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<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Student ID</u>
8/10/2005	Saya Gabe	Chunh	2398636
28.10.2005	Alina Vasilak	Bogfity	2044475
2/11/05	Indira	Ch	2328744
8/11/05	Calvin	Ch	2328744
11/11	Ada	Ch	2344776
19/11/05	Philippe Tchoupe	Ch	2117820
9/5/06	Tian SHOU XIN	Ch	243434
26/05/06	Renzo Onogata	Ch	2434618
4/8/06	Myko Oye	Ch	2434618
14/10/06	R. HAREL	Ch	200029722
26.10.06	A. VASILAKI	Bogfity	2044475
18-01-07	Sumaira Zafar	Ch	M00040810
01-02-07	Sumaira Zafar	Ch	M00040810
03-02-07	Chandry Adel Khe	Ch	M00040810
26.02.2007	A. VASILAKI	Bogfity	2044475
27/2/07	BARBARA CICCIA	Ch	M00099039
29.02.2007	A. VASILAKI	Bogfity	2044475
07-03-07	Sumaira Zafar	Ch	M00040810
07-03-07	" " "	Ch	M00040810
04-04-07	Anu Thomas	Ch	M00054009
18.04.07	A. VASILAKI	Bogfity	2044475
23-07-07	Sumaira Zafar	Ch	M00040810
29/09/07	R. Harel	Ch	200029722
6/11/07	Kendsuk N.	Ch	M0012908
13/11/10	Anuz	Ch	M0025647
14/02/10	Benedetta Nwelle	Ch	M0226954

**THE RELATIONSHIP BETWEEN CULTURE,
LEADERSHIP, STRATEGIC PLANNING AND
PERFORMANCE
IN
SMALL AND MEDIUM SIZED ENTERPRISES**

**A thesis submitted to Middlesex University
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NICHOLAS O'REGAN

Middlesex University Business School

Middlesex University

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ABSTRACT

The importance of manufacturing Small and Medium Sized Enterprises (SMEs) to the economy is well documented. Most research on SMEs focuses on efficiency-related measures. The literature suggests that a significant amount of efficiency based initiatives have been directed at SMEs and that the time is now opportune to consider a more strategic approach. The literature survey indicates a dearth of empirical research on strategic planning in SMEs. In addition, the literature implies that strategic planning is influenced by a range of factors, which include culture, leadership and contingency factors such as the formality of planning, barriers to strategic development, the operating environment, size, ownership, perceived market share and industrial sector. Little is known about these factors in relation to SMEs and no attempt has been made to examine them in one integrated model in any firm size. Accordingly, the aim of this study was to empirically test the validity of a deductive model linking contingency factors, culture, leadership, strategic planning and organisational performance. This was attained by formulating a series of objectives and testing these objectives using a variety of methods. These included descriptive statistics, factor analysis, chi-square tests, canonical correlation analysis and the wilcoxon test.

The research utilises a hybrid positivist-phenomenological method. Exploratory research methods in conjunction with the literature review were used to develop an *inductive* model. The exploratory interviews were held with managing directors of SMEs in the engineering and electronics' sectors. A postal survey was used as it is the most reliable and effective means of data gathering in order to test the *deductive* model. The survey was based on the opinions or perceptions of managing directors - an approach extensively used by other researchers. The questionnaire achieved a satisfactory response rate (nearly 28%) and yielded strong factor structures during the data analysis stage. The main statistical techniques used in the analysis of the data included factor analysis and

canonical correlation analysis - to derive clear associations between the main concepts and to link all the main factors in the deductive model.

The key findings indicate that there is no association between the contingency factors and the main concepts in the deductive model: culture, leadership, strategic planning and organisational performance. In addition, none of the contingency factors impact on the product type (mature, standard or customised), the proportion of total sales exported or the propensity to invest in research and development.

All the attributes of organisational culture are associated with the characteristics of strategic planning. The analysis also indicates that strategic planning is associated with the following dimensions of organisational performance: *learning and growth*, *meeting customer demands* and the *provision of quality goods on time*. This tends to suggest that strategic planning leads to an improvement in effectiveness.

The results in relation to the main concepts of leadership, culture, strategic planning and organisational performance indicate that *transactional - rewards*, *competence*, *creativity* and *employee focused* leadership styles are associated with all five cultural types. The results indicate that these leadership styles are also likely to impact to a greater extent on strategic planning than *laissez faire* leadership styles. This finding broadens the *Wilderom and van den Berg* categorisation of leadership by the inclusion of *transactional - rewards* attributes.

The analysis of the data suggests that high success firms place a strong emphasis on each of the attributes of leadership and culture associated with strategic planning and on each of the characteristics of strategic planning associated with organisational performance. The main parts of the deductive model are therefore confirmed.

Finally, a comparison of the emphasis given to the attributes of culture, leadership and strategic planning by firms with 1-9 employees and those with 100-249 employees failed to detect any statistically significant differences. Accordingly, it can be concluded that size is not a key determinant of behaviour. The hypothesis that SMEs adhere to generic

strategies such as the *Miles and Snow* typology was partially supported. These findings enable a greater understanding of the influences on strategic planning in SMEs and its role in relation to organisational performance. In particular, the findings are relevant to SME managing directors, policy makers, business advisers and researchers.

The research improves the understanding of strategic planning in SMEs. It fills a number of gaps identified in the literature review in relation to the relationship between contingency factors, culture, leadership, strategic planning and performance.

The main limitation of this study results from the use of a single respondent, although it should be noted that this approach has a strong base in the literature. Other possible limitations include the use of a lengthy questionnaire, the restriction of the sample to only two industrial sectors and the use of the strategic planning process as a surrogate measure of strategy. However, it is important to note that the latter is not unusual and other researchers have also adopted this approach.

The thesis comprises eleven chapters. Chapter 1 introduces the study by providing a brief critique of the literature and sets the study's aims and objectives. Chapters 2-6 provide the literature review in relation to: *SMEs, strategic planning, leadership and culture*. The methodology and research design are outlined in chapter 7. The remaining chapters involve the analysis of the data and the testing of the deductive model.

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CHAPTER ONE: INTRODUCTION

1.0 Preamble

'Small and medium-sized enterprises (SMEs) possess different characteristics and face different problems than larger organisations. For most small organisations, the priority is to survive. Added to this, they have fewer people, fewer resources, less bureaucracy, a much flatter hierarchy with managers undertaking more than one role, and they have more shared responsibility. As a consequence, the time available for introducing new initiatives is limited' - Wilkes and Dale (1998).

Thus *Wilkes and Dale* encapsulate the problems that small and medium sized enterprises (SMEs) encounter as they face continual change and the increasing need to adapt to an uncertain future. They imply that measures appropriate to SMEs are needed that are clear, purposeful and implementable. *Clarke (1994 p.1)* contends that *'the last decade brought with it a time of totally unprecedented change'*. He states that the change process continues unabated and affects every business. However, *Goodman (1995 p.49)* stresses that manufacturing firms in particular, are influenced by change and suggests that they need to *'get leaner and more responsive to customer demand'*. This implies that change can impact on some firms to a greater extent than others. For example, change may impact to a considerable extent on SMEs that are no longer able to rely on stable markets, or are uncertain about their competitors or the speed with which their competitors can become a major threat, or are unable to meet the demands of consumers that change virtually overnight. Some SMEs adopting a pro-active approach are often the subject of a 'scissor-type' movement as they attempt to meet changing consumer demands, while at the same time, achieving radical organisational and cultural change. To achieve competitive advantage by ensuring that their development is 'steered' rather than based on 'trial and error', it is contended that SMEs need strategic planning. However, the association between the strategic planning process and organisational performance is not clear, as various studies indicate conflicting results. Moreover, the association is often complicated by the various influences on strategic planning such as the organisation's leadership and culture, as well as a range of contingency factors such as the external environment, the formality of the strategic planning process and the barriers to its deployment.

A series of exploratory interviews with the Managing Directors of manufacturing SMEs in the electronic and engineering sectors confirmed that the important issues facing SMEs include contingency factors (formality of planning and barriers to strategic planning deployment), leadership, culture, strategic planning and organisational performance. A literature review was undertaken to establish the current thinking, understanding and knowledge of these factors. It confirmed the importance of the issues outlined by the exploratory interviews. The literature indicates that these issues have been investigated in relation to large firms but suggests that little is known about them in relation to SMEs. In addition, it indicates that there is no systematic examination of these concepts in an integrated model in manufacturing SMEs. Accordingly, both the exploratory interviews and the literature review are used in the development of the inductive model. The testing of the model and the findings of the study are of interest to a wide range of organisations and in particular the managing directors of SMEs, policy makers, business advisers and researchers.

This chapter:

- presents a critique of the literature and outlines the theoretical context of the study (section 1.1)
- proposes a deductive model depicting the relationships between contingency factors, culture, leadership, strategic planning and organisational performance (section 1.2)
- discusses the importance of the study and its contribution to existing knowledge and understanding (section 1.3)
- outlines the aims and objectives to be examined (section 1.4)
- provides an outline of the research methodology (section 1.5)
- describes the structure of the thesis and the order of presentation (section 1.6)

1.1 Critique of the Literature

Much is written about small and medium sized enterprises and their role in national and local economies. In the absence of a consensus on the definition of an SME, a working definition based on an employment criteria of fewer than 250 employees is in general use - *Atkins and Lowe* (1997). This definition is under threat as the structure and processes of SMEs are changing rapidly, largely influenced by new technology, knowledge and information, and globalisation - *Ghobadian and Gallear* (1997), *Sampler* (1998), *Wilkes and Dale* (1998). Such changes inevitably raise questions on the relevance of categorising firms according to the number of staff employed. A number of broader definitions have been proposed [*Brooksbank* (1991), *Dewhurst and Burns* (1993) and the *European Commission* (1996)]. However, none of these definitions take on board the intangible factors of knowledge and information. It is reasonable to argue that the debate on the definition of an SME which began with the *Bolton Report* (1971) will continue to engage the minds of academics for many years to come.

The importance of SMEs to the economy is significant. Their contribution to wealth and job creation is illustrated by studies carried out by *Gallagher et al* (1990), *Daly and McCann*, (1992), *Department of Employment*,(1992). A review of the literature supports this on both UK and International levels - *Storey* (1994) and *Schreyer* (1996). In an effort to ensure sustainability, National Governments and the European Commission [EC] provide a range of assistance to SMEs, mainly in the form of efficiency related tools - *Boraston et al* (1996), *Bridge et al* (1998). The range of initiatives is vast - *Clark* (1997), and not surprisingly concern was raised on their impact by the *European Observatory for SMEs* (1995). For example, concerns raised relate to a lack of knowledge and understanding of SMEs, their needs, entrepreneurial potential, responses to internationalisation and the challenges of a competitive environment. The *European Observatory for SMEs Report* was followed by a criticism of the bias of efficiency related measures towards the measurement of past actions rather than a consideration of the future - *Spitzer and Evans* (1997). This criticism follows more specific comments made in relation to one of the more high profile efficiency related tools - total quality management (TQM) in larger firms by *Redman et al* (1995) and relates to the lack of

focus on a strategic approach as the main reason for the low success rates of TQM. There is no reason to suggest that a similar criticism is not relevant in the case of SMEs.

The literature suggests that a strategic planning approach is needed to maintain competitive advantage and to overcome the failure to distinguish between operational effectiveness and strategy - *Porter (1996), Skinner (1996)*. A strategic planning approach is also seen as one of the most effective ways for firms, regardless of size or sector, to cope with the changes in their business environment - *Hart and Banbury (1994)*. However, the literature points out that whilst most large firms are emphasising strategic planning - *Ancona and Caldwell (1987)*, the position in relation to SMEs is blurred and unclear. *McKiernan and Morris (1994)* refer to the rarity of strategic planning processes in SMEs and suggest that as few as one in six firms have a strategic plan. Later studies contend that the incidence of strategic planning is much higher in SMEs. *Larsen et al (1998)* suggest that 87.5% of high growth companies review their strategies at least yearly. *Baker et al (1993)* cited in *Larsen et al (1998)* state that 86% of successful US small firms engage in strategic planning at least annually. However, in a study of UK SMEs, *Deakins and Freel (1998)* comment that SMEs are often 'naïve about planning and the development of strategy'.

Much is written on the impact of strategic planning on the performance of larger firms. Although the number of studies in relation to SMEs is increasing, there is still a dearth of information relating to the association between strategic planning and organisational performance in SMEs. This is not surprising as strategic planning is a relatively new field which emerged during the 1960's - *Kay (1993), Bourgeois (1996)*. Since then a number of studies have sought to ascertain its impact on organisational performance (see section 3.2). Caution must be exercised in interpreting the findings of many of these studies because various surrogate measures of strategic planning are used, such as the:

- formality of the process used to develop the content of strategy
- use of planning techniques
- use of external assistance
- consideration of risk and the congruency of goals.

Clearly these studies by and large, do not consider the content of the strategy or the processes used to deploy the strategic plan. In essence, it is difficult, if not impossible, to

translate the contents of an organisation's strategy to a set of simple questionnaire constructs, except at a very simple and superficial level. Similar arguments apply to the deployment of strategy. On the other hand, it is logical to assume that the process has an impact on both content and deployment of strategy. In fact, this point is supported by the literature. *Mintzberg (1973)* contends that while both content and process are separate elements of strategy formulation, they are highly interdependent. The interrelationship is seen as so significant that a consideration of the content of strategy in the absence of the strategic process means that only a limited view is obtained.

The relationship between strategic planning and organisational performance has received significant consideration but results are fragmented and contradictory - *Ramanujam et al (1986)*. A number of research studies show that small firms employing strategic concepts perform better than those that do not - *Bracker, Keats and Pearson (1988)*. *Joyce, Seaman and Woods (1996)* suggest that 'strategic' small firms are more likely to have greater capabilities to grow and expand, innovate and introduce a new product to the market place. *Roper (1997)* contends that 'strategic' small firms are more likely to grow and achieve greater profitability. *Kargar and Parnell (1996)* in a study of small banks, found an association between seven strategic planning characteristics and planning satisfaction which they defined as financial and organisational effectiveness. These results appear to indicate that strategic planning in SMEs is linked to enhanced performance.

However, a further batch of studies contend that there is no association between strategic planning and organisational performance - *Pearce, Freeman and Robinson (1987)*, *Robinson and Pearce (1983)*, *Schwenk and Schrader (1993)*. Interestingly, these studies were undertaken in the 1980s, which is an era of 'organisational positioning' rather than 'strategic planning' (see section 2.4). Accordingly, the contradictory evidence from the various studies presents some difficulties in reaching a clear cut conclusion regarding the nature of the relationship between the strategic planning process and organisational performance. It is difficult to either accept or reject the hypothesis that strategic planning positively influences the performance of the organisation. Accordingly, this study seeks to address the gap in the knowledge base in relation to the association between strategic planning and organisational performance in SMEs.

The relationship between strategic planning and organisational performance is not a straightforward relationship. For example, the literature outlines a range of factors that influence the strategic planning process directly. Leadership style is perceived as one of the main factors that has a significant impact on the formulation and deployment of a strategy plan - *Berkley Thomas (1988), Keller (1992), Kotter and Heskett (1992), Motowidlo (1992), Hart and Quinn (1993) and Wilderom and van den Berg (1997)*. However, the concept of leadership is complex - to date leadership studies are high in number, wide-ranging and diverse - *Bass (1981)*. In addition, many firms arguably fail to differentiate between leadership and management. *Hart and Quinn (1993)* conclude that leaders able to master 'diverse and seemingly conflicting roles will deliver higher firm performance'. *Bass (1990)* cited in *Wilderom and van den Berg (1997)* suggests that leadership impacts significantly on performance and that transformational leadership has the greatest impact on performance, followed by transactional leadership style. However, virtually all the studies so far focus on leadership in the large firm context - *Wilderom and van den Berg (1997)*. Accordingly, this study seeks to address the gap in the knowledge base in relation to the association between leadership and strategic planning in SMEs.

Studies also indicate that there is a close relationship between leadership and organisational culture. '*Excellent leaders are not merely aware of their organisation's basic assumptions, they also know how to take action to mould and refine them*' - *Brown (1992)*. Effective leadership uses organisational empowerment rather than control, based on rituals, language, ceremony or symbols - *Sims et al (1993), Brown (1995)*. There are few studies that examine the association between culture and leadership. However, that is not to say that leadership, as an issue, has not been considered in the context of culture. *Hofstede et al (1990)* in their constructs designed to measure culture include many items that refer to leadership attitudes and styles. In fact, they state that 'key leaders undoubtedly shape organisational culture'. *Wilderom and van den Berg (1997)* conclude that in many studies 'part of what is measured and labelled as culture is, in fact, leadership'.

Organisational culture is another factor that is perceived to have an impact on the formulation and deployment of a strategy plan - *Hofstede (1980), Deal and Kennedy (1982); Peters and Waterman (1982), Smircich (1983), Shrivastava (1985), Rollins (1993), Brown (1995), Wilderom and van den Berg (1997), Heller (1997), Vargas, Rivera and Cardenas (1997)*. Organisational culture can also impact on performance directly - *Lewis et al (1997)*. However, the majority of studies examine culture in large firms, leaving a dearth of data in relation to SMEs. Accordingly, this study seeks to address the gap in the knowledge base in relation to the association between culture and organisational performance in SMEs.

Other factors influencing the formulation and deployment of strategic planning include the degree of formality of the strategic planning process and the operating environment of the firm. In particular, the degree of formality in the strategic process is seen as a significant influence on strategic planning. However, an analysis of the literature findings pointed to contradictory results. Studies carried out by *Ramanujam and Venkatraman (1987)* and *Shrader et al (1984)* in large firms suggest a significant influence. *Bracker, Keats and Pearson (1988)* and *Lyles et al (1993)* also suggest a significant influence in relation to small firms. Another study on the formality of strategic planning in SMEs provides inconclusive results - *Parks et al (1991)*. Accordingly, this study seeks to address the gap in the knowledge base in relation to the impact of the formality of strategic planning in SMEs.

The operating environment is '*the sum total of all the forces that affect a company's actions*' - *De Geus (1997)*. A range of issues affect the operating environment from its dynamism, turbulence, technological change, substitute products, or new firms entering the markets, to the changing regulatory environment - *Kargar and Parnell (1996)*. However, many of these factors lie outside the immediate control of management- *Bourgeois (1996)*. Studies on the impact of the operating environment of firms on strategic planning show relationships in both size categories - *Covin and Slevin (1989)*,

Storey et al (1987) and *Kargar and Parnell* (1996) in relation to small firms and *Mills and Friesen* (1992) and *Thompson* (1996) in relation to larger firms. Accordingly, this study seeks to address the gap in the knowledge base in relation to the impact of the operating environment on SMEs.

