board Director* reported performing strategic planning. When asked to further elaborate on how the company performed strategic planning she stated that it was done through outlining an action plan for which the business cases demonstrated how the strategy would be executed, so that the directors were able to take strategic decisions (SF16).

The *Business Development Director's* quotations regarding the strategic planning activity were:

"We are actively working on the strategy of a project concerning our IT security. The key aims of this project are to provide a robust and secure platform that is able to drive the organization forward successfully by supporting the key business functions" (SF1)

"Most of our opportunities are determined through market demand. Based on market demand we then develop a strategy that allows us to allocate our resources accordingly." (SF5)

"Information technology is one of the key aspects that we take into consideration when working towards being competitive in our target market." (SF35)

"Once we have outlined the strategy, a plan is provided to the managers that informs the team leaders of their specific objectives. This enables execution of the strategy." (SF42)

The *Business Development Director* was the key contributor to the activity of strategic planning. He provided a prime example of a strategy for IT security that they were working on (SF1). The planning involved the strategic allocation of resources (SF5), and one of the key resources was the technology required (SF35). The strategic plan was also used as a communication tool that enabled strategic execution (SF42).

Review of Actors' data

Both the actors reported that they were involved in strategic planning and used an action plan. While *the Operation and Board Director* was mostly concerned with the decision-making aspect of strategic planning and using an

action plan to determine the strategy (SF16), the *Business Development Director* defined the action plan and the resource allocation (SF5).

Discussion

The literature indicates that it is not unusual for SMEs to have little or no formal record of strategies or business plans (Russo & Martins, 2005). Although these types of documentation were not found within the SME under observation, the actors reported that an action plan was developed and used throughout the strategy process phases (SF16, SF5). The literature suggests that the SME under observation should have been more involved in formal strategy (Baird et al., 1994); however, it was observed that the business development manager used the action plan to communicate the objectives to operational staff, despite findings in the literature that SMEs do not sufficiently involve their operational teams (Aram & Cowen, 1990). This communication was also noticed when the *Business Development Manager* involved operational staff, especially the *IT Manager,* to define the action plan.

The lack of strategic planning was confirmed by Wang et al. (2007) who quoted a series of studies with similar findings in this respect. Furthermore, according to Jocumsen (2004) the majorities of SMEs fail. Wang et al., (2007) also stated that there is a strong correlation between strategic planning and the success rates of SMEs, based on the revision of a series of studies. The data of the present study does not enable it to verify whether the SME was successful because they use action plans to strategically allocate recourses. However, it is believed that the SME was under-performing as a result of insufficient strategic planning. A large amount of criticism is aimed at SMEs for not performing formal strategy, which is inherent to their very nature and limited resources, thus implying that they are unable to afford strategists.

During the observation it was noted that the staff of the SME had limited experience in the strategic planning of the organization. As they were unable to provide thorough plans that demonstrated their ability to accomplish projects, this means that they under-performed by being only able to obtain a limited share of the market. It was noted that the action plans used were only applied once a project had been won. The SME should be more actively involved in formal planning aimed at obtaining new projects as part of their strategy.

The overall interpretation

For the analysis of the formulation phase the first three activities have been grouped as they are closely related to each other. It was found that in total the number of quotations for these three activities was greater than the other two activities together. The development of mission and vision statement is the activity that has been least referred to. This amounts to a total of ten per cent. This is followed by goal setting activity that was identified equal to twenty six per cent of times. The last of the three is setting objectives that amounted to thirty three per cent. The other two activities together were quoted a total of thirty two per cent that is equally divided.

It has been observed during the interviews that defining the vision and mission is only performed by Directors: it seems a reasonable explanation as to why this activity has been referred to less frequently. Similarly it was noticed that strategic planning was only found from the quotations of the interviews with the Directors. The setting of objectives has been identified most frequently: it is believed that this is because of a communication problem that the SME under observation is working towards overcoming by clearly specifying the short-term objectives. This is similar for the long-term goals. See table 6.2 for the summary.

Table 6.2: An overview of how involved the SME is in every activity for formulation phase

	Operations and Board Director	Business Development Director	Business Manager	Marketing and Communications Manager	IT Manager	Percentage
Development of mission and vision statements	0	• Five to twenty year vision (SF39) • Establish reliable IT infrastructure (SF40) — 2	0	0	• Stay updated (SF24, SF25) — 1	10%
Setting goals	• Business cases demonstrate how objectives are attained (SF8) — 1	• Strategic tools for goal setting (SF9) • Project cost and benefits must be approved (SF31) • Provide public sector services (SF43) • Increase customer service standards through IT (SF44) — 4	• Directors specify long-term goals — 1	• Goal setting to drive forth the business (SF21) — 1	• Goals are defined by directors (SF22) — 1	26%
Setting objectives	• Objectives defined in action plan (SF15) — 1	• Strategy must be approved by fiancé department (SF10) • Overcome problems in goal setting through right tools and data (SF11) • Reduce risk when possible (SF13) — 3	• Increase awareness of short-term objectives among staff (SE33) • IT objective to enable day-to-day operations (SF36) — 2	• Align IT with business operations (SF45) — 1	• Ensure 100% IT uptime (SF7) • Meet user requirements (SF26, SF27) • Review IT purchasing plan (SF28) — 3	32%

Strategic choice	• Presentation of business cases (SF4)	1	• Improve decision-making process through collected data (SF12) • Less risky choices (SF14)	2		0	• Not choice, just seize opportunity (SE20) • Business case proposals for strategic choice (SF37)	2		0	16%
Strategic planning	• Outline action plan for business cases (SF16)	1	• IT security plan (SF1) • Strategic planning through resource allocation (SF5) • Key resource in planning is IT (SF35) • Strategic plan enables execution (SF42)	4		0		0		0	16%
	4		15		3		4		5		100% 31

Summary

The literature states at length that SMEs are not performing strategic planning (Wang et al., 2007). With regard to the content of strategy formulation (Gică, 2011), the present study has observed some involvement with regard to these activities. The first of the activities is to define the mission and vision for which limited evidence was found in the present study. According to the literature more details should be provided, and tools such as a fishbone diagram could be used. This demonstrates that the SME in the present study is inadequately performing this activity. It was found during the interviews that the SME in the present study experienced difficulties with setting long-term goals, primarily due to a lack of resources. This is in accordance with the literature, in which it has been found that goals are formulated through the allocation of resources (O'Regan & Ghobadian, 2004; Stonehouse & Pemberton, 2002). This is particularly complicated in SMEs. With regard to the present study, more involvement was observed for the setting of short-term objectives. These were objectives such as cost setting, reducing risks, improving goal attainment, and alignment of IT. The *Marketing Manager* referred to their importance in day-to-day operations and the *IT manager* noted the requirement of availability. The importance of IT has also been identified in the literature (McKeen & Smith, 2003) and its alignment will increase both IT effectiveness and organizational performance (Chan et al., 1997; Prasad et al., 2012).

It was found that sixteen per cent of quotations given by actors of the SME within the formulation stage were dedicated to strategic choice. This was conducted through the use of business cases, with which proposals were put forward such that it was possible to select how the goals would be attained. This is in accordance with the literature, which states that strategic choice is to

be achieved through the resources that are allocated during the strategy (Carraresi et al., 2011). As strategic choice depends on the resources available, which are limited in SMEs, it was found in this study that it was not about choice as such but rather about taking advantage of external opportunities. In addition to strategic choice the literature finds that strategic choice can be divided into six perspectives (Vos, 2005). These perspectives demonstrate that the SME in the present study could do more in its strategic decisions to focus on how they can take advantage of external opportunities.

It has been found in the literature that SMEs rarely have strategies or business plans (Russo & Martins, 2005) and this holds true for the SME in the present study. However it was found that sixteen per cent of its quotations indicate that the SME was involved in strategic planning. The main tool used for strategic planning was found to be an action plan. The lack of strategic planning has been identified in the literature as one of the key reasons why a SME is unsuccessful. The success of the SME could not be evaluated through the present study; nevertheless, it is believed that improved organizational performance could be attained through improved strategic planning.

Section three: Strategy implementation (SI) phase

Section three: Strategy implementation (SI) phase

Introduction

The following section of chapter six discusses the analysis of the strategy implementation phase for the SME under observation. The quotations related to the strategy implementation phase have been categorized according to the interviewees and the activities that took place within the implementation phase, in accordance with the literature on the strategy process. This phase contains the following activities: '*allocation of resources, alignment of budget with strategy, alignment of human resources with strategy, strategy execution, implementation of tactics, communication of strategy and strategic change management*'. For each of the activities a summary is made to provide an overview of how each participant was involved in these activities. These summaries are then related to each other to develop an understanding of how the SME under observation was involved in these activities and whether the different actors gave similar, complimentary or perhaps even differing statements during interview. Once an overview was provided of how the SME was involved in the activities of the strategy implementation phase, the findings were compared against the literature, which provides an understanding of how effectively the SME was involved in the activities. The quotations have been quantified as a means of finding how involved in each activity, for each phase of the strategy process, the SME was.

Allocate resources Activity, Alignment of budget with strategy Activity, and Alignment of human resources with strategy Activity

In the strategy implementation phase the first three activities have been amalgamated, to analyse and to facilitate comparison with the literature (discussion). The quotations are related to how the SME manages its resources in general. Further activity looks at how human resources are managed and

how finances are managed. These are a crucial aspect of the strategy implementation phase. It is important for the SME under observation to have a clear plan for implementing its strategy. Through the analysis an overview has been created of how the SME under observation was involved in the first three activities of the strategy implementation phase.

The *Operations and Board Director's* quotations with regard to human resources and finance were:

"We have recently created a change management team in the organization. Through the change leadership program we have started project teams that work between departments, with the purpose of identifying cost saving opportunities through financial means and reduction of resources by sharing between departments." (SI18)

"We build our HR processes and procedures to support corporate, team and individual performance, strengthening the hearts, minds and power of our people" (SI68)

"We are working towards the reduction of our budget. This is especially true of the IT front were we have started to implement virtualization, centralised storage, and centralised deployment. This means that ICT can be provided more efficiently and total work is reduced. This also enables us to save on the power consumption of ICT equipment." (SI44)

According to the *Operations and Board Director* the SME was involved in the alignment of human resources and budget. The change leadership program that they had in place demonstrated how they were seeking to invest in staff so that the overall organizational objectives could be accomplished more effectively (SI18). She stated that through the development of human resources, improved organizational performance was achieved (SI68). The alignment of human resources was also closely related to financial alignment,

as improved human resource alignment means improved financial performance. *The Operations Board of Director* stated that the SME under observation was actively involved in cost reduction, especially through optimization of resources (SI18). There was a specific focus on cost reduction in the area of IT (SI44).

The *Business Development Director's* quotations explain how the SME under observation allocated resources and strategically aligned human resources and finance:

"We have found that re-using the IT infrastructure has become an important aspect of how we meet our objectives. This is achieved by reviewing our IT and re-aligning the equipment to our new objectives." (SI43)

Alignment with Human Resources Activity

"We are actively working with all the departments to better understand the staff requirements. We have implemented user groups to obtain feedback from staff and also run a questionnaire. Through this feedback we are able to manage our staff teams more effectively. The feedback is used during the planning of strategy for use by the internal analysis." (SI57)

"During a recent evaluation of our strategy it has been found that staff are under developed. This caused some changes in our strategy in order to develop a training program." (SI58)

Alignment of Budget with Strategy Activity

"We are increasingly focusing our efforts on sales and marketing" (SI22)

The *Business Development Director* demonstrated the importance of how resources were allocated. Specifically, it was done by re-using the IT infrastructure and by making sure that IT was used to meet the organization's strategic objectives (SI43). Similarly, he explained how the SME aligned

human resources by developing an understanding of staff requirements (SI57). An example was when a training program was initiated to increase staff skills (SI58). While the *Business Development Manager* was very much involved in IT and staff resources of the SME, he was not responsible for the financial aspects. However, indirectly he had to work towards meeting the sales and marketing targets (SI22).

The Business Manager's quotations related to allocation and alignment of resources were:

Allocate Resources Activity

"*Within the organization strategic decisions are made depending on the market situation. Each situation is different. Most of the strategic decisions involve resource allocation, company priority, and other steps to ensure organizational growth.*" *(SI16)*

 "*During the decision-making process we carefully consider ROI. We do this by accessing the cost of our projects in terms of investment and what we will get out of it.*"*(SI14)*

It was found that the SME determined its resource allocation based on market conditions in the first instance, but also depended on internal ability (SI16). The *Business Manager* focused especially on financial alignment, stating that the SME under observation was particularly focused on return on investment (SI14).

The *Marketing and Communications Manager*'s quotations were:

"*One of the hardest aspects of strategic management during the recession is the managing of cash flow to keep the business alive.*" *(SI17)*

According to the *Marketing and Communications Manager* the most complicated aspect of resource management was not the main allocations, but rather to maintain cash flow in day-to-day operations (SI17).

IT Manager commented on how the SME under observation allocated and aligned resources:

"The main ICT software that we provide is an office package from Microsoft. We are all slaves to Bill Gates. We also use Sageline 50 and Sage payroll in the accounting department. For HR we have not yet found a suitable system. For customer relationship management we have a custom built package." (SI38)

"IT is a key factor in competition. It is important for our organization to have highly qualified staff. This enables us to use IT services to their full extent and be competitive within our target market." (SI9)

"We have found that staff are unable to use our new systems. This has caused problems in meeting strategic objectives. Training is now being provided to overcome this problem" (SI54)

Alignment of Budget with Strategy Activity

"We as an organization are not that efficient at budget management. Usually project outlines are passed on to the finance department, which confirms the budget." (SI35)

The *IT Manager* explained how IT resources were being allocated to a great extent to maintain the business function of the SME (SI38). He explained the importance of staff, qualified through training, taking advantage of the available IT resources (SI9), and that unqualified staff was a problem area in the SME under observation (SI54). In addition, he stated that the SME was not

efficient in terms of budget management, which had the potential to impact negatively on projects (SI35).

Review of Actors' data

Resource allocation within the SME generally involved how IT was used, and how finance was used to allocate IT and human resources within the SME. According to the *Marketing and Communications Manager* the SME allocated its resources according to market conditions and the internal ability of the SME (SI16).

The main concern of the SME was the alignment of IT resources, because the service they offered was dependent on IT. The primary context in which the actors mentioned the allocation of IT resources was for to it to be able to perform its business functions (SI17) and meet the company's strategic objectives (SI43). Furthermore, it was found that the allocation of IT resources was related to human resources as well as financial management. According to the *IT Manager*, IT resources could be used more effectively by qualified staff (SI9). On the other hand IT resourcing was related to financial management in that the SME sought to reduce the cost of its business processes through the implementation of IT resources (SI44).

The alignment of human resources was identified to be an important area for the SME, based on the change leadership program that they had introduced to more effectively align human resources with the organization's objectives (SI18, SI58). Additionally, it was found that they were working on understanding human resource requirements (SI57), to have a positive influence on the performance of the SME (SI68), because the SME had been able to improve its financial performance through effective human resource alignment.

Financial resource allocation of the SME was demonstrated through the alignment of IT and human resources. The SME was actively involved in cost reduction through IT resources as well as human resources (SI44). The SME had laid out clear financial targets in sales and marketing terms (SI22), but its main concern in terms of financial management was return on investment (SI14). Furthermore, it was primarily focused on financial resource management on a day-to-day basis (SI17). Poor budget allocation had a negative impact on the performance of the SME.

Discussion

The allocation of resources to implement strategy in SMEs is a relatively simple task, due to the scarcity of such resources; however, it means that a SME has limited options in terms of implementation. Nevertheless, the main problem is that the literature does not define how these option limited can be overcome. As the SME market is very competitive, the allocation of limited resources is an opportunity to gain competitiveness and use these resources innovatively (Rae, 2007). Similar findings were observed within the SME under study, which allocated its resources according to external market conditions and internal availability (SI16). Limited resources have consequences for the amount of opportunities a SME seeks to exploit. Although mentioned in the section on formulation for the SME under observation, strategy implementation with limited resources can involve a certain amount of risk (Rae, 2007). Furthermore, as they have limited resources to research and investigate, these strategies should be questioned (Alon, 2004; Burke & Gaughran, 2006).

The importance of human resource alignment with strategy has been identified in the literature (Gică, 2011; Raps, 2004), for the purpose of attaining the organization's vision (Brauer & Schmidt, 2006) and strategic goals (Harrison

& Pelletier, 2001). It was found that the SME sought to achieve human resource alignment with strategy through their change leadership program (SI18), which included developing an understanding of how human resources could be applied more effectively (SI57). It was noted that the SME wanted staff to conform to the strategic views of the organization.

SMEs have limited availability of other resources in addition to financial constraints. According to several studies, SMEs are especially limited because of short-term cash flow, which causes shortages of other necessary resources (Alon, 2004; Burke & Gaughran, 2006; Celuch et al., 2007; Hudson-Smith & Smith, 2007; P. Savioz & M. Blum, 2002; Spence & Essoussi, 2010; Wesson & De Figueiredo, 2001). As consistency of strategy implementation has been found to be an important factor for success, findings also indicate that the ability to maintain that success is determined by the organizational budget (Love et al., 2002). The literature pertaining to SMEs suggests that they are concerned with survival (Ates & Bititci, 2011), which was found to be the case for the SME under observation. The actors stated that the main concern was managing cash flow; and this was also confirmed during the interviews with the SME (SI14). As a solution, the literature finds that the key to resolving the cash flow issue can be through tight control of financial expenditure and by having SMEs take on no more projects that they can handle financially, such that appropriate resources can be allocated to each one.

Strategy Execution Activity

The Operations and Board Director's quotations related to strategy execution were:

"*We believe that strategic management is vital to the success of the organization. Through the correct strategic approach we can attain success.*

Through strategic management we have demonstrated that it is possible to improve organizational performance" (SI51)

"We have found that when good management practices are put in place the organization performs better. We measure organizational performance from the perspective of financial, customer satisfaction, innovation and overall goal attainment. " (SI52)

"We review company performance based on quarterly reports provided by every department within the organization." (SI53)

"Our main tools are SWOT and cost benefit analysis. Although most implementations are instinctive, we meet formally to confirm those findings." (SI59)

"We are working throughout our organization to transform our current work. This involves the implementation of continuous improvement of current day-to-day practices." (SI70)

In the SME, success was determined by how strategy was implemented (SI51). The *Operations and Board Director* stated that strategy was implemented through introducing improved management practices, and that the organization was working to implement a change program that involved continuous improvement (SI170). They were able to measure its impact through customer satisfaction, innovation and goal attainment, as well as financially (SI52). The revision of performance was done on a quarterly basis (SI53). However, it was perceived that there was a lack in actual planning for the implementation of strategy, as meetings to discuss results only took place after implementation (SI59).

The *Business Development Director* stated the following with regard to strategy execution:

"We look at how we can diversify the company into the private sector, through selling products and services that have been identified as essential for the private sector. These services include marketing and teleservices." (SI12)

"The implementation of our strategy is discussed formally and informally. Prior to obtaining a project bid informal discussions are held. It is at the stage of actually being accepted for a project that we formally meet and develop a strategy for the project." (SI16)

"The usage of IT is essential to the success of our business. We have designed bespoke databases for each project that enable us to track the project and measure its performance and quality." (SI48)

"It is the directors who decide which strategies to implement based on organizational performance. I view customer satisfaction as the most important indicator. This is because our strategies are aimed at improving customer satisfaction. By receiving feedback on customer satisfaction we know that a strategy was successful. We tend to supplement this feedback with financial indicators as a confirmation of customer feedback." (SI49)

"When strategy is implemented we find that the initial improvements in performance are found in the department. This is then later reflected at organizational level" (SI50)

According to the *Business Development Director* the SME under observation implemented strategy to increase its customer base by making available its products, and was focusing increasingly on the private sector (SI12). He stated that informal meetings were held to discuss whether to work towards a bid, and when the bid was obtained then the strategy was formally implemented (SI16). The formal strategy that was implemented was defined by the directors of the organization (SI49). Furthermore, IT played a key role in the

implementation of the strategy, particularly in terms of recording performance (SI48), and assessing performance (SI50).

The Marketing and Communications Manager's quotations with regard to strategy execution were:

"*We have implemented a bespoke software system named Mate which is a CRM. This is part of our strategy to increase customer communication channels. Through this software we are able to track the progress of client consultations.*" *(SI65)*

According to the *Marketing and Communications Manager* the SME was involved in the implementation of strategy. As an example of implementing strategy she provided the example of how a CRM (customer relationship management) system was implemented to meet the objective of improving customer satisfaction (SI65), which demonstrates how IT was such a crucial part of the company's strategy.

The IT Manager's quotations with regard to strategy execution were:

"*We implement strategy to obtain optimal results within the organization. During the strategy implementation we should be aware of internal and external factors to improve implementation. This is done through informal meetings.*" *(SI10)*

"*We have a number of IT systems that are disconnected from each other. They are also disconnected in a certain sense from the organization as they are not used to their full extent to support business requirements. An example is of how IT is provided to users. This demonstrates that many business procedures need to be digitalized, and although many are already digital, staff are not using them.*" *(SI20)*

"We do not really enter into the decision-making process. This is done by the directors at the head office. Once the decision is made the managers who implement the strategy are informed. Although feedback is regularly provided, generally this is a process of following instructions provided by the directors" *(SI34)*

"We run skills and business employment and business support services on behalf of the public sector. This is to get people back into work and to improve the business." (SI67)

The *IT Manager* reported during the interview that the SME was concerned with the results of strategic implementations, based on the analysis of internal and external factors discussed during informal meetings (SI10). The decisions were made by the directors, who communicated to the manager responsible for implementing strategy (SI34). He further explained how IT was not used to its full capacity within the SME and how they were seeking to implement a strategy to digitalize their business processes (SI20). As an example of a recent strategy that was beginning to be implemented, the *IT Manager* reported how the SME provided a service that met the customer's needs, by bringing people back to work who were struggling during the economic recession (SI67).

Review of Actors' data

The concept of how the SME actually performed strategy is hard to capture through the responses of a set of actors. However, based on the actors the following picture was formed. It was stated that the success of the organization was determined by how the SME implemented its strategy (SI51), and that the initial stages of the strategy process were very informal, while once decisions had been made formal strategy took place (SI17). This formal strategy was the responsibility of the directors within the SME (SI49)

who communicated it to the managers (SI34). The lack of initial formal planning had an impact on strategy implementation (SI59), which was found through the quarterly evaluation of strategy performance (SI53).