1.2 Proposed deductive model

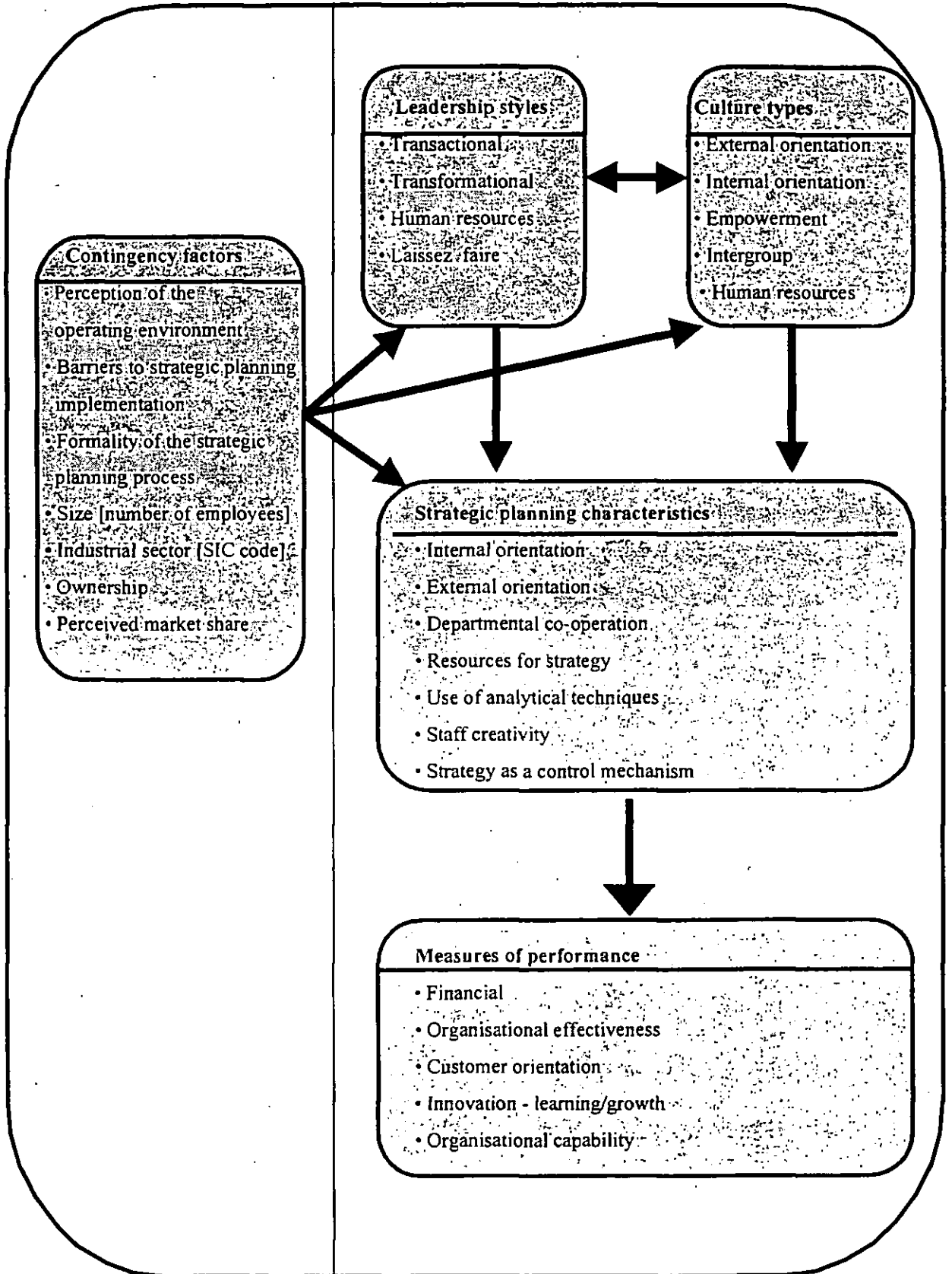
The literature suggests that on balance, strategic planning is associated with organisational performance. However, the majority of the studies focus on large firms. This means that very little is known on the impact of strategic planning on the performance of SMEs (see section 3.3.1). The literature also suggests that there are associations between culture (see section 5.2.1) and strategic planning, and between leadership (see section 4.2) and strategic planning. However, as outlined in the previous section, few studies have been conducted on culture and leadership in SMEs.

In addition, contingency factors such as size, ownership status, perceived market share, industrial sector, the formality of the planning process, barriers to the deployment of strategic plans and the operating environment are stated to be factors impacting on the overall performance of SMEs. These issues are confirmed by the results of the exploratory interviews (see sections 1.5 and 7.3.2).

The literature review and the exploratory interviews led to the development of a deductive model. This model is based on the contention that strategic planning is influenced by organisational culture, leadership style and contingency factors, and in turn influences organisational performance. The various elements that make up the model will be covered in detail in chapters 2-6. These chapters draw heavily upon the existing literature, including previous empirical studies in this field. As far as the author is aware, this is the first time that all the main factors relating to organisational performance in manufacturing SMEs are considered in one integrated study.

The deductive model is depicted in Figure 1.1 and suggests a two-way relationship between these factors, that is to say, they both affect and are affected by each other. A causal relationship is not propounded.

Figure 1.1 Deductive model



1.3 Importance of the study and its contribution to existing knowledge and understanding

In section 1.1, the author identified the gaps in the existing literature in relation to SMEs, which include that:

- the impact of strategic planning on the performance of SMEs is unclear. Most studies relate to large firms and present mixed findings.
- little is known on the impact of leadership on the strategic planning process in SMEs. The limited number of studies conducted to date focus on large firms only.
- little is known on the impact of culture on the strategic planning process in SMEs. The studies carried out focus on large firms only.
- little is known on the impact of contingency factors on the strategic planning process of SMEs.
- no attempt has been made so far to examine the main concepts outlined in the deductive model in an integrated manner using one sample
- the existing literature largely defines SMEs according to employee numbers. It suggests that all firms with fewer than 250 employees are SMEs.

A lack of a clear understanding of these issues is hampering the development and growth of SMEs. More detailed discussions with regard to each of the above are presented in chapters 2, 3,4,5 and 6.

This study provides SME managing directors, policy makers, business advisers and researchers with:

- a greater understanding of the concepts that are associated with enhanced performance
- an understanding of strategic planning based on an integrated framework
- an understanding of the more important dimensions of each of the concepts and at a more detailed level, an understanding of the more important attributes of each dimension

- a template from which existing approaches to strategic planning and competitive advantage can be critically examined.

The research findings also provide a foundation for further research, such as the examination of other 'contingency' factors that influence strategic planning. The literature review was augmented by a series of semi structured interviews with the Managing Directors of manufacturing SMEs. This resulted in the development of the deductive model presented in section 1.2. The present study attempts to close the gaps identified at the beginning of this section. Furthermore, it examines the key factors, differentiating between high performing and low performing firms. The deductive model contends that the various associations ultimately result in enhanced organisational performance. Accordingly, it could be argued that high performing firms (firms with a perceived increased market share) are more likely to place a greater emphasis on the elements with positive associations than low performing firms (firms with a perceived decreased market share).

An additional statistical analysis is carried out to ascertain the extent to which SMEs follow the generic strategies proposed by *Miles and Snow* (1984). In addition, the model is tested to ascertain the association between the strategic orientation and performance by classifying firms as high performing firms and low performing firms.

Finally, there is a clear need to draw the principal concepts together and incorporate the first hand experience of an integrated approach into the body of knowledge. The first hand experience needs to be drawn from a large and wide ranging sample of SMEs from throughout the UK rather than from one region or area, to identify the emphasis on strategic planning and enable the development of a model applicable to SMEs nationwide.

1.4 Aims and objectives of the study

The aim of the study is to empirically test the validity of the deductive model presented in section 1.1. To achieve this, it was necessary to fulfil a number of objectives. The key objectives are presented below:

Key objective 1

To test the association between contingency factors and strategic planning in SMEs, five hypotheses are proposed. These are outlined in table 1.1.

Table 1.1 Hypothesis one - contingency factors

<i>Hypothesis</i>
Hypothesis 1(a) <i>'That firm size, financial turnover, industrial sector and perceived market share influence leadership, culture, strategic planning and organisational performance in SMEs.'</i>
Hypothesis 1(b) <i>'That there is a significant difference between the emphasis on leadership, culture, strategic planning and organisational performance by firms that perceive their operating environment to be 'dynamic and changing' compared with firms that perceive their operating environment to be 'market threats focused'.</i>
Hypothesis 1(c) <i>'That strategic planning implementation problems are experienced to the same extent by high performing and low performing firms.'</i>
Hypothesis 1(d) <i>'That the barriers to the implementation of the strategic planning process are the same in firms deploying formal strategic planning and firms relying on non formal processes.'</i>
Hypothesis 1(e) <i>'That there is a significant difference between the emphasis given to the characteristics of strategic planning by firms deploying formal strategic planning compared to firms deploying non-formal strategic planning.'</i>

Meeting this objective required the identification of the impact of the contingency factors on the factors of the deductive model. Hypothesis 1(a) is tested using descriptive statistics. Hypotheses 1 (b), (c), (d), and (e) are tested using statistical analysis techniques.

Key objective 2

To test the association between culture and leadership in SMEs, the following hypothesis outlined in table 1.2 is proposed:

Table 1.2 Hypothesis two - culture and leadership

<i>Hypothesis</i>
<i>'That elements of the dimensions of leadership styles are associated with the elements of the dimensions of organisational culture in SMEs'</i>

Meeting this objective required the identification of the dimensions of leadership that are associated with the dimensions of organisational culture.

Key Objective 3

To test the association between leadership and strategic planning in SMEs, the following hypothesis outlined in table 1.3 is proposed:

Table 1.3 Hypothesis three - leadership and strategic planning

<i>Hypothesis</i>
<i>'That elements of the dimensions of leadership styles are associated with the characteristics of strategic planning in SMEs'</i>

Meeting this objective required the identification of the dimensions of leadership that are associated with strategic planning and the attributes of each dimension.

Key objective 4

To test the association between culture and strategic planning in SMEs, the following hypothesis outlined in table 1.3 is proposed:

Table 1.4 Hypothesis four - culture and strategic planning

<i>Hypothesis</i>
<i>'That elements of the dimensions of organisational culture are associated with the characteristics of strategic planning in SMEs'</i>

Meeting this objective required the identification of the dimensions of organisational culture associated with the characteristics of strategic planning.

Key objective 5

To test the association between strategic planning and organisational performance in SMEs, the following hypothesis outlined in table 1.5 is proposed:

Table 1.5 Hypothesis five - strategic planning and organisational performance

<i>Hypothesis</i>
<i>'That the characteristics of strategic planning are associated with elements of organisational performance in SMEs'.</i>

Meeting this objective, in turn, required the establishment of the association between the various characteristics of strategic planning and the elements of organisational performance such as financial, customer orientation, organisational effectiveness, innovation/creativity and organisational capability.

Key objective 6

In order to test the deductive model, the following objective outlined in table 1.6 is proposed:

Table 1.6 Hypothesis six - testing the deductive model

<i>Hypothesis</i>
<i>'That high performing firms place a greater emphasis on the elements with positive associations between culture and strategic planning, leadership and strategic planning, and between strategic planning and organisational performance, than low performing firms'.</i>

Meeting this objective required ascertaining the emphasis given to the:

- dimensions of organisational culture and leadership that are perceived to be associated with the characteristics of strategic planning
- the characteristics of strategic planning that are perceived to be associated with organisational performance.

In order to test the model, firms were classified according to their perceived market share. For example, firms with a perceived increased market share were categorised as 'high performing' and firms with a perceived decreased market share were categorised as 'low performing' firms.

Key objective 7,

In order to ascertain the homogeneity of SMEs (employing fewer than 250 people), the following hypothesis outlined in table 1.7 is proposed:

Table 1.7 Hypothesis seven - testing for size

<i>Hypothesis</i>
<i>'That firms with fewer than twenty employees differ from firms with 100-249 employees on the degree of emphasis given to the attributes of leadership, culture and strategic planning'.</i>

Meeting this objective entailed comparing the emphasis on the various attributes of leadership, culture and strategic planning by two groups of firms (employing 1-19, and 100-249 respectively). It is contended that if any differences exist, they are more likely to be between small and medium sized firms.

Key objective 8

To ascertain the applicability of generic strategies the following hypothesis outlined in table 1.8 is proposed:

Table 1.8 Hypothesis eight - the applicability of generic strategies

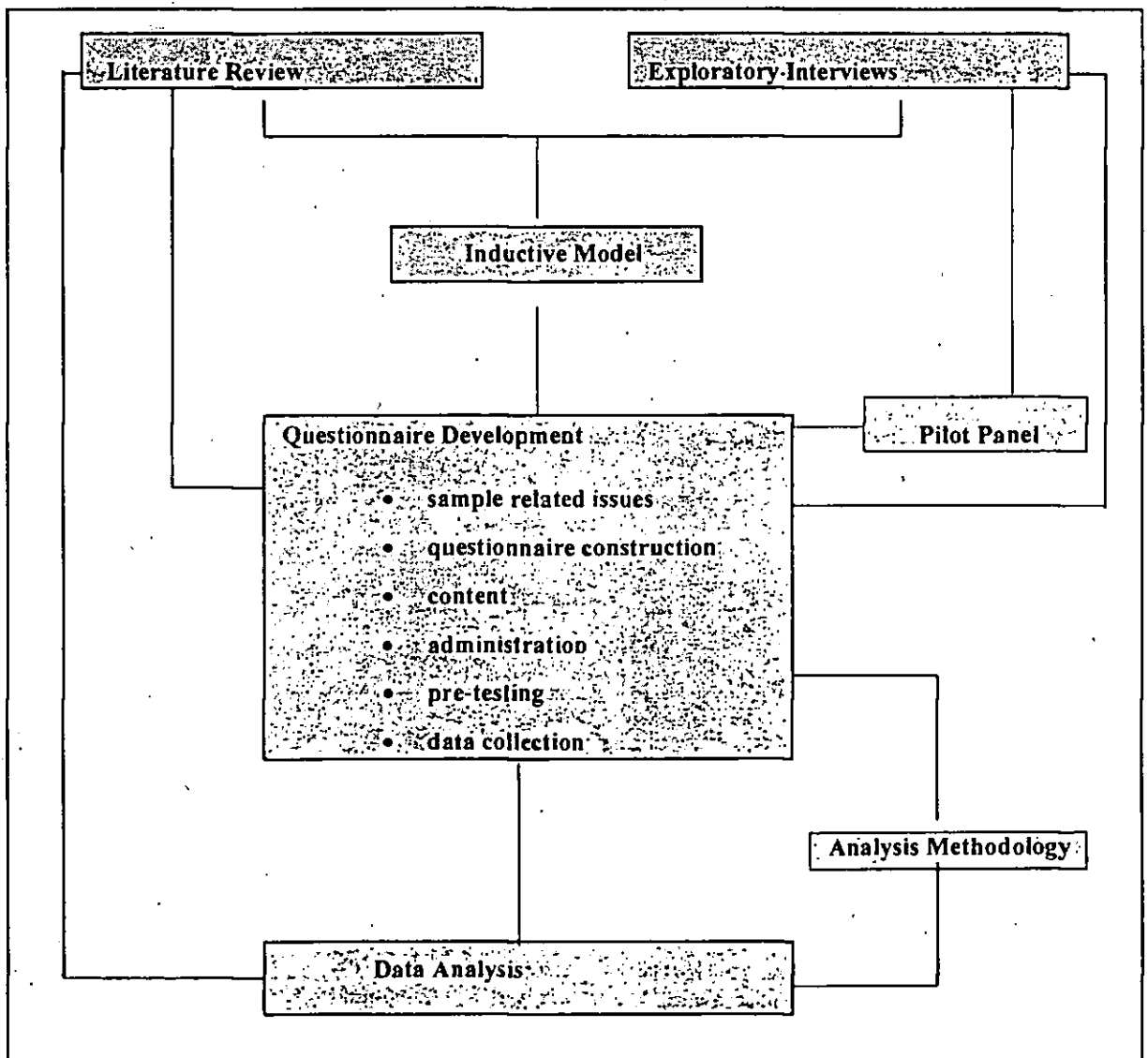
<i>Hypothesis</i>
<i>'That SMEs follow the generic strategies proposed by Miles and Snow (1984)'.</i>

Meeting this objective, in turn, required comparing the listing of self classification according to strategic orientation with an analysis of the operating environment (dynamic and changing or market threats focused) and product type (customised, standard or mature).

1.5 Outline of the research methodology

The aim of this section is to present a brief outline of the methodology used in the research. The research methodology is described in detail in chapter seven. The research process comprises five main phases: an extensive literature review, exploratory research, questionnaire development, piloting the questionnaire and data collection and analysis. Figure 1.2 outlines the research design which is described in detail in chapter seven. However, only a brief outline of the main elements is presented below.

Figure 1.2 An outline of the research design



A **literature review** is stated by *Bell (1987)* to be a very important stage of any study. It is used as the foundation for the research and provides the theoretical framework for the study. It has the following aims:

- to provide an analysis of the context of the operation of SMEs within the UK economy and provide a background and basis for the exploratory interviews
- to examine the nature of the strategic planning process in SMEs by evaluating the existing studies and derive characteristics appropriate to SMEs
- to review the existing studies on the association between leadership and strategic planning and derive dimensions of leadership appropriate to SMEs
- to examine the context of organisational culture in SMEs by examining existing studies and deriving characteristics appropriate to SMEs
- to review the existing studies on organisational performance to derive performance measures appropriate to SMEs
- to consider the broad research philosophies and research strategies as well as the methods appropriate for data analysis

The aim of the study determines the structure of the literature review. Each of these areas is allocated a separate chapter. *Veal (1992 p.32)* argues that a literature review enables the researcher to *'identify concepts clearly and measure them accurately'*. An extensive literature review is therefore necessary to identify the relevant published research. A variety of databases are used to identify the key publications in these areas since 1988.

In particular, it is necessary to identify the characteristics of strategic planning, the dimensions of organisational culture and organisational leadership as well as measures of performance, relevant to SMEs for inclusion in the survey instrument. This means reviewing the definitions of each aspect of the model, deriving their common themes to achieve a consensus in the derived definitions. This in-turn means establishing the basis for each of the characteristics, dimensions and measures derived in the extant literature.

The **exploratory interviews** are stated by *Robson (1993 p 42)* as finding out *'what is happening; to seek new insights; to ask questions and to assess phenomena in a new light'*. Therefore, the exploratory interviews have the following aims:

- to obtain insights into the problem areas facing SMEs
- to obtain a consensus on the key components of the deductive model.

In accordance with recognised practice, Managing Directors were interviewed until a redundancy stage was reached in the exploration of concepts. This approach is referred to as 'theoretical saturation' by *Eisenhardt* (1989). The exploratory interviews achieved sufficient 'depth' as evidenced by the earlier than expected redundancy stage. The exploratory interviews confirmed the deductive model. Accordingly, the deductive model was structured on the basis of the literature review and the exploratory interviews.

Questionnaire development follows the formulation of the deductive model. In designing questionnaires, the validity of the constructs was one of the key considerations. To ensure external validity, the author adopted a strategy based on identifying tried and tested relevant constructs. These constructs were modified in the light of the semi-structured interviews conducted with seven managing directors of manufacturing SMEs. Broadly the questions on strategic planning are based on the established constructs developed by *Kargar and Parnell* (1996) and the questions on organisational leadership and organisational culture are derived from a survey instrument developed and tested by *Wilderom and van den Berg* (1997). For further details refer to section 7.3.3.

The pilot testing of the draft questionnaire is an important stage in the study, particularly as many of the concepts are complex. The literature suggests that the pilot questionnaire should be tested on '*people who resemble the types of people to whom the questionnaire will finally be given*' -*De Vaus* (1996 p.103). Accordingly, twenty managing directors of manufacturing SMEs from the electronics and engineering sectors were chosen. *Kidder* (1981) cited in *May* (1997) encapsulates the rationale for a pilot survey when he states that:

'changes are necessary before the start of the full-scale study. The pre-test provides a means of catching and solving unforeseen problems in the administration of the questionnaire, such as the phrasing and sequence of questions or its length. It may also indicate the need for additional questions or the elimination of others'.

The pilot testing has the following objectives:

- to ensure content validity
- to establish the likelihood that the survey instrument will be completed by respondents in broadly similar circumstances to those of the pilot group
- to establish that the questions are clear and understood
- to ascertain that the instructions for completion are adequate
- to ensure that the format of the questionnaire is user-friendly
- to ensure that the final instrument contains relevant questions only

In the light of the results of the pilot survey, a number of minor alterations were made to the survey instrument such as:

- the removal of some redundant or ambiguous questions
- the addition of new categories of response to some questions
- the revision of the structure of some of the questions

Data gathering and analysis was carried out using a postal survey approach. The primary data is taken from a national sample of 702 SMEs in the engineering/electronic sectors. 194 completed questionnaires were returned, representing a response rate of approximately 28% (see section 9.1.1). Data analysis involved the use of a number of statistical techniques:

- factor analysis was used on all the main concepts as a means of data reduction. It was also used to identify the underlying factors in each dimension.
- Cronbach's 'alpha' was used to establish internal consistency of the constructs.
- Canonical correlation analysis was used to determine the associations between the various concepts. This technique is commonly used to establish the association between two variables (see section 7.4.6).
- the mean scores were primarily used for the descriptive statistics stage and for the testing of the model.
- the *Wilcoxon* test was used to examine the size of the difference between two pairs in a similar manner as t-tests.

1.6 Structure of the thesis

This thesis comprises eleven chapters. Chapter 1 introduces the study by providing a brief critique of the literature, setting the aims and objectives, and the research methodology. Chapters 2 to 6 provide a literature review, which explores and evaluates the current body of knowledge on each of the main concepts. The study then examines how the issues needing clarification can be explored and outlines a research methodology based on a quantitative approach. The final element of the study (chapters 8-10) involves the analysis of the data and the testing of the deductive model.

The structure of the thesis is therefore as follows:

Chapter One provides an overview of the context of the study and outlines the research precedent. It also gives the aims and objectives of the study.

Chapter Two begins the critical review of the literature by focusing on the role of SMEs. It reviews the definition of an SME and identifies the problems that exist in achieving a practical up to date definition. The chapter reviews the influences on the SME operating environment and examines the emphasis of SMEs on efficiency related initiatives. It notes that larger firms are already using a strategic orientation for competitiveness and explores whether SMEs can use a similar approach

Chapter Three documents and critically reviews the literature relating to the concept of strategic planning. It examines the basis for strategic planning, reviews the various definitions and derives a definition of strategic planning applicable to SMEs based on established guidelines. Finally, it derives the characteristics of the strategic planning process.

Chapter Four explores and critically reviews the literature relating to the concept of organisational culture and differentiates the concept of leadership from management. After a review of the seminal works on leadership, the chapter considers recent studies and derives the various dimensions of leadership style.

Chapter Five outlines and critically reviews the literature relating to the concept of organisational culture and derives a definition. It examines the basis of organisational culture and its importance. After a review of the seminal work on culture, the dimensions of culture are established.

Chapter Six documents and critically reviews the literature relating to the concept of corporate performance. It reviews the extant literature on financial and non-financial performance measurement systems. Moreover, it reviews the most recent models of performance measurement and finalises performance measures appropriate to the needs of SMEs.

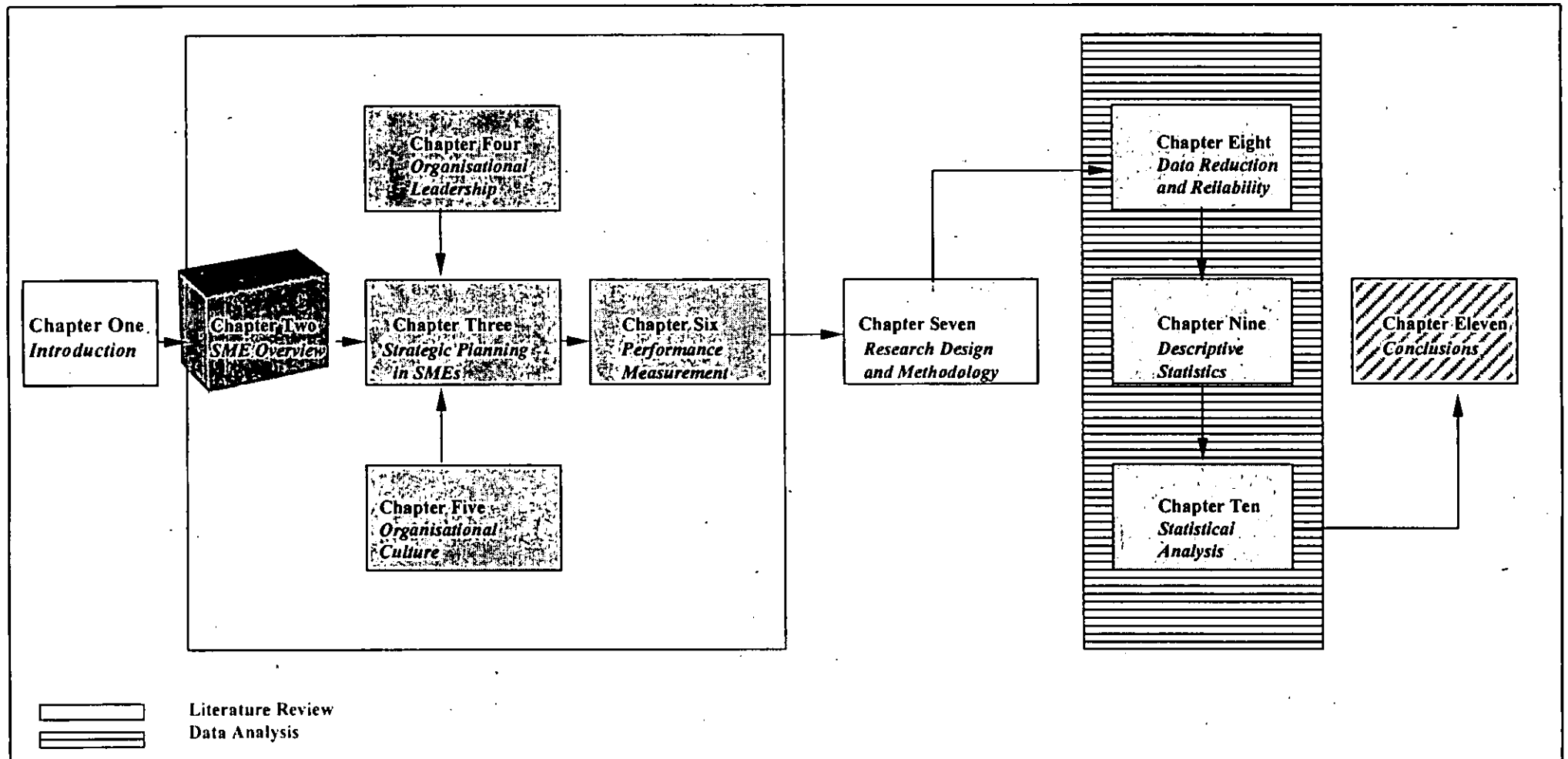
Chapter Seven describes the design of the research. It outlines the development of the draft questionnaire instrument, the exploratory interviews and the subsequent pilot testing of the survey questionnaire. The chapter justifies the design and deployment of the questionnaire approach. It outlines the administration of the questionnaire and continues by describing the methodology for analysis.

Chapter Eight outlines the data validation and data reduction process deployed.

Chapter Nine reports the descriptive analysis of the data. It begins with a range of descriptive data and continues with an analysis of each of the principal components.

Chapter Ten reports the testing of the hypotheses.

The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises - Chapter Outline



CHAPTER TWO: AN OVERVIEW OF SMEs AND THEIR OPERATIONAL ENVIRONMENT

2.0 Introduction

Despite the widely acknowledged importance of small and medium sized enterprises (SMEs) to the national economy and an extensive debate in the literature on SME classification criteria there appears to be little consensus on the most appropriate definition of an SME [see, for example *Atkins and Lowe (1997)*, *Wilkes and Dale (1998)*]. The constantly changing SME business environment is extensively covered in the literature [see, for example *Ghobadian and Gallear(1997)*, *Scott (2000)*]. Whilst a review of the literature indicates that a more strategic approach is needed for enhanced performance - *Skinner (1996)*, governmental and advisory agencies tend to focus on the introduction of a vast array of additional efficiency related measures - *Campbell and Alexander (1997)*. Many of these measures are introduced with little reference to a strategic planning framework. However, this is not surprising as the emphasis on a strategic planning approach in SMEs is 'rare' - *McKiernan and Morris (1994)*.

The literature indicates that large firms are placing an increased emphasis on strategic planning, but SMEs are reluctant to follow this course - *Deakins and Freel (1998)*. Whilst SMEs differ significantly from larger firms - *Jennings and Beaver (1995)*, *Wilkes and Dale (1998)* it is worth considering whether best practice is generic and establishing if any lessons are transferable to SMEs.

The aim of this chapter is to provide a review of the extant literature on the context of the operation of SMEs within the UK economy. It considers:

- the difficulties in achieving an accepted definition of an SME (section 2.1)
- the importance of SMEs to the UK economy (section 2.2)
- the factors influencing the performance of SMEs (section 2.3)
- the response of SMEs to the changes in the business environment (section 2.4).

The chapter then considers a re-focusing of SMEs using a more external orientated approach (section 2.5), and concludes by setting the scene for the consideration of strategic planning as a means towards enhanced performance (section 2.6).

2.1 Defining small and medium sized enterprises

There are many accepted definitions of SMEs and the classifications vary from industry to industry and from country to country - *Atkins and Lowe* (1997). Concerns over the lack of an accepted generic description of an SME were raised as long ago as the 1970s by the *Bolton Report* (1971) and *Stanworth and Curran* (1976). Nearly 25 years later these concerns are still not resolved.

One of the first definitions of SMEs is provided in the *Bolton Report*:

'In economic terms, a small firm is one that has a relatively small share of its market. It has an essential characteristic where it is managed by its owners or part-owners in a personalised way, and not through the medium of a formalised management structure. It is also independent in the sense that it does not form part of a larger enterprise and that its owner-managers should be free from outside control in taking their principal decisions' - *Bolton* (1971 p.1).

The *Bolton Report* (1971 p.3) sought to remedy the inadequacies in its definition of a small firm by attempting to differentiate between sectors. It states that, in relation to size, what constitutes a large business in one sector may be small in another. This in effect, signals a movement away from a uniform definition. Nearly two decades later *Storey et al* (1987), in a major study into SMEs' performance, express serious concerns on the haphazard approach to a uniform definition. However, they do not venture so far as to propose an alternative definition.

In an attempt to clarify the definition of a small business, *Brooksbank* (1991) prescribes a criteria based on firms employing less than 100 staff and having a turnover of less than £2.5m. A modification on this definition is given in the Companies Act 1985, Section 249. This refers to a small business as one that has a turnover of less than £2.8m, a balance sheet of less than £1.4m and less than 50 employees, and a medium sized firm as having a turnover of less than £11.2m, a balance sheet of less than £5.6m and employing

fewer than 250 employees. In the absence of a definitive classification, the definition of a small and medium sized enterprise was, until recently, given as one employing fewer than 500 employees by the European Observatory for SMEs (1985). A similar definition was used in the United States, comprising the following categories:

- Micro enterprises - up to 9 employees
- Small enterprises - 10 - 99 employees
- Medium Enterprises - 100 - 499 employees

It could be argued that a firm employing 499 employees could be considered to be a large firm in many parts of the European Community. As a result of the disparity in size categorisations and concerns regarding the targeting of European Community initiatives, the European Court of Auditors and the European Parliament in 1996 took up the issue of how an SME should be defined. Their deliberations resulted in a criticism of the European Commission (EC) for failing to formulate an accepted definition of SMEs. As a result the EC adopted a criteria for classification to be applied to all Community programmes, as shown in table 2.1:

Table 2.1 Criteria for SME classification

	Medium Sized	Small	Micro
Maximum number of employees	less than 250	less than 50	less than 10
Maximum turnover(in million ECU)	40	7	-
Maximum balance sheet total (in million ECU)	27	5	-

Source Commission recommendation 3 April 1996 OJ L 107 of 30.4.1996, p.4.

The EC further specified that to comply with the SME definition, a firm must adhere to employee numbers, the degree of independence and financial criteria. The financial considerations are reviewed every four years.

2.1.1 Applying the EC definition to SMEs

The EC definition of SMEs is based on employee numbers and financial criteria such as market share (usually dependent on the actions of other larger businesses), independence (self regulated and self controlled) and personalised management (owner(s) participate in all major decisions). However, the EC definition does not provide a monumental breakthrough in the classification of an SME. In fact, a similar definition was outlined three years earlier by *Dewhurst & Burns* (1993), who proposed an 'economic-control' definition which covers market share (not large enough to influence the prices of goods sold to any extent), independence (owner has control of the business) and management style (owner actively participates in all aspects of the management and decision making processes of the business).

Attempts so far to establish generic definitions mainly centre on financial and employment size criteria, as shown by the *Brooksbank* (1991) and the European Commission (1996) definitions. In a recent review of published journals, *Atkins & Lowe* (1997) found that classification of firms as SMEs could be based on the expanded criteria of employment, turnover, assets, managerial processes and ownership. However, this suggested definition is still not focused enough to overcome the issue of misinterpretation raised by *Boswell* (1973), who states that financial measures are '*subject to the obvious erosion of inflation*' and employment figures can be '*dubious*'.

Other measures such as market share are also open to question as SMEs trading in specialised market niches may have a significant role in that market share - *Stanworth & Curran* (1976). In addition, managerial processes are changing as SMEs adopt new management principles. An example is the decentralisation of decision making. The EC definition includes over 99% of all businesses in the UK and virtually 100% in smaller EU States such as Ireland. Accordingly, it could be argued that it is time to re-assess the definition to enable more meaningful analysis to be undertaken - *O'Regan et al* (1998a).

2.1.2. The rationale for a re-assessment of the SME definition

All the definitions of an SME examined for this study have size (employee numbers) as a common factor. This is a quantitative approach which emphasises 'tangible' criteria. However, the SME of the future is already adopting a different form to that of the traditional SME, as it embraces high technology, capital intensive products and processes' - *Sampller* (1998). Accordingly, major competitive factors such as knowledge and information are not included in the definition of an SME. Various examples outlined by *Stewart* (1997) show how firms use information and knowledge based capabilities to attain competitive advantage. For example, the U.S. subsidiary of the Finnish Group *Nokia* has annual sales of over \$160m yet only employs a handful of employees: In addition, another United States based company, *Nike* is renowned internationally for its sports wear and in particular its shoes. *Nike*, however, does not manufacture shoes but instead relies on knowledge intensive aspects of research and development, marketing and distribution. Its success is demonstrated by its financial results, which show sales per employee 'running' at \$344,000 compared to \$248,000 for the mean of the *Fortune 500* companies. Another example of the knowledge based growth era is *Netscape*, whose chairman controls stock worth nearly a billion dollars; yet this company was unheard of 4 years ago - *Stewart* (1997). It follows that the emphasis on 'intangible' factors is likely to increase as production moves from being labour intensive to capital intensive and to a reliance on knowledge and information technology for competitive advantage.

In the light of such changes, it is reasonable to consider varying the concept of 'SMEs' in preparation for the future. It could be argued that any reconsideration of the definition of an SME needs to take on board the increasing importance of information and knowledge factors. This contention is based on the increasing emphasis on employees being 'information and knowledge literate' - *Applegate* (1995). The new knowledge industries have increased productivity by more effective working by a re-definition of the tasks and the elimination of any unnecessary actions' - *Hammer* (1990). Examples of this include a recent study of two hundred and eight Belgian SMEs which shows that 'firms... who use more information, achieved better results in the past and are more optimistic about the future' *Lybaert* (1998 p.188).

One of the anomalies arising from the list of definitions outlined so far is that many businesses perceived as 'large', match the criteria for classification as SMEs. For example, the American subsidiary of *Nokia* could hardly be classified as an SME, even if it conforms to the criteria of employee numbers. Accordingly, it is reasonable to argue that the definition of SMEs must provide for the assessment of employee numbers as a criterion for SME classification on a 'relative' basis. Whilst a range of definitions exist, it is important that a standard accepted definition is available, particularly for the purposes of grant aid, financial assistance or benefits from government initiatives. It is recognised that a definition based on employee numbers will not be consistent with a definition based on turnover. For example, it is not unusual to find firms with low staff numbers and high financial turnover such as *Netscape*. Recognising that any variation in the SME classification will take some time to be accepted, the definition of an SME based on employee numbers criterion is adopted in this study as being the most relevant definition available. The rationale for this criterion arises from the recognition that '*integral to the concept of size is the nature of the managerial processes that are employed in different firms*' - *Atkins and Lowe* (1997). Additionally, employee numbers criterion are frequently used to define an SME. For example, in a major review of the literature, over two-thirds of the papers use employee numbers as the size criterion - *Atkins and Lowe* (1997). Accordingly, the employee number criterion also appears to relate directly to the aspects of this study such as organisational culture, leadership and management style as well as contingency factors, such as the formality of the strategic planning process.

2.2 The importance of SMEs

For decades the role of SMEs in the national economy has been significant - *Robinson and Pearce* (1983), and *Bracker, Keats and Pearson* (1988). Empirical studies conducted throughout the 1980s, reveal that small firms make a considerable contribution to the UK economy - *Daly and McCann*, (1992), *Department of Employment* (1992) confirm the views of *Gallagher et al* (1990) and *Daly* (1990), that small firms are a significant source of wealth and job creation. A review of the literature also supports this contention - *Storey* (1985), *Storey* (1994), *Schreyer* (1996), *North and Smallbone* (2000).

SMEs are widely regarded by the Government as a major source of current and future employment in the UK. They are seen as an essential part of the economy, providing the industrial leaders of the future, improving the competitive edge of the economy by maximising the range of choice and challenging the dominance of existing market leaders - *Department of Employment* (1991). This view is shared by the EC when it emphasises that SMEs play a decisive role in job creation and are an important driver of social stability and economic drive at a European level. This is evidenced by the growth of employment in SMEs during a period of retrenchment by larger firms - *Jacquemin and Pench* (1996). It is therefore no surprise that a range of assistance and advice is provided annually to SMEs from a variety of sources - *Birch* (1979), particularly in areas of high unemployment - *Bridge et al* (1998), where it is used to overcome obstacles to enterprise development - *Boraston et al* (1996). But this assistance is not always effective due to a lack of knowledge of SMEs, of their needs, their entrepreneurial potential, their response to internationalisation and the challenges of a competitive environment - *European Observatory for SMEs* (1995). It is contended later in this chapter, that the provision of assistance in the form of efficiency tools in the absence of strategic planning, reflects a short term approach and is unlikely to lead to competitive advantage in the medium to long term.

2.2.1 SMEs and employment creation

The importance of both manufacturing and service sector SMEs to the United Kingdom economy is illustrated by their significance as a source of employment. The latest figures published by the DTI (July 1998) indicate that there are over 3.7 million SMEs in the UK of which 3.5 million employ fewer than 10 employees. This figure includes 2,523,535 sole traders leaving 1,177,535 firms employing 1-249 employees. The statistics show that 99.8% of all UK firms employ fewer than 250 employees. Accordingly, the importance of SMEs to the National economy can be clearly understood. Table 2.2 outlines the number of businesses, their employment numbers and turnover.