Some examples of how the SME implemented strategy were: through the organization change program, including continuous improvement (SI17); how the SME sought to move its client base into the private sector (SI12); implementation of a customer relationship management system to track client satisfaction (SI65); implementing a strategy to digitalize their business processes (SI20). This initiative demonstrates how IT was playing a key role in the implementation of strategy within the SME (SI48). Although limited, these examples provide an overview of how the SME implemented strategy.

Discussion

The term 'execution' is often used within the literature to refer to the strategy phase implementation rather than the activity of executing the strategy (Li et al., 2008). In the present study strategy execution was the activity during which the strategic actions were performed. According to Schaap (2006) strategy execution is the most complex task of the strategy process, which takes up most time. Leslie (2008) researched the key success factors of strategy implementation through a case study of the impeders of the strategy process, and specifically strategy execution. It was found in the present study that there was insufficient support from managers to support the operational aspect of executing the strategy. This lack of support was in part due to a lack of a formal process being followed and the key managers being too involved in solving day-to-day problems, which meant that they were not dedicated to the strategy and thus demonstrated poor allocation of human resources. Furthermore it was found that they did not focus on less tangible objectives sufficiently to attain successful execution.

Out of the several points identified in the literature only two can be related to the findings of the present study. The first point is that strategy execution was supported insufficiently. As there was no explicit mention of insufficient support during the interviews, there is no reason to believe that this was the case in the SME under observation. Furthermore, it is critically important that appropriate managers support the strategy execution activity, but this support was also not observed during the interviews, and there was no evidence that the staff were too involved in day-to-day operations and thus did not execute strategy. On the other hand it can be considered that the day-to-day maintenance of the organization's operations were part of the strategy that should not be neglected. Furthermore the literature indicates that the strategy execution activity focuses insufficiently on human resources and business processes. The SME was involved in the alignment of human resources; however, it was not observed whether there was any consideration of the business processes. Nevertheless, the SME was involved in the execution of its strategy according to a formulated plan. The problem identified was that they performed insufficient formal planning, with a negative impact on the execution of strategy, which was also found in the literature (Leslie, 2008).

Implementation of tactics Activity

The strategic activity that deals with short-term actions in order to obtain an objective is known as a tactic. This section summarizes the findings of the interviews during which it was observed that the SME was involved in the implementation of tactics activity. It is then assessed based on what is known from the literature whether the SME performed implementation of tactics activity and how effectively they performed it. The findings of the analysis of this activity aids understanding of how the SME performed strategy implementation.

The Operations and Board Director's quotations with regard to the implementation of tactics:

"We are working towards the reduction of our costs. This is especially true of the IT front where we have started to implement virtualization, centralized storage, and centralized desktop deployment. This means that ICT can be provided more efficiently and total work is reduced. This also enables us to save on power consumption of ICT equipment." (SI45)

"For me – the purpose of IT- it is a tool to support my everyday work, and a marketing tool. Internet and email are very important marketing media for most of our projects." (SI46)

The *Operations and Board Director* explained how IT was an integrated part of everyday operations within the SME (SI46), which enabled specific approaches and tactics to implement the strategy. However, she stated that they were actively working towards reducing the IT budget. She explained the specific tactics they were implementing to attain this objective, which involved especially how IT could be used more effectively (SI45).

The Business Development Director's quotations with regard to the implementation of tactics were:

"We are working to diversify our customer base. The main target is to move into the private sector. We have planned to do this by selling products and providing services which were identified as essential within their sector. Examples of such services are marketing and teleservices." (SI3)

"We are increasingly focusing our efforts on sales and marketing" (SI21)

"We have found that re-using the IT infrastructure has become an important aspect of how we meet our objectives. This is by reviewing our IT and re-aligning the equipment to our new objectives." (SI42)

The *Business Development Director* explained that to increase the revenue from sales through marketing (SI21) that was the primary tactic to achieve the financial objective of the SME, they sought to increase their customers (SI3). Additionally, he provided details of how the SME was working towards taking advantage of its internal resources, especially IT, by re-using the facilities to attain new objectives. This demonstrates how IT enables strategic tactics to be implemented to meet organizational objectives (SI42).

The Marketing and Communications Manager's quotations with regard to implementing tactics were*:*

"*Through conducting marketing research we as an organization have become able to better understand the needs and interests of our customers.*" (SI1)

Based on the information collected during the interview the SME implemented the tactic of marketing research so that they were able to attain the objective of increasing customer satisfaction (SI1).

The *IT Manager's* quotations with regard to implementing tactics were:

"*The main ICT software that we provide is an office package from Microsoft. We are all slaves to Bill Gates. We also use Sageline 50 and sage payroll in the accounting department. For HR we have not yet found a suitable system. For customer relationship management, we have a custom built package.*" (SI39)

"*We need to develop our business technologically as this is crucial for our success. We are using technology insufficiently. We are also not applying it to satisfy the business's requirements. Its main usage is in day-to-day operations.*" (SI40)

"We are currently not involved with energy consumption saving, we mostly look at the cost of staff; this is despite the importance of corporate social responsibility" (SI66)

According to the *IT Manager* the departments of the SME used different software packages as tactics to be able to achieve shorter-term objectives as well as long-term goals (SI39). The implementation of IT to meet business requirements was a key tactic of the SME (SI40). Finally, he stated a future tactic that they were working towards implementing was related to how the IT infrastructure was used (SI66).

Review of Actors' data

Strategic activity tactics were discussed during the interviews. It was found that IT played a very important tactical role in the implementation of strategy within the SME (SI46). According to the *Operations and Board Director* it was the digitalization of business processes that enabled an organization to reduce its costs (SI45). The Business Development Director and IT Manager communicated similar ideas. The *IT Manager* stated that specific IT implementation was a tactic to implement strategy (SI40). Other examples were provided of how the *Business Development Director* achieved targets and increased the customer base (SI3). Additionally the *Marketing and Communications Manager* explained how she conducted marketing research as a tactic to increase customer satisfaction (SI1).

Discussion

The strategic activity 'tactics' have been examined in recent literature (Bleistein et al., 2006; Casadesus-Masanell & Ricart, 2010; Li et al., 2008). The findings of the interviews were analysed based on the definition that a strategic tactic is a short-term action that enables attainment of an objective. It is possible to find several examples of tactics in the SME under observation.

Moreover, it was found that in the literature four different types of tactics were identified (Li et al., 2008). A study by Nutt (2006) found that there are four types of tactics *'Intervention, Participation, Persuasion, and Edicts'*. He stated that organizations that apply these tactics attain higher success rates. Based on the findings of the interviews it has been found that the SME under observation was predominantly involved in the strategic tactic known as 'intervention', through changing and modifying the strategy during the implementation by defining new targets. Because the SME had limited resources, it needed to be flexible in its approach in order to adjust during the implementation phase. Examples of this tactic given were when technology was used to reduce costs (SI45), the need for *The Business Development Director* to manage organizational targets (SI3) and *The Marketing and Communication Manager* researching how to maintain customer satisfaction (SI1). Based on the discussions held in the interviews, it is clear that the SME performed the tactics 'participation' and limited 'persuasion', which was found in the activity of human resource alignment. However, there was no indication that organizational policies had been observed in the findings.

Communication Strategy Activity

The *Operations and Board Director*'s quotations with regard to communication strategy were:

"Whenever I identify a strategy or project this is communicated to the relevant managers. Feedback by the managers can be provided during weekly team meetings. Occasionally managers address me directly in private to discuss any issues." (SI28)

The *Operations and Board Director* demonstrated how the strategy was communicated within the SME through informing the managers at the start. Although there were fixed intervals at which managers were expected to

report on progress, it was possible that pressing events could be communicated as required (SI28).

The *Business Development Director's* quotations with regard to communication strategy were:

"The implementation of our strategy is discussed formally and informally. Prior to obtaining a project bid, informal discussions are formed. It is at the stage of actually being accepted for a project that we formally meet and develop a strategy for the project." (SI6)

"I personally work closely with the IT Manager in planning what we need, and with the Business Manager who may want to implement a specific form of IT; then I liaise between both to communicate the requirements and make sure that it is possible" (SI61)

"Once we define our strategy it is communicated to the staff, who execute it." (SI63)

The *Business Development Director* explained that communications took place during all stages of the strategy process, but were different in nature. Prior to strategy implementation, informal discussions took place; however, once the strategy was to be implemented this communication became formal, and achieved through meetings (SI6). He described how he worked together with other members within the SME to improve communications between the business requirements of the *Business Manager* and *IT Manager* (SI61). Based on the information obtained during the interview, strategic decisions were communicated to staff for execution once formulated (SI63).

The *Business Manager's* quotations with regard to communication strategy were:

"Strategies are mostly developed by the managing directors who inform us so that we can implement strategies within our department. On a weekly basis we meet and provide feedback on the running of the strategy." (SI30)

"We have found that our main problem in strategy is its execution. This is because staff do not understand the changes that we are working towards. This is due to poor communication. We are starting a training program for managers to learn to communicate the objectives of strategy to staff." (SI55)

According to the *Business Development Manager*, the directors to the managers communicated strategy. At fixed weekly intervals the managers had the opportunity to provide feedback on the running of the strategy (SI30). She also stated that the SME had problems in the execution of strategy due to the lack of communication; however, they were working on improving communication (SI55).

The Marketing and Communications Manager's quotations with regard to communication strategy were*:*

"On a weekly basis there is a meeting with the managers. It is during those meetings that ideas can be communicated to improve the strategy, and taken into consideration by managing directors who may not have as clear an understanding of specific departmental issues as department managers like me in marketing." (SI32)

It was found during the interview with the *Marketing and Communications Manager* that the managers met on a weekly basis to discuss their progress on strategy execution (SI32). This meeting allowed managers of different departments to gain a better understanding of what was happening throughout the organization.

Review of Actors' data

Through the interviews it was found that there were defined communication channels that had been brought in place by directors and managers. It was found that at the start of strategic implementation, strategy was communicated to the managers, and they in turn were required to report back on the progress of strategy implementation (SI28, SI30, and SI32). However, it was found that there was insufficient communication, which deterred staff from executing strategy (SI63). The researcher observed that there was a distinction between communication before and after starting the strategy, related to the level of formality (SI6). The *Business Development Director* also described how he worked together with the managers to close the communications gap between different departments (SI61).

Discussion

It has been found in the literature that the strategic activity '*communication of strategy*' is more frequently mentioned than any other as a strategy success factor (Alexander, 1985). Furthermore, a considerable amount of research has investigated organizational communication within the strategy process (Foreman & Argenti, 2005; Heide et al., 2002; Peng & Litteljohn, 2001; Rapert et al., 2002; Schaap, 2006). Li et al., (2008) stated that the key information required during the communication of strategy is: accurate explanation of 'who', 'when', and 'how' the specific tasks must be performed, such that the strategy can be successfully implemented. Based on the information obtained during the interviews it is known which communication processes took place (SI28, SI30, and SI32). Furthermore, it was reported that the SME had some difficulties with the execution of strategy due to suffering from insufficient communication (SI63). This could be a consequence of the SME under observation inappropriately communicating the strategy, which could have a negative impact on the organization.

The overall interpretation

The first three activities of the phase of strategy implementation have been grouped for the analysis, as they are closely related to one another. It has been found that activities: alignment of human resources, budget, and the allocation of resources represented thirty one per cent of the respondents' references to the activities of the strategy implementation phase. The alignment of human resources was quoted thirteen times which demonstrated that there was some involvement to ensure that these resources were used as effectively as possible. The alignment of the budget was referred to eleven per cent of the times, which demonstrated the difficulties for the SME in maintaining this resource effectively. The allocation of resources was infrequently quoted with a total of seven per cent, but this is made up for by the previous two activities, which are impossible without resource allocation.

The next three activities were referred to more frequently. The strategy execution activity and the implementation tactics activity were referred to thirty-three and twenty per cent respectively. These two activities demonstrate how the SME was involved in the implementation of the strategy at a micro level to attain the overall strategic objectives. The final activity strategy communication was referred to less frequently, and it was also identified during the interviews that there were some problems with this activity. It was referred to seventeen per cent of the total (See table 6.3).

Table 6.3: An overview of how involved the SME is in every activity for implementation phase

	Operations and Board Director		Business Development Director		Business Manager		Marketing and Communications Manager		IT Manager		Perce ntage
Alignment with Human Resources Activity	• Change leadership program (SI18) • Development of human resources (SI68)	2	• Understanding of HR requirements (SI57) • Training program (SI58)	2		0		0	• Qualified staff to take advantage of IT (SI9) • Unqualified staff	2	13%
Alignment of Budget with Strategy Activity	• Cost reduction in area of IT (SI44)	1	• Meeting sales and marketing targets (SI22)	1	• Financial investment based on return on investment (SI14)	1	• Cash flow of day-to-day operations (SI17)	1	• Inefficient budget management (SI35)	1	11%
Allocate Resources Activity			• Re-use IT to meet strategic objectives (SI43)	1	• Resource allocation depending on internal ability and market conditions (SI16)	1		0	• IT resources to support the business functions (SI38)	1	7%
Strategy Execution Activity	• Strategic approach determines success (SI51) • Factors to measure performance (SI52) • Quarter annual performance (SI53) • Implement SWOT analysis and cost	5	• Diversify into private sector (SI12) • Strategy formally implemented when bid is successful (SI17) • IT used to implement strategy (SI48) • Directors decide when strategy is implemented	5		0	• Customer relationsh ip management system to increase customer satisfaction (SI65)	1	• Attaining successful strategic implementation (SI10) • Digitalize business processes (SI20) • Strategy is executed when directions communicate it with managers (SI34)	4	33%

	benefit analysis (SI59) • Implementation of continues improvement (SI70)	(SI49) • IT to measure strategy performance during implementation (SI50)			• Provisioning of services to public sector (SI67)	
Implementation of tactics Activity	• IT used as a tactic for day-to-day operations (SI45) 2 • IT as a tactic to reduce budget (SI46)	• Marketing and telesales services as a tactic to increase customer base (SI3) 3 • Sales and marketing as a tactic to increase revenue (SI21) • IT as a tactic to meet strategic objectives (SI42)	0	• Marketing research as a tactic to understand customer needs (SI1) 1	• Software packages as a tactic to achieve short and long-term objectives (SI39) 3 • IT as a tactic to meet business requirements (SI40) • Cost reduction tactics (SI66)	20%
Communication strategy Activity	• Feedback provided during meetings or in private (SI28) 1	• Formal communication to implement strategy (SI6) 3 • Communications with other managers (SI61) • Strategy communicated to staff for execution (SI63)	• Weekly feedback meetings (SI30) 2 • Lack of communication causes poor communication (SI55)	• Discuss progress on a weekly basis (SI32) 1	0	17%
	11	15	4	4	12	100% 46

Summary

Within the strategy process phase the literature has found the allocation of resources to execute the strategy to be critical. It is through the allocation of resources that SMEs are able to gain a competitive advantage. In the present study, it was found that the SME under observation gained a competitive advantage by exploiting the external environment in allocating its internal resources (SI16). The difficulty for SMEs is to make internal resources available, and in many cases they are not able to take advantage of the external opportunities identified. One of the key internal resources of an organization is staff. It was found that the SME under observation was actively involved with the allocation of human resources through its change leadership program (SI18) and also in developing an understanding of how they could allocate human resources more effectively (SI57). However, the finer detail on whether they dismissed staff that did not embrace the organizational vision remains unclear. In addition to human resources allocation, it was found that the SME lacked financial resources. This was most evident in the form of a lack of short-term cash, which represented an obstacle during the implementation of strategy and can cause strategies to fail. The SME was found to be having some difficulties in the short-term cash area, and could improve it by having tighter budget management, and by taking on only projects that they were sure to complete successfully.

The next activity in the implementation phase of the strategy process is execution of the strategy. In the literature it has been found that the execution of the strategy needs to be supported by the most senior figures within the organization; it was observed that this support, was the case with the SME under study. However, senior figures tended to become too involved in day-to-day activities and solving problems, which meant that they became unable

to execute the strategy. In addition, it was found that the SME did not get involved in the alignment of business processes which is a part of planning, moreover, it was found that the SME was insufficiently involved in the formal planning of strategy and thus was unable to execute its strategy effectively.

To execute strategy, a tactics are required. Based on the categorization within the literature of different types of tactics, it was found that the SME under observation executed its strategy through intervention. It did this because it acted on unexpected changes in the external environment or had to adjust plans due to poor planning. Although it was involved in tactics and with participation and persuasion during the strategy execution activity, it was found that the SME did not implement policies as part of their strategy.

The strategy execution of these tactics needs to be communicated. For a successful implementation of strategy, a high standard of communication is required. The SME under observation communicated through formal and informal channels. However, the details of how the strategy should be communicated seemed to get lost in the process, as the SME seemed to have some difficulties at the communication level. This had a negative impact on the results of the strategy execution activity due to the limited formulation of strategy, which caused poor communication.

The allocation of resources in SME is complicated due to the lack of internal resources and the changing external environment; however, SMEs that are able to effectively allocate resources are able to significantly increase their competitive advantage. The SME under observation was involved in human resource allocation through a change leadership program and by investigating how they could most effectively allocate human resources. It was found that there were difficulties with regard to day-to-day operations, as managers were unable to focus on the execution of strategy. These difficulties may have been

a consequence of poor cash flow, which was identified in the interviews. It is thus recommended that SMEs do not take on more projects than they can handle, so that they can maximize their internal resources to attain a successful strategic implementation. The actual execution of strategy was also found to be substandard, which is believed to be a consequence of the poor strategy formulation and communication. The SME was found to implement strategic tactics as an intervention; however it seems likely that these tactics were in anticipation of changes in the external environment or poor planning, rather than really a strategic tactic. Informal and formal communication took place.

However, as the strategy was not sufficiently formulated it could not be communicated, and this meant that the results of the strategy were not as anticipated.

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Section four: Strategy evaluation (SE) phase

Section four: Strategy evaluation (SE) phase

Introduction

The fourth section of chapter six presents the strategy evaluation phase of the strategy process. To understand how involved the SME was in the strategy evaluation phase of the strategy process, specific quotations of the interviews related to the strategy evaluation phase have been compiled. This has been done according to the five activities that take place within the strategy evaluation phase of the strategy process: *Control of strategy and organization performance; Gathering Feedback; Revision and learning; Identify corrective action; and identify preventive action.* The quotations are categorized according to these activities, and then they are summarized such that comparison can be made between the different actors to assess whether there are inconsistencies. Once a summary is produced for each activity, it is evaluated whether the SME is performing these activities according to how SMEs have been described in the literature.

Control of Strategy and Organization Performance Activity

In this section, it is evaluated how effectively the SME is able to ensure that the strategic implementations remain on course, as described during the formulation phase. It questioned which statements demonstrate that the SME worked towards controlling the strategy. The second aspect of this activity, which is closely related, is referred to as 'performance measurement' of the strategy implementation. As part of controlling, the strategy is implemented according to the description during the formulation phase, and performance measurement is applied. For the managers to understand whether the implementation has met its target, quantitative figures were used. The process of performance measurement can enable the SME to maintain a better control over its strategy implementation.

The *Operations and Board Director*'s Quotations were:

"*When strategies have been implemented we use the information collected during the monitoring of the project to evaluate it. We use these results to improve the project or in future projects.*" (SE7)

"*We have quarterly monitoring review meetings to evaluate on-going progress*" (SE42)

The quotations of the *Operations and Board Director* demonstrated how the SME evaluates project implementation (SE7) and review the progress of its strategy implementations (SE42).

The Business Development Director's Quotations were:

"*We measure departmental performance through client perception which is obtained through their feedback.*" (SE22)

"*When we suffer from IT down time and our systems are not working we make a risk evaluation to determine what the potential loss is. This is then reviewed at the following weekly meeting to develop a better understanding of what has gone wrong and what we can do to overcome such a catastrophe in the future*" (SE50)

It was found through the interview with the *Business Development Director* that the SME was actively measuring performance of its departments (SE22). As part of the strategy of performance measurements, risk evaluations were performed on the IT system (SE50). As the IT system is very critical to the business, a loss is incurred through downtime. Through evaluation the SME's management sought to understand how it was possible to minimize this loss and how they could reduce downtime, as well as the impact it would have on the business.

The *Business Manager*'s quotations were:

"Strategies are mostly developed by the managing directors who inform us such that we can implement strategies within our department. On a weekly basis we meet and provide feedback on the running of the strategy." (SE13)

"We encourage our team leaders to pay increasing attention to the short-term results. This is a recent long-term strategic decision that we have implemented. We are testing to find out whether the team leaders need extra time to get used to this strategy or whether specific training must be provided. We are expecting that this will have a significant impact on daily operations and increase efficiency." (SE19)

"The managing directors are responsible for the decisions regarding the organizational performance." (SE24)

"During our weekly meetings we discuss the monitoring results of activities such that we can re-evaluate our strategies." (SE49)

According to the *Business Manager* the progress of strategy implementations was closely controlled through weekly meetings (SE13). As a means of improving the impact of strategy implementations and controlling the strategy implementation to improve results, the SME has started to increase awareness of short-term objectives with key staff (SE19). The control of strategy was exercised by the managing directors, who act based upon the performance (SE24). These results were discussed at weekly meetings that enabled evaluation of how well the strategy was being implemented (SE49).

The *Marketing and Communications Manager'* Quotations were:

"We have spent a great effort on monitoring customer satisfaction and requirements. The data collected during this effort enables us to evaluate our strategy and make both short and long-term decisions" (SE4)

"On a weekly basis there is a meeting with the managers. It is during these meetings that ideas to improve the strategy can be communicated and taken into consideration by managing directors, who may not have as clear an understanding of specific departmental issues as department managers like me in marketing." (SE15)

"The main factors used to measure organizational performance are the balance sheet and customer satisfaction surveys." (SE26)

"We collect feedback from the customers to evaluate our services." (SE44)

"During the evaluation of our strategy we use project data and market feedback to determine the emergent strategy." (SE46)

The interview with the *Marketing and Communications Manager* revealed that the SME collects data during the strategy execution to allow for strategy evaluation (SE4). She stated that on a weekly basis the results of the strategy performance were discussed through meetings (SE15). Two sources for measuring the performance in the SME were the balance sheet and customer satisfaction (SE26, SE44): project data and market feedback were also used (SE46).

The *IT Manager's* quotation was:

"When we evaluate our strategy and find a positive result we continue our strategy" (SE16)

The *IT Manager* informed the researcher that the company evaluated strategy to control its on-going strategic direction, which was based on whether they attained positive results, or not (SE16).