Table 2.2 The number of businesses, employment and turnover by size of business -1997

Size Range (Number of Employees)	Businesses		Employment		Turnover	
	Number	%	(000s)	%	£m ex VAT	%
0	2,535,535	68.1	2,866	13.6	86,706	4.8
1-4	803,275	21.7	2,106	10.0	215,110	12.0
5-9	191,755	5.2	1,396	6.6	112,403	6.2
Total for Micro	3,518,565	95.0	6,368	30.2	414,219	23.0
10-19	107,395	2.9	1,511	7.2	142,295	7.9
20-49	49,980	1.3	1,539	7.3	152,559	8.5
Total for Small	157,375	4.2	3,050	14.5	294,854	16.4
50-99	15,415	0.4	1,071	5.1	105,087	5.9
100-199	8,135	0.2	1,121	5.3	112,913	6.3
200-249	1,580	0.0	352	1.7	38,550	2.1
Total for Medium	25,130	0.6	2,544	12.1	256,550	14.3
250-499	3,215	0.1	1,118	5.3	142,789	8.0
500+	3,410	0.1	7,993	37.9	688,751	38.3
Total for large	6,625	0.2	9,111	43.2	831,540	46.3
Total for all firms	3,707,695	100.0	21,073	100.0	1,797,164	100.0

Source: DTI Statistical Bulletin URN 98/92 July 1998

Table 2.2 shows that the employment figures for larger firms (over 250 employees) is 9,111,000 whereas SMEs (under 250 employees) employ well in excess of this figure at 11,962,000. In addition, SMEs account for 99% of all businesses in every industry sector except the utilities, where the figure is 85.7%. Statistics provided by the *Bank of England* (1997) show a slight decrease in the total number of businesses from 3,725,000 to 3,706,078 (estimated) whereas *Barclays Bank* (1998) estimate that the figure has now reached 3.8million. However, the total SME percentage remains the same.

2.2.2 Manufacturing SMEs

The *Competitiveness - Forging Ahead* White Paper (1995) confirms the role of manufacturing SMEs in the creation of employment. As an example, small firms employing fewer than 20 staff created over a million extra jobs between 1985 and 1989 and in the two year period following that, created 350,000 new jobs. The consistency of SMEs net employment gains over large firms can be explained by the contention that they are less affected by macro-economic factors - *Ghobadian and Gallear* (1997).

However, the future task is to ascertain whether SMEs can sustain or improve on employment gains in the face of growing globalisation and other factors.

2.2.3 The geographical distribution of manufacturing firms

Table 2.3 shows the geographical distribution of all manufacturing firms in the UK for 1996. Whilst the table indicates the number of SMEs according to employee numbers, it does not conform to the size categorisation adopted for this study due to the non availability of data. For example, it uses a classification bracket covering 100-499 employees. Nevertheless it is a useful indicator of the importance of small and medium sized firms.

Table 2.3 Geographical distribution of manufacturing firms in the UK 1996

Total Manufacturing Division	Employment Size					Total
	1-9	10-19	20-99	100-499	500+	
North	3,915	885	1,035	395	65	6,295
Yorkshire and Humberside	9,845	2,095	2,470	730	110	15,250
East Midlands	10,580	2,245	2,565	740	85	16,215
East Anglia	4,930	845	905	260	35	6,975
South East	44,655	6,755	5,940	1,335	175	58,860
South West	10,690	1,725	1,675	500	60	14,650
West Midlands	14,130	3,116	3,325	890	120	21,581
North West	11,935	2,740	2,835	860	110	18,480
Wales	4,516	845	985	375	55	6,776
Scotland	7,120	1,575	1,815	520	100	11,130
Northern Ireland	2,825	565	585	200	20	4,195
Total	125,141	23,391	24,135	6,805	935	180,407

Source DTI Statistics Unit Table 10 Number of Local Units in Manufacturing industries in 1996

The largest concentration of manufacturing SMEs is in the South East (almost 33% of the total figure). However, it can be seen from table 2.3 that manufacturing SMEs are represented in every region to a significant degree. A summary of the breakdown of firms according to size categorisations is outlined in table 2.4.

Table 2.4 Breakdown of manufacturing firms by size categories

Firm Size	No. of Firms	% of Total Manufacturing
1-9	125,130	69.37
10-19	23,390	12.97
20-99	24,140	13.38
100-499	6,800	3.77
500+	930	0.51
Total	180,390	100.00

Tables 2.2 and 2.3 confirm the importance of SMEs as a vital component of the National economy, in terms of their employment numbers and turnover. Their performance is, therefore, of the utmost importance. It could be argued that measures to ensure competitiveness are, to a large extent, related to the factors that influence the SME business environment. Accordingly, the next section will focus on the main factors influencing the SME performance.

2.3 Factors influencing the SME business environment

Managing most SMEs is considered to be more demanding and more volatile than in the previous decade - *Coopers & Lybrand* (1997). Problems are no longer simple to solve and are often the result of a range of interdependent factors including the increasing importance of the globalisation of markets, advances in telecommunications technology, the Single European Market and the growing interdependencies between economies - *Ghobadian & Gallear* (1997). Other factors impacting on SMEs include '*heightened volatility, hyper competition, demographic changes, knowledge based competition*' - *Daft & Lewin* (1993). It is axiomatic that all business organisations need to be able to respond to any changes that could potentially have a significant impact on their development, growth and survival. The business models assume that all SMEs want to grow - *Churchill & Lewis* (1983), *Kazanjan* (1988), *Foster* (1993). However, *Kimberley* (1979) and *Gray* (1996) show that this is not necessarily true in the case of every SME, as many are content to survive rather than operate with expansion plans. Nevertheless, it could be argued that both survival and growth are becoming increasingly dependent on

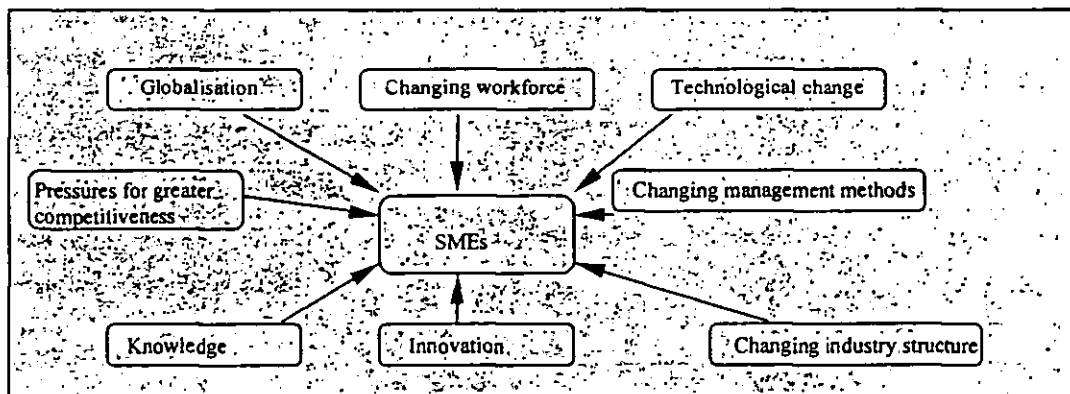
competitiveness. SMEs are already aware of some of the factors that are likely to impact on their competitiveness over the next decade- *O'Regan et al (1998b)* as outlined in table 2.5. It must be stressed that this is only a limited selection of factors illustrating the changing business environment of SMEs. These factors are elaborated on further in this section as examples of the external and internal operating environments. Other important factors outside the scope of this study include regulation/deregulation, access to information, attitudes to risk and so on.

Table 2.5 The principal factors influencing the operating environment of SMEs

External	Internal
Globalisation of trade Changing industry configuration Workforce characteristics	Technological change Knowledge Innovation Pressures to be more competitive Changing management methods

Each of the factors outlined, taken individually, can have significant impact on an SME. As each of the factors can have a catalytic effect on the other(s), the resultant cumulative impact can constitute a potentially powerful force. Such impact could be seen as both 'destabilising' and creating 'opportunities for innovative firms to solve the problems of others' - *Kim & Mauborgne (1997)*. The influencing factors are summarised in figure 2.1.

Figure 2.1 Some factors impacting on the SME business environment



The following sections outline the major factors and their influence on the SME operating environment in somewhat more detail:

- the impact of technological change (section 2.3.1)
- the changing industry configuration (Section 2.3.2)
- globalisation (Section 2.3.3)
- the structure and organisation of the workforce (Section 2.3.4)
- knowledge, information and learning (Section 2.3.5)
- innovation and creativity (Section 2.3.6)
- the pressures for greater efficiency (2.3.7).

2.3.1 The impact of technological change

One of the most important influences on the competitiveness of SMEs is undoubtedly technological change, which has altered *'the fundamentals of design, manufacture, distribution and organisation alike'* - Peters (1989 p.19). It has resulted in a transformation of economic and social life. The scale and impact world wide, of new technology in the past century, is reputed to be greater than in the previous 2,000 years - Kennedy (1989). As an example of the rapid rate of change, Scott (2000) states that the average product life-cycle has halved over the past ten years.

The advantages of technology include the ease, speed and extent by which information and communication can be effected. Telecommunications technology is already used in larger firms to enable a shift from concentrating on one specialised product, to a more integrated and flexible approach, allowing for the increased production of more customised products. New technology is continually advancing and is likely to affect all aspects of SME performance; for example, research and development, design services and strategic approaches. Its impact is seen not only on issues such as greater efficiency in production, but also on corporate structures, communication and creativity. In this regard, concern is expressed that SMEs may not be able to keep up with the pace of change as *'none of management's tools - basic accounting practices, patterns of organisation, formulation of strategy or workforce care - can cope with the new rates of change'* - Peters (1989 p.19).

The increased world-wide emphasis on technology means that goods can be produced anywhere - *Peters (1997)*. In effect, this means that the ability to meet customer need, through specialised knowledge, is a key differentiating factor. The author found in his discussions and interviews with a number of SMEs, grave concerns in relation to imports into the UK from lower waged and increasingly skilled countries. This concern is also evident from the responses to the study questionnaire (see section 9.3). Accordingly, it could be argued that SMEs tending to ignore new technologies, will have greater difficulty maintaining their competitive advantage in the longer term.

2.3.2 Changing industry configuration

SMEs face an increasingly competitive environment where change is the order of the day. *'If ever there was a time when business-as-usual described the way business ran, that time has elapsed'* - *Webber (1988)*. Change is undoubtedly taking place and is given many names such as: the boundaryless organisation, the virtual organisation, the horizontal organisation, the networking organisation and so on - *Handy (1990)*, *Mills, (1991)* *Quinn, (1992)*, *Miles and Snow (1994)*, *Bartlett and Ghoshal (1989)*. The speed of change in the configuration of industry is still increasing and is now facilitated by information technology - *Sampller (1998)*. The state of the changing industrial configuration is encapsulated by *Hirschhorn and Gilmore (1992)* who suggest that *'the traditional organisation map describes a world that no longer exists'*.

The configuration of business is a moving target, as firms tend to establish networking arrangements, strategic alliances and become involved in mergers and acquisitions. The speed with which change occurs is also a key factor. Business changes are becoming more radical and are moving away from being incremental. *Champy (1995)* states that *'now we must not only manage change, we must create change - big change - and fast'*. This point is re-echoed by *Hammer (1990)* who states that *'nothing is simple. Whatever you do is not enough. Everything is in question. Everyone must change'*. While the literature refers primarily to change in large firms, it is reasonable to argue that SMEs are also affected.

2.3.3 Globalisation

The production of goods is increasing on a transnational basis aided by international supply chains and often resulting in national boundaries becoming increasingly less important. *Peters* (1997 p.4) states that 'we're all next-door neighbours' and continues by saying that:

'the global village is here... with a vengeance. No business person is, literally, more than six-tenths of a second (measured by the speed of light) away from any other business person. When I need a partner, I can just as easily look in Bangalore, India as next door in my Silicon Valley neighbourhood'.

It is no surprise, therefore, that relationships between firms on a multi national basis, arising from partnerships and alliances, are also enhancing this trend - *Heller* (1997). Globalisation is not a passing phenomenon and is likely to continue as new markets emerge in formerly underdeveloped areas such as Eastern Europe, South America and Asia - *Coopers and Lybrand* (1997).

Globalisation is being further enhanced by the removal of boundaries as a result of the creation of the Single European Market and the agreements on World Trade. Both factors have reduced barriers to trade and in the process increased the pressures for competitiveness on both large firms and SMEs. In addition, they provide the foundation for stable and predictable world trade. Trade has also been liberated following the Uruguay round of multilateral trade negotiations. Between 1970 and 1997, over 100 Countries abolished exchange controls affecting the import of goods and services - *Financial Times* (Oct 1 1997 p.16). Such deregulation is changing the emphasis of competition in many industries.

Yet, globalisation is a double-edged sword, as existing markets become vulnerable to increased competition. The resultant pressures give an added impetus for firms with existing home markets only, to seek new opportunities elsewhere. *Coopers and Lybrand* (1997) found that firms generate approximately two thirds of their business in their home markets, which they expect will reduce to half over the next five years, as inroads are made into markets such as Eastern Europe or Asia. The study cautions '*that globalisation takes a long time - it is much more than international expansion - it requires organisational development that fosters world-wide standards combined with local*

thinking and action'. This means that SMEs have some room for manoeuvre to prepare for increased competition. SMEs must remember that a global firm can '*pull the trick of using cheaper sources of inputs from elsewhere in the world, something local players cannot easily duplicate*' - Ohmae (1989).

It follows that SMEs wishing to compete with world wide competitors will need creative, innovative, high value and quality products. Greater efficiency, even if possible, is no longer the way forward. This implies that SMEs must seek other avenues to compete - Johannessen et al (1997).

2.3.4 The structure and organisation of the workforce

The nature of employment is also undergoing extensive change as evidenced by the tendency to introduce more participative working arrangements in many firms - Atchison, (1991), Katzner, (1995). This is a trend which is likely to continue to develop, as a means of dealing with complex problems that cannot be solved by hierarchical positions alone - McLagan and Nel, (1995).

It is clear that the organisation of the past has changed and with it has gone the accepted features of the traditional firm, such as, stability, predictability and certainty - Peters (1997). In its place firms now face rapid change, greater uncertainty and a more empowered workforce, dealing in what is essentially, a world-wide market. This means that SMEs with greater flexibility to adapt will have distinct advantages over firms with more rigid structures.

2.3.5 Knowledge, information and learning

The 1990's is referred to as the '*Information and Knowledge Age*', which emphasises the need for employees to be 'information and knowledge literate' and not just 'computer literate' - Applegate (1995). Information and knowledge literacy is reflected in the new ways of creating and delivering market needs and marks a shift in the ethos of organisations, as differentiation is now by results, rather than tasks, performed.

The era of production based on the traditional factors of land, capital and finance are now a thing of the past. Pope John Paul states in his encyclical letter *Centesimus Annus* that 'at one time, the decisive factor of production was land, later capital ... today the decisive factor is increasingly man himself, that is his knowledge' - cited in Stewart (1997 p.12). In a major EC report *Growth, Competitiveness, Employment: The Challenges and Ways Forward into the 21st Century*, (1994 p.121), information is stated to be 'the competitive element for industry for decades to come'. A similar contention is outlined by Stewart (1997). It is therefore important that knowledge and information factors are clearly understood and incorporated within the SME strategic planning process, as the main drivers of competitive advantage. It follows that access to knowledge that others lack is a definitive competitive advantage. However, care must be taken to ensure that the right information is gathered, and that the firm has the ability and capability to understand and interpret it - Lindell and Karagozoglu (1997).

It can be argued that knowledge on its own is not enough, and by necessity, must be integrated into a re-focused strategic planning approach. As a first step, this means knowing where the knowledge is and who has it. Until now, the only knowledge being emphasised was derived from aspects that are measured within the organisation. This has profound implications for the accounting and performance measurement systems as well as guidelines for investment. The ease with which knowledge and information can be incorporated into the strategic and operational environments is also significant. The degree of effective incorporation can be used to compensate for the flatter structures that have evolved from cost cutting measures. If incorporation in both aspects is relatively easy and effective, then it can be applied to all SMEs, leaving differentiation or comparative advantage dependent on the degrees of creativity and innovativeness. However, many traditional firms have difficulties accommodating knowledge orientated factors. Quinn (1985) identifies a number of very significant barriers including top management conservatism, short time horizons for expected pay back, excessive bureaucracy and inappropriate rewards. While Quinn (1985) refers to large companies, there is no reason to suggest that similar barriers do not occur in SMEs. Such barriers can be overcome by greater emphasis on learning within the organisation, but the organisation ethos must encourage such actions. De Geus (1997) refers to the

organisation ethos of '*flocking or territorial behaviour*'. He states that '*Birds that flock learn faster, so do organisations that encourage flocking behaviour*' (p.57). This has training and staff development implications for SMEs.

2.3.6 Innovation

New ways of thinking and adapting business processes are needed if SMEs are to achieve added value from the information which is freely available. It follows that their behavioural approach must change to incorporate the new ways of thinking in order to use information as a basis for a more knowledge-based approach - *Stewart (1997)*. It follows that SMEs must provide the emphasis, time and resources for innovation to ensure that they can meet the demands of the future. The excuse that the rapidly changing world makes it difficult for SME managers to have time to be innovative no longer holds true - *Peters (1997)*. *Davis and Botkin (1994)* suggest that many SMEs emphasising efficiency related measures have decreased levels of creativity. Today, rapidly changing technology is one of the key influencing factors in economic growth but on its own is not enough to achieve competitive advantage. Attitude and approach are seen as a 'discernible factor' in identifying firms that are successful from those that are not - *Kim and Mauborgne (1997)*, *Peters (1997)*. *North and Smallbone (2000)* suggest that innovation in SMEs is influenced by 'interactive learning' which is a central characteristic of successful firms. They suggest that innovation relates to the maintenance and improvement of competitiveness. Essentially, innovation involves firms doing new things in new ways to increase productivity, product development, sales and profitability. It involves new ways of identifying the needs of new and existing clients and of making and marketing the products that satisfy them. The research, development and use of new, cost-effective technology is central to this process, but innovation in other areas such as general management, marketing, finance and administration is equally important. Innovation is one of the principal challenges to the management of SMEs. '*Innovate or fall behind, the competitive imperative for virtually all businesses today is that simple*', is how *Leonard and Straus (1997 p.111)* see it, and their view is widely shared - *Drucker (1989)*, *Peters (1990)*. Many SMEs have the ability to innovate effectively and develop new products more rapidly than larger firms - *Acs and Preston (1997)*. This could be

argued to be a significant factor in enabling small firms to create more jobs than their larger counterparts - Hall, (1987), Evans (1987), Dunne and Hughes (1994). A further differentiation is made by Greenan and Guellec (1995) who state that innovative firms create more jobs than firms that are not innovative. While they are referring to firms in general, there is no reason to suggest that innovative SMEs do not perform as well as innovative larger firms.

2.3.7 Pressures for greater efficiency

Arising from increased globalisation, (see section 2.2.3), competition is now more intense. This means that a greater search for more efficiencies and new ways to achieve competitiveness are needed in many SMEs. Small firms are often at a crossroads when they are faced by choices such as whether to strive for greater efficiency, 'sticking to their knitting', or adopting an innovate approach. The literature suggests that the consequences of dynamic change can not be addressed solely by efficiency related measures, but require a strategic response - Skinner (1996). In this regard, D'Aveni, (1994 pp. 41-42) states:

'competition is so intense and markets are so volatile that this evolution has become the dominant force in strategic action. Thus the position of a firm offers only a temporary advantage. It is the firm's ability to maintain a series of interactions successfully that determines the success of the company'

Such interactions include a greater responsiveness to stakeholders and the environment and can be interpreted as a steer towards a more strategic approach.

2.4 The response of SMEs to the changing business environment

Section 2.3 outlines some of the factors impacting on the business environment of SMEs. A review of the literature indicates that a vast array of efficiency related measures have been introduced over the past four decades, in an effort to assist SMEs to meet the challenges and problems that influence their business environment - De Meyer and Ferdows (1990).

The evolution of the various efficiency-related measures used are outlined in table 2.6 in an attempt to categorise the various management techniques introduced in the past four decades. A clear pattern can be seen: firms began with the long range planning techniques which coincided with a period of expansion and continued with the corporate planning techniques of the 1960s-1970s. The 1980s represent the decade of organisational positioning which was followed in the early 1990s by a period of concentration on competitive advantage, based on the maximisation of internal strength. Whilst the late 1990's show an increased emphasis on an innovative approach, it is overshadowed by an array of cost cutting measures. In effect, the period from 1950-late 1990s demonstrates a continuum of efficiency related measures. Interestingly, the continuum shows a movement away from quantitative measures and an increasing emphasis on qualitative analysis.

Table 2.6 Examples of efficiency related measures

Stage 1 Pre 1960's	[Budgetary planning and control]	
Budgetary planning and Control	Long range planning	
Stage 2 1960-70s	[Corporate planning Techniques]	
Decision trees	Theory X and Theory Y	Management by Objectives
Scenario Planning	Brainstorming	Zero based budgeting
Product diversification	Investment planning models	Competitor Analysis
Stage 3 The 1980's	[Organisational positioning]	
Empowerment	Just in Time	Porters 5 Forces
Corporate culture	Management by walking around	Decentralisation
Portfolio planning model	Value chain	Strategic business Units
Quality Circles	Experience curves	Diversification
Stage 4 The early 1990's	[Maximising Internal Strengths]	
Core competencies	Management of change and innovation	Benchmarking
Quality management	Value added partnerships	Value constellations
Knowledge based company	Resource allocation	
Stage 5 The late 1990's	[Cost Cutting Measures]	
Delaying/downsizing/rightsizing	Business process re-engineering	Lean production
Outsourcing	Knowledge and learning	

Based on *Davis and Devinney (1997)* and *Grant (1997)*

Table 2.6 indicates a number of measures introduced in the late 1990's which could be argued to represent labour force 'cost cutting measures'; even though the 'espoused' rationale for their introduction related to the achievement of 'enhanced effectiveness'.

In addition to the measures outlined in table 2.6, SME management is also subject to a vast range of other initiatives such as increased attention and assistance from successive Governmental agencies, the EC, employers' representative bodies and higher education. The rationale for such assistance is related to the role of SMEs in employment creation - *Birch (1979)*.

2.4.1 A critique of efficiency related tools

A number of studies examine the use of efficiency tools. Whilst the number of initiatives is large, *Clark (1997)* suggests that only a limited number of tools are used in smaller firms. *Bain and Co. (1994)* surveyed managers of larger firms to ascertain their use of management tools such as efficiency techniques and found that on average, twelve out of twenty-five named tools are used. It is reasonable to argue that on average SMEs use a smaller number of efficiency related management tools than larger firms. Specific criticisms of efficiency type measures relate to the degree of bias towards the measurement of past actions rather than a consideration of the future - *Spitzer and Evans (1997)*. Another criticism relates to the lack of focus, which is often manifested in the poor integration of the actions needed with the overall objectives of the firm - *Redman et al (1995)*.

While efficiency measures are no substitute for strategic planning, there is no evidence to suggest that their introduction in the absence of a strategic plan is harmful to SMEs. In fact, they help to provide some insights into the way companies are run, which can be beneficial in the formulation of the strategic process - *Campbell and Alexander (1997 p.48)*. However, the strong emphasis on efficiency related measures has resulted in strategic planning being overshadowed into second place, which has tended to undervalue the strategic approach - *Prahalad and Hamel (1995)*. Arguably, many SMEs need to adopt a more strategic approach and select the appropriate efficiency related initiatives that support their strategic plan. Already the UK Government, in the *White Paper on*

Competitiveness (1995), has sought to ensure that the various efficiency related initiatives are 'customer-focused' and delivered in 'an effective manner'. More importantly perhaps, the Government should also ask if SMEs are being addressed in the right way and dispel the perception of SMEs as focusing on labour intensive activities and producing output geared towards larger industry.

2.4.2 Efficiency tools within a strategic planning context

Many authors stress that the demanding environment can only be met by firms taking a more strategic approach - *Senge, Ulrich and Lake, Chakravarthy and Daz* (cited in *Hart and Banbury* 1994). This approach applies to all firms and has been accepted as the way forward by large firms some years ago - *Ancona and Caldwell* (1987). Acceptance by large firms does not mean that the same approach can or should be adopted by SMEs, but SMEs would be foolish not to incorporate the lessons that large firms experienced during the strategic planning process. However, there are many differences between large firms and SMEs that may affect the transferability of any lessons learned (see section 2.5.2).

The previous section implies that efficiency tools are likely to be more effective if deployed within the context of a clear strategic plan. It is understandable that many SMEs concentrate on efficiency measures when they are confronted by a 'rollercoaster' environment and merely seek increased efficiency in what they are already doing. This inevitably means a flattening of structures and doing more with less resources - *De Geus* (1988). The literature indicates that 'delayering' and cost cutting measures have removed a degree of flexibility from organisational structures, which often manifests itself in less emphasis on innovation and creativity - *Miles* (1989). This is not unsurprising as a flattening of structures ultimately means a loss of some knowledge, which may be vital to the creativity process. However, as labour costs now account for only 5-15% of production costs, the scope for further efficiency improvements focusing on labour is limited - *Wisner and Fawcett* (1991). Whilst these figures relate to large firms, there is no reason to suggest that labour costs as a percentage of product costs are any higher in SMEs.

The literature suggests that a concentration on efficiency measures is indicative of short term thinking - *Skinner* (1969). There is no reason why efficiency measures can not be introduced and promoted as part of an overall clear strategic plan. Indeed, over 25 years later, *Skinner* (1996) appears to suggest a similar approach when he states that a 'new breed of managers' are needed, who are strategically, rather than operationally and functionally orientated, to counteract the years of concentration on efficiency related techniques that resulted in managers thinking and looking inwards rather than outwards. While *Skinner* was referring to larger firms, the suggestion is equally relevant to SMEs, as they compete in the market place with larger firms. The author interprets this as referring to the use of efficiency tools within the context of strategic planning, rather than their abandonment. *Skinner's* argument can be reconciled with the work of *Bennis* (1966) who suggests that new ways should be found to cope with the rapidly changing environment, changing managerial behaviour and increasing specialisation.

The issue of reconciling efficiency tools and strategic planning can also be seen in the light of operational efficiency and effectiveness. *Neeley, Gregory and Platts* (1995) refer to effectiveness as being the extent to which customer expectations are met and efficiency as a measure of 'how economically the firm's resources are utilised when providing a given level of customer satisfaction'. Whilst many SMEs concentrate on efficiency related measures which have undoubtedly helped their operational processes, the changes discussed are radically re-shaping the business environment. It is contended that any further concentration on efficiency measures is inappropriate until a new 'fit' is established with the changing business environment. The failure to recognise and adapt to changing trends can lead to the loss of competitive advantage and affect growth and even survival prospects. SMEs could continue to follow traditional ways of thinking and traditional rules; but they are of little use when confronted by competitors who deploy different rules and are in effect playing a different game - *Welsh* cited in *Tichy and Charan* (1989).

The literature presents a mixed picture in relation to the use of strategic planning in SMEs. *McKiernan and Morris* (1994) refer to the rarity of its use and suggest that only one in six SMEs formulate and deploy a strategic plan. *Robinson* (1979 p.23) contends

that small firms are more accustomed to a 'seat of the pants' type strategy, which suggests a short term, rather than long term approach. Other studies, however, suggest a higher usage of strategic planning in SMEs. *Baker et al* (1993) cited in *Larsen et al* (1998) contend that 86% of successful US small firms annually deploy a strategic planning approach.

2.5 Strategic planning to gain competitive advantage

Improving competitiveness in an increasingly volatile business environment is probably the most important task facing any SME. In doing so, it is necessary to ensure that as far as possible, the organisation 'fits' the outside environment and meets customer needs both effectively and efficiently - *Drihlon and Estime* (1993). *Porter* (1996) states that effective strategic planning gives a firm a competitive advantage over its competitors as it '*renders choices about what not to do, as important as choices about what to do*'. He continues by saying that '*the root of the problem is the failure to distinguish between operational effectiveness and strategy*', as firms pursue the same goal of organisational effectiveness, which he compares with '*a series of races down identical paths, that no one can win*'.

Yet SMEs are often stated to be 'naive about planning and the development of strategy' - *Deakins and Freel* (1998). This is exemplified by the number of ways that SMEs tend to respond to change. Firstly, they tend to look inwards rather than outwards and ignore change. Secondly, some continue to rely on efficiency based measures as their 'strategic plan' for the future. Thirdly, some SMEs believe that, as they are part of a localised supply chain, they are immune to any of the external influences outlined in section 2.3.

Skinner (1996) suggests that strategic planning is an important means towards achieving competitive advantage. Arguably, many SMEs have improved their strategic planning processes. For example, the author noted during numerous interviews with SME Managing Directors, that a strategic plan is no longer a formal document with restricted circulation. Instead it is available to all staff throughout the organisation. This represents a major change from the strategic plan developed by the chief executive and/or top management only - *Mintzberg* (1987) and is arguably a direct result of the changes in the business environment

where strategic planning is seen as a continuous process rather than a once a year ritual focusing on functional or operational planning. In addition, strategic planning is increasingly seen in a more holistic light rather than just an amalgamation of business strategies. These changes result in a broader approach giving a more flexible and adaptable approach, as all employees are involved, rather than just the corporate planner - *Wall and Wall (1995)*.

Another important aspect of strategic planning in SMEs noted by the author during the exploratory stage of this study is the 'overview' approach of strategic planning. Here the emphasis on setting the scene is considered more important than identifying a market niche or opportunity and adapting the organisation to meet that opportunity. This is a major change from the traditional strategic thinking, which is mainly used to predict what is likely to happen in the short to medium term based on the expected nature of competitors actions. The 'holistic' view of strategic planning can be reconciled with the emphasis on adaptability rather than control, based on the use of information to maximise competitive advantage - *Bartlett and Ghoshal (1995)*.

The formulation of a unique SME strategic plan is important and whilst some lessons may be learned from the experiences of larger firms, the assumption that strategic benefits gained from large firms experiences are instantly transferable to SMEs is questionable. It is important to note that the implementation of measures can rarely be adopted completely from another firm - *Matejka and Dunsing (1995 p.62)*. However, it is not unusual for SMEs to look to larger firms for guidance on how to prepare for the future. Accordingly, the next section will consider the benefit of 'learning' from the example of larger firms.

2.5.1 Larger firms - an example to SMEs?

Even though SMEs go through similar strategic process as large firms - *Rice (1983)*, significant differences exist between them. All firms differ greatly in aspects such as competencies, resources, ideals and structured approaches and this includes SMEs –

Gilmore (1971). Work by other writers show that the management processes within the small and medium size firms are very different from that of the larger firm - *Jennings and Beaver* (1995), *Wilkes and Dale* (1998). As an example, *Jennings and Beaver* (1996) refer to the strategic approach of SMEs as adaptive (following a change in circumstances) and large firms as predictive (explicit policies followed to achieve a goal). In a further article, *Jennings and Beaver* (1997) re-enforce the message that SMEs differ from large firms by saying that the management processes of an SME 'bears little or no resemblance to management processes found in larger firms'.

Without doubt, the inherent differences between large firms and SMEs are significant - *Barraw, Brown and Clarke* (1995), *Joyce, Seaman and Woods* (1995). They are also encapsulated in the following quotation from *Penrose* (1959) cited in *Bridge et al* (1998): 'The differences in the administrative structure of the very small and the very large firms are so great that in many ways it is hard to see that the two species are of the same genus... We cannot define a caterpillar and then use the same definition for a butterfly'.

On a more specific level, the main differences can be summarised as relating to structures, procedures, behaviour, processes, people and external orientation - *Ghobadian and Galleur* (1997). *Hanan and Freeman* (1984), and *Meyer and Zucker* (1989), suggest that large firms can have unwieldy structures and complex procedures that hinder strategic change and give rise to complacency. By implication, smaller firms have greater flexibility. Another view propounded by *Pfeffer and Salancik* (1978), is that larger firms with significant resources, can influence their environments to a greater extent than SMEs. Other studies indicate that smaller firms generally, have less resources - *Lees and Lees*, (1987), *Welsh and White*, (1981) - a state which can be argued, affects their ability to develop processes. The consequences of resource shortages are often reflected in firms concentrating on the operational and short term aspects at the expense of strategic planning and long term matters - *Carlson* (1990).

Performance is also a differentiating factor as shown by the *ENSR Enterprise Survey* (1997) which contends that 'labour productivity increases with enterprise size, and varies between ECU 30,000 in very small enterprises to ECU 55,000 in large enterprises.' In addition the study found that profitability is higher in larger firms, although such firms have a greater risk of retrenchment during recessionary periods than smaller firms.

Many writers such as *Gorb et al* (1981) note with concern that there appears to be very little research into small business strategic planning. Whilst the majority of the studies examining the impact of strategic planning on performance, have been carried out in larger firms, it cannot always be assumed that there is direct transferability of strategic results. *McKiernan and Morris* (1994) state that strategic planning is a more formal process in larger firms, and make the point that formal planning systems can often conflict with the culture of SMEs - *'the danger lies on the assumptions that their benefits are instantly transferable to other organisations, including their smaller counterparts'*. *Stanworth and Curran* (1976) and *Gorb et al* (1981), also question the adaptation of techniques applied in larger firms to SMEs.

Lindsay and Rue (1980) suggest that small firms 'should be considered as a separate class in future research studies' but fail to elaborate on how this can be operationalised. Whatever the answer, it is clear that SMEs cannot be treated in a similar way to larger companies and that a greater understanding is required of their needs, aspirations and how they meet their objectives. It can be argued that the inherent differences between SMEs and large firms are centred on the advantages that arise from greater resources, clearer functional divisions and a higher degree of specialisation. Accordingly, it could be argued that the differences between large firms and SMEs are too great to suggest the direct transferability of any lessons and best practice. The following quotation encapsulates the variation caused by the differences in firm sizes and draws the conclusion that the transferability of applications is not advisable:

'..a small business is not a 'little' large business; differences exist in structure, policy making procedures, utilisation's of resources to the extent that application of large business concepts directly to the small business may border on the ridiculous' *Welsh and White* (1981).

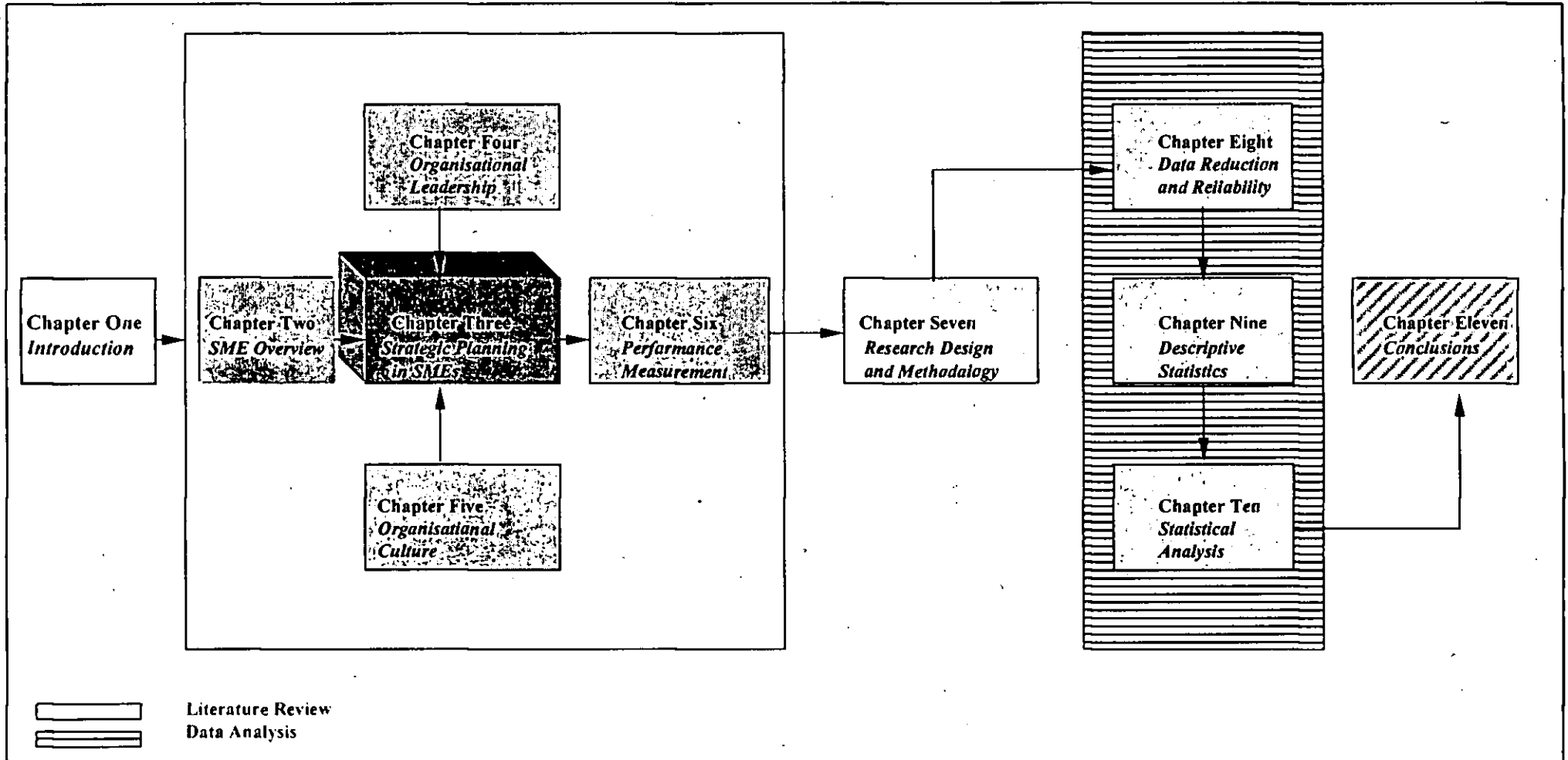
It is therefore clear that the consideration of the formulation and deployment of strategic planning needs to be considered in terms specific to SMEs in their own right. However, it is contended that the experiences of large firms are not irrelevant as they have in the past, encountered similar problems to SMEs. The solutions that have emerged provide useful signposts in an emerging area of SME competitiveness.

2.6 Concluding remarks

This chapter examines the definitions of SMEs and concludes that a number of anomalies exist which need to be considered by the EC and National Governments to enable the definition of an SME to be updated. In doing so, it will be more than a symbolic act as it will re-enforce the need to actively consider the impact of knowledge/information and innovation on the operations of the firm. The definition adopted for this study is based on size only, as this criterion is perceived as being closely related to the principle concepts of this study and frequently used by other researchers.