Review of Actors' data

It has been found through a series of quotations obtained from the several interviews that the SME was involved in the control and measurement of its

strategic implementations. According to the O*perations and Board Director,* they performed strategy control through evaluations of strategic implementations (SE7). This was confirmed by the other actors (SE49, SE4). The evaluations performed were based on data that was collected during strategy execution (SE4) and allowed assessment of whether the implementation of the strategy was going according to plan (SE16). It seems that control of strategy implementation within the SME was actively being exercised to ensure outstanding results.

It was found that the SME was involved in the control and measurement of strategy through meeting at regular intervals (SE42). According to the *Business Manager,* meetings were held at weekly intervals (SE31) to evaluate strategy implementation (SE49). Similarly the *Marketing and Communications Manager* confirmed that meetings took place on a weekly basis, however he stated that the meetings were for the purpose of measuring the performance of the strategic implementations (SE15). Both of these actors provided complementary information with regard to weekly meetings, but with a different perspective of control and performance measurement activity, to evaluate and control strategic implementations as well as measure the performance.

It was found that measuring the performance was critically important in controlling the strategy. According to the *Business Development Director* the SME was actively involved in measuring the performance of different departments (SE22). He also stated that the performance measurement of strategy was important for evaluating risk to the IT infrastructure (SE50). The *Business Manager* complemented the *Business Development Director's* statements, by stating that the company controlled its strategy implementations through measuring their performance (SE24). The *Marketing*

and Communications Manager stated that they conducted performance measurement based on the balance sheet and customer satisfaction survey (SE26, SE44). The results of performance measurement were discussed on a weekly basis (SE15).

Discussion

It was found in the literature that control over strategic implementations differs depending on the size of the organization. Oakes and Lee (1999) indicate that a lack of control in a SME is due to an inability to influence demand to the extent that larger organizations can. In terms of strategic planning SMEs are, according to Brouthers et al. (1998), not involved politically, and exercise a low level of strategic control. Furthermore, it has been found that when SMEs perform strategic control its appropriateness is questioned (Neumann-Szyszka, 2003, cited by Rickards, 2007). However, according to Rickards (2007)strategic control problems can be overcome through the application of the BSC methodology.

It was found during the interviews that the SME was performing strategic control to some extent. However, it is questionable whether they were performing strategic control effectively, although effective strategy control and performance measurement seems to be of great concern throughout the literature. Although the literature recommended the usage of the BSC methodology to improve strategic control, this was not being applied in the SME under study according to the quotations, it is therefore suggests that the SME was not very effective at applying strategic control for this reason. However, as the key aspect to exercise strategic control is performance measurement, the performance measurement of the SME requires further evaluation.

Performance has been widely discussed in the literature of SMEs, and researchers have stated that SMEs have insufficient resources in terms of time and availability (Tenhunen et al., 2002). Based on the findings of the interviews, **no information** related to this subject was found, however, it was known based on findings from the strategy formulation phase that the SME under observation had limited resources. Furthermore, according to the literature, SMEs that apply performance measurement use operational and financial metrics (Rompho, 2011). Similar findings have transpired from the interviews, in which the *Marketing and Communications Manager* indicated that the SME used its balance sheet, a customer satisfaction survey, and data collected during the strategy execution to measure performance. Unlike SMEs cited in the literature, the SME of the present study used performance measurement to evaluate risk to its IT infrastructure, which demonstrates significant involvement in performance measurement.

Gathering Feedback Activity

The collection of feedback is critical during strategy evaluation phase, as the evaluation of the strategy depends on the information collected, and it is through the feedback collected that evaluation is performed. The *Operations and Board Director's* Quotations were:

"We formulate our strategy based on current market conditions. This means that we cannot develop an idealistic strategy but are really trying to survive in the current market conditions. This is reflected mostly in the allocation of our resources, which are scarce. The actual formulation of those strategies is both formal and informal. Informally we have meetings with managers responsible, especially when tendering for projects. Formal strategy usually starts when we have obtained a project successfully, throughout the project and when

evaluating the project. This is done by meeting with the key stakeholders."
(SE5)

"Our sales statistics are discussed in monthly board meetings" (SE31)

"During the quarter annual meetings when our quarterly reports are made available, the sales and marketing information is reviewed. Based on those figures our strategy is adapted." (SE40)

It was found that internal feedback in the SME was provided through informal meetings (SE5), and there were meetings at regular intervals to discuss the feedback. For example monthly sales statistics were discussed (SE31), while every three months sales and marketing results were reviewed (SE40).

The *Business Development Director*'s quotations were:

"We measure departmental performance through client perception, which is obtained through their feedback." (SE21)

"We are actively working with all the departments to better understand the staff requirements. We have implemented user groups to obtain feedback from staff and also run a questionnaire. Through this feedback we are able to manage our staff teams more effectively. The feedback is used during the planning of strategy for the usage of the internal analysis." (SE35)

The *Business Development Director* stated that they sought to obtain feedback from customers (SE21). In addition there were internal processes to obtain feedback through a questionnaire (SE35). He also stated the importance of the feedback for strategic planning (SE35).

The Marketing and Communications Manager's Quotations were:

"A huge effort and emphasis is placed on monitoring customer requirements and satisfaction. ... This data feeds into both the short-term and long-term decision-making of the organization." (SE2)

"The main factors used to measure organizational performance are the balance sheet and customer satisfaction surveys." (SE25)

"We collect both qualitative and quantitative data to make informed strategic decisions" (SE33)

"We collect feedback from the customers to evaluate our services." (SE43)

"We work towards improving our services and increasing customer support. This is done based on the feedback that we receive from our customers who have rated our services and described what went well and what we could do to provide a better service." (SE45)

According to the *Marketing and Communications Manager,* the SME was involved in understanding customer requirements and satisfaction, as this was important for the decision-making process (SE2). Feedback on the services was collected for evaluation purposes (SE43). The feedback was collected through a customer satisfaction survey (SE25). The data collected was both qualitative and quantitative (SE33). It was through the collection of this data as part of the feedback process that customer services were improved (SE45).

Review of Actors' data

Only three of the five actors mentioned involvement in the activity of gathering feedback with the intention of evaluation, which was performed through both qualitative and quantitative means (SE33). From the quotations that have been obtained from the actors it was found that there was both internal and external feedback. In the case of internal feedback, this refers to understanding how strategy implementations can be improved based on feedback from staff. External feedback is interested in how it is possible to improve strategic implementations based on feedback obtained from customers. Both forms of feedback are important when evaluating the strategic implementation of an organization. According *the Business*

Development Director feedback was critically important for strategic planning (SE35).

In particular, the *Operations and Board Director* as well as the *Business Development Manager* provided statements on the internal feedback gathering process. Feedback was collected through both an internal staff questionnaire (SE35) and regular meetings. It was found that these regular meetings mostly took place at weekly intervals (SE5) and monthly intervals (SE31). During these meetings, especially sales and marketing data were reviewed (SE31).

Externally, feedback was gathered from the customer. The *Business Development Director* explicitly stated that the company sought to obtain feedback from its customers (SE21). The *Marketing and Communications Manager* added to this statement by stating that they were involved in better understanding customer requirements and satisfaction (SE2). Similarly to the internal process of gathering feedback through a questionnaire, a customer survey questionnaire was employed for gathering feedback externally (SE25). The *Marketing and Communications Manager* emphasized that the external collection of feedback was critically important to improving customer services (SE45).

Discussion

It has been found in the literature that the collection of feedback is an important issue in attaining strategic achievements (Leslie, 2008), and the literature states that it is critical that all employees receive regular feedback. Furthermore, the feedback should be put into practice during the next strategy implementation. It is through this feedback that continuous improvement takes place through reformulation, which is discussed in the next section. The literature suggests that success must be rewarded, and failure should be critically reviewed. It was found in the interviews that the SME provided

regular feedback during set meetings (SE43, SE5, and SE31) as well as through internal staff questionnaires (SE35). However no quotations from the interviews demonstrated that the managers informed the staff about the success or failure of their strategic implementations.

It was also found in the literature that obtaining feedback is a timely matter, but more importantly a question of using the right key performance indicators (Duqrett & Stowe, 1993, cited in Wu, Lin and Chang, 2011). The interviews with the staff of the SME under observation demonstrated that they collected both quantitative and qualitative information (SE33). Furthermore, Qi (2005) emphasized the importance of an adequate feedback system as one of the main key success factors to successful strategy implementation. Additionally an in-depth study into the strategy process of a SME found that feedback was obtained during the implementation of the strategy (Russo & Martins, 2005): as a part of Russo and Martins' statistical analysis it was found that there was a significant relationship between feedback and strategic learning. It was also found that organizations that did not conform to this finding did not use the BSC. As the SME under observation was not implementing the BSC methodology it is questionable whether they were effectively collecting feedback and performing strategic learning.

Revision and learning Activity

The *Operations and Board Director's* Quotations related to Revision and Learning activity were:

"During our strategy meetings we review the business progress to understand whether we are on track" (SE32)

"We have quarterly monitoring review meetings to evaluate on-going progress" (SE41)

The *Operations and Board Director* was involved in revision and learning. This was found through the statement about strategy review meetings (SE32) and quarterly monitoring review meetings (SE41).

The *Business Development Director's* quotation was:

"*We are actively working with all the departments to better understand our staff requirements. We have implemented user groups to obtain feedback from staff and also run a questionnaire. Through this feedback we are able to manage our staff teams more effectively. The feedback is used during the planning of strategy for the use of the internal analysis.*" (SE36)

According to the *Business Development Director* the SME performed revision and learning through a feedback questionnaire obtained from staff within the organization (SE36). This feedback information enabled the managers to better understand staff requirements for future strategic planning purposes.

The *Business Manager's* Quotations were:

"*Strategies are mostly developed by the managing directors who inform us such that we can implement strategies within our department. On a weekly basis we meet and provide feedback on the running of the strategy.*" (SE14)

"*Our strategy reviews are based on up to date market research and competitor analysis*" (SE39)

"*During our weekly meetings we discuss the monitoring results of activities such that we can re-evaluate our strategies.*" (SE48)

According to the *Business Manager* the SME was very involved in the revision of the strategy. She stated that on a weekly basis there were meetings during which the progress of the strategy was reviewed (SE14, SE48). These reviews were based on market research (SE39).

The *Marketing and Communications Manager's* Quotation was:

"We have spent a great effort on monitoring customer satisfaction and requirements. The data collected during this effort enables us to evaluate our strategy and make both short and long-term decisions" (SE3)

It was found that the SME was very much involved in the revision and learning of how they could improve their services and products to increase customer satisfaction (SE3).

Review of Actors' data

It has been found that the SME is involved in the strategic activity of revision and learning during the evaluation phase of the strategy process. Based on the *Operations and Board Director* their review meetings (SE32) and quarterly monitoring review meetings (SE41). The *Business Manager* agreed with their being weekly meetings to review the strategy (SE14). The main purpose of reviewing the strategy is to improve services and products such that customer satisfaction can be increased (SE3), based on the feedback questionnaire (SE36) and market research (SE14).

Discussion

It was found during the interviews that the SME in the present study performs the activity of revision and learning. This is mostly based on the findings that demonstrate several actors to be involved in periodical review meetings. The literature has revealed that these periodic review meetings are essential to achieve organizational learning (Hudson et al., 2001). It was also found in the present study that the purpose is to improve services and customer satisfaction through feedback questionnaires and market research. It is known that the SME under observation applied performance measurement during strategic application that forms the basis for single loop learning. It has been found in the literature that the stronger form of organizational learning is through double loop learning which means that corrective actions is applied during

implementation of the strategy subsequent to evaluation (Argyris & Schon, 1978, cited by Buckmaster, 1999; Greenwood, 1998). Furthermore, it was found in the literature that the BSC approach encourages an organization to apply double loop learning (Soderberg et al., 2011). As the SME of the present study does not get involved with the BSC approach it is suggested that they may have performed double loop learning to a certain extent. The next sections will further investigate the activities regarding corrective and preventive actions.

Identification of Corrective Actions Activity

The *Operations and Board Director's* quotation related to the identification of corrective actions activity was:

"When strategies have been implemented we use the information collected during the monitoring of the project to evaluate it. We use these results to improve the project, or in future projects." (SE8)

It was observed through the interview with the *Operations and Board Director* that the SME sought to identify corrective actions as part of the evaluation process, such that it could improve further execution of the strategy or improve future project planning (SE8).

The *Business Development Director's* quotations were:

"When something goes wrong with the IT system we try to solve it ourselves internally and reduce the risk of this happening again. Based on experience we will try to avoid this happening again." (SE20)

"Every time something does not work, we calculate the cost of the losses, and reflect on that such that it does not happen again. We have active continuous improvement such that we do not only look to improvement when something does not work" (SE51)

Throughout the interviews with the *Business Development Director* it was found that IT was essential in the workings of the SME and its day-to-day operations. Because it is so critical, it was found that the SME sought to identify corrective actions such that when something went wrong it would not happen repetitively (SE20). This corrective action was part of a wider evaluation process through which they sought to stimulate continuous improvement (SE51).

The *Business Manager's* quotations were:

"*We have found that our main problem in strategy is its execution. This is because staff do not understand the changes that we are working towards. This is due to poor communication. We are starting a training program for managers to learn to communicate the objective of a strategy to staff.*" (SE30)

The interview with the *Business Manager* demonstrated an example of how the SME applied a corrective action to the problem identified, which was their strategy execution (SE30). As it was believed that this was due to poor communication, they initiated a training program to improve communication.

The *IT Manager*'s quotations were:

"*We are mostly a reactive organization. This is because we solve problems as we encounter them. We are proactive in organizational change, through a corrective approach*" (SE18)

It was found that the SME was very much an organization that made decisions based on the events that happened, and therefore was very much corrective in its approach rather than preventive (SE18).

Review of Actors' data

Several quotations have been identified relating to the activity of identifying corrective actions. As part of the evaluation phase of the strategy process, the

SME, according to the *Operations and Board Director,* identified corrective actions that took place to improve future strategy execution (SE8). The *Business Development Director* emphasized that the main approach to corrective action was to learn from mistakes in the form of continuous improvement (SE51) such that identified problems did not recur (SE20). In addition the *Business Manager* provided an example, where the SME had identified a problem in its strategy execution (SE30) that was due to poor communication, to which, as a solution, they offered a training program. A final observation was made during the interview with the *IT Manager* who claimed that the SME was more involved in solving problems correctively rather than attempting to take preventive action (SE18).

Discussion

In terms of understanding whether the SME in the present study performed double loop learning and how effectively the revision and learning phase was performed, it was found during the interviews that corrective actions took place through continuous improvement. By contrast, it has been found in the literature that SMEs do not apply corrective actions when errors are identified (Murphy & Kielgast, 2008) and that SMEs are not concerned with future strategic developments and thus have a reactive strategy (Argument, Harrison, & Wainwright, 1997 cited by Hudson et al., 2001). The present study found that the SME was involved in continuous improvement, and did not neglect corrective actions where possible. However, it may be able to more actively work towards identification of these corrective actions. In the literature it has been found that SMEs are usually more reactive in their approach than proactive/preventive (Jennings & Beaver, 1997). In one of the interviews the *IT Manager* stated that the problem-solving process was of a corrective nature and not preventive. This is similar to the findings of the literature.

Identify preventive action activity

The *Operations and Board Director's* quotation related to the Identify preventive action activity was:

"*When strategies have been implemented we use the information collected during the monitoring of the project to evaluate it. We use these results to improve the project or in future projects.*" (SE9)

According to the *Operations and Board Director* the SME sought for preventive actions during the implementation of strategy through the usage of information collected (SE9).

The *Marketing and Communications Manager's* Quotation was:

"*It is the feedback of our projects and related market data which we use to evaluate our strategy such that we can make proactive decisions*" (SE47)

The *Marketing and Communications Manager* explained that the SME was involved in proactive decision-making (SE47).

The *IT Manager's* quotation was:

"*We have experienced a high rate of change in technology which requires us to continually upgrade our hardware. We attempt to forecast future requirements to reduce our IT costs.*" (SE17)

The *IT Manager* explained that the SME attempted to take preventive actions through forecasting IT requirements in an attempt to reduce costs (SE17).

Review of Actors' data

A limited number of quotations were identified from the interviews related to the activity of identification of preventive actions. The *Marketing and Communications Manager* indicated that the SME was involved in identifying proactive actions through their decision-making process (SE47). It was found

that these preventive actions were defined through information collected (SE9). Nevertheless the *IT Manager* provided an example of a preventive approach, which was the usage of IT where future IT requirements were anticipated, with the intention of reducing costs (SE17).

Discussion

In the literature few references have been made to the activity of identifying preventive actions: however, some indications of preventive actions have been identified through the decision-making process, and decisions to reduce the cost of IT. References in the literature have indicated that SMEs are reactive in nature as opposed to preventive (Cagliano et al., 2001; Gilmore, 1966; Jennings & Beaver, 1997; O'Regan & Ghobadian, 2002). As SMEs have lower operating volumes they have been found to be less proactive (Augustine et al., 2012). A preventive approach to revision and learning is the most effective, as most SMEs do not have the human resources available through which they can have highly experienced and qualified staff to anticipate problems during the strategy execution.

The overall interpretation

A significant number of quotations were obtained from the interviews for this phase. The most often referred to activity was the control of strategy and organization performance, which referred to thirty six per cent of the quotations. It is believed that this activity produced such a large amount of quotations because it involved two aspects, which were the control of strategy and measuring its performance. The next largest per cent age was for the activity of collecting feedback, which amounted to twenty six per cent of total quotations. It was found that this activity was particularly of interest as the SME under observation was keen to evaluate customer satisfaction. The next largest activity by per cent age, revision and learning, only amounted to

eighteen per cent of the total. It was found that this activity was insufficiently performed as the previous two activities were based on revision and learning activity. The activities for identification of a corrective action and a preventive action were quoted thirteen per cent and eight per cent respectively, which demonstrates that they were not actively applied, especially the identification of preventive action, (see table 6.4).

Table 6.4: An overview of how involved the SME is in every activity for evaluation phase

	Operations and Board Director	Business Development Director	Business Manager	Marketing and Communications Manager	IT Manager	Percentage
Control of Strategy and Organization Performance	• Project implementation evaluation (SE7) • Quarterly monitoring meetings (SE42) **2**	• Measurement of departmental performance (SE22) • IT systems risk evaluation (SE50) **2**	• Weekly strategy control meetings (SE13) • Raise awareness of short-term objectives (SE19) • Strategy control through performance measurement (SE24) • Review strategy implementation results (SE49) **4**	• Data collection during strategy (SE4) • Weekly strategy performance meetings (SE15) • Balance sheet and survey to measure performance (SE26) • Customer feedback collection (SE44) • Strategy evaluation with project data and feedback (SE46) **5**	Strategy control based on results **1**	36%
Gathering Feedback	• Internal feedback at meetings (SE5) • Sales stats discussed monthly (SE31) • Quarter annual review (SE40) **3**	• Obtain customer feedback (SE21) • Feedback through questionnaire (SE35) **2**	**0**	• Monitoring customer requirements and satisfactions (SE2) • Measure organizational performance (SE25) • Collecte qualitative and quantitative data (SE33) • Collect customer feedback (SE43) • Customer service improvement (SE45) **5**	**0**	26%

Revision and Learning	• Revision of the business process (SE32) • Quarterly progress evaluation meetings (SE41)	2	• Learning from staff feedback questionnaire (SE36)	1	• Strategy progress revision (SE14) • Market research and competitive analysis for strategy revision (SE39) • Evaluation through monitoring results (SE48)	3	• Improve services to increase customer satisfaction (SE3)	1		0	18%
Identify Corrective Action	• Improve strategy execution (SE8)	1	• Reduce risk of IT system down time (SE20) • Evaluation for continues improvement (SE51)	2	• Identification of communication problem (SE30)	1		0	• Deci-sion-making process is corrective (SE18)	1	13%
Identify Preventive Action	• Preventive actions through collected information (SE9)	1		0		0	• Proactive decision-making (SE47)	1	• IT requi rements forecasting (SE17)	1	8%
Total	9		7		8		12		3		100% 39

Summary

The evaluation of strategy is an important phase within the strategy process, and is often neglected. To evaluate whether the SME in the present study was involved in this phase the following activities were observed during the interviews: strategy control and performance measurement, collection of feedback, revision and learning, identification of corrective and preventive action. It was found, based on the per cent age of quotations for each activity, that the SME in the present study was mostly involved with control and measurement of strategy and collecting feedback. To a lesser extent the SME performed revision and learning with some identification of corrective actions and almost no identification of preventive actions.

It has been found in the literature that SMEs rarely exercise proper strategic control (Oakes & Lee, 1999). Similar findings were noticed within the present study. The literature also suggests that the BSC approach can be used to improve strategic control. Because the BSC approach was not used by the SME in this study, it is likely that insufficient strategic control was performed. The second aspect of strategic control is the measurement of performance through which strategy is controlled. In the literature it has been reported that SMEs have limited resources, which are usually only sufficient for the implementation and not the measurement of performance (Tenhunen et al., 2002). The SME in the present study was able to allocate an IT system which they used to record data collected during the strategy process for the purpose of measuring performance.

The collection of feedback is critically important in the evaluation phase of the strategy process and forms part of the controlling of strategy (Leslie, 2008). While it was found that there were several mechanisms for staff to provide feedback on strategic implementations, the results were not communicated to

the staff, which has been identified as important in the literature. The most important aspect of feedback is the factors on which it reports. The SME in this study used both qualitative and quantitative methods for strategic control and performance measurement; however, the literature indicates that a BSC approach also improves the collection of feedback (Russo & Martins, 2005). This is because it will enable the organization to collect the right feedback for strategy evaluation. In the present study the BSC approach was not being used, and although several feedback processes were applied it is questionable whether the collected information enabled appropriate revision and learning.

The revision and learning was performed through periodic review meetings in the SME under observation, which according to the literature is essential (Hudson et al., 2001). The SME only performed limited revision and learning, and according to the literature they engaged with single loop learning, and only to a certain extent into double loop learning, through the identification of corrective and preventive actions.

The literature has identified that SMEs are not often involved in the application of corrective actions (Murphy & Kielgast, 2008), as they are not concerned with strategic development resulting from reactive actions (Argument, Harrison, & Wainwright, 1997 cited by Hudson et al., 2001). The SME in the present study was involved in applying corrective actions, even though the *IT Manager* stated that they were more corrective than preventive, which reflects the literature for SME organizations (Jennings & Beaver, 1997). Nevertheless some minor preventive decisions were being made to reduce the cost of IT. Due to the nature of SMEs, they usually lack the human resources necessary to apply this activity (Augustine et al., 2012).