The chapter considers the environmental context of SMEs and the factors that influence their operations. It reviews the degree of emphasis that SMEs give to the use of efficiency related initiatives in a bid to gain/regain or retain competitiveness and suggests that the time is now right to consider a move away from efficiency measures to a more strategic approach. Efficiency measures are often given high priority but it is questionable if they achieve the objectives of the firm without being part of an overall strategic plan. Indeed, many SMEs may consider efficiency measures to be their strategy. Such measures may not assist in forecasting the future or looking ahead to the longer term, as they cannot be termed strategic. SMEs appear to have little option but to adopt a more strategic approach. To enable SMEs to develop and benefit from strategic planning, it is now necessary to develop an underpinning mechanism that emphasises the main factors of influence. Such factors will inevitably include the impact of leadership style and organisation culture on strategic planning, which in turn affects corporate performance. Such a complex task requires a practical analytical approach based on sound theoretical foundations. The next four chapters will seek to establish the theoretical basis for the proposed elements of this study.

The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises – Chapter Outline



CHAPTER THREE: STRATEGIC PLANNING IN SMEs

3.0 Introduction

The last chapter contends that the use of efficiency orientated initiatives leads to a limited degree of success - *Campbell and Alexander (1997)*. To enable further success and sustained performance to be achieved, *Skinner (1969)* suggests that a more strategic approach by manufacturing firms is necessary. Accordingly, this chapter examines the nature of the strategic planning process in SMEs.

The chapter is structured in five parts. It:

- sets the scene for the consideration of strategic planning in manufacturing SMEs (Section 3.1)
- examines the definitions of strategic planning (Section 3.2)
- reviews previous studies investigating the association between strategic planning and performance (Section 3.3)
- develops a framework to infer characteristics of the strategic planning process (section 3.4).
- briefly examines strategic orientation typologies (section 3.5)

3.1 Setting the scene for the consideration of strategic planning in manufacturing SMEs

Section 2.3 indicates that the business environment is complex and in a state of constant change - *Ghobadian and Gallear (1997)*. One of the principal components of change is the consumer expectation of wider choices at more competitive rates. The rapid and unprecedented rate of change means that many SMEs have to re-evaluate their strategic plans in order to ensure that they can gain, attain or retain competitive advantage in the face of growing competition - *Hamel and Prahalad (1993)*, *Kay (1993)*.

Peters (1997) refers to competitiveness in more drastic terms by saying that '*if the other guy's getting better, then you'd better be getting better faster than that other guy's getting better ... or you're getting worse*'. *Peters' (1997)* contention is based on the view

that innovation is essential for the survival of most businesses. This is consistent with the work of *Davis and Botkin* (1994) which propounds that new technology plays an increasingly important role in the competitive advantage of SMEs, as well as playing a key role in economic growth. However, new technology on its own is not enough to achieve competitive advantage. Often new ways of thinking and behaving are needed to enable SMEs to achieve added value from the information which is freely available.

Many manufacturing SMEs have adopted a range of efficiency related measures called 'lean manufacturing strategies' in an attempt to ensure greater cost competitiveness - *Womack, Jones and Roos* (1990), *Lamming* (1993), and *Womack and Jones* (1996). However, cost is only one factor - innovation is also needed to combat the shortening of product life cycles - *Pisano and Wheelwright* (1995). In addition, customers are continually demanding greater quality standards - *Hayes and Jaikumar* (1988). To this end, *Drucker* (1985) argues that defining and minimising the risks facing entrepreneurs is not enough for success and continues by saying that '*defending today*' rather than '*making tomorrow*' is a risky strategy.

The literature emphasises that SMEs can only meet new challenges effectively by focusing on a corporate strategic approach - *Skinner* (1969). This means that a rationalisation of future choices is necessary as well as the systematic preparation for the execution of organisational plans. It follows that SMEs using strategic planning are less likely to be reliant on a 'trial and error' approach and more likely to have systematic and analytical processes in place. The literature confirms the usefulness of this approach in a meta-analysis of studies focusing on SMEs in general, which show that a strategic approach promotes long-range thinking, reduces the focus on operational detail and provides a structured means for the identification and evaluation of strategic alternatives - *Schwenk and Schrader* (1993).

3.2 Reviewing the definition of strategic planning

Strategy is a term that virtually every business person believes they know and understand, yet the definitions vary - *Quinn* (1980). Despite numerous studies there is no commonly accepted and universal definition. In fact, the term 'strategy' is often used in a

contradictory manner - *Ghobadian* (1993). This is not surprising as management strategy is a relatively new field - the first book on strategy was written in 1965 by *Ansoff - Bourgeois* (1996). However, strategy existed long before the 1960s '*but only since the 1960's has it been common to address explicitly the question of what strategy should be*' - *Kay* (1993). One of the earliest definitions is provided by *Chandler* (1962) when he refers to strategic planning in terms of goals and the allocation of resources. A definition by *Proctor* (1997) twenty-five years later also refers to strategic planning as reflecting the goals and objectives of the business, usually set within a time framework, and specifying the main policies and plans for attaining those goals. The importance of matching the firms activities with its environment is stressed by *Proctor* (1997). As the environment is continually changing, it is also necessary for strategic planning to continually change in order to maintain a 'balance' or 'fit' with the external environment. This point is strongly emphasised by *Wright, Kroll and Parnell* (1996).

As strategic planning underpins organisational achievements and performance, it follows that a valid trait must be the anticipation of change -*Quinn* (1980). Following *Porters'* seminal work on competitiveness in 1990, corporate strategy achieved increased status and progressed from being a mechanism to anticipate change, to a means of achieving increased competitiveness. In 1994, *Porter* sought to refocus the discussion on strategic planning by asking '*why do some companies succeed and others fail?*'. He suggests that further work is needed to enable business to understand strategic planning by arguing that:

'while there has been considerable progress in developing frameworks that explain differing competitive success, at any given point in time, our understanding of the dynamic process by which firms perceive and ultimately attain superior market positions is far less developed' - *Porter* (1994).

By 1994 the number of definitions of strategic planning had grown rapidly, based on approaches that are outlined in the literature in terms such as strategic thrust, corporate focus or strategic intent - *Mintzberg*, (1993), *McDonald*, (1996) and *Chararbaghi and Willis* (1998). Generally, common aspects of most definitions are concerned with the long-term direction of the organisation, defining what business the organisation should engage in, matching the activities of the business to the environment to minimise threats

and maximise opportunities, as well as matching the organisation's activities to its resources - *Drucker* (1961), *Ansoff* (1969) and *McDonald*, (1996). In short, the various studies seem to be in agreement that strategic planning is concerned with a firm's sense of purpose. This is encapsulated by *Drucker* (1969) who suggests that strategic planning is purposeful action through plans. *Mintzberg* (1989) refers to intuition and the benefits of experience as influential factors in the formulation of a strategic plan. *Porter* (1991) broadens the remit of a strategic approach by including intangible aspects as well as tangible factors, and by referring to strategic planning as a description of the configurations of the collection of discrete and interconnected economic activities. This is a valid point, as a strategic approach needs to consider experiences, emotions, "gut feeling" and other variables in addition to the structured assessment based on the availability and analysis of information. *Mintzberg* (1992) adopts a more structured definition and refers to strategic planning in terms of the formulation of plans prior to action being taken and implemented deliberately with the organisation's mission in mind.

The importance of a qualitative as well as a quantitative approach to strategic planning is confirmed by a number of empirical studies. For example, *Ramanujam and Venkatraman* (1987) suggest that high performing firms place a high emphasis on their past performance levels and the reasons for their past failures. This led them to state that the use of strategic planning can benefit from reviews and reflections rather than a second guess at an uncertain future. Nevertheless, the essence of strategic planning remains the preparation for an uncertain future using a systematic approach. *Ohmae* (1983) encapsulates the meaning of strategic planning when he states that:

'what business strategy is about is, in a word, competitive advantage ... The sole purpose of strategic planning is to enable a company to gain, as efficiently as possible, a sustainable edge over its competitors'.

Strategic planning thus implies an attempt to alter a company's strength relative to that of its competitors, in the most efficient and effective way.

A selection of definitions of strategic planning is outlined in table 3.1.

Table 3.1

Selected definitions of strategic planning

<i>Chandler (1962)</i>	'the determination of the long-term goals and objectives of an enterprise, and the adoption of courses of action, and the allocation of resources necessary to carry out these goals'
<i>Andrews (1971)</i>	'the pattern of major objectives, purposes or goals and essential policies or plans for achieving those goals, stated in such a way as to define what business the company is in, or is to be in, and the kind of company it is or is to be'
<i>Ansoff (1979)</i>	'the positioning and relating of the organisation to its environment in a way which will assure its continued success and make it secure from surprises'
<i>Steiner (1979)</i>	'the futurity of current decisions. It also looks at the alternative courses of action that are open in the future; and when choices are made among alternatives, they become the basis for current decisions'
<i>Radford (1980)</i>	'focuses on decision situations concerned with both internal and external environments of the organisations, recognises the concept and importance of positive acceptance from shareholder groups and accepts the inevitability of rapid change in a complex external environment'
<i>Quinn (1980)</i>	'a pattern or plan that integrates an organisations major goals, policies and action sequences into a cohesive whole.. to marshal and allocate an organisation's resources into a unique and viable posture based upon its relative internal competencies and shortcomings, anticipated changes in the environment, and contingent moves by intelligent opponents'
<i>Glueck (1980)</i>	'a set of decisions and actions which lead to the development of an effective strategy or strategies to help achieve corporate objectives'
<i>Porter (1980)</i>	'taking offensive or defensive actions to create a dependable position in an industry, to cope successfully with the five competitive forces and thereby yield a superior return on investment for the firm'
<i>Reinhardt et al (1981)</i>	'general programs of action with an implied commitment of emphasis and resources to achieve a basic mission' based on 'patterns of major objectives, conceived and stated in such a way as to give the organisation a unified direction'
<i>Carroll (1982)</i>	'strategy is a statement of important action to be taken to improve relative performance by allocating limited resources, which reflects an understanding of the principle economic forces affecting the business, of the external changes to the business requiring a response, and of the role to be played by competitors'
<i>Ghobadian (1993)</i>	'a rational activity concerned with the determination of the extent and the manner that the top management of the organisation deploys its resources or diverts resources from its current activities in pursuit of gaining or compounding its competitive advantage or meeting non-profit related objectives, in a consistent fashion, taking into account the risks involved and the values of the organisation'
<i>Johnson and Scholes (1997)</i>	'strategy is the direction and scope of an organisation over the <i>long term</i> : which achieves <i>advantage</i> for the organisation through its configuration of <i>resources</i> within a <i>changing</i> environment, to meet the needs of <i>markets</i> and to fulfil <i>stakeholder</i> expectations'

3.2.1 Identifying common areas in the definitions of strategic planning

An analysis of the definitions outlined in table 3.1 indicates that strategic planning is a complex and dynamic process, dependant on the objectives the organisation wishes to achieve. It is primarily concerned with giving direction and purpose to an organisation based on the resource potential available and influenced by a relatively large number of factors, requiring detailed analysis and consideration. The principle components of the various definitions are outlined in table 3.2.

Table 3.2 Definitions of strategic planning and their principal components

Author	Environmental positioning	Long term goals and objectives	Impact of firm's future	Allocation of scarce resources	Action Plans/ Systematic	Pursuit of Competitive Advantage	Monitoring of the Strategic Plan
<i>Chandler</i> [1962]	√			√	√		
<i>Andrews</i> [1971]		√	√		√		
<i>Ansoff</i> [1979]	√						
<i>Steiner</i> [1979]			√				
<i>Radford</i> [1980]	√						
<i>Quinn</i> [1980]		√		√			
<i>Glueck</i> [1980]		√					
<i>Porter</i> [1980]						√	
<i>Reinhardt et al</i> [1981]		√				√	
<i>Carroll</i> [1982]	√			√			
<i>Ghobadian</i> [1993]		√		√		√	√
<i>Johnson and Scholes</i> [1997]	√	√	√	√	√	√	
√ = factor present in this definition							

An analysis of table 3.2 indicates that strategic planning is likely to relate to the following criteria:

- (a) the positioning of a firm in relation to the environment
- (b) the firms long term goals and achievements
- (c) the future of the firm

- (d) the deliberate and planned allocation of scarce resources
- (e) the use of action plans and a systematic approach
- (f) the pursuit of competitive advantage
- (g) the monitoring of the strategic plan

A review of the literature establishes the basis for the inclusion of each of these common areas in a definition of strategic planning appropriate to SMEs.

(a) The positioning of a firm in relation to the environment refers to the achievement of a match or 'fit' between the internal and external environments - *Godiwalla et al* (1981). The importance of an organisational 'fit' with its environment is widely documented in the literature - *Lawrence and Lorsch* (1967), *Venkatraman and Camillus* (1984), *Johnson and Scholes* (1997), *Hayes and Pisano* (1996), *Skinner* (1996), *Hofer and Schendel* (1978) and *Kay* (1993). However, it is a complex task, which includes a series of treaties and networks that form part of the firm's environment - *Ghoshal and Bartlett* (1990). *Miles and Snow* (1984 p.11) describe 'fit' as '*a process as well as a state ... a dynamic search that seeks to align the organisation with its environment and to arrange resources internally in support of that alignment*'. An analogy to describe a concept like 'fit' is provided by *De Geus* (1997 p.105) when he states that:

'when the temperature goes up, the rock on the mountainside expands. When it freezes at night, the rock contracts. It may crack in the process, but in a very short time the rock is back in harmony with its cold environment'.

Achieving a 'fit' with the environment does not happen automatically. *Bourgeois* (1996, p.8) argues that a firm that is:

'truly thinking strategically can be identified in a number of ways. First, its executives know and understand the firm's mission and strategy. Second, they know their core competencies and capabilities as an organisation. Third, they can identify their competitors and predict their reactions to the firm's strategic moves. Fourth, they have developed a culture that supports their strategy. Finally they are constantly developing new capabilities for renewing their strategies and for competing successfully in the future'.

The achievement of 'fit' as a means of enhanced performance has received much attention in the literature from as early as 1961, when *Burns and Stalker* (1961) found that organisations' structures vary depending on the nature of their external environments.

The contention by *Jauch and Osborn* (1981, p.492) that '*the probability of organisational survival increases as the congruence of environmental, contextual and structural complexity increases*', is confirmed in an empirical study carried out by *Powell* (1992).

Environmental conditions such as stability and control are important to many SMEs as they focus and guide actions and at the same time allow for adaptation to the external environment - *Mintzberg* (1992). The importance of a match or 'fit' is often more evident during the consideration of the high investment costs associated with manufacturing plants, particularly during an era when consumer demand is constantly changing. This implies that expensive infra-structural investments should not be made lightly and not without a detailed analysis of the external environment. However, *Wyer and Smallbone* (1999), express some doubts on the ability of smaller SMEs to react in an effective manner to their external environment.

(b) The firms long term goals and achievements are seen as the rationale for a strategic plan by *Johnson and Scholes* (1997). However, *Ghobadian* (1993) contends that strategic plans need not necessarily be long-term and encapsulates a revised criterion when he states that '*the time span is dependent on the contingency factors and the particular objectives to be pursued*'.

(c) The future of the firm is arguably one of the main roles of strategic planning. It can be argued that the effective formulation and deployment are the means by which organisations interpret opportunities and threats and decide on the optimum uses for their skills and resources. By implication, the strategic planning process must look to the future rather than be an extension of the present.

(d) The deliberate and planned allocation of scarce resources is stressed by many writers as the means by which firms achieve their key aims and objectives- *Ohmae*, (1983), *Porter* (1985), *Kay* (1993) and *Johnson and Scholes* (1997). However, a difficulty often arises in identifying what the key objectives are and how they should be prioritised. Resources and capabilities are the fundamental basis of a strategy and are

classifiable in terms of financial, physical, human technological and organisational factors - *Grant* (1991). This could be described in a more generic format as anything that can be thought of as a strength or weakness of a firm - *Wernerfelt* (1984).

In the formulation of a strategic plan it is worthwhile to incorporate a multi-dimensional approach and consider the effects of strategic deployment and impact (thinking outwardly) - *Johnson and Scholes* (1997). To enable strategic choices to be made, the strategic objectives must be clearly understood. This means that care has to be taken to avoid failing 'to distinguish between *purpose* (what an organisation exists to do) and *constraints* (what an organisation must do in order to survive)' - *Campbell and Alexander* (1997). However, while a strategic plan can not in itself guarantee future success, it is a useful basis for considered actions - *Gilmore and Brandenburg* (1962). This arguably means that resources are allocated following a critical analysis of the options available.

(e) The use of action plans and a systematic approach reinforces the concept of strategic planning as a purposeful activity whereby managers clearly understand the firm's environment and exploit it, acting on its uniqueness for competitive advantage. This theme is taken up by *Henderson* (1989) when he states:

'strategy is a deliberate search for a plan of action that will develop a business's competitive advantage and compound it. For any company, the search is an iterative process that begins with a recognition of where you are now and what you have now. Your most dangerous competitors are those that are most like you- the differences between you and your competitors are the basis of your advantage. If you are in business and self supporting, you already have some kind of advantage, no matter how small or subtle....The objective is to enlarge the scope of your advantage, which can only happen at someone else's expense'.

Hofer and Schendel (1978) state that any decision on a firm's direction should be carefully considered, yet research carried out by *Quinn* (1980) suggests that planned changes such as formulating a strategic plan are rarely deliberately considered or deployed. In many cases, little consideration is given to the introduction of a strategic plan until the firm hits a crisis - *Aram and Cowan* (1990).

In the literature, the achievement of a systematic approach is seen as 'prescriptive'. *Mintzberg* (1987) disagrees with the 'prescriptive school' approach and states that this approach is impractical. He outlines the difficulties of forecasting ahead on a definite

basis and doubts if firms will sacrifice short term benefits in exchange for longer term benefits. His main point is that strategic planning is an on-going process or 'emergent' and can not be 'set in concrete' for a period of years ahead. In addition, he sees strategic planning developing on an incremental basis, to ensure that the culture and attitudes of employees accept the 'steer' given by senior managers. - *Mintzberg*, (1987). In effect, *Mintzberg* states that strategic plans evolve over time. In a separate work, *Mintzberg* (1990) confirms this interpretation and goes on to contend that a strategic plan evolving over time is more likely to effectively take on board the organisation's culture and enable stakeholders to adapt to changes as they occur. However, while the alignment of a firm's objectives with the external environment is often achieved by incremental action, as patterns of decision making and behaviour develop - *Snow and Hambrick* (1980), it is also clear that 'emergent' strategies are both short term and reactive. Nevertheless, such practices are capable of being translated into a pattern of business related decisions or a series of activities and decisions that together form a pattern in a firm - *Covin* (1991), *Inkpen and Choudhury* (1995).

Strategic planning is considered to be the common underlying logic that unifies the important actions and decisions of a firm, and according to *Mintzberg* (1987), is derived out of a process that is partly deliberate and partly emergent. In a later article, *Mintzberg* (1994) agrees that there is room for both emergent and formalised strategies as '*all real world strategies need to mix these in some way - to attempt to control without stopping the learning process*'. This represents a mellowing of the hard line approach that *Mintzberg* took earlier in relation to the benefits of formalised planning. In fact, *Mintzberg* states that strategies can form as well as be formulated.