Section five: Emergent strategy

Section five: Emergent strategy

Introduction

The final section of this chapter seeks to evaluate how the SME in the present study dealt with emergent strategy. It has been found in the literature that emergent strategy includes actions that were not planned during the formulation phase and were not initially intended. These actions can be instantly implemented in some cases, however for more complex situations it is necessary for the organization to go through a reiteration of the strategy process, which allows for the reformulation of the strategy and merges the formulation and implementation phases of the strategy process into strategy formation. This can be referred to as a strategy phase on its own, although it consists of other strategy phases. It is during this stage that corrective and preventive actions identified throughout the evaluation of the strategy are also applied.

Strategic change management activity

Within the strategic phase of emergent strategy the first activity that is examined is strategic change management. *The Operations and Board Director's* views were:

"The economics are most influential on us. Generally, our business is influenced by the global financial crisis. The economic environment ensures changes happen fast, this forces us to have to review our internal environment so that we can endure those changes and continue our business" (ES4)

"Board meetings are very formal, and used to gain an overview of the changes that impact the business. The business change developments are constantly reviewed through a business case. (ES22)

According to the *Operations and Board Director* the SME in the present study involved in strategic change and was especially concerned with the external factors related to technology and the economy, which were most influential in terms of their impact on the SME (ES4). When the external environment changed the strategy had to be managed. It was found during the interview with the operations board of directors that the strategy change was managed through a formal steering group, and was done through reviewing the business cases (ES22).

The *Business development director*'s quotations were:

"The business is impacted by competitors who are considered to be an external factor. The policies and decision-making of the higher levels of management are affected by the economic situation." (ES3)

"The economy and technology affect how the organization sustains itself. It is important to understand how trends determine our future in the long-term, so that the right decisions can be made in response to external changes." (ES5)

"Our organizational strategy is defined by upper management. However, we have observed that despite several strategic implementations, organizational performance has not improved." (ES9)

The interview with the *Business Development Director* revealed that decision-making and top-level management policy needed to be changed according to changes in the external environment, such as market conditions and the financial crisis (ES3). He emphasized especially economic and technological changes in the external environment (ES5). Furthermore, he stated that through effective strategic change management it was possible to improve organizational performance (ES9).

The *Business Manager's* quotations were:

"It is about being able to understand the market and how we can take advantage of it, even if this means that we have to adapt our strategy." (ES6)

"We are so constantly exposed to change within the organization, having to adopt new systems and projects, that I believe change has become part of our culture." (ES8)

The company reacted quickly to changes in the business environment, and discussed and reviewed reports on these changes in weekly morning meetings (ES15).

The findings based on the interview with the *Business Manager* demonstrated how the SME in the present study needed to be involved in strategic change management to maintain its future (ES6). She stated that change management was part of the day-to-day routine due to the nature of the business (ES8). The organization reacted quickly to changes based on their weekly review meetings (ES15).

The *Marketing and Communications Manager's* quotations were:

"Competition is increasing; we develop through qualified human resources and maintaining relationships with clients and competitors. Also we are actively working to solve the problem about decreasing markets by changing strategy to be more alert of market needs (ES1).

"Strategic management is crucial to the performance of the organization. As the competition has become tougher, strategic management is our main tool to drive the business forward. Strategic management can also be flexible." (ES14)

"Feedback from market data and project data shape the emergent strategy to enable us to behave proactively" (ES20)

The *Marketing and Communications Manager* mentioned the increasing levels of competition and the decreasing markets, which require adaptation of the strategy accordingly (ES1). Strategic management must be flexible and able to adapt to the changing environment to increase organizational performance (ES140). Furthermore, strategic management changes emerge from market and project data (ES20).

Review of Actors' data

During four of the interviews of the present study, several quotations of change management activity related to emergent strategy. It was found that strategic change usually occurs as a consequence of externally changing variables to which the organization reacts internally to ensure its future existence (ES6). The changing factors that most influenced the SME in the present study were technological and economical (ES4, ES5), as well as market conditions such as the financial crisis (ES3, ES1). Change management was constantly taking place (ES8), and weekly review meetings to change the strategy were held for more formal discussion (ES15). Strategic management was performed through the revision of business cases (ES22), market and project data (ES20), with the purpose of increasing organizational performance (ES22, ES9). Therefore, strategic change management was considered an essential activity to sustain the organization.

Discussion

According to Mintzberg, who defined the concept of 'emergent strategy', the best strategies emerge out of changing circumstances (Beer et al., 2005). However strategic change is a challenging activity for managers, and is considered a major issue (Johnson et al., 2003). Strategic change management is viewed as a means to manage increasing organizational complexity (Kotter, 1995). During the interviews it was found that most of the interviewees

focused on the external factors that influence organizational change, forcing them to realign internal factors. The external factors were summarized as being technology, the economy, market conditions, etc. However, there was no discussion about a specific approach to managing the change of strategy. In the literature a method to manage this change is identified (Pettigrew, 1997), which has been described as consisting of the interaction between three dimensions. These dimensions are: what strategy is to be changed; the purpose for which the strategy is changed and how; and the third dimension is the organizational context or where the strategy is changed. Even though the SME was not applying this approach, it was noticed that they were very aware of the context of changes, and the purposes for which they had to make changes. Nevertheless it could not be understood from the quotations whether the SME was aware of the 'what' of emergent strategy, or the implications of the objectives, purposes and goals of the strategy.

Strategy reformulation activity

Strategy formulation is in principle the same as the strategy formulation phase, but is referred to as an activity to deal with emergent strategy, which is part of the strategy formation phase. This section investigates whether the SME in the present study was involved in this activity and how effectively it was applied. Through this analysis it should become clearer how the SME addressed changes that were identified in the external environment and what implication this had on existing strategy, in addition to the changes made to it, such that the organization continued to be competitive in its target market.

The *Operations and Board Direct*or's quotations were:

"The services are reviewed through feedback collected to ensure customer satisfaction. The external analysis also enables the organization to understand new opportunities and how we can take advantage of them." (ES2)

The *Operations and Board Director* provided a quotation pertaining to the reformulation of strategy at the SME. Her comments demonstrate the importance of the analysis of the external environment to enable actions to be made accordingly (ES2).

The *Marketing and Communications Manager's* quotations were:

"The company gathers feedback from its customers in order to maintain good relationships with them. The company holds regular meetings to discuss threats and priorities for improving the business, and strategy is revisited informally as well as in formal management meetings" (ES18)

"Feedback from market data and project data shape the emergent strategy to enable us to behave proactively" (ES21)

It was found during the interview with the *marketing and communications manager* that the SME was working towards improving its business strategy during management meetings (ES18). Furthermore, market data and project data were used to define emerging strategy (ES21).

Review of Actors' data

During the investigation of the present study it was found that the SME was only involved to a limited degree in the strategic activity known as 'strategic reformulation'. The *operations and board director* emphasized the importance of the analysis of the external environment to formatting the organization internally, so that it could formulate emergent strategy (ES2). According to the *Marketing and Communications Manager,* strategies were improved during management meetings (ES18) through the use of market and project data to define emergent strategy (ES21). These activities demonstrate how the SME in the present study was somewhat involved in reformulating emergent strategy.

Discussion

A limited amount of literature has been identified on the activity of reformulation. Reformulation is part of the formation process involving formulation and implementation of strategy and depends on evaluation. It is performed as part of the formulation of strategy phase discussed earlier in this chapter. In the literature, some scholars suggested that strategy reformulation involves the revision and reformulation of strategy for an organization's products, services, markets, and technologies to increase competitiveness. The importance of strategy reformulation has been recognized in the literature (De Toni et al., 2011; Dean, 1986; Krzakiewicz & Cyfert, 2012; Sáez-Martínez & González-Moreno, 2011). Although limited evidence on strategy reformulation was found, it is known that the SME in the present study formatted its resources internally as a means of strategy reformulation reacting to changing external factors (ES2). They used project and market data during this process: however, no formal technique for strategy reformulation was identified.

Application of corrective action activity

The activity referred to as the application of corrective action takes place during the formation of strategy. Once the strategy implementation is evaluated then corrective actions are identified, and it is subsequent to reformulation that these actions are implemented. In this section, the present study seeks to evaluate to what extent the SME was applying corrective actions.

The *Business Development Director's* quotation was:

"*We will handle it straightaway, if we can solve it. If that this is not possible we will work towards reducing the problem until it can be solved, possibly by involving a third party. (ES12)*

When questioning the *Business Development Director* about the application of corrective actions, she confirmed that when possible these actions were brought into practice as soon as possible, subject to feasibility (ES12).

The *IT Manager's* quotation was:

"*The company is a reactive organization; problems are solved and requirements are implemented. A proactive approach exists only in terms of organizational change, as a corrective approach*" (ES11)

The *IT Manager* explained during the interview that the SME was a reactive organization, with organizational change procedures achieved through a corrective approach (ES11).

Review of Actors' data

Throughout the interviews it was clear that the SME was involved in the identification of corrective actions. This section has taken this to the next level so that a better understanding can be formed of the application of these corrective actions. It was found through the interview with the business development manager that corrective actions were applied whenever possible (ES12). The *IT Manager* explained some of the procedures that corrective actions go through, despite the SME being predominantly a reactive organization (ES11).

Discussion

Based on the interviews that have been completed for the present study it was found that the SME performed corrective actions when possible, when they had the means to do so and the situation allowed for correction (ES12). The SME applied corrective action insufficiently, and those actions that were applied were usually reactive (ES11). It is known from the literature that SME organizations are not usually involved in the application of corrective actions,

which is largely ascribed to the low volumes that they operate on (Augustine et al., 2012). It would be better for organizations to adopt a formal approach to the application of corrective actions, such as ISO 9000.

Application of preventive action activity

The activity referred to as the application of preventive action takes place during the formation of strategy. Once the strategy implementation is evaluated then preventive actions are identified, and it is subsequent to the reformulation that these actions are implemented. In this section, the present study seeks to evaluate to what extent the SME was applying the identified preventive actions.

The *Business Development Director's* quotation was:

"Every time something does not work, we calculate the cost of the losses, and reflect on that to make sure that it does not happen again. We have active in continuous improvement so that we do not only look to improve when something does not work "(ES24)

According to the *Business Development Director*, the SME in the present study implemented preventive actions in order to ensure that the same problems did not reoccur (ES24).

The *Marketing and Communications Manager's* quotation was:

"Feedback is gathered from market data, project data shape the emergent strategy to enable us to behave proactively" (ES19)

The Marketing and Communications Manager stated that emergent strategy was formatted through feedback so that problems could be anticipated (ES19).

The *IT Manager's* gave an example of preventive action, saying that:

"We are now providing staff IT training to reduce complaints" (ES17)

The *IT Manager* thus provided an example of a proactive approach to IT complaints through training (ES17).

Review of Actors' data

It was found in the previous section of strategy evaluation that little or no identification of preventive actions took place within the SME. In this section some of the references obtained during the interviews demonstrating the application of preventive actions were reviewed. The *Business Development Director* stated that the SME was involved in implementing preventive actions so that the same problems did not reoccur (ES24). This was based on feedback that enabled problems to be anticipated (ES19). As an example the *IT Manager* explained that there were some IT related problems because some staff were unable use the IT systems, therefore related training was implemented to ensure new staff would be able to use the IT systems immediately (ES17). Although it was previously found that the SME in the present study was mostly reactive, some forms of proactivity were found.

Discussion

Although in the previous section almost no quotations were obtained regarding the identification of preventive actions, it was found that some preventive actions were implemented. However, this was not common practice within the SME. This was due to the lack of resources within the SME, as has been identified in other sections of this chapter, and this is one of the main obstacles that the SME faces during the strategy process. Furthermore, there is a close relationship in the application of corrective and preventive actions in the SME and therefore it is necessary that a formal approach be applied, such as ISO 9000.

The overall interpretation

The counting of the quotations for each of the activities for the section of emergent strategy in this chapter has revealed that most of the focus was on strategic change management. This amounted to more than half of the quotations. This certainly demonstrates that the SME in the present study was aware of the need to manage strategic change. The counting resulting from the other activities demonstrates that the SME performed some related actions, which were discussed during the interviews by multiple actors; however, these actions were insignificant. Preventive actions were mentioned more often, but it was found that more corrective actions were made; therefore this result is an anomaly (see table 6.5).

Summary

The phase described as emergent strategy in this chapter consists of four activities. It was found through counting the activities in this section that strategic change management was the most commonly performed activity. Strategic change management is considered a major issue according to the literature, and although the SME performed this activity to a certain extent, based on the activities that they identified as changing as a result of the external environment, the literature provides no formal approach to performing this activity.

Other activities were referred to less frequently, with an average of ten per cent. Strategy reformulation, which has been found to be critical in the literature for emergent strategy to take place, was only performed within the SME to a limited extent, partially due to the lack of resources. Similarly, the implementations of corrective and preventive actions were insufficiently performed. For these activities to be part of organizational strategy an approach is required to implement a standard such as ISO 9000, enabling the SME to more effectively deal with emergent strategy.

Table 6.5: An overview of how involved the SME was in every activity for emergent strategy

	Operations and Board Director	Business Development Director	Business Manager	Marketing and Communications Manager	IT Manager	Percentage
Strategic change management	• Technological and economic factors (ES4) • Formal steering group to review business cases (ES22) — 2	• Decision-making and top level management policy (ES3) • Economic and technological change (ES5) • Improve organizational performance (ES9) — 2	• Sustainable organizational future (ES6) • Change management is day-to-day routine (ES8) • Fast reaction to change through weekly meetings (ES15) — 3	• Increasing competition (ES1) • Flexible strategic management to increase performance (ES140) • Change management through market and project data — 3	0	58%
Strategy reformulation	0	• Reformulation depends on external environment (ES2) — 1	0	• Management meetings to improve business strategy (ES18) • Market and project data define emergent strategy (ES21) — 1	0	12%
Application of corrective action	0	• When possible corrective actions are applied (ES12) — 1	0	0	• Procedures of corrective actions — 1	12%
Application of preventive action	0	• Preventive action to overcome problems (ES24) — 1	• Emergent strategy through feedback (ES19) — 1	0	• Training to overcome IT problems — 1	18%
Total	2	5	4	4	2	100% 17

Chapter seven: Conclusions

Introduction

The following chapter provides the conclusions to the current study. Based on the answers to the research questions a contribution to knowledge is presented which includes an integrated framework of the BSC, SWOT analysis and QFD tools. Justification is grounded on the literature, and the analytical findings that demonstrate how the framework may improve the strategy process for SMEs by addressing inherent difficulties within the strategy process. The chapter includes the limitations of the study and directions for further research.

Whilst the literature lays out a systematic, sequential process the picture presented of the case study SME is somewhat different. The process that the SME uses is messy; it is not systematic; it is not sequential and is not clear. The reasons for this may be summarized as follows:

- Ambiguous communication of information
- Inability to manage development, growth, and innovation without a flexible approach
- A lack of systematic methods for defining strategy
- Importance/ seeking of new opportunities
- Short-term cash flows
- High risk in the SME

Answer to the research questions

Answering the first question requires a summary of the key strategic activities that were performed by the SME under study and explains the actions the SME performed during these activities. This is followed by the second part of the question, which looks at what strategic tools were used to support these activities. The first question is then summarized through answering how the SME performed the strategy process and how this process evolved. Once the first question is answered, the second question is addressed. The answer to the second question is to demonstrate how a strategic tools framework based on a BSC, SWOT analysis and QFD can support the strategy process. Answers to these questions are a contribution to knowledge (the strategic tools framework that will be presented in the following section).

Q1a What are the key strategic activities in the SME and how are these activities performed?

The researcher found that in **the environmental analysis** phase the SME was most involved in the analysis of the external environment. This activity was performed to identify opportunities in the external environment and monitor external change as well as customer satisfaction. This was achieved through improving communications with customers in order to perform long-term planning, data collection strategies of market data, regulations and legislation as well as customer satisfaction. Internal analysis was the second most performed activity in the SME, and this activity identified its internal resources. The internal analysis activities were performed when results of the external scans were completed, then the SME's limited resources were allocated in order to take advantage of these external opportunities. Internal analysis was performed through discussion and was weighted to determine its importance; through this weighting decisions were taken.

The strategic fit activity was the third most performed within the phase of environmental analysis. Through this activity the SME worked to find out how it was possible to apply its internal resources to the external opportunities that were targeted. They did this by checking whether they had the required internal resources for the opportunities that were identified as well as searching for external opportunities that could be achieved based on internally available resources. The SME communicated as much as possible with its customers to gain a better understanding of their needs so that they could plan ahead to take advantage of future opportunities. Moreover, they also worked towards targeting customers as accurately as possible to maximize the advantage that they made of their opportunities. The least performed strategic activity within the SME was the evaluation of opportunities. Although the literature considered this activity critical for successful environmental scanning, the SME was less concerned with this activity, probably due to the fact that they were extensively analysing the external environment and did not perceive a need to perform the activity of evaluating opportunities.

Within this research three key activities of the **strategy formulation** phase have been grouped together: vision and mission; setting of objectives; setting of goals. These three activities were related to defining how the SME was planning to progress through its strategy. The activity most often performed by the SME was the setting of objectives. The SME was working towards improving its attainment of short-term objectives, and this advanced strategic implementation and enabled the attainment of long-term goals. The SME set out its short-term objectives as an action plan, which enabled clear communication within the organization, both to the finance department that needed to confirm the objectives, and the staff who would implement the short-term objectives. Some examples of short-term objectives within the SME were: reducing risk when possible; maintaining a hundred present

uptime and optimising IT systems for day-to-day operations. These were key actions that demonstrated how the SME was performing the strategic activity of setting objectives.

The second most performed activity within the formulation phase was the setting of long-term goals. Within the SME it was the directors who most commonly performed the task of setting long-term strategic goals. The goals demonstrated how the business would expand in the future as well as making sure that these long-term goals fitted with the financial plans of the SME. Some examples of long-terms goals were increasing customer service standards through usage of IT systems and providing services to public sector service providers. The third most performed activity within this group was the defining of vision and mission. This activity was the least performed within the SME, possibly because it was an activity performed only by the directors of the SME. During the defining of the vision and mission the state in which the SME saw itself in the next five to twenty years was specified. Other than that, limited time was spent on defining the vision and mission of the SME.

Two further activities (strategic choice and strategic planning activity) were performed with roughly equally frequency within the SME, and the strategic choice activity in particular demonstrated which strategic choices were made within the SME. The researcher found that the SME made strategic choices at the start of a project by adopting different approaches to take advantage of external opportunities. Through strategic choice the SME improved the decision-making process, while through data collection, strategic choice was enabled. Strategic choices were directed towards making less risky choices. However, the SME did not really have a wide range of choices: the decisions were made out of the necessity to survive in their market, rather than as a luxury. Once choices and decisions had been made, the strategic planning

activity was started. Strategic planning was done by defining the actions that the SME would undertake to attain its objectives. Through defining how the objectives were to be attained, the resources to be used were specified in detail, and IT was used extensively during the planning stage. Once the strategic plan was defined it was executed.

The subsequent phase is known as the **strategy implementation** phase. Out of the five strategic activities that were identified as being performed by the SME, the strategy execution activity was performed most often. Generally, the directors formulated the strategy, and when they had communicated it, execution took place. The main aim was to ensure successful strategic implementation, and success was subsequently determined through measuring key factors and quarterly monitoring. Strategy execution played a key part in supporting implementation as well as in recording performance measurement data. Some examples of how the SME executed its strategy were through digitalising its business processes and providing their services to the public sector.

The second most performed activity for the implementation phase of the strategy process was the implementation of strategic tactics, which were the specific techniques used by the SME for executing its strategy. In this regard, IT improvement was most frequently used as a tactic, in order to meet the company's business requirements, enable day-to-day operations, reduce the budget, and meet strategic objectives. Specific software packages were also used to meet long and short-term objectives, while other tactics involved mostly sales and marketing initiatives to increase the customer base and also increase revenue. Marketing research was implemented as a tactic to better understand customer needs; other tactics were mainly focused on reducing the cost of organizational operations.

The next most common strategic activity was the communication of strategy. It was found that there was a significant amount of communication taking place within the SME, and strategy was communicated to managers for implementation as soon as it was formulated by the directors. The managers in turn communicated specific execution tasks to the staff within their department. However, most of the communication within the SME was in the form of feedback rather than communication of targets, objectives or the success of strategic implementation. Furthermore, the nature of the feedback had a tendency to inhibit strategy execution. The departmental staff were able to communicate their feedback during weekly meetings with the managers, and the managers also had weekly meetings with the directors. When an urgent matter arose they discussed it in private.

The final three activities were least often performed within the strategy implementation phase; however, they were related in nature. These strategic activities concerned the alignment and allocation of organizational resources, specifically human resources and budget. The alignment of human resources with strategic activities, prioritised because it was found to be an area of strategy execution problems. Human resource development initiatives such as change leadership programs were implemented to train staff. In addition, there was a focus on how HR requirements could be better understood. The SME valued qualified IT staff very much, as there was a lack of such staff who were able to work with their IT systems.

The alignment of the budget was a strategic activity within the SME that was critical because the company had difficulties maintaining the cash flow of its day-to-day operations. This was due to a lack of proper budget management; the most important aspect in budget alignment was to ensure a return on investment. Therefore the marketing and sales targets were closely monitored

and the SME worked towards cost reduction of its IT systems. The alignment of human resources and budget formed an integral part of resource allocation within the SME, and the allocation of resources mostly depended on external opportunities. IT resources were allocated within the SME to support business functions and to meet strategic objectives.

The final stage of the strategy process was the **evaluation of the strategy**. The SME performed strategic evaluation mostly through controlling the strategy based on organizational performance. During this activity the SME evaluated its projects in order to assess if short-term objectives were being accomplished. For example, IT systems risk was evaluated so that the strategy implementation results could be reviewed. The evaluation was achieved through performance measurement based on the data that was collected during the implementation phase. These data were derived from the balance sheet and from questionnaires, and were used to measure departmental and organizational performance. Weekly meetings took place to review these implementations, and quarterly meetings were held for monitoring purposes.

The second most often performed activity in the phase of strategy evaluation and control was the gathering of feedback. This activity took place between the control of strategy and performance measurement. The gathering of feedback was performed at the SME through both internal and external means. Internally a feedback questionnaire was circulated to the staff, while externally they tried to collect customer feedback so that customer services could be improved. It is through this data that the SME was able to measure strategy performance, strategy control and ultimately evaluate strategy.