It could be argued that the 'emergent' school gives grounds for concern, as in reality it is nothing more than a series of non structured and unprioritised actions which can be unduly influenced by managers adhering to their own agenda. The emergent approach gives SMEs a 'blurred' process and fails to ensure that the resources of the firm are maximised for the corporate benefit of the organisation. While in both the prescriptive

and emergent approaches it is difficult to say that either one conforms totally with reality, it is more likely that the prescriptive approach provides a greater basis for competitive advantage in the longer term.

(f) The pursuit of competitive advantage is the essence of strategic planning -- Porter (1980) and (1985), and is arguably achieved by the provision of goods or services in ways that can not be easily imitated by others. However, the basis for competitive advantage involves a range of factors which are rarely possible to consider in one exercise and as such it is necessary to prioritise the key factors that are essential to its existence. Such factors are referred to by Ohmae (1983) as the '*key factors for success*'.

(g) The monitoring of the strategic plan and its importance arguably can not be understated. It is the means by which a firm obtains the necessary information to enable it to assess the success of the deployment process. It ascertains that the best use is obtained from scarce resources. In turn, this information is used to enable amendments to be made to the strategic plan, if necessary. Simons (1995, p.156) states that:

'strategic control is not achieved through new and unique systems but through beliefs systems, boundary systems, diagnostic control systems and interactive control systems working in concert to control both the implementation of intended strategies and the formation of emergent strategies. These systems provide the motivation, measurement, learning and control that allow efficient goal achievement, creative adaptation, and profitable growth'.

Monitoring the deployment of the strategic plan needs to be an on going activity, as the company acquires, interprets and processes information about its environment- Pettigrew and Whipp (1991).

3.2.2 Achieving a definition applicable to SMEs

Selected definitions of strategic planning are presented in section 3.1 and their co-ordinates are identified. The literature supporting each co-ordinate is reviewed in section 3.2. The definitions of strategic planning outlined in the literature focus on the degree of uncertainty and unpredictability that firms face and provide a way of considering how to create a desired future. However, it could be argued that predicting the future is not the

sole purpose of a strategic plan and that greater consideration needs to be given to ensuring that the firm is in a position to maximise new opportunities or confront potential obstacles. In addition, the formulation of a strategic plan is not a prescriptive exercise, but also involves numerous qualitative as well as quantitative variables. While the various definitions of strategic planning have distinct common themes, their proliferation is likely to lead to a degree of confusion in many SMEs. It is essential therefore, that a clear definition of strategic planning appropriate to SMEs is available. The definition of strategic planning by *Johnson and Scholes (1997)* takes on board the majority of the common themes identified and is consistent with the understanding of strategic planning by SME Managing Directors, as related to the author during a series of exploratory interviews. Accordingly, the definition of strategic planning used in this study is:

'the direction and scope of an organisation over the long term: which achieves advantage for the organisation through its configuration of resources within a changing environment, to meet the needs of markets and to fulfil stakeholder expectations'.

This definition encompasses the common themes identified and supported in the literature. It explicitly deals with the positioning of the firm in relation to the environment, long term goals for the future of the firm, the planned allocation of resources in a systematic manner and the pursuit of competitive advantage. This definition could be argued to apply equally to SMEs as to larger firms.

3.2.3 Strategic planning - content and process

SMEs need to be aware of the distinction between the 'content' or the 'what' of the strategic plan, and the 'process' or the 'how' of strategy formulation. The 'how' enables the achievement of the 'content'. The content relates to the distinct elements of the strategic plan which differs from firm to firm. On the other hand, the process relates to the mechanisms for the development of the strategic plan and its subsequent deployment. While the substance of the strategic plan is unique to a firm, there is 'no logical reason why organisations can not deploy a common process in the establishment of 'strategic' plans' - *Ghobadian (1993)*. *Mintzberg (1973)* contends that while both content and process are separate elements of strategy formulation, they are highly interdependent. The interrelationship is so significant that a consideration of the content of strategy in the

absence of the strategic process means that only a limited view is obtained - *Mintzberg* (1990). Moreover, others contend that it is impossible to consider one without the other - *Hinterhuber and Popp* (1992). However, strategic planning is much more than a 'what' and a 'how'. *Pettigrew and Whipp* (1991) state that strategic planning is not just a matter of formulation and deployment, it also includes how people interpret and deploy the strategic plan. This view is consistent with the 'emergent' school of thought, which sees the strategic plan being formulated and deployed more or less by trial and error, as it is influenced and interpreted by the way people respond - *Mintzberg* (1990). This implies that strategic planning evolves, taking on board the internal decisions and the external factors to 'create a new, widely, shared consensus for action' - *Quinn* (1978). In effect, these influences reflect the way that an intended or emergent strategy becomes a realised strategy- *Mintzberg* (1990). Research by *Bourgeois et al* cited in *Dean and Sharfman* (1996) shows that deployment can have a significant influence on the final outcome and effectiveness of strategy. *Porter* (1987) cited in *Tushman et al* (1989) states that strategic planning can not be separated from implementation. This is consistent with the views of *Beer et al* (1990), who suggest that any drawbacks in the strategic planning process relate to deficiencies in its implementation. This shortcoming in the success of deployment is also shown in a report by *Deloitte and Touche* (1992) which suggests that eight out of ten companies fail to deploy their strategies effectively. It could be argued that there is little purpose in having a range of visions, goals, aims, objectives and so on, if there is no attention given to how they can be deployed effectively.

3.2.4. Establishing a surrogate measure of strategy

Strategic content and strategic processes are interdependent functions rather than independent of each other - *De Wit and Meyer* (1994 p.30). In essence, it is difficult, if not impossible to translate the contents of an organisation's strategy to a set of simple questionnaire constructs, except at a very simple and superficial level. Similar arguments apply to the deployment of strategy. It could be argued that the content of any strategic plan will change to meet the firm's operating environment. *Stacey* (1993) suggests that prescriptive strategies are 'too inflexible for an unknown future' and a 'recipe for stagnation'. Instead, he argues that strategies should emerge from the 'self organising activities of loose, informal, destabilising networks'. In a dynamic business environment,

the plans of many SME's Managing Directors are constantly in the course of modification, revision and refinement, often in the minds of the top management - *Henderson* (1989). This implies that plans can be modified until they are implemented and often result in changed or unrealised content - *Mintzberg* (1987). It could be argued that the 'dominant logic' referred to by *Stacey* (1993) is encompassed in the strategic planning process, rather than in the strategic content. Accordingly, this study uses the strategic planning process as a surrogate measure of strategy.

3.2.5 Formality of the strategic planning process

It can be argued that a formal strategic planning process is a deliberate means to include factors and techniques in a systematic way to achieve specified tasks. In essence, it involves the establishment of a clear goal and the necessary processes to achieve it - *Armstrong* (1982). It follows that a formalised strategic planning process has the following benefits:

- strategic planning is included on the corporate agenda
- it is approached in a systematic manner
- the process increases staff awareness and participation in the strategic plan

Empirical studies provide a mixed picture in relation to the value of a formal strategic planning. Whilst *McKiernan and Morris* (1994) state that a formal strategic planning process in SMEs often fails to provide a holistic view of the firm, a major study of small firms in the United States found that a formalised strategic planning process has some benefits - *Lyles et al* (1993). As a summary, *Lyles et al* (1993 p.42) state that

'the elements of goal formulation, developing distinctive competencies, determining authority relationships, deploying resources, and monitoring implementation receive more effective attention when small businesses engage in formal planning'.

As a detailed consideration of formal and informal strategic planning processes is outside the scope of this study, a written or unwritten strategic plan is used as a surrogate measure of formality. This approach is appropriate for the consideration of strategic

planning in smaller firms and is consistent with the work of *Gilmore (1971)*, *Robinson and Pearce (1983)*, *Bracker Keats and Pearson (1988)*.

3.3 The association between strategic planning and organisational performance - links with previous work

The relationship between strategic planning and organisational performance has received significant consideration - *Buzzell and Gale (1987)*, and *Porter (1980)*, but results are fragmented and contradictory- *Ramanujam et al (1986)*. This section provides a review of the literature to date on studies that have considered the association between the strategic planning process and organisational performance. The section is structured as follows:

- studies showing a positive association between strategic planning and financial performance
- studies showing no association between strategic planning and financial performance
- studies showing a positive association between strategic planning and a mixture of financial and non financial performance measures

3.3.1 Studies showing a positive association between strategic planning and financial performance

Table 3.3 summarises a selection of studies that measured performance using financial/profitability criteria. The characteristics of strategic planning include:

- the formulation and deployment of plans
- general trends in the use of strategic planning
- the key issues to be addressed
- the use of strategic planning techniques

The studies undertaken in the 1970s relate mainly to large firms - *Kargar and Malik (1975)* and *Wood and LaForge (1979)*. Each of these studies use planning as a surrogate measure of strategy. The number of characteristics is broadened by *Wood and LaForge*

(1979), when they refer to the impact of a total strategy, partial strategy or no strategy, on organisational performance. This approach is followed by *Frederickson* (1984) when he sought to ascertain the association between the level of comprehensiveness in the strategic planning process with organisational performance. While each of the studies use financial performance measurement criteria only, the findings in each study show that strategic planning firms outperform non strategic planning firms.

The first studies on the association between strategic planning and organisational performance in SMEs that the author was able to access, were carried out in the 1980s. Not surprisingly, these studies use financial performance measurement criteria. For example, *Robinson* (1982) uses the return on sales as a measure of performance, while *Bracker, Keats and Pearson* (1988) use profitability as the performance measure.

In a review of fourteen studies of small firms, *Schwenk and Shrader* (1993) use sales growth and return on assets as the measure of performance. However, these studies differ from those carried out on large firms in relation to the characteristics of strategic planning used. For example, *Robinson* (1982) and *Bracker, Keats and Pearson* (1988) use specific aspects of strategic planning such as the use of external assistance, or the use of strategic planning techniques.

Table 3.3 Summary of unidimensional studies showing the relationship between strategy and performance

Study	Sample Type and Size	Strategic planning/process measures	Performance measures	Findings
Ansoff et al (1970)	93 large manufacturing firms	the systematic formulation and deployment of plans on the success of acquisitions	financial - sales, earnings - return on equity	planners outperformed non planners on financial criteria
Kargar and Malik(1975)	8 large industrial firms	formal integrated long range planning and objectives	financial - sales, net income, earnings per share	formal planners outperformed non planners
Burt (1978)	92 large Australian retailing firms	internal consistency of goals consideration of risk	financial	positive relationship between strategy and performance
Wood and LaForge (1979)	41 large banks	the formulation of a total strategy, a partial strategy and no strategy	financial	comprehensive planners outperformed non planners
Robinson (1982)	202 small firms	use of external assistance in strategic planning	return on sales	firms employing outside assistance to develop strategic plans performed better
Frederickson (1984)	38 large paint manufacturers	level of comprehensiveness in the strategic planning process	financial	a positive relationship between comprehensiveness and return on assets
Bracker, Keats and Pearson (1988)	73 small entrepreneurial firms	use of sophisticated planning techniques	profitability	sophisticated strategic planning firms outperformed other firms
Schwenk and Shrader (1993)	14 studies on small firms	use of external assistance. use of sophisticated strategic planning. use of planning formality.	sales growth return on Assets	demonstrated a link between planning and performance across studies

Each of the studies on small firms demonstrates a positive association between the characteristics of strategic planning used and financial performance.

Based on these studies it is clear that irrespective of size or sector, strategy measured using process dimensions has an impact on the financial performance of organisations.

3.3.2 Studies showing no association between strategic planning and financial performance.

A number of studies did not find a positive association between strategic planning and financial performance in both large and small firms. The characteristics of strategic planning used range from the formality of the planning process to the comprehensiveness of the decision making processes - *Frederickson and Mitchell* (1984). Table 3.4 provides a summary of these studies.

Table 3.4 Summary of unidimensional studies showing a 'no effect' impact between strategy and performance

Study	Sample type and size	Strategic planning/process measures	Performance measures	Findings
Grinyer and Norburn (1975)	21 large UK firms	<ul style="list-style-type: none"> common perception of objectives clarity of role perception formality of planning communication processes 	<ul style="list-style-type: none"> financial - return on net assets 	no relationship between strategic planning and performance
Kudla (1980)	Fortune 500 Companies - 348 large firms	<ul style="list-style-type: none"> absence of no formal planning use of written plans use of comprehensive, systematic and future orientated planning 	<ul style="list-style-type: none"> financial return to shareholders 	no significant differences in the returns between planners and shareholders non planners
Robinson and Pearce (1983)	85 small banks	<ul style="list-style-type: none"> use of formal planning - written documentation -Use of environmental scanning -Setting of goals and objectives -Distinct competency -Authority relationships -Resource deployment -Monitor control 	<ul style="list-style-type: none"> financial (loan growth) 	no relationship between formal strategy and financial performance
Frederickson and Mitchell (1984)	27 large forest firms (109 executives)	<ul style="list-style-type: none"> comprehensiveness of decision making processes -assignment of responsibility -breadth of participation -willing to seek outside help -ideas vs. extensive analysis -range of techniques used 	<ul style="list-style-type: none"> financial - return on assets - return on sales 	no relationship between comprehensiveness and performance
McKiernan and Morris (1994)	1380 small firms	<ul style="list-style-type: none"> use of formal planning 	<ul style="list-style-type: none"> financial - Sales growth - Profit margin - Return on current assets - Employee productivity 	formality of the strategic planning process does not impact on performance

Each of these studies uses a limited number of planning process characteristics. For example, *Robinson and Pearce* (1983) in a study of small firms, refer to strategic planning in terms of formal planning and outline the following activities to be included in a written document:

- the use of environmental scanning
- the setting of goals and objectives
- competency
- authority relationships
- resource deployment
- monitoring/control measures

Robinson and Pearce (1983) found that there was no relationship between a formal strategy and financial performance. The following year, *Frederickson and Mitchell* (1984) used the comprehensiveness of the decision making processes as a surrogate measure of strategic planning. Characteristics of comprehensiveness include the:

- assignment of responsibility
- breadth of participation
- willingness to seek outside help
- analysis undertaken/range of techniques used

Frederickson and Mitchell (1984) found no relationship between comprehensiveness and financial performance.

It can be argued that the studies outlined use the following limited number of characteristics of strategic planning such as surrogate measures of strategy:

- formality of the process used to develop the content of strategy
- use of planning techniques
- use of external assistance
- consideration of risk and congruency of goals

While *Frederickson and Mitchell* (1984) use the comprehensiveness of the planning processes, their characteristics do not include external orientation. The importance of

external orientation is stressed by *Rhyne* (1986), who states that an external focus combined with a long term perspective, is associated with an enhanced return to stockholders.

However, it is possible to argue that these studies present findings contrary to those outlined in section 3.3.1 and as such present a degree of concern to SMEs on the use of strategic planning. One possible explanation for the lack of consistency may be attributed to a lack of understanding of the strategic planning process in both large and small firms. In an attempt to ascertain the association between strategic planning and organisational performance, *Greenley* (1986) reviews the literature up to 1986, reporting results of the relevant empirical studies. He suggests that it is not possible to accept or reject the hypothesis that the use of a strategic planning process in manufacturing firms influences their performance. *Pearce, Freeman and Robinson* (1987) confirm this finding in relation to small firms. However, whilst a direct association between the impact of a strategic planning process and performance can not be established beyond doubt in these studies, it can be argued that the process of strategic planning is beneficial to firms in identifying the broader issues - *Schwenk and Shrader* (1993). Furthermore, the literature emphasises the benefits of a strategic planning process, which enable a firm to gain insights about its customers and identified/evaluated unique market opportunities- *Deschamps* (1996).

From tables 3.3 and 3.4, it is clear that the majority of studies are carried out to examine the association between strategic planning and financial performance. In more recent years studies have focused on examining the relationship between strategic planning process and several dimensions of performance.

3.3.3 Studies showing a positive association between strategic planning and a mixture of financial and non financial performance measures

In the late 1980s, *Ramanujam and Venkatraman* (1987) found that a broad range of strategic planning characteristics are associated with planning effectiveness measured using financial and non-financial criteria. In the 1990s, the number of studies on the association between strategic planning and a mixture of financial/non financial measures in SMEs increased. The findings of these studies are summarised in table 3.5.

Table 3.5 Summary of multi dimensional studies showing positive findings on performance

Study	Sample Type	Strategic planning /process measures	Performance measures	Findings
Kargar and Parnell (1996)	47 Small banks	use of planning characteristics;- internal and external orientation, functional integration, resources for strategy, and planning techniques, and a focus on control	satisfaction with financial outcome organisational creativity in planning	findings showed a link between 7 strategic planning characteristics and planning satisfaction effectiveness
Baker et al (1993)	194 Small firms	emphasis on regular strategic planning, written plans and the involvement of top management	profitability marketing/product mix industry leadership decision making communication/unity motivation	completion of strategic planning is positively associated with profitability
Joyce, Seaman and Woods(1995)	301 Small firms	emphasis on strategic planning, planning, informational strategy, and evolutionary strategy	short term growth increase in staff numbers investment in new technology	found that 'strategic' firms are more likely to grow and have increased employment, increased investment in in new technology and greater innovation success
Roper (1997)	703 Small firms	emphasis on introducing new products expanding into new export markets, quality, MIS, consensual management centralising control or ownership	growth, profitability	significant link between strategic initiatives and asset utilisation/profitability but no evidence of a link between strategic initiatives and their turnover to asset ratio.
Naffziger and Mueller (1999)	71 Small firms	Degree of officer involvement, communication methods, degree of formal planning and the collection of information and time spent on planning	service and quality improvement, changes in productivity and market share	High degree of satisfaction on the use of strategic planning based on the performance measures.

Using broadly similar strategic planning characteristics to *Ramanujam and Venkatraman* (1987), *Kargar and Parnell* (1996) found that seven planning process characteristics are associated with organisational/financial performance. *Baker et al* (1993), *Joyce, Seaman and Woods* (1995), *Roper* (1997) and *Naffziger and Mueller* (1999) also found a degree of association between strategic planning and performance. Each study with the exception of *Baker et al*, uses a mixture of financial and non financial performance measures. It is, therefore, possible to conclude that a broad range of planning process characteristics are relevant to SMEs and that they can be used to achieve performance in terms of financial and non-financial measures. This conclusion is also applicable to large firms as shown by *Ramanujam and Venkatraman* (1987).

Sexton and Van Auken (1985) indicate that strategic planning processes play a significant role in the performance of firms, but they caution that small firms in general, use strategic planning process in a temporary and erratic way. While planning is no guarantee that success will be achieved, there is some evidence that non-strategic planning firms achieve less progress than other firms - *Ackelsberg and Arlow* (1985). Concern on the problems that arise from the lack of a strategic planning process such as the underestimation of the capability of competitors is mentioned by *Whipp et al* (1989) and *Anderson and Dunkelberg* (1993).