A significant aspect of strategy evaluation was that strategic implementations were reviewed. It was important to consider which actions were taken as a consequence of that revision to improve the strategy. The strategic activity of

revision and learning sought to learn from collected data (such as customer and staff questionnaires) in a way that enabled the business processes and strategy to be reviewed. This revision was performed through a quarterly monitoring process. To be able to perform revision and learning it was necessary for the SME to have identified corrective and preventive actions. However, the findings indicated that the SME was insufficiently involved in these activities, primarily due to a lack of resources.

Q1b Which strategic tools were used in the SME during the strategy process?

The first part of question 1, referred to as '*question 1a',* aimed to identify what the key strategic activities were and how the SME used them. Further investigation looked at whether the SME used any tools in the process of performing those strategic activities. This section answers the question 'which tools were used in each activity of the strategy process phases'. Some context is provided to better understand why and how those tools were used.

During the **phase of environmental analysis** several strategic tools were applied. The external analysis that was most extensively exercised within the SME involved the use of SWOT analysis and cost benefit analysis. Although SWOT analysis was applied informally, it enabled the SME to define external threats and opportunities and relate them to internal strengths and weaknesses. Furthermore, cost benefit analysis was used to determine whether the opportunities identified were worth their return on investment. SWOT analysis was also used to evaluate internal strengths and weaknesses, and the results were weighted to determine their importance. However, the intuitive nature of this approach and the lack of formal SWOT analysis meant that these strategic activities were not very efficiently performed.

Within the strategic activity 'evaluation of opportunities' the SME used two tools. Firstly, it used *what if scenarios* to evaluate the opportunities identified

in the external environment. This was done through evaluation of what the consequences would be of pursuing the opportunity. Additionally, a risk analysis was applied to assess that the risk of pursuing the external opportunity was within the means of the SME. Once a strategic opportunity had been evaluated, the SME defined its strategic fit. Although actors made no explicit mention of the use of strategic management tools in the context of performing the strategic fit activity, it is clear from the interviews that the SME used SWOT analysis for this activity as well.

The SME used several strategic tools for the environmental analysis phase. Most of the activities had a specific strategic tool to support the activity, and SWOT analysis was used throughout the phase as it was able to provide support for the strategic activities identified. However, as the SME used this tool only in an informal sense, they did not take advantage of its full capability, which could have consequences in later stages of the strategy process, such as its formulation and implementation.

The **formulation phase** of the strategy process involved some strategic tools in terms of implementation: however, there was no use of tools for defining the vision and mission of the organization. The setting of long-term goals depended mostly on the output of SWOT analysis implemented during the environmental scanning phase. Additionally, business cases were used, and the setting of short-term objectives was supported by the action plan that formed a part of these business cases. It was through the action plan that short-term objectives were defined, so that longer term goals may be attained.

The definition of the strategic long-term goals and short-term objectives led to strategic choices. Within the SME key strategic choices were made through business cases, which enabled the SME to evaluate how they would take advantage of external opportunities. Once the strategic choices had been made

strategic planning was initiated, and the main tool used for strategic planning was the action plan. The action plan was used to define the action that the SME took in the short-term to define how the business achieved its long-term goals.

Limited usage of strategic tools for the fulfilment of strategy formulation was found within the SME. In fact, strategy formulation depended on the SWOT analysis results of the environmental scanning phase. Other tools used during this phase were business cases and action plans. Once the strategy was formulated, the action plans were defined.

For the SME in the present study some strategic tools were used to implement the strategy. The execution of strategy was supported through a customer relationship management (CRM) system that was custom built for the SME. Through the CRM system the SME was able to track clients through the client life cycle. Cost benefit analysis was used to align the finances of the SME with the execution of its strategy, as well as to reduce the cost of strategic implementation. Telesales was a strategic tool used for marketing. The strategic activity of communication was based on reporting tools.

The **evaluation phase** was mainly dependent on the activity of controlling strategy through performance measurement. The SME performed this strategic activity through the use of its balance sheet but also used surveys, which enabled the SME to monitor the performance of strategic implementations. The SME frequently used questionnaires as a strategic tool to gather feedback from staff and also from customers. When the feedback was collected, an analysis was applied to review the strategy and learn to improve future implementation. Although there were no specific tools for the identification of corrective action, the SME performed 'requirement forecasting' for their IT operations as a preventive action to reduce costs in the long-term.

Q1 What is the strategy process and how does it operate within the SME?

During this study it was observed that the SME was involved in several different aspects of strategy as defined in the literature review. This included several phases of the strategy process, and the activities within each of these phases. While some activities were more frequently performed than others it was found that the SME used certain strategic tools to support its strategic activities. However, the findings indicated a lack of documentation with regard to formal strategy have negative consequences on organizational performance. This means that strategies are less thoroughly formulated, and therefore problems occur at the stage of communicating the strategy for implementation and this leads to an inability to perform an evaluation against the original targets of the formulated strategy.

The SME in the present study did not perform strategy formally, and there is a lack of documentation on the strategy implementations as a consequence of insufficient resources. As a result it was found that the SME did not have a coherent strategy process, as identified in the literature. Instead it was found that activities were performed in a very ad-hoc manner. Although the SME performed several of the identified strategic activities, they are performed as and when required and not necessarily according to the strategy process illustrated in the conceptual framework (figure 5.4, p.173).

Figure 7.1 shows the revised conceptual framework (p.339), presented to reflect the strategy process within the SME in the present study. Although it was not possible to accurately capture the sequence of activities that the SME went through when performing its strategy, in general terms the four phases of the strategy process were followed. However, due to the lack of formal strategy the SME had a large amount of emergent strategy which it failed to

deal with effectively, and in future it should work to overcome this by implementing a more coherent and formal approach.

The revised conceptual framework of strategy process shows the aspects that were most commonly performed within the SME through the size by which they are depicted. The size is determined by how often the phase or an activity within the phase was mentioned within the interviews. Table 7.1 records how much organizational effort was directed towards each of the strategy process phases. Subsequently, in 7.2 the count for each activity is displayed and expressed as a percentage of the total amount. The figures in table 7.1 and table 7.2 are used within figure 7.1 to represent the size with which each of the phases and activities are displayed: the greater the frequency with which an activity was mentioned, the more the SME may be inducted to have been involved in the phase or activity[2].

The researcher believes that the instrument does not introduce a frequency bias because the same numbers of case study questions were asked for each phase of the strategy process (See appendix A).

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[2] The researcher also took into account a qualitative interpretation of what the actors said during the interviews, as well as taking into account the frequency with which involvement in each activity was mentioned

Table 7.1: The count for each strategy process phase is displayed in a percentage of the total amount

Phase	Count	Percentage
Strategy implementation	45	27%
Strategy evaluation	39	23 %
Environmental Analysis	34	21%
Strategy formulation	31	19%
Emergent strategy	17	10%

Table 7.2: The count for each activity is displayed in a percentage of the total amount

Strategic activity	Count	Percentage
Analysis of External Environment	15	9. %
Analysis of Internal Environment	9	5 %
Evaluate opportunities	2	1%
Strategic fit	8	5%
Development of mission and vision statements	3	2%
Setting goals	8	5%
Setting objectives	10	6%
Strategic choice	5	3%
Strategic planning	5	3%
Alignment with Human Resources Activity	6	4%
Alignment of Budget with Strategy Activity	5	3%
Allocate Resources Activity	3	2%
Strategy Execution Activity	15	9%
Implementation of tactics Activity	9	5%

Communication strategy Activity	7	4%
Control of Strategy and Organization Performance	14	8 %
Gathering Feedback	10	6%
Revision and Learning	7	4%
Identify Corrective Action	5	3%
Identify Preventive Action	3	2%
Strategic change management	10	6%
Strategy reformulation	2	1%
Apply corrective action	2	1%
Apply preventive action	3	2%

Figure 7.1: The revised 'messy' framework of strategy process'

Environmental scanning

External analysis

Internal analysis

Strategic fit

Evaluate opportunities

Mission and vision

Strategy formulation

Setting goals

Strategic planning

Strategic choice

Setting objectives

Apply preventive action

Apply corrective action

Strategy reformulation

Emergent strategy

Strategic change management

Identify Preventive action

Human resources alignment

Gathering feedback

Control and performance

Strategy execution

Resource allocation

Strategy evaluation

Strategy implementation

Revision and learning

Communication

Budget alignment

Identify Corrective action

Strategic tactics

How may a normative BSC strategy framework [along with other business tools (QFD and SWOT analysis)] be used to support the strategy process in SMEs?

To answer the research question of whether the BSC framework, QFD and SWOT analysis may support the strategy process in SMEs, the following section will summarise: first, from the literature review, the most common weaknesses of SMEs in performing strategy. Second, the actual findings of the research regarding the strategy process in the SME (for example: Ambiguous communication of information, and a lack of systematic methods for defining strategy, etc.). Differences will be highlighted between the *actual findings* of the research and existing literature. Finally how in the literature BSC framework is used to overcome the identified weaknesses (based on findings of the present study and existing literature) is presented. Then the research question will be answered based on the literature from chapters three and four that discussed the BSC, and other business management tools such as SWOT analysis and QFD, based on the merits of these strategic management tools.

- **Ambiguous communication of information**

The literature reveals that SMEs have problems in the unambiguous communication of information (Berger & Udell, 2006). The communication of strategy is critically important to make implementations consistent with how the strategy was initially formulated. Furthermore, accurate communication is critical during the decision-making process and is considered a long-term success factor for SMEs to be able to survive (McGovern, 2006; Spillan & Ziemnowicz, 2003). These examples from the literature explain the importance of the clear communication of strategy within SMEs.

The present study found that although the SME had defined communication channels between directors and managers, it was found that the problem in

strategy communication was one of insufficient communication rather than ambiguous communication, in contrast to the two problems of strategy communication identified in the literature. Therefore, strategy was not executed as originally formulated. Additionally, there was informal communication of strategy prior to strategy execution which meant that formulation was not fully accomplished; this had consequences on the implementation of strategy. Informal communication existed between the different levels of the SME as well as the different departments.

Communication is a critical factor for achieving strategic success, and the BSC has been demonstrated to be a strategic tool that encourages communication (Kaplan & Norton, 2004; Malina & Selto, 2001). Furthermore, through formulating strategy with the BSC the communication of strategy becomes more effective (Tapinos et al., 2011) through improved communication between top level management and operational management (Atkinson, 2006). According to Othman (2006), organizations that implement the BSC see most improvement in their communication of strategy. Whether the problem is that SMEs are communicating ambiguously or insufficiently, the implementation of the strategic tool BSC may improve communications and overcome problems related to strategy communication.

- **Inability to manage development, growth, and innovation without a flexible approach**

SMEs in particular have difficulties of organizational development, managing growth and continually innovating to stay ahead of competitors. However, SMEs are able to gain such competitiveness through ensuring a flexible approach (Dean, 1986). Operational flexibility in SMEs can be achieved through strategic planning (Rudd et al., 2008), and it is through strategic planning that resources and budget can be allocated and aligned according to

strategic objectives. This is particularly important in SME's as their resources are limited. Therefore, careful planning enables flexibility in the use and reuse of resources to the extent that competitiveness can be gained, together with growth through innovation.

Observations indicate that the SME was working hard to be flexible, by trying to allocate resources in such a way that they could be reused and that allowed for future expansion. This was very important due to the limited resources available to the SME. Flexibility is important when external changes occur so that SMEs are able to adjust themselves internally, and although findings in the literature indicate that SMEs do not perform strategic planning, the SME in the present study used an action plan approach to plan its strategy. However, the limited formal planning within the SME was part of its flexible approach, as it frequently had to make changes during day-to-day operations. This indicates that if strategies are 'over planned' then flexibility problems can occur, unless they are planned to allow development, growth and innovation.

The SME used action plans as tools to perform strategic planning. However, they did not attain strategic flexibility through high quality planning, rather they allowed for the possibility that changes could be made to informal plans as the strategy was executed. In future, the SME could increase its formal planning through implementing the BSC approach to strategy formulation and implementation. Furthermore, through using SWOT analysis, changes in the internal environment may be anticipated, and allow for the SME to react flexibly. Furthermore, the BSC approach accounts for development, growth, and innovation as one of its perspectives. Through implementing such a formal approach to strategy, the SME may be able to drive the business more effectively, anticipate change and control it accordingly.

- **A lack of systematic methods for defining strategy**

Strategy formulation, as defined in the literature is rarely performed by SMEs, and SMEs are often criticized for a lack of formal method to the defining of strategy (Beaver & Prince, 2004; Dean, 1986). The lack of organization within the SME has significant implications on concepts such as the decision-making process, the overall vision and short-term informal strategies (Brouthers et al., 1998). Usually, SMEs perform limited strategic planning due a shortage of available resources. They allocate their limited resources to implementing their projects, rather than to formulation.

In the present study similar findings have been observed as in the literature. In the first instance, the SME in the present study did not actually go through a formal process, although there is a plethora of literature describing the strategy process. Rather, the SME performed specific activities as and when required. Furthermore, the SME performed its strategy formulation activities poorly; mainly as a consequence of limited resources.

In the previous section it was highlighted that the SME had difficulties in managing growth, development and innovation, and that tools such as BSC and SWOT analysis may help to overcome those problems. The current section, based on the literature and the present study, found that the SME did not have a formal method for defining strategy, and failed to follow the strategy process, according to the literature, partly due to a lack of resources, but mainly as a consequence of insufficient planning. The SME could apply the BSC and QFD to progress systematically through the phases of the strategy process.

- **Importance/ searching of new opportunities**

In the literature SMEs are described as having limited resources and this has significant impact on the opportunities that they can take advantage of.

According to Wiklund and Sheperds (2003) SMEs that are able to effectively identify external opportunities benefit from improved performance. This is considered a key success factor. However, it is more complicated than simply identifying external opportunities: successful SMEs are able to actually take advantage of those opportunities through internally formatting their resources (Badri et al., 2000). However, most SMEs lack creative thinking to take advantage of those opportunities through their limitedly resources. It is the innovative use of limited internal capability that enables SMEs to be competitive (Allocca & Kessler, 2006). The success of SMEs lies in knowing how to take advantage of opportunities despite their naturally weak market position.

The SME in the present study was active in the identification of new opportunities. The current economic circumstances have made the competition for public sector contracts more fierce, with more bids per contract. Therefore, the SME has decided to move and expand into the private sector, to identify new opportunities for its products and services. Furthermore, they spent a significant amount of research on trying to better understand customer requirements and how they could improve customer services internally.

The literature indicates that for SMEs to be successful in competitive markets, it is vital to learn to identify new opportunities, and how they can internally take advantage of those opportunities. Innovative thinking is what allows those opportunities to be identified and make available internal resources. The SME under study was astute to move into the private sector, and work was done internally to become more productive. However, they were only really searching for new opportunities and mapping their internal resources to a limited extent, in order to pursue these opportunities. This may have been because the SME was implementing SWOT analysis very informally, and that

through the more effective use of SWOT analysis the SME could become more structured in finding new opportunities and taking advantage of them to gain long-term success.

- **Short-term cash flows**

Several sources in the literature have documented that the key limitation for SMEs is the lack of resources and more specifically the availability of short-term cash. The limited availability of resources means that it is hard for SMEs to maintain their projects and undertake new opportunities (Alon, 2004; Burke & Gaughran, 2006; Celuch et al., 2007; Hudson-Smith & Smith, 2007; P. Savioz & M. Blum, 2002; Spence, 2003; Wesson & De Figueiredo, 2001). An important aspect of SMEs is deal with their resource limitations in an effective way, and to ensure that these resources are effectively allocated according to the organization's objectives and goals. Paradoxically, resource limitation implies that SMEs are only able to conduct strategy to a certain extent, which means that they may not be able to allocate their resources, or plan to ensure that financial resources are available throughout the project (Alon, 2004; Burke & Gaughran, 2006). SMEs need to implement a formal approach to strategy formulation to reduce planning costs and increase the allocation of resources, in particular short-term cash management.

The SME in the present study was not dissimilar to those described in the literature. The SME did not manage its budget properly and had difficulties in maintaining its day-to-day operations due to poor cash flow. The literature indicates, and the present study confirms, that a lack of short-term cash flows is often due to a lack of planning, and it is therefore questionable whether the SME did not have sufficient resources, even though prior to every project approval the budget had to be confirmed by the SME's accountant. This may

indicate a lack of alignment between budget and strategic objectives, which are not sufficiently well defined during the planning of strategy.

Both the present study and existing literature have found that SMEs have problems with short-term cash management. Generally, a more structured approach to strategic planning would help the SME with the problem of short-term cash management. However, resource limitations mean that this is not always possible: nevertheless, SMEs should invest a minimum time in planning to achieve higher success rates. Through the use of the BSC approach SMEs are encouraged to conduct more carful strategic planning so that short-term objectives are more closely linked to budgets. Furthermore, when SMEs integrate the BSC approach with other strategic tools such as SWOT analysis and Quality Function Deployment, it is possible to link short-term objectives with long-term goals. This may allow the SME to manage its day-to-day operations more accurately such that it may become possible to manage cash flow problems.

- **High risk in the SME**

In addition to resource limitations the literature indicates that SMEs are frequently exposed to risk (Aloulou & Fayolle, 2005). As a result of resource limitations SMEs make poor decisions, and strategic choices are made without full knowledge of the risk involved. On the other hand, 'SME risk' is often part of entrepreneurship, which makes success (Rae, 2007). The difference here is that success can be achieved through calculated risk, for which SMEs need to carefully plan and be aware of.

In agreement with the literature, the present study found that the SME was exposed to a certain amount of risk. Within the planning phase a considerable effort was made in terms of decision-making with regard to strategy.

Figure 7.2: A normative BSC strategy framework or BSQ framework of strategy process

EA = Environmental analysis
SF = Strategy formulation
S I= Strategy implementation
SE = Strategy evaluation and control
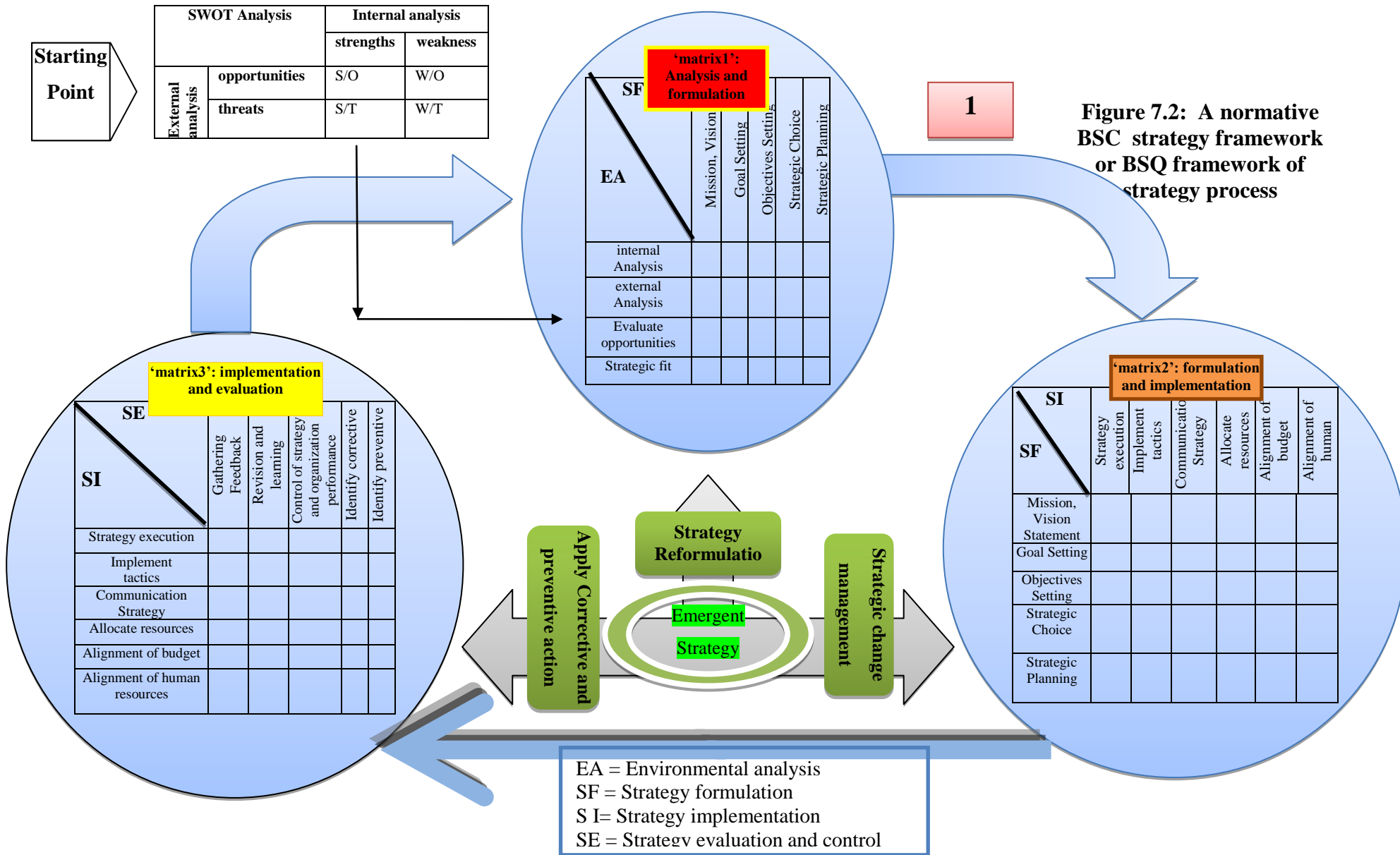
Contribution to knowledge

This study makes several contributions to the body of knowledge for a strategy process as management theory and practice. The contributions are the conclusions drawn from the individual subject areas of the three literature chapters; the conceptual model that was deduced from the literature; the methodological implementation of the research paradigm of moderate constructionism and validation through crystallization; and the extensive answers to the research questions forming intellectual knowledge, and finally, a normative BSC strategy framework that is constructed to aid SMEs in performing the strategy process as outlined in this thesis. These are significant developments to the field of research and business strategy.

Contribution to theory

First, a comprehensive literature review investigates and extends the strategy process phases and activities literature. As a consequence of the rich literature on the developments of strategy, an in-depth focus was placed on the individual activities that are performed as part of each of the strategy process phases. Through this investigation, a conceptual model of the strategy process, having phases involving strategic activities supported by the use of tools, was developed (Figure 5.4). The development of this conceptual model of the strategy process, detailing the strategic activities as they occur during the evolution of the strategy process, is new to the literature and is a contribution to knowledge.

The developments of the BSC reviewed in the third chapter demonstrating its evaluation over three generations of development, is a systematic literature review. It is also a contribution to knowledge as the researcher investigates why the BSC has evolved the way it did and how this aids organization with

the strategy process. Subsequently, the BSC integration with other strategy tools, SWOT analysis and QFD was reviewed. Through this literature review, the importance of strategy theory and *how* it relates to the development of strategy tools has been demonstrated. Each of the chapters presented a review, demonstrating an understanding of *how* development occurred. The analysis of historical developments and how theory is used in the development of strategic tools (using strategy tools to support the strategy process) is another contribution to knowledge.

This study extends the literature of how the BSC can integrate with other business tools to develop the strategy framework. The BSC has been well accepted by many organizations since 2000, mainly operating a large business, only minor attempts have been made to relate developments to small or medium sized businesses (see table 4.1, p. 160). However, the adoption and use of BSC framework in SMEs for the strategy process (as phases and activities) is new; to the best of the researcher's knowledge, there is no evidence of research carried out for this purpose, this has resulted in *a normative BSC Strategy Framework* based on the previous review of theoretical and empirical literature of strategy processes that is developed for SMEs (Figure 7.2, p.347).

Second, this study explores and analyses current management strategy process concerned with the development of strategy. It thereby provides an in-depth answer to the research questions. The evaluation of the conceptual model of strategy process phases and activities, based on the findings of the interviews conducted in the SME in the present study, led to a revised view of the conceptual model for the strategy process (see figure 7.1, p.339).

Through the careful but extensive answers to the research questions, based on the analysis of the research in the current study, knowledge is created that is used to justify how a strategic framework can be generated to support the

strategy process and its individual activities within the setting of a SME. This is perhaps the most critical part of the thesis, as it implies a foundation on which the suggested strategic framework is based. The validity of the strategic framework depends on the answers to the research questions and is unique to the current study.

The final contribution to theory within this research lies in suggestion of a normative strategy BSQ framework, which adds to theory (and it also adds to practice -see contribution to practice, next section)

This normative strategy framework is developed through the synthesis of existing theoretical research on the strategy process and strategic tools, with evidence gathered from the *empirical study* within the SME, in order to understand how the SME performed the strategy process, and whether any strategic tools may be used to support this process. Based on the practice derived from the present study and theoretical knowledge from the literature, a strategy framework integrating BSC with two other strategic tools (SWOT analysis and QFD) is developed in order to support the phases and activities of the strategy process. The normative strategy framework **adds to theory as follows:**

Whilst the literature lays out a systematic, sequential process the picture presented of the case study SME is somewhat different. The process that the SME uses is messy; it is not systematic; it is not sequential and is not clear. The reasons for this may be summarized as follows:

- Ambiguous communication of information

- Inability to manage development, growth, and innovation without a flexible approach

- A lack of systematic methods for defining strategy

- Importance/ seeking of new opportunities

- Short-term cash flow issues

- High risk in the SME

The proposed normative framework has been created through a novel integration of the strategic tools in a way that facilitates the phases of the strategy process, *to overcome these process limitations of the SME* (see answer question 2, p.331). There is no evidence in the literature from previous theoretical or empirical studies that an integrated framework exists that is based on a synthesis of SWOT analysis, BSC and QFD to support the strategy process phases and activities within SMEs. The framework matches the perspectives of the BSC in each synthesized strategy process of the QFD to implement the strategy map, starting from a strategy process phase, through environmental analysis, to formulating, implementing, and evaluating the whole strategy.

Moreover, It overcomes the main limitations of the BSC that were discussed in the literature review (for example: Barad & Dror, 2008; Cobbold & Lawrie, 2002; Dror, 2008; Fernandes et al., 2006; Ip & Koo, 2004; Kaplan et al., 2008; Lawrie & Cobbold, 2004; Lee & Ko, 2000; Luu et al., 2008; Morisawa, 2002; Papalexandris et al., 2005; Papalexandris et al., 2004; Quezada et al., 2009; Ray, 2011; Stewart, 2008; Tan & Bennett, 2007; Tan et al., 2004; Wu, 2005). The QFD approach overcomes the main limitations of the BSC methodology, which are: cause-effect within the strategy map, and the complexity problem. The SWOT analysis is integrated with the BSC to overcome its deficiency in being able to include strategic direction.

Contribution to practice:

This study makes several contributions to knowledge of strategic process in practice:

First, *Methodology*: The practical part of the current study is concerned with analysis of the interviews collected from the SME. The analysis of this research is unique and can be considered a contribution to knowledge, as it has not been seen in any prior literature. This was based on the methodology that was used. Within this research the researcher adopted a *moderate constructionist paradigm*, through which reality is socially constructed during the interviews between each interviewee and interviewer. To validate the results of the interviews the researcher used 'crystallization'. While crystallization is a known method, the method of application through which the results of each interview were categorized, according to the activities of the strategy process, is novel. This allowed a comparison of the interviewees and determined whether they had views which were compatible, or contradictory. The case study also contributes by being based on interviews, which is unusual, rather than on survey, which is more usual.

Second, the integrated normative BSC strategy framework is also novel in the following respects which may support managers in maintaining a coherent strategy process, by overcome limitations for the SME, as follows:

- **Synthesis of process phases.**

This framework enables strategy as a process, by interconnecting the strategy process phases. The results of one phase are the input for the next phase, such that they depend on each other. The strategy process framework allows a holistic view of the phases, which makes it simpler to plan ahead.

- **Activities in each phase are highlighted and positioned.**

A set of strategic activities are suggested for every phase. This provides guidance to managers for every activity. This research has demonstrated which activities are more likely to be used by the SME (see figure 7.1): nevertheless, other activities may turn out to be equally important.

- **Tools related/ connected to activates and phases**

Each of the three tools (BSC, SWOT analysis, and QFD) in the strategy process framework has a specific purpose and are joined together on the basis that they would overcome each other's limitations. While the SWOT analysis is only used at the beginning of the process during the research and analysis phase, the BSC and QFD are used throughout the strategy process and all its phases. It is with these tools that the prescribed activities are performed.

- **The possibilities of implementation are explicitly considered**

The suggested strategy process framework turns strategy into practice, by providing activities for every phase, such that strategy can be *applied*.

- **Unified process**

The suggested strategy process framework makes all the activities part of the same process through connecting the strategy process phases.

- **A flexible and coherent process**

The suggested framework allows for the simultaneous application of phases in a dynamic process. By having a flexible process, it is easier to manage the strategy process such that emergent strategy can easily be blended with deliberate strategy.

Through the usage of the suggested strategy process framework, the implementation of the strategy process becomes coherent and easier to implement. It is based on normative theory, providing consistency. By using

this framework, the manager is able to deal with every stage in the strategy process, as compared with most strategic tools detailed in the literature that address a specific strategic activity or task.

Third, the findings of the research within the SME allowed the validation of the conceptual strategy process model in understanding how SMEs perform strategy and which phases they go through.

Implication to practice

To support and help SME managers engaged with strategic management, there are some guidelines of how they could operate a normative BSC strategy process framework, including phases and activities to overcome, first, the limitations that were found in the SEM in the current study, and, second, the limitations concluded from the literature.

The implementation of the devised normative BSQ strategy process framework is complicated and requires well-educated strategic managers. This is one of the factors for which SMEs have been criticized in the literature. Therefore, some of the basic requirements for the usage of this framework within and SME are outlined.

First: For a SME to be able to implement the normative BSC strategy framework there are some prerequisites, which are necessary to the success of this framework for the strategy process. The key requirement is *strong leadership* within the organization, which could be defined as top level management, as well as chief executive *support* and involvement in the process. These leaders must have a distinct view of where they are driving the business, proper business acumen, and *knowledge* of strategy and relevant strategy tools, as they are the key people who take control of decision making and the strategy framework. Consequently, it is found in the evaluation of this research that it is important that the *resources* of the SME are well managed,

and it is suggested that specific roles are allocated within the organization to deal with human resources and finance as well as other resources, depending on the nature of the business. This is necessary to effectively implement the suggested strategy framework, as this is one of the key weaknesses within SMEs. At a broader level within the organization strong *team working* must exist, and it is essential that staff cooperate during the strategy process. At a human resource level, on-the-job training must be provided, such that business specific skills are of a high standard, so that confidence in strategy implementation is developed.

Second: The following steps for SME managers to implement this framework (figure 7.2, p.347, as guidance (instruction) to support them:

The proposed normative strategy framework is made up of SWOT analysis, BSC, and QFD. The strategy map is the core component of the BSC, and consists of the four strategy process phases: environmental analysis phase; strategy formulation phase; strategy implementation phase and strategy evaluation phase (including deliberate and emergent strategy). These phases are the four perspectives aligned with the SME vision in order to implement its mission and objectives, in addition to key performance indicators used to measure the performance of the strategy. SWOT analysis is used to define the strength of those relationships through identifying in the first perspective whether there are opportunities or threats, and then fitting these to the strengths and weaknesses identified in the subsequent perspective.

Each perspective of the BSC is placed alternately in the "WHATs" and "HOWs" of the *'A synthesized strategy process'* to link the strategy map.

There are three matrices of a synthesized strategy process. Through these three matrices stages the four phases of the strategy process are related and the strategy is processed from environmental scanning to evaluation. The strategic

framework starts with the application of a SWOT analysis, through which the internal and external environments are analysed. Once the activities of the environmental analysis phase are performed through a SWOT analysis, they are input into the first matrix of a synthesized strategy process where they are mapped against the activities of the strategy formulation phase. Once the operations of 'matrix1' are performed, the strategy is formulated and can be transferred into 'matrix 2', which links the activities of the formulation phase with the activities of the implementation phase. Similarly, as with the transition between the first to the second matrices, a transition is made to the 'matrix3'. Figure 7.2 presents the normative BSC strategy framework or BSQ framework of a strategy process.

The steps that illustrate how *a normative BSC strategy framework* is operationalized are summarized as follows:

Step one

Define the functionality of each tool and how they integrate.

Step two

Apply SWOT analysis to define the strategic direction of the strategy. The application of the SWOT analysis requires the identification of the strengths, weaknesses, opportunities and threats of each strategy activity through the strategy process phases. Within this framework the SWOT analysis allows for the environmental analysis phase to take place, and strategic fit and identification of opportunities are supported.

Step three

Using the SWOT analysis result, define goals (long-term) and objectives (short-term) of every strategic activity; sort them according to the four perspectives/ strategy process phases of the BSC (figure 7.3), define key

performance indicators (KPI), and strategy initiatives for each goal and objective. Then define the cause-effect links in the strategy map (figure 7.4).

Step four

Place the four perspectives of the BSC in '*WHATs matrix', and 'HOWs matrix'* of the three matrices of a synthesized strategy process (figures 7.5, 7.6, 7.7) according to the strategy map, each of which connects two phases of the strategy process.

First 'matrix1': Analysis and formulation (WHATs matrix, and HOWs matrix)

WHATs matrix is the environmental analysis phase (a form of both internal and external SWOT analysis factor results.)

HOWs matrix is the strategy formulation phase

Second 'matrix2': formulation and implementation (WHATs matrix, and HOWs matrix)

WHATs matrix is the strategy formulation phase

HOWs matrix is the strategy implementation phase

Third 'matrix3': implementation and evaluation (WHATs matrix, and HOWs matrix)

WHATs matrix is the strategy implementation phase

HOWs matrix is the strategy evaluation phase

Step five

Calculate the matrix of a synthesized strategy process, which contains the following four matrices

The *relationship matrix* is completed by the managers within the organization through allocating a relationship strength between the 'WHATs' and HOWs' results of each phase of strategy process. This is done as follows:

Strong relationship = 9

Medium relationship = 3

Weak relationship = 1

And 0 in the event that there was no relationship

Performance matrix

The **_performance matrix_** enables measurement of how effectively the results of each strategy process phase have been implemented. It is through the performance matrix that the BSC is integrated. The matrix of a synthesized strategy process is calculated based on the key performance indicators of the BSC, the customer satisfaction and importance survey and the potential for the case to be implemented. The results are interpreted through a SWOT analysis to define what the SWOT for each perspective is.

This is done through entering the customer importance average and the customer satisfaction average. The competitive satisfaction performance is the comparison between different organizations. The key performance indicator is copied from the BSC. The improvement ratio is calculated through dividing the key performance indicators by the customer satisfaction average. The sales point is set to high, medium and low where the improvement ratio is less than three, equal to three, or above three respectively. The raw weight is calculated through multiplying the importance rating average by the improvement ratio and the sales point. This is then normalized by dividing it by the aggregate raw weight. Each column of the performance matrix is calculated as follows:

Customer importance average from a survey

Customer satisfaction average from a survey

The competitive satisfaction performance = is the comparison between different organizations

The key performance indicator is copied from the BSC

The improvement ratio = the key performance indicator / the customer satisfaction average

The sales point is:

Set to high if the improvement ratio is above three.

Set to medium if the improvement ratio is equal to three.

Set to low if the improvement ratio is less than three.

The Raw weight = the importance rating average * the improvement ratio and the sales point

Normalized Raw weight= Raw weight / aggregated raw weight.

The Correlation matrix in the roof of first matrix of a synthesized strategy process

Correlate the "HOWs" variables by identifying the correlation between each individual variable within each strategy process phase; the outcome of this step shows a negative, positive or neutral correlation.

These calculations of *The Correlation matrix* can be expressed in the following forms:

A strong positive correlation = +2

A positive correlation = +1

A neutral correlation = 0

A negative correlation = -1

A strong negative correlation = -2

The **target matrix**: throughout, the three matrices of a synthesized strategy process are used to calculate the priorities of the formulation, implementation, and evaluation activities. In the first matrix of a synthesized strategy process, the ranking can be used as the input for the subsequent 'matrix2' in which the implementation activities are related to the formulated strategy. The same process is applied to the final matrix of a synthesized strategy process to relate the output of the strategic implementation with the activities of evaluating the strategy. The 'matrix1', 'matrix2', and 'matrix3' are shown in figures 7.5, 7.6, and 7.7 respectively.

It is required here to calculate an absolute importance through the addition of all the results. The relative importance is calculated by dividing the absolute importance by the total, and the target ranking is defined through scaling the result to a value from one to five.

These calculations of the **'target matrix'** can be expressed in the following equation:

Absolute importance = the results of the correlation matrix + the results of the relationship matrix

Relative importance = absolute importance / the total

Target ranking = scaling the result to a value from one to five

Complete this process for subsequent matrix of a synthesized strategy process carrying over the prioritization of the variables between the *three* matrices of a synthesized strategy process by the output of both performance matrix and target matrix.

Step six

Extract the result of each performance matrix through the application of a SWOT analysis to define the strategy for implementing the vision.

Step seven

Change the input variables until a desired strategy for continuous improvement is developed.

Step eight

Present the strategy to the stakeholders.

SWOT analysis

A SWOT analysis is the first strategy tool used in the framework. It is used to provide strategic direction to the strategy. The application of the SWOT analysis requires the identification of strengths, weaknesses, opportunities and threats. Within this framework the SWOT analysis allows for the environmental analysis phase to take place, which the BSC does not enable. Each of the four activities that are identified as being performed to some extent by the SME, especially internal and external analysis, can be performed by SWOT analysis. In addition, the more advanced activities of the environmental analysis phase such as strategic fit and identification of opportunities are supported. SWOT analysis is an invaluable strategic tool within the suggested framework, which enables SMEs to perform strategy.

Balanced Scorecard (BSC)

The BSC is the second and most fundamental strategy tool used in the suggested strategy process framework. The application of the BSC is divided according to its four perspectives, which in this framework have been replaced with the four strategy process phases that are shown in figure 7.3. Each perspective (strategy process phase) of the BSC records the goals and

objectives of that strategy process phase, which are accomplished through its strategic activities. The performance of each activity can be measured through key performance indicators, which cumulatively provide an overview of the performance of each strategic phase. Each of the phases is connected to the previous and following phases when the strategy takes a deliberate path. However, emergent strategy can occur during any of the phases as depicted in figure 7.3. When emergent strategy takes place it is possible that the problem is fixed and the strategy is resumed from the phase where it was interrupted, whereby the strategy may be evaluated and reformulated by continuing the strategy phases accordingly.

Strategy map

Once the goals and objectives for each of the BSC perspectives have been defined and key performance indicators are specified for the measurement of performance, the strategy map is accomplished (see figure 7.4). The strategy map provides a different view on how the strategy is implemented. Viewing the stages of the strategy process sequentially it is clear how this will enable SMEs to work towards their destination statements, by implementation of each activity of the phases so that the SME can progress to the subsequent phases. To identify how strategy maps are used to define the strategy and the mission of an organization; depending on the purpose of the strategy, the perspectives are placed differently in relation to each other. Different allocations of the perspectives provide different results or could provide strategies for different purposes within the organization.

Destination statement (vision and mission)
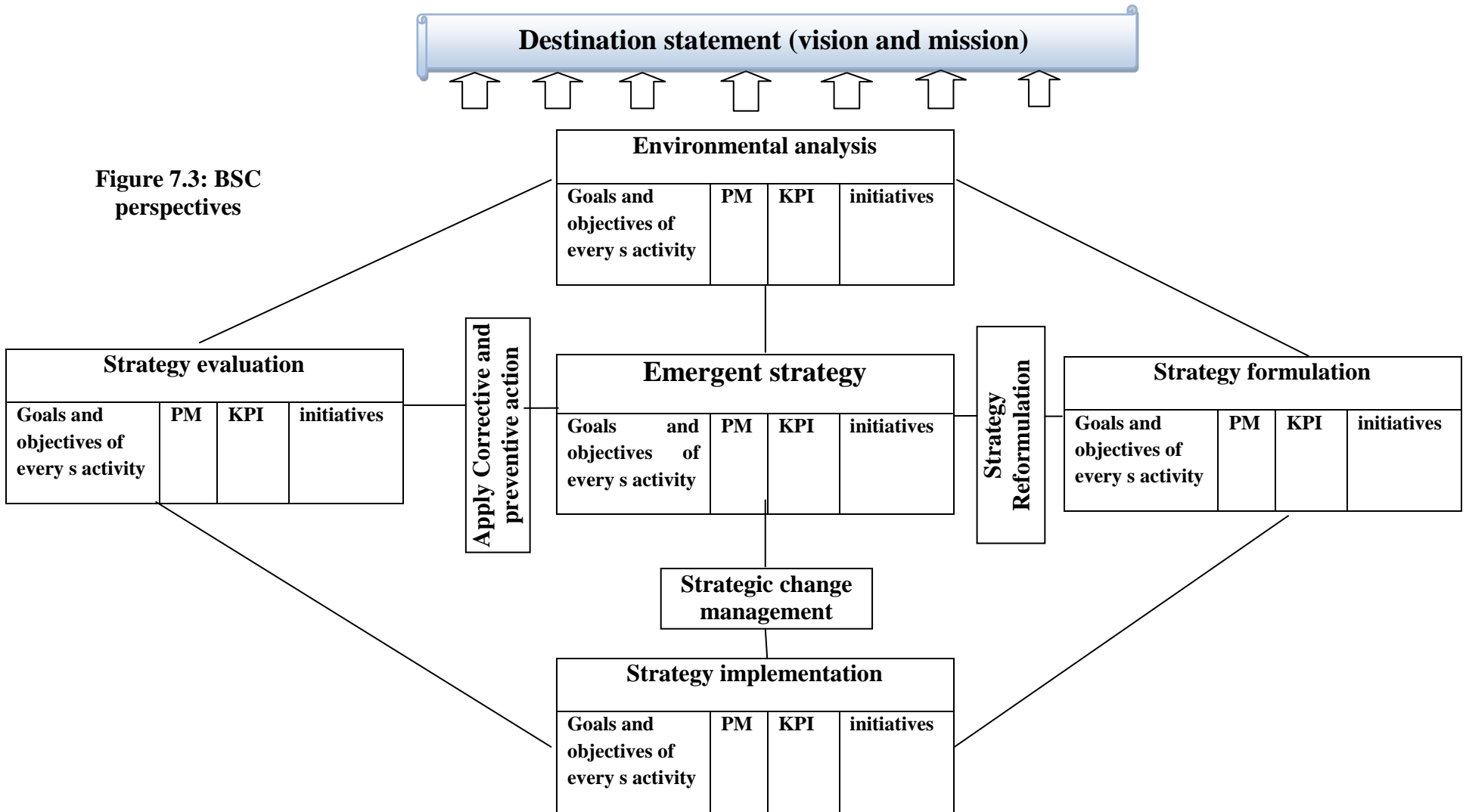
Figure 7.3: BSC perspectives

Environmental analysis

Goals and objectives of every s activity	PM	KPI	initiatives

Strategy evaluation

Goals and objectives of every s activity	PM	KPI	initiatives

Apply Corrective and preventive action

Emergent strategy

Goals and objectives of every s activity	PM	KPI	initiatives

Strategy Reformulation

Strategy formulation

Goals and objectives of every s activity	PM	KPI	initiatives

Strategic change management

Strategy implementation

Goals and objectives of every s activity	PM	KPI	initiatives

Figure 7.4: Strategy Map

Toward destination statement

Strategy Evaluation
- Control of strategy and organization performance
- Gathering Feedback
- Revision and learning
- Identify corrective action
- Identify preventive action

Apply Corrective and preventive action

Strategy Implementation
- Strategy execution
- Implement Tactics
- Communication Strategy
- Allocate resource
- Alignment of budget with strategy
- Alignment of human resources with strategy

Strategic change management

Strategy formulation
- Developing mission, vision statement
- Goal setting
- Objectives setting and tactic
- Strategic planning and thinking
- Strategic choice

Strategy Reformulation

Environmental analysis
- Analysis of external environment
- Analysis of internal environment
- Evaluate opportunities
- Strategic fit

Strategy emergent

Quality function deployment (QFD)

The third and final tool that is integrated in the suggested framework is quality function deployment. QFD is used to simplify the difficulties in the strategy map of the BSC. The literature demonstrates the difficulty of defining the cause-effect links in the strategy map. However, through QFD it is possible to define how the strategy is progressed between each phase of the strategy process, which is achieved through the use of the three synthesized strategy process (matrices), each of which connects two phases of the strategy process. Details of how the first matrices of a synthesized strategy process are integrated are provided below.

The first matrix of a synthesized strategy process

The matrix of a synthesized strategy process is the fundamental unit of the strategy process framework that links together all the strategy process phases. The first of the three synthesized strategy process is unique from the perspective that it has an input in the form of results of the SWOT analysis in the 'WHATs' matrix. It is through the first synthesized strategy process that both internal and external factors are joined. Each of the strategic activities has been predefined according to the findings of the literature. The relationship matrix is completed by the managers within the organization through allocating the relationship strength between the 'WHATs' results of the environmental analysis activities and the 'HOWs' activities to formulate the strategy. The performance matrix enables measurement of how effectively the results of the environmental scanning have been implemented. It is through the performance matrix that the BSC is integrated. The target matrix is used to calculate the priorities of the formulation activities so that the ranking can be used as the input for the subsequent a synthesized strategy process in which the implementation activities are related to the formulated

strategy. The same process is applied to the final matrix of a synthesized strategy process to relate the output of the strategic implementation with the activities of evaluating the strategy. The 'matrix1', 'matrix2', and 'matrix3' are shown in figures 7.5, 7.6, and 7.7 respectively.

Once the first matrix of a synthesized strategy process (Analysis and formulation) has been calculated, the final results in the ranking/target column of the target matrix are placed in the importance rating of the second matrix of a synthesized strategy process (formulation and implementation), where the process of six matrices is restarted. This process takes place over the three synthesized strategy process (matrices) of QFD. The four perspectives of the BSC are divided over the three matrices, whereby the allocated perspective of "HOWs" becomes allocated to "WHATs" in the next matrix. The application of QFD is used to process the steps between the four perspectives of the strategy map.

Figure 7.5: A synthesised strategy process 'matrix1': Analysis and formulation

Correlation matrix

Strategy formulation

SWOT Analysis	Internal analysis	
	strengths	weakness
External analysis — opportunities	S/O	W/O
External analysis — threats	S/T	W/T

Developing mission, vision statement

Goal setting

Objectives setting and tactic

Strategic planning and thinking

Strategic choice

Importance to the customer

WHATs Matrix

Customer satisfaction average

The competitive satisfaction performance

Key performance indictor

sales point

Improvement ratio

Raw weight

Normalize raw weight

Environmental analysis

Analysis of external environment

Performance Matrix

Analysis of internal environment

Relationships Matrix

Evaluate opportunities

Strategic fit

Absolute importance

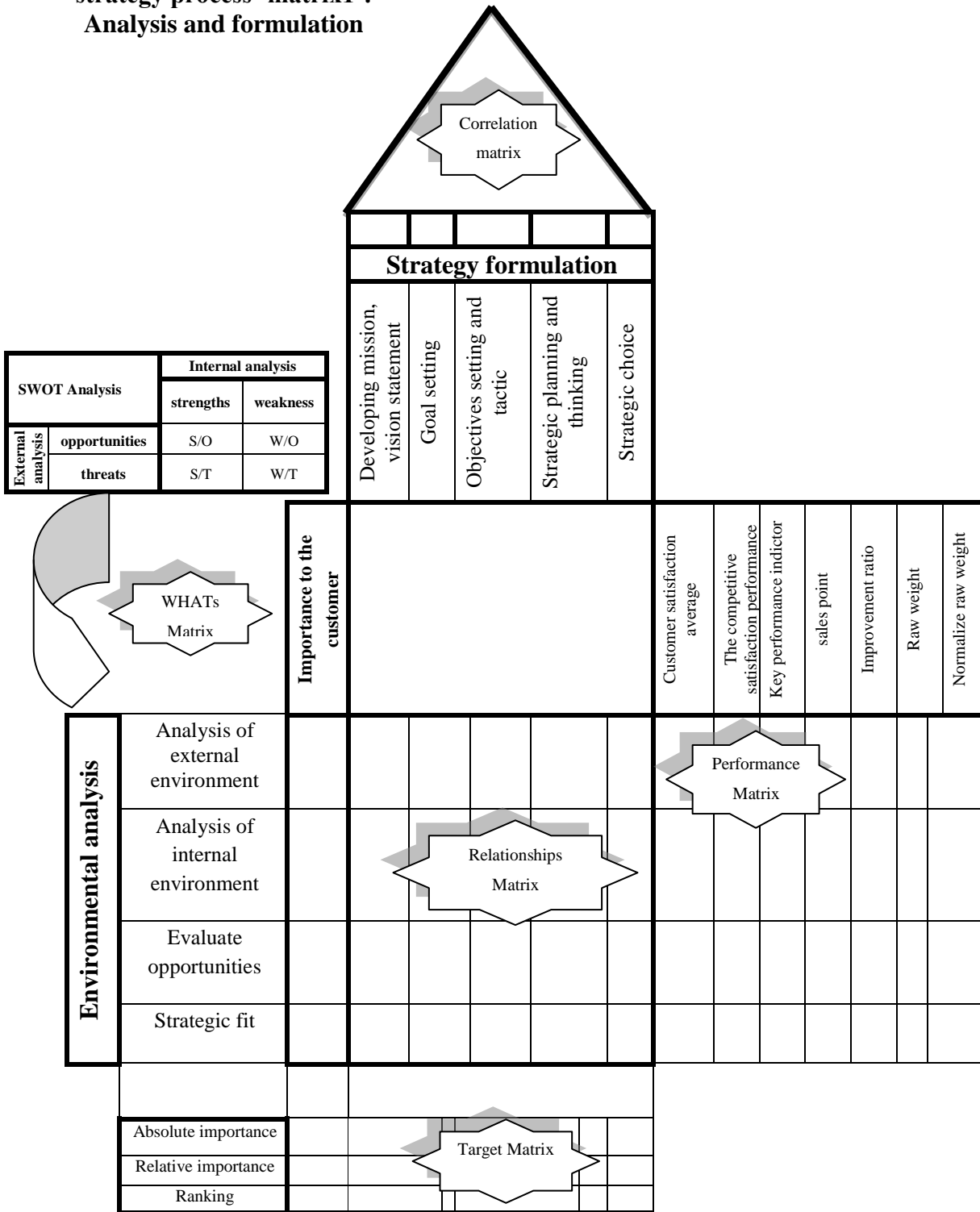Target Matrix

Relative importance

Ranking

Figure 7.6: A synthesised strategy process 'matrix2': formulation and implementation
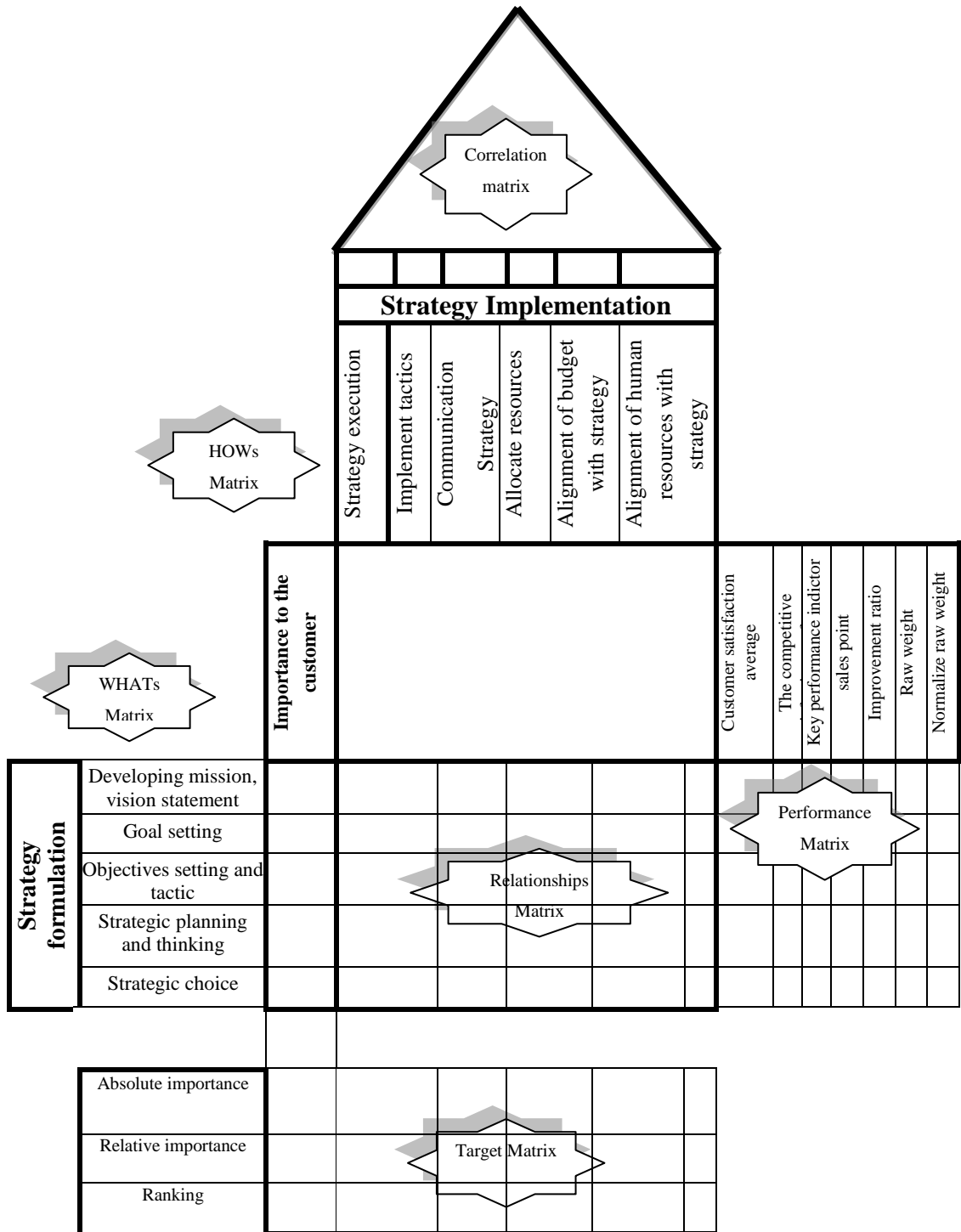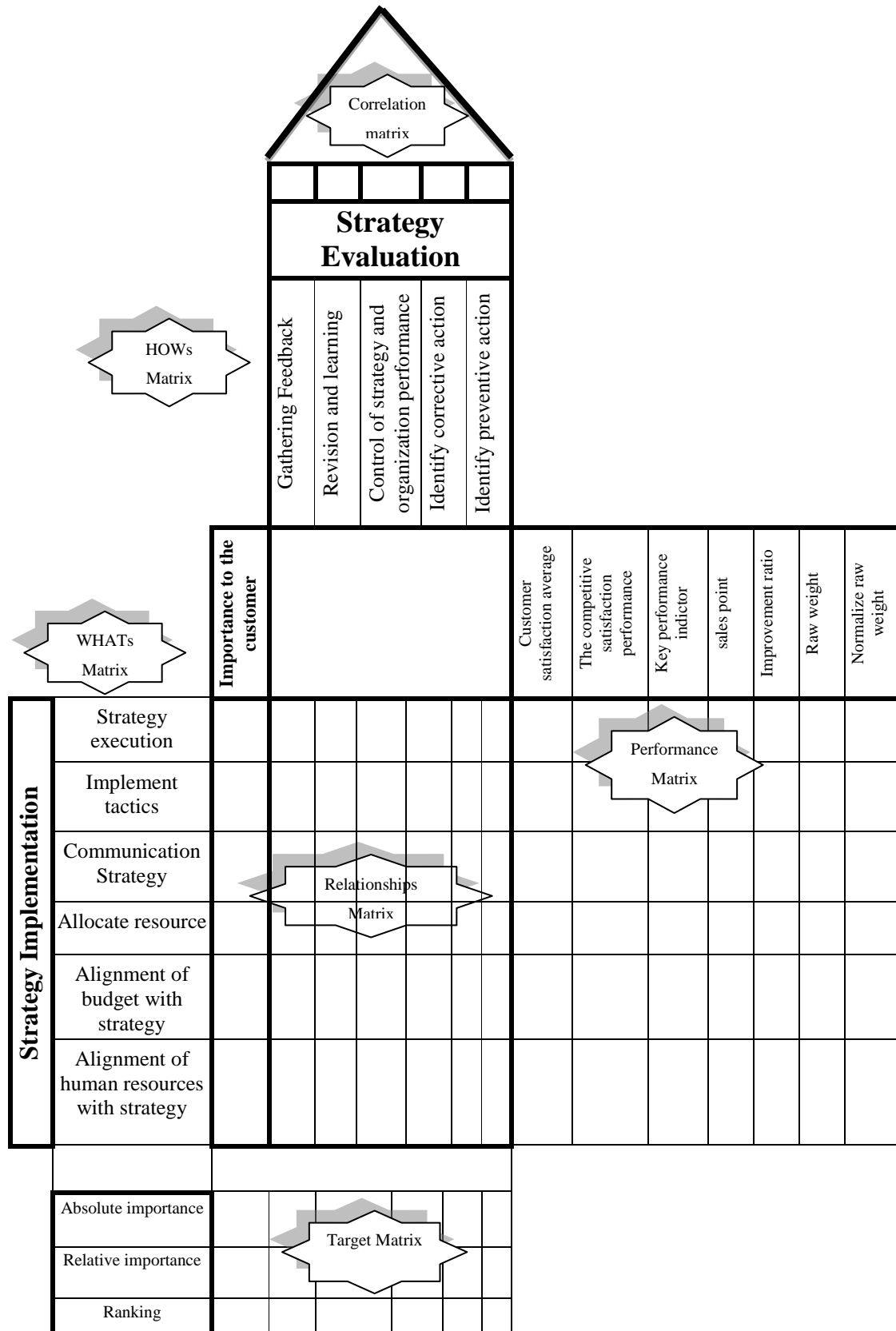
Figure 7.7: A synthesised strategy process 'matrix3': implementation and evaluation

Research limitations

Research limitations within the context of the current study refer to the aspects that have not been completely attained or were only achieved to a certain extent. Overall the current study is constructed from strong evidence including an extensive, systematic, literature review, interpretive research methodology, and a faithful analysis and discussion.

The suggested normative BSC strategy framework looks at where the problems were within the SME and how the strategy process was performed, to justify how a normative BSC strategy framework may improve process. *The main limitation of this research is that the normative BSC strategy framework has not been implemented and tested within a SME environment to find out how effective it is in practice.* Through implementing this normative BSC strategy framework in practice it would be possible to test and improve it accordingly. The research method for the normative BSC strategy framework is based on a 'multiple methods' research design. It uses both quantitative and qualitative research methods to collect the data needed for the proposed framework. The initial part of this proposed framework requires defining the variables that will be analysed, whilst during the second part all the variables are assigned a value. This gathering of information is based on three individual sources, because the framework involves the customer, the business, and suppliers. Each of these investigations needs to be conducted such that reliable information is presented when processing the data through the proposed research framework. A practical limitation of this study is that to operationalize this normative strategy framework, a SME has to operate as an effective team.

Future research suggestions

Some suggestions are stated for further research, as follows:

- In the first instance this research calls for researchers to evaluate it by reconstructing it and understanding the strategy process as it is performed by SMEs. This will allow researchers to determine whether the conceptual framework of the strategy process (figure 5.4) as defined by this research is valid and to what extent SMEs are involved in the strategy process. In this way the knowledge gap on how SMEs are involved in strategy can be filled.

- The second point of this research is that it calls for future research into the development of strategic tools. The literature of the current study is presented in such a way that there is a full chapter on strategy tools and how they are integrated, reviewing both empirical and theoretical studies. As it was not possible to implement and test the suggested normative BSC strategy framework, future research should seek to do this.

- The third point in this study that calls for future research of the implementation of the moderate constructionist paradigm with *crystallization methods* within other research fields. The researcher adopted this paradigm, through which reality is socially constructed, during the interviews between the interviewees and interviewer. The application of *crystallization,* through which the results of each interview were categorized according to the activities of the strategy process, is novel and calls for more research and development.

- The results of this study may hopefully facilitate future research that can expand on its findings, be conducted in different sectors, both public and private.

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Appendixes

Appendix A: Case study protocol

Research questions

The questions of this study are:

Research Question 1: What is the strategy process and how does it operate within the SME?

In order to answer this broad research question, the researcher has first to answer two further research questions which are:

Research Question 1a: What are the key strategic activities and how are these performed in the SME?

Research Question 1b: Which strategic tools are used in the SME during the strategy process?

Research Question 2: How may a normative BSC strategy framework [along with other business tools (QFD and SWOT analysis)] be used to support the strategy process in SMEs?

The aim of this research is twofold. It seeks to understand the strategy process approach within SMEs. It also aims to generate a strategy framework [using the BSC framework with support of other businesses tools (QFD and SWOT analysis)] to support SME management in the creation of a coherent strategy process.

Research objective

- To identify from the literature what is known about the strategy process, especially in relation to SMEs?
- To utilize a dynamic process view as an approach to clarify activities, strategy tools, techniques and methods in the SME strategy process.
- To generate a framework incorporating BSC and other business tools (SWOT analysis and QFD) to connect and carryout the strategy process.

Summary of research methodology

The Research paradigm in the present study is moderate constructionism. This research paradigm implies that the findings of this research are socially constructed and are subjective in nature. This is realized through an abductive research approach that involves the deduction of a conceptual framework from theory followed by an inductive process during which the conceptual framework is compared against the findings of the empirical research. This research process is based on qualitative data that allows for in-depth findings. The research strategy for this study is based on a single case study with one unit of analysis, which is the SME itself. The use of a single case study enables a focused approach to test whether the theory on the strategy process holds true in the SME.

The research methods in the present study are divided into two sections. These are the data collection and data analysis methods. For the collection of data an interview was conducted with five of the key actors in the SME who held information relevant to this study. Once the data was collected through the interviews, it was analysed through two methods. Firstly, the thematic analysis was applied such that it could be determined how effectively the SME implemented each of the strategy process phases. This was then broken down into each of the activities that took place in the phases. The second method used counting to determine how often each of those phases and activities were referred to in order to gain a better understanding of the extent to which the SME was involved in the strategy process and its activities.

Research quality criteria

This study was validated through quality criteria. To increase the quality of the findings for this study, the credibility, external transferability, dependability, and conformability were checked.

The first two approaches looked at internal and external quality. In this study the internal credibility was validated through the usage of existing theory about the strategy process found in the literature and the conceptual model that was defined at the start of the study. The external assessment of quality should involve comparison between cases or with other case studies of the same kind. This study was only engaged to a limited extent with external quality by means of comparing against practical studies in the literature that have empirical strategy results.

Once internal consistency and external consistency were checked, the dependability of the research was confirmed. Although this study did not perform a consistency check by implementing multiple cases such that they can be cross referenced, the study has a high level of dependability as the research methodology is very detailed, enabling any researcher to perform a study according to the same research process to validate the findings. The final approach to attaining high quality in the findings of this research was through conformability. This was achieved by asking, in the first instance, the supervisory team to review the case study. Furthermore, crystallization was used to compare the findings of the interviewees.

Case study report

In addition to the research quality criteria that were used to increase the standard of the results for the present study, a case study report was completed. The case study report also increases confidence in the findings of the research. In the case study report an overview has been provided on the findings that have resulted from the study, which enables anyone to gain a rapid overview of the case study with the required details. An overview of the SME in this study is provided so that it can be understood what type of organization was investigated and the internal structure of the SME.

Subsequently an overview is provided of how the researcher understands the strategy process to take place within the SME after having completed the research by providing a description of each phase and the key activities. A conclusion of key gaps in the strategy process and obstacles is supplemented in the closing section

Study limitations

Case study question

For this research a series of semi-structured interviews was completed with the key actors in the organization who were considered to hold relevant information for this study. However, due to the nature of the study, it was necessary for this research to obtain as many details about the strategy process in the SME as possible; therefore, the questions where posed in such a way that would encourage the actor to respond with a descriptive answer. Initially an interview was conducted to gain an overview of the organization and ask typical questions about the SME. This was to help in the planning of further research and identity who should be contacted for specific interviews.

The interview was prepared with questions to ask the actors in the SME to explain what they understood to be the meaning of the strategy process and each of its individual phases. Once they had responded the interviewer would explain in further details what those phases mean. This would then be followed with the question of how they performed this activity within the SME, and the extent to which they were engaged in these activities.

The guide questions were;

1. Can you provide me an over view of the SME organization, what products or services are provided, in which markets it operates, different departments, amount of employees, etc. ?

2. Which position do you hold and which responsibilities does that entail?

3. Can you provide me with organizational charts?

4. Are you involved in strategic decision-making, and who performs strategic decision-making within this SME?

5. Are you involved in strategy, do you use any tools?

6. Do you look at strategy as a process?

7. Have you investigated how external factors may influence the SME, did you use any strategy tools?

8. Which activities do you perform as part of the formulation of strategy and are any tools involved?

9. Which activities do you perform as part of the implementation of strategy and are any tools involved?

10. Which activities do you perform as part of the evaluation of strategy and are any tools involved?

11. Do you undertake performance management, if so do you use any tools?

12. Has the SME attained any competitive advantage through strategy?

13. What is the destination statement of the SME?

Appendix B: Case study report

Introduction

The case study report is included as a means to rapidly get an overview of the SME observed in the present study. The information included in the report was collected by Amina Basiouny Mousa Elshamly from the University of Gloucestershire during the year 2010. Five interviews were conducted with the following members of the SME:

- Operations and Board Director

- Business Development Director

- Business Manager

- Marketing and Communications Manager

- IT Manager

This report is based on that analysis performed on the interviews and related documentation as well as observations. The report has been checked by one of the interviewees of the organization for consistency to ensure that all recorded information was correct. This report consists of a SME context, and structure, followed by a brief overview of how the SME engages with the four phases of the strategy process and emergent strategy. The report is concluded with how the researcher views the SME in the present study to perform the strategy process.

SME's context

The origin of the SME in the present study is in North Wales and has been trading as a private organization for over twenty years. Having started as a SME with modest means it was found that slowly but surely the organization started to take shape and became what is now today. As the organization

started to expand more staff joined, and more offices were allocated. This was a consequence of the SME taking on new contracts. Some examples are: Training initiative program in North Wales and Skills for small business program delivered in Merseyside throughout the UK and especially in Gloucestershire.

The SME in the present study has its origin in North Wales and has been trading as a private organization for over twenty years. Having started as a SME with modest means, slowly but surely, the organization started to take shape and became what is now today. As the organization started to expand more staff joined, and more offices were allocated. This was a consequence of the SME taking on new contracts. Some examples are: training initiative programs in North Wales and skills for small business programs delivered in Merseyside, throughout the UK and especially in Gloucestershire.

Having obtained a major contract in Gloucestershire, the SME decided to open offices in the city of Gloucester. This became its main branch and the managing director of the SME started to operate from this location. Shortly after, it expanded to South Wales, London and the South of England. As this contract was gaining success the London offices were established which lead to a change of ownership in 2001.
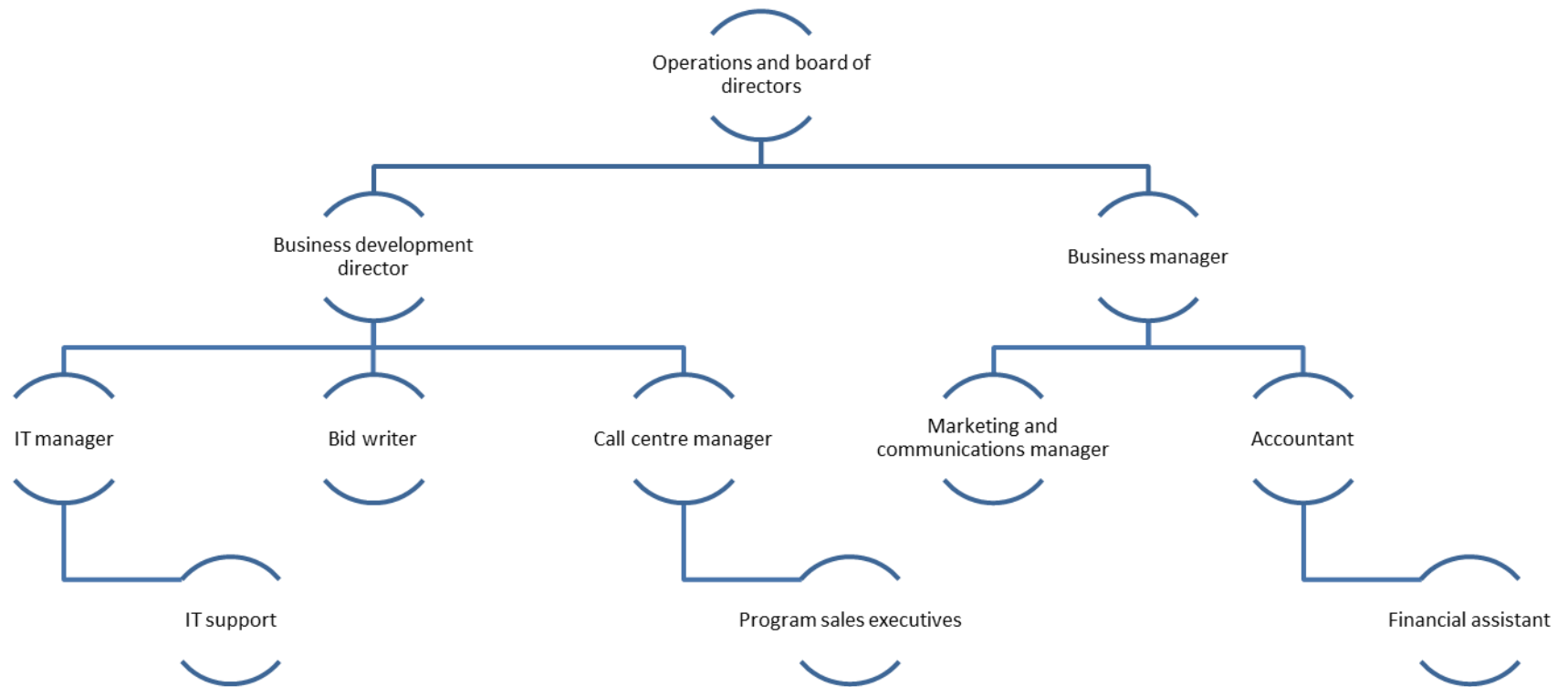
It continued to grow until 2006 which meant that more office space in London was required to accommodate the increase in staff and therefore a location at Shepherds Bush was acquired. Additionally in Cardiff offices were opened two years later.

As the SME has continued to grow, the management principles and good work ethic were maintained and the organization kept up strong relations with the public sector governmental organizations. Through these relations the SME was able to become involved in a series of contracts.

The very nature of the SME means that they operate throughout the UK. The vision focuses on how the social aspects of society can be improved. The SME provides mostly services to the public sector but would want to diversify into the private sector. They have a reliable history of twenty years during which they have demonstrated significant involvement in the UK economy. The SME continues to deliver success even through tough economic times.

SME's structure

The SME in the present study has a relatively simple organizational structure; however, it was found that this structure adapts according to the projects that the SME undertakes. Below the basic organizational structure is outlined. However, this changes when for example the SME undertakes an IT project, then the IT department increases for the duration of the project, or similar examples were provided for marketing projects during which the SME adapts its organizational chart temporarily.

Operations and board of directors

Business development director

Business manager

IT manager

Bid writer

Call centre manager

Marketing and communications manager

Accountant

IT support

Program sales executives

Financial assistant

SME strategic process

Phase 1: Environmental Analysis (EA)

The SME in the present study actively performs environmental scanning. Based on the activity counting conducted in this study (see chapter six) it was found that most emphasis was placed on external analysis activities, in addition to internal analysis. Also

Some references were made to the evaluation of opportunities and identification of strategic fit.

During the analysis of the quotations for the external analysis activity it was found that the SME performed this activity in a variety of different ways. It main purpose was to identify external opportunities, and its main activity was to monitor key factors such as technological change, customer demand, etc. Although not applied formally, the SWOT analysis and cost benefit analysis was used to identify which factors affected the SME. Furthermore, environmental analysis was found to be an ongoing activity. Furthermore, data collection strategies were implemented to improve the decision-making process and increase customer communications, to improve the planning process.

Although it was found that the SME was less involved in the strategic activity of internal analysis, which is known to be easier to perform as it is in the comfort zone of the organization, contrary to external analysis. Also, internal analysis was an ongoing activity and was initiated through data collection; internal data collection was found to have existed since the start of the organization. The SWOT analysis was used informally and intuitive, and the results are weighted such that the limited available internal resources could be used to exploit external opportunities.

It was found in the present study that the SME was involved in the evaluation of opportunities and strategic fit to a lesser extent. The evaluation of opportunities was performed to better understand its customer's requirements such that internal strengths could be used to take advantage of external opportunities identified in the previous two activities. This was done through 'what if' scenarios and risk analysis, which were the main tools to evaluate opportunities. The last activity, which is the identification of strategic fit, was applied within the SME through defining how internal resources were applied to external opportunities. This activity was performed through searching for opportunities consistent with internal competencies. Because of the limited available resources this activity was hard to perform and therefore external changes could have a significant impact on decision-making. However, the successful application of strategic fit resulted in increased profit, improved targeting of customers, and an increased customer base that allowed for planning ahead.

Phase 2: Strategy formulation (SF)

The SME in the present study performed strategy formulation to a certain extent, but like most SMEs there was insufficient planning. They nevertheless defined an overall vision for a period of five to twenty years, of which technologically the main mission was to establish a reliable IT infrastructure that was kept up to date.

The SME was more involved in the setting of long-term goals than realizing its mission and vision. It was the directors that specified and defined the long-term goals to drive forwards the business, and the main strategic tools used during the setting of the objectives were business cases, which demonstrated in their details how the long-term goals were attained. This included definitions of the required cost and resources as well as the benefits of

perusing the business case. Two of the most prominent objectives were to increase customer service standards through IT and to provide services to the public sector.

The most performed activity in the phase of strategy formulation was the setting of short-term objectives. This was because the day-to-day operations consisted of short-term activities. The objectives were defined within the business cases through an action plan that included all the objectives. The SME was working hard to ensure that the staff were well informed on the short-term objectives to overcome longer term problems with attaining the goals. Important considerations when setting goals were that risk was reduced where possible, and that objectives enabled day-to-day operations, and where required the objectives had to be approved by the finance department; some of the example objectives provided were the alignment of IT with business operations, ensuring IT uptime, and meeting the user requirements. This was done through reviewing the IT purchasing plan.

For the last two activities in the phase of strategic planning it was found that there was some involvement in the SME, mostly by the directors. The first of these two activities is strategic choice. The operations and board of directors used the business cases that were presented to them to make choices about which strategies to deploy. They usually chose less risky strategies, and tried to collect as much data as possible to improve the decision-making process. However, it was found that in reality this phase was rarely about choice, but about finding a suitable opportunity that the organization was able to take advantage of. It was through the business cases that choice could be exercised on which opportunities were pursued and how the SME would pursue them through its allocation of internal resources. This leads to the final planning activity during which an action plan was outlined for the selected business

cases. The strategic planning involved mostly the allocation of resources, and especially how IT was used. At the time the interviews were conducted it was observed how an IT security plan was completed. This demonstrated how the strategic plan enabled execution.

Phase 3: Strategy implementation (SI)

The strategic phase of implementation was performed in a variety of ways. It was found that the SME was very involved in the first three activities: aligning human resources; aligning budget; and allocating resources. The SME tended to allocate its resources according to internal capability and external opportunities, as identified in the environmental scanning phase. They were most concerned with the allocation of IT resources to ensure that they supported the business functions, as well as ensuring that all IT equipment was re-used in current strategy implementations.

The alignment of human resources with the business functions was more complex, and the SME was committed to developing a better understanding of its HR requirements. Additionally, the SME was very considerate of staff as they had a change leadership program to ensure that the staff were able to implement the company's short-term objectives as accurately as possible. They were also concerned with the development of human resources: for example, it was found that there were some problems with the ability of staff to use the IT systems, and hence a training program was initiated to overcome this difficulty and to improve the internal workings of the organization. It was commented that it was important for qualified staff to be able to take maximum advantage of the IT systems.

In addition, there was a financial consideration to the implementation of strategy. This was in the first instance to ensure that the organization was able to meet its sales and marketing targets and that the strategic implementations

were financially worth doing. However, there was some budget management deficiency in the SME, even though they had limited resources that made it even harder to manage the cash flow of day-to-day operations. The SME ensured that every short-term objective was carefully planned, especially from a financial perspective, and even had the department of finance confirm the action planes. Furthermore, emphasis was placed on the cost reduction potential of the IT systems.

Once the resources were allocated and aligned, the strategy was executed. This is considered one of the most critical aspects of the strategy implementation. As soon as new projects were confirmed the implementation started, and the directors decided which strategies and when they were implemented through communicating them to the managers (These projects involved types of specialisms; see table 1 for some projects examples). However, the strategies implemented were of a low standard due to the lack of managerial support, and because the human resource aspect and business processes were not sufficiently considered. Nevertheless, the execution of the strategy was performed according to the action plan. As a consequence, the poor execution of its strategy plan resulted in a negative impact. Despite this negative impact, the SME used a strategic management approach and IT systems to improve its organizational performance. Through IT systems it was able to manage customer relationships to increase customer satisfaction, and digitalize the business processes. As part of the strategy implementation they diversified into to the private sector and increased provisioning for the public sector. Several tools were used during this activity, such as SWOT analysis, cost benefit analysis, and continuous improvement. IT was also used during the executing of the strategy to measure the performance, which was reviewed on a quarter annual bases.

During the evaluation of the interviews it was found that the SME was involved in strategic implementation mostly through tactics of intervention, as well as through participation and persuasion. IT was the most used tactical tool within the SME for attaining strategic objectives, being used to sustain day-to-day operations, reduce the budget, meet strategic objectives, meet business requirements, and software packages were even used for long-term goals and short-term objectives. Other tactics included the provisioning of services to other organization and increasing the customer base by performing marketing and telesales to increase revenue, and marketing research to better understand customer needs.

Strategy communication is a critical activity in the implementation phase of the strategy process. As the communication flow in the SME was limited there were some problems in the execution activity. Although there were several communication channels within the SME, formal communication between the directors was initiated when a project proposal had been accepted; this was then communicated to the mangers, who in turn communicated it to the required staff for execution. Weekly feedback meetings were held for the staff to feedback to the mangers, and the managers had weekly meetings to feedback to the directors and have the possibility to communicate any problems in private as required. It was found that the main limitation was that due to weak formulation, the strategy could not be communicated effectively. Furthermore, the directors and managers needed to communicate when the success of short-term objectives was attained, which, if done, could increase organizational performance above what is currently being performed by the SME.

Table 1

Skills Brokerage	Customer Service team
Referrals and partnerships with the wider business support community	Monitoring and Review service
Business Mentoring	Advice on business start ups
Leadership and Management Development	Guidance on funding streams and applications for financial support
Dedicated Telemarketing Resource	Industry specific knowledge and support
Qualified Skills Broker and Business Adviser Teams	Advice and support in relation to quality accreditations, policies, legislation and training
Specialist Business-to-Business marketing	Access to wider business community support and a professional portfolio of integrated business services
CRM Database facility	Strategic program development
Increase overall levels of employment by working strategically with local employers and support groups	Provide effective pre and post redundancy support to employers and individuals
Partnership development	Increase sales
Sourcing training provision	Improve performance
On-going advisory support	Grow and succeed
Reporting and review systems	Telemarketing and Call Centre services
Employer engagement and guidance	Sales & Lead Generation

Phase4: Strategy evaluation (SE)

The strategy evaluation phase in the strategy process was the stage during which the strategy implementation was reviewed. The SME performed strategic evaluation through activities such as strategy control and performance measurement, gathering feedback, revision and learning, and identification of corrective and preventive actions. Like most other activities, the SME performed strategic control. The SME managed the control of its strategy through the data collection procedures of the implementation stage. Weekly strategy control meetings were held during which the performance results were discussed and emphasis was laid on the short-term objectives to raise awareness, so that the SME continued to work towards its targets. Performance was measured through the performance measurement strategy, which facilitated measurement of departmental performance and collection of customer feedback. There was also an IT risk evaluation as this was critical to the organization's performance. Every three months there was a meeting during which the long-term goals were re-evaluated to monitor the ongoing strategy that occurred on a weekly basis, through which short-term objectives are reviewed. This demonstrated how the SME was involved in strategy and performance measurement. However they lacked a specific approach to strategy control such as the BSC; this would improve organizational performance.

To be able to evaluate its strategy implementation, the SME collected feedback. The SME collected different types of feedback which can be distinguished as internal and external feedback. Internally feedback resulted from meetings, internal questionnaires and organizational performance results. Externally the focus was especially on the collection of customer feedback. This was achieved by monitoring customer requirements and customer

satisfaction; this allowed for the improvement of customer services. The data collected both internally and externally was qualitative. Furthermore sales statistics were discussed monthly and revisions took place three quarter annually. The SME performed data collection extensively; however, the literature suggests that high quality data is required to be collected such that strong revision and learning can be performed.

The SME performed revision and learning during regular meetings, which could take place at weekly internals as well as quarter annually. This was sometimes used to review the business processes or general strategy process revision. Marketing research and competitive analysis were performed together with the monitoring results in addition to staff feedback, to increase customer satisfaction. Despite this, there was a lot of indication of practices of revision and learning within the SME that were examples of single loop learning. If the SME had been performing revision and learning continually, this would have created the potential to make possible the implementation of a structured approach rather than the piecemeal approach that was found.

During the strategy phase of evaluation the SME worked towards finding which actions would be implemented to correct mistakes made, and to avoid future mistakes. The primary purpose was to improve strategy execution. Some of the corrective actions that were taken related to maintaining IT system uptime, improving communication processes, and decision-making. Preventive actions were performed through data that was collected during the evaluation phase, so that proactive decisions could be taken, such as forecasting IT requirements. The SME was fairly weak at performing corrective and preventive actions, which was primarily due to a lack of resources. This meant that they were frequently required to make strategic changes during the process that sometimes turned out to be costly.

Emergent SME strategy

Emergent strategy was based on the strategic decisions that were taken during the strategy process, because the SME was unable to identify preventive actions and therefore needed to apply corrective actions. The SME formats emergent strategy through reformulation, which was determined by strategy change. Once the new actions were defined they could be implemented through corrective or preventive actions. The least of the efforts of the SME were put towards formation of strategy, which meant that they were not performing sufficient evaluation of strategic implementation such that the organization was continually improved. One of the limited activities performed to improve the strategy during the strategy process was change management.

Change management was an activity performed in the SME on a day-to-day basis. Change management took place according to the external environment, which caused internal resources to be formatted accordingly. The most critical external factors for the SME were technology and economic factors. This enabled the directors of the SME to steer the strategy change by reviewing business cases, which in turn facilitated the decision-making process and management through policy. Essentially, change management was performed through the market and project data was collected. In the long-term the company sought to sustain the organization and improve organizational performance in the short-term, as well as to increase competitiveness. It was relatively easy for the SME to perform change management as they were a flexible organization.

Only limited information was obtained on other aspects of implementing emergent strategy. Strategy reformulation was performed according to the changes in the external environment and the market and project data presented at management meetings with the purpose of improving organizational performance. Once the strategy was reformulated, corrective and preventive

actions were applied. It was found that there was a specific procedure for the application of corrective actions, which could be applied when feasible. Preventive action were applied to overcome problems based on emergent feedback, an example provided was the provisioning of IT training to overcome problems in the IT department.

Conclusion

The SME was facing its hardest years since its startup in 2000. This was especially because of the economic downturn, which made it very hard for the SME to stay up to date with technology and remain competitive. With this additional restraint on the resources of the SME the company's situation became even harder, and therefore strategic management was essential for the long-term sustenance of the SME. The primary strategy of the SME was to move into the private sector through the prevision of services that were currently provided in the public sector, and to try to maintain its relationships in the public sector.

AS the strategy of the SME was of such an importance, each of the individual phases were evaluated to develop a detailed understanding of how the SME performed its strategy, to determine whether they would be successful in the long-term. Through this revision it was found that the SME treated the strategy process too informally and did not implement its strategy properly, due to a lack of formulation, insufficient support of the managers and poor communication. The SME had a large amount of data collection processes during several of its stages within the strategy process, but failed to use them properly during the evaluation, and therefore did not react to changes that should have been made to the strategy, and was unable to avoid problems through preventive actions. Despite these weak aspects of the way the strategy process was conducted at the SME, it was found that the SME performed most activities to a certain extent in each phase.

Appendix C: An Example of SME coding process

The transcripts from the digital recordings from the interviews were initially prepared (in full) in word. 'In full' indicates that all words were transcribed, but did not include all Para- linguistic elements (ums, aahs, hesitations etc.).

The response elements that directly addressed the particular interview questions, as conceptual phases or sentence were these entered into an initial word table. However, control of multiple tables (one for each actor) proved problematic.

The cell contents from each table were transferred to an excel spread-sheet, presenting the original word table structures.

Each actor was entered, in order, in the first column of the table. Their replies in respect of the initial themes which emerged from their response to questions (this were not pre-defined) were entered in the second column. This helped with the first structured coding step, which was to examine the initial themes identified for reference to, or connection with, the four strategic phases identified in the literature. These four phases (Environmental analysis (EA) phase, Strategy formulation (SF) phase, Strategy implementation (SI) phase, Strategy evaluation (SE) phase) were level one in the *'codebook'*. Each subsequent step drew on the codes previously identified from the literature.

This resulted in a large word table of around 40 pages. This table was difficult to manipulate, - for example, in terms of the table were transferred to an excel workbook, where the opportunities was taken to divided into worksheets, based on the phases of the process, the four initial ones and an extra sheet for 'emergent ideas'.

So, the initially identified methodological themes are categorized by the strategy process phase into the appropriate sheets. This is followed by the application of the **'codebook'** according to the conceptual framework (figure 5.4). The coding process identified **Level one coding,** for each strategic phase,

and '*Level two coding'* under which strategic activities the interviewee's quote is categorized. After completing coding this 'Main Spreadsheet', was broken down into 'five Spreadsheets' as follows:

Spreadsheet one: Environmental analysis (EA) phase

Spreadsheet two: Strategy formulation (SF) phase

Spreadsheet three: Strategy implementation (SI) phase

Spreadsheet four: Strategy evaluation (SE) phase

Spreadsheet five: Emergent strategy

The quotations of each Spreadsheet where numbered during the evaluation of the emergent themes. The numbering was performed sequentially including a letter for every phase for example: Spreadsheet one: Environmental analysis (EA) phase, EA1 and EA2, EA3, etc. These represent the quotations number 1, 2 and 3 in this Spreadsheet respectively. This is done for all the five sheets. Once the quotations were coded according to the activities within the phases the numbering system remained. The numbering system is used for referencing purposes during the analysis and discussion of the quotations. This allows the reader to easily refer back to the original quotation when the author mentioned a series of reference and contrasts it against the original findings in the literature, and it enabled the researcher to conduct the overall interpretations of how involved the SME was in every activity for each phase of the strategy process.

Quotations	Main Themes	Level one coding: Strategy Process Phase	Level two coding: Strategy Process activities	Strategy Tools
The Operations and Board Director: "Understanding the supply and demand of our target markets is essential for success. We aim to attain the highest levels of customer satisfaction through increasing communications with both customers and suppliers. We found that this has a positive impact on customer satisfaction in the long-term" (EA4)	Customer and market requirements	Environment analysis (EA) phase	Analysis of External Environment Activity	N/A
The Marketing and Communications Manager: "The main tools we use to analyse new opportunities are: 'risk analysis' and 'What if scenarios'	Using tools to Evaluate opportunities	Environmental Analysis (EA)phase	Evaluation of opportunities	'risk analysis and 'What if scenarios'
The IT Manager: **IT vision** "Stay updated with Microsoft (update to Win7)" (SF24)	the development of the IT vision	Strategy formulation (SF) phase	Developing Mission, Vision Statement Activity	Mission,
The IT Manager: "Keep our IT systems up to date" (SF25)	IT mission	Strategy formulation (SF) phase	Developing Mission, Vision Statement Activity	Vision
The IT Manager: "The directors need to put forth recommendations about the projects	IT Goal Setting	Strategy formulation (SF) phase	Goal Setting Activity	N/A

to senior directors. But decisions on the project once approved are down to the directors" (SF22)				
The IT Manager: "Our objectives are not concerned with environmental matters; we focus our day-to-day operations of key business activities to better understand how IT can support those functions of the business." (SF7) "…Just meet the work requirements of the users." (SF26) "Ensure that users are able to complete their work…by providing e-mail service, shared folders...etc." (SF27) "Economically… Lease computers rather than purchase computers…Look at long-term purchasing" (SF28)	IT Objective Setting	Strategy formulation (SF) phase	Objective Setting Activity	N/A