The studies in table 3.5 show the detailed criteria used by both large firms and SMEs in both strategic planning and organisational performance. For example, *Ramanujam and Venkatraman* (1987) identify trends in the design and use of strategic planning systems under the following headings:

- the fulfilment of planning objectives
- general trends in planning
- key planning issues and functional emphasis
- the use of planning techniques and the roles of the planning system

They measure organisational performance using the following multiple indicators:

- sales growth
- net income growth
- return on investment and market share changes

Whilst the study identifies a link between the planning process and performance, it also establishes the following planning process principles for high performing firms:

- resource commitment for the strategic planning process
- line staff commitment
- retrospection by considering internal capabilities
- functional integration
- the involvement of a trade-off between creativity and control

Kargar and Parnell (1996) examine the impact of the emphasis on seven characteristics of the strategic planning process on organisational performance. The planning process characteristics used are:

- internal and external orientation
- external orientation
- functional integration
- key personnel involvement
- the use of analytical techniques
- creativity in planning
- a focus on control

Roper (1997) investigates the impact of strategic planning processes on organisational performance by measuring the degree of emphasis on the following characteristics:

- the consideration of improved products and new markets
- the introduction of quality systems and new information systems
- moves to centralise control or ownership
- moves to more consensual managerial styles
- moves to more hierarchic or directive managerial styles

Roper (1997) concludes that firms with broader development objectives, new product development, export market development, and moves towards a more consensual managerial approach, achieve enhanced profitability, increased growth and asset utilisation.

3.3.4 Analysis of existing studies

From tables 3.3 to 3.5, it can be seen that a limited number of studies have been carried out examining the relationship between strategic planning and performance. The majority of the studies carried out to-date are uni-dimensional and examine the association between strategic planning and financial performance. These studies mainly characterise firms in the roles of planners or non planners, formal planners and informal planners - all of which are arbitrary classifications. Yet even when studies use the same classification, the results vary enormously. For example, in the banking sector, a study by *Robinson and Pearce* (1983) found no association between formal planning and financial performance, whereas in the same sector, both *Wood and LaForge* (1979) and *Sapp and Seiler* (1981) found that strategic planning is associated with better financial performance.

However, all the multi-dimensional studies carried out to-date indicate a positive association between strategic planning and performance assessed by non financial as well as financial measures. Interestingly, the timing of the multi dimensional studies coincides with high profile work carried out on multi dimensional performance measurement systems in the 1990's: *Fitzgerald et al* (1991), *Cross and Lynch* (1992), *Kaplan and Norton* (1992), *Brown and Laverick* (1994) which propound the use of non financial as well as financial measures of performance. Studies carried out by *Kargar and Parnell* (1996), *Joyce, Seaman and Woods* (1996) and *Roper* (1997) confirm the use of several performance measures in small firms.

3.4 Inferring the characteristics of the strategic planning process

Section 3.1 provides a selection of the definitions of strategic planning and outlines that there is no one accepted definition. Not surprisingly, there is no commonly accepted categorisation of the characteristics of the strategic planning process. The planning process characteristics for this study are based on a review of the most recent studies that tested a number of constructs. It is also necessary to determine a series of attributes to infer the various characteristics of the strategic planning process. Inferring the characteristics of the strategic planning process has a number of advantages. Firstly, it

addresses the reluctance of firms to reveal their strategic plan, which on occasions could be awaiting implementation. Secondly, it ensures that the interpretation of the strategic plan is not based totally on the statements of senior managers who may have said one thing but behaved otherwise - *Burgelman and Rosenbloom* (1989, p.19). This often leads to an incorrect assignment of strategic behaviour on the basis of verbal testimony - *Kotter*, (1982). Finally, it confirms the importance of each characteristic based on the degree of perceived emphasis on each of their attributes.

3.4.1 Existing studies on the characteristics of the strategic planning process

The processes involved in the formulation and deployment of a strategic plan are critical influences on it's content *Ghobadian* (1993). Accordingly, this study concentrates on the impact of a number of strategic planning characteristics that are seen as crucial in the achievement of organisational performance. This represents an attempt to devise a rational process for the formulation of strategic plans. *Ghobadian* (1993) argues that this process is based on a predominant 'domain of action' which is either external or internal in orientation. Other authors broaden the 'domain of action' to include functional integration, the use of analytical techniques, creativity and resources for strategic planning - *Ramanujam et al* (1986), *Ramanujam and Venkatraman* (1987), *Veliyath and Shortell* (1993) and *Kargar and Parnell* (1996).

Each of these studies are considered briefly in the following sections.

Ramanujam, Venkatraman and Camillus (1986) is one of the first studies to recognise the multidimensional nature of the strategic planning process. It identifies the following seven key characteristics of this process based on their effectiveness as demonstrated by previous studies:

- systems capability
- the use of techniques
- attention to internal and external facets
- functional coverage

- resources provided for planning
- the degree of resistance to planning

The study develops a multiple criteria of effectiveness based on organisational effectiveness and performance relative to competition. A number of attributes are also determined in relation to both planning process characteristics and performance perception. The study, which was carried out on Fortune 500 companies, indicates that the key characteristics of strategic planning *are systems capability, resources provided for planning and functional coverage*. Whilst the study relates to large firms, it provides a useful basis for the consideration of similar characteristics in SMEs. Table 3.6 outlines the characteristics and their attributes, of both the strategic planning process and the perceptions of performance used.

Table 3.6 Characteristics and attributes of the strategic planning process and perceived performance developed by Ramanujam et al (1986)

<i>Characteristics</i>	<i>Attributes</i>
External Orientation	Monitoring environmental trends.
Internal Environment	Internal capabilities, past performance and reasons for past failures.
Functional Integration	Marketing function, operations and manufacturing functions, finance function, personnel function, purchasing and procurement function, research and development, technology, computers and management information systems.
Use of techniques	Portfolio planning, PIMS models, financial models, zero based budgeting, value-based planning, project management techniques, stakeholder analysis, scenarios/delphi techniques, and forecasting/trend analysis.
Resources for planning	The number of planners, time spent by the CEO and the involvement of staff managers in planning; and resources provided for planning.
Resistance to planning	The overall emphasis on strategic planning, involvement of line managers in strategic planning, resistance to planning in general, and threats to the continuation of strategic planning.
Systems Capability	The ability to anticipate surprises and crises, flexibility to adapt to unanticipated changes, value as a mechanism for identifying new opportunities, role in identifying key problem areas, value as a tool for managerial motivation, capacity to generate new ideas, ability to communicate top management's expectations down the line, value as a tool for management control, capacity to foster organisational learning, ability to communicate line management's concerns to top management, value as a mechanism for integrating diverse functions and operations and value as a basis for enhancing innovation.
<i>Performance Characteristics</i>	<i>Attributes</i>
Organisational Effectiveness	Organisational effectiveness predicting future trends, evaluating alternatives based on more relevant information, avoiding problem areas, enhancing managerial development, improvement in the short term and improvement in the long term.
Performance relative to competition	Growth in sales, growth in earnings, changes in market share and return on investment.

Ramanujam and Venkatraman (1987) sought to establish the link between the characteristics of the strategic planning process and organisational performance. The study isolated the significant differences between high and low performing companies using data from 207 large North American Corporations. Although the titles of the characteristics differ from the *Ramanujam et al* study, their attributes have distinct

similarities. The results of the study indicate that the following six characteristics of the strategic planning process are associated with organisational performance:

- resource commitment
- line-staff commitment
- internal capabilities
- functional integration
- the use of analytical techniques
- a balance between creativity and control

Performance is evaluated with regard to the firms' competitors, which is seen as more relevant than using arbitrary financial return parameters. Table 3.7 outlines the characteristics and their attributes used in the study.

Table 3.7 Characteristics and attributes of the strategic planning process and perceived performance developed by Ramanujam and Venkatraman (1987)

<i>Characteristics</i>	<i>Attributes</i>
Fulfilment of planning objectives	Improvement in long term performance, improvement in short term performance, predicting future trends and enhancing management development.
General trends in planning	Resources provided for strategic planning, number of planners, time spent by the Chief Executive in planning, involvement of staff managers in the annual planning exercise and consistency between strategic plans and budgets.
Key planning issues/ functional emphasis	Past performance, reasons for past failures, diversification opportunities, customer-end user preferences, operations/manufacturing function, research and development/technology function and computer/MIS.
Use of planning techniques	Forecasting and trend analysis by reference to the use of nine popular planning techniques - portfolio models, PIMS model, financial models, zero based budgeting, value based planning, project management techniques such as PERT, stockholder analysis and forecasting and trend analysis.
Roles of the planning	Ability to anticipate surprises, flexibility to adapt to anticipated changes, a mechanism for identifying new business opportunities, the generation of new ideas, a tool for management control, a means of fostering organisational learning and a basis for enhancing innovation.
<i>Performance Characteristics</i>	<i>Attributes</i>
Performance	Sales growth, net income growth, return on investment and market share changes.

Veliyath and Shortell's (1993) study involves large firms and identifies the following key characteristics of the strategic planning process:

- planning implementation which includes an assumption that internal organisational strategic processes represent a managerial choice response to external environmental conditions
- key personnel involvement including a cross functional approach
- staff planning assistance including resources for planning
- innovativeness of strategic plans

Table 3.8 outlines the characteristics deployed in this study and their respective attributes.

Table 3.8 Characteristics and attributes of the strategic planning process developed by *Veliyath and Shortell (1993)*

<i>Characteristics</i>	<i>Attributes</i>
Planning implementation	strategic planning needs to become formalised and disciplined Strategy implementation plans are well developed Strategic planning process would benefit from more involvement of the department directors/heads.
Market research	Ability to perform or obtain market research is good Ability to perform or obtain market research information needs to be strengthened.
Key personnel involvement	Involvement of line management staff and the involvement of board members.
Staff planning assistance	Involvement of staff at all levels within the firm.
Innovativeness	Increased degree of innovation compared to previous processes and compared with competitors.

Kargar and Parnell (1996) prior to their investigation of the association between strategic planning and organisational performance in small banks, evaluate the previous studies carried out on large firms by *Ramanujam et al (1986)*, *Ramanujam and Venkatraman (1987)* and *Veliyath and Shortell (1993)*. They derive characteristics broadly similar to those derived by *Ramanujam et al (1986)* but add a further characteristic - a

focus on strategy as an instrument of control. Table 3.9 outlines the characteristics and their attributes derived by Kargar and Parnell (1996).

Table 3.9 Characteristics and attributes of the strategic planning process developed by Kargar and Parnell (1996)

Characteristics	Attributes
External Environment	Analysis of investment opportunities, analysis of deposit opportunities, analysis of competition, market research and analysis.
Internal Environment	Perceived degree of attention to customer services, efficiency of the operations process, attracting and retaining high quality employees, analysis of financial strengths and weaknesses.
Functional Integration	Perceived degree of emphasis accorded to functional involvement, co-ordination and integration, marketing, finance function and personnel functions.
Use of techniques	Portfolio analysis techniques, financial models, forecasting and trend analysis.
Resources for planning	Number of planners, time spent by the Chief Executive in strategic planning, involvement of staff managers in planning, involvement of board members in planning.
Systems Capability or Creativity	Ability to anticipate surprises and crises, flexibility to adapt to unanticipated changes value as a mechanism for identifying new opportunities, role in identifying key problem areas, value as a tool for managerial motivation, capacity to generate new ideas, ability to communicate top management's expectations down the line.
Focus on Control	Value as a tool for management control, ability to communicate management's concerns down the line and staff concerns to management, value as tool for managerial motivation, capacity to foster organisational learning, value as a mechanism for integrating diverse functions and operations, monitoring and controlling the implementation of the bank's strategy, value as a basis for enhancing innovation, using multiple financial/ non financial control measures, using control measures to monitor performance and having control systems to revise current plans.

Performance is evaluated by deploying the perception of the degree of satisfaction with financial performance and organisational effectiveness as shown in table 3.10.

Table 3.10 Characteristics and attributes of the performance indicators developed by Kargar and Parnell (1996).

Performance Indicators	Attributes
Financial Performance	Predicting future trends, enhancing managerial development, improvement in short term performance, improvement in long term performance, direct impact on financial performance.
Organisational Effectiveness	Improving ability to evaluate alternatives, improving ability to avoid mistakes and improving the budget process.

The study confirms a positive association between the seven characteristics of strategic planning and organisational performance in small firms. This study is very important as it uses characteristics tested in larger firms and confirms their applicability to smaller firms.

3.4.2 Analysis of existing studies

The analysis of existing studies outlines a number of characteristics of the strategic planning process that have been tested in larger firms - *Ramanujam et al* (1986), *Ramunajam and Venkatraman* (1987) and *Veliyath and Shortell* (1993). In addition, the study by *Kargar and Parnell* (1996) confirms the relevance of many of these characteristics to small firms. In analysing previous studies to ascertain their applicability to SMEs, it is necessary to derive the common themes or characteristics. Common themes are useful to obtain a directional steer - *Dess and Davis* (1984). A summary of the characteristics of a strategic planning process is outlined in table 3.11.

Table 3.11 Summary of the characteristics of the strategic planning process used in previous studies

Characteristics	Ramanujam, Venkatraman and Camillus 1986	Ramanujam and Venkatraman 1987	Veliyath and Shortell 1993	Kargar and Parnell 1996
(1) External Environment	Yes	Yes	Yes	Yes
(2) Internal Environment	Yes	Yes	Yes	Yes
(3) Functional Integration	Yes	Yes	Yes	Yes
(4) Use of analytical techniques	Yes	Yes	No	Yes
(5) Resources for the strategic planning process	Yes	Yes	Yes	Yes
(6) Systems capability/creativity	Yes	Yes	Yes	Yes
(7) Resistance to planning	Yes	No	No	Yes
(8) Focus on control	Yes (part of 6)	Yes(part of 6)	No	Yes

Table 3.11 indicates that the key areas identified by the literature with respect to the characteristics of the strategic planning process are similar to the characteristics derived by *Kargar and Parnell (1996)*. Each of these characteristics are discussed briefly in the following sections.

The external environment represents the competitive arena in which the firm operates and includes all the external influences that impact on a firm from its external stakeholders - *Hegarty and Hoffman (1987)*. The external environment can be considered in the context of economic, political, technological, social and cultural factors which inevitably increase its complexity - *Andrews (1971)*, and *Mintzberg (1994)*. This approach includes a vast number of factors that could potentially influence the future performance of the firm - *Schwartz (1991)*, and *Thompson (1993)*. In any event, many of the external factors are outside the immediate control of management- *Bourgeois (1996)*. In brief, the external environment includes 'the sum total of all the forces that affect a company's actions' - *De Geus (1997, p.35)*.

The importance of the external environment varies, depending on whether the firm operates in a stable or turbulent market. The more complex or dynamic the environment, the greater the degree of uncertainty - *Duncan (1972)*. Consequently, in a dynamic market, greater emphasis is given to the external environment.

However, greater attention does not mean that the costs involved in adapting to external environment conditions should be allowed to outweigh the potential benefits - *Frederickson and Mitchell (1984)*. The importance of the external environment to SMEs is stressed by *Covin and Slevin (1989)*, who state that:

'general economic conditions as well as fiscal and regulatory influences are commonly acknowledged as determinants of small firm creation and success'.

The consequences of not concentrating on the external environment are exemplified in a study by *Storey et al (1987)*, which indicates that slow growth SMEs tend to have little understanding of the external environment and of their competitors. However, while the literature shows that the external environment is vital to the success of firms, many SMEs have difficulties achieving the appropriate awareness and analysis of it. The key aspects of the external environment are arguably 'uncertainty', 'awareness of the environment', and 'forecasting competitor actions'. 'Uncertainty' is a key factor in the external environment, often influenced by the rapid technological and political changes - *Lawrence and Lorsch (1967)*. It can be argued that uncertainty cannot effectively be dealt with in the absence of a process that assists SMEs in the diagnosis of its potential impact - *Ansoff (1969)*, *Gibb and Scott (1986)*, *Stacey (1993)*, *Thompson (1996)* and *De Geus (1997)*.

It is undoubtedly for the reasons outlined earlier in this paragraph, that the literature highlights the need for firms to be aware of the external environment- *Mills and Friesen (1992)*. 'Awareness' can be increased by using secondary data as well as direct contact with customers and suppliers - *Easterby-Smith (1990)*, *Mills and Friesen (1992)*. Research carried out by *Royal Dutch/Shell* cited in *De Geus (1997)* confirms that long surviving companies tend to monitor the external environment for indications of change and use the findings to avert any impending crises. To ensure a greater awareness of the environment, it is suggested that firms consider the assignment of staff to continually monitor it - *Fahey and King (1977)*, *Thomas (1980)*, *Porter (1980)*, *De Geus (1997,p.59)* suggests that:

'planners must go out into the wide world. Once out there, they have to look back at their company and ask themselves the question what relevance could the driving forces that we see externally, have for the more limited world of their own company and industry?'

However, it can be argued that few SMEs have the resources for such an approach which means that SMEs need to have more effective means of assessing their external environment - *Pettigrew and Whipp* (1991). The literature suggests that firms should at least consider their competitors - their products, cost structures and motives, as well as how they view *others in their market* - *Porter and Spence* (1982). *Porter* (1980, p.88) encapsulates the competitive nature of the market place by stating that '*the outcome of a competitive move by one firm depends at least to some extent on the reactions of its rivals*'. To enable the attributes of the external environment characteristic to be determined, the following studies are examined: *Miller and Friesen* (1982) and *Fiengenbaum, Hart and Schendel* (1996). However, none of these models are tested in SMEs. Briefly, *Miller and Friesen* (1982), use three attributes to assess the external environment:

- heterogeneity (the number and diversity of external factors)
- dynamism (unpredictability and rate of change in the heterogeneity factors)
- hostility (threats from increased competition and reduced markets)

Fiengenbaum, Hart and Schendel (1996) refer to the external environment attributes as 'competitor needs', 'customer needs' and 'stakeholders needs'.

Only one of the models outlined in section 3.3.3 is tested in a study of SMEs - *Kargar and Parnell* (1996). Attributes of external orientation similar to those used by *Kargar and Parnell* (1996) are well documented in the literature. In addition, preliminary discussions with SME Managing Directors confirm that these attributes are relevant to SMEs and are easily understood. Accordingly, the following attributes are used in the survey instrument in this study:

- general economic and business conditions (opportunities)
- regulatory and Government issues
- analysis of current competitive position and trends (competition)
- technological trends and capabilities
- customer trends

The internal environment refers to the degree of orientation towards internal factors such as organisational strengths/weaknesses and the actions necessary to meet the firm's objectives and goals. An internal environment assessment is like a 'situation audit' as it considers the internal capabilities to ensure 'common mind sets', efficiency of operating systems and the reasons for past failures - *Ramanujam et al* (1986). In the late 1980s and early 1990s the thinking changed to include the internal orientation as an important source of competitive advantage - *Hamel and Prahalad* (1994), *Barney* (1991). *Porter* (1990) stresses the need for effective internal orientation to enable 'clear trade offs and strategic choices' to be made and to ensure that pace is kept with the firm's external orientation. The importance of keeping pace with the internal environment is encapsulated by *Fombrun* (1992) when he states that:

'firms fail because their internal features generate inertia and momentum that seduce managers to opt for the status quo, favouring established directions that proved successful in the past, because their activities embed them in business communities that shield them from the wider environment'.

The attributes outlined in these studies (see section 3.4.1) show a degree of commonality. For example, capability and past performance. The *Kargar and Parnell* attributes are used in a study of small firms and encompass the attributes used in other studies. Accordingly, the following attributes are used in this study:

- past performance of the firm
- strengths and weaknesses in current products/services
- strengths and weaknesses in marketing
- strengths and weaknesses in general managerial ability
- strengths and weaknesses in human resources
- financial strengths and weaknesses
- diagnostic assessment of past failures or performance shortfalls

Following the exploratory interviews, the construct 'internal orientation', was re-titled 'Attention to product delivery' in the survey instrument (question 17). This was seen as more appropriate to SMEs.

Functional integration refers to the effective integration of different functional areas needed to achieve an integrated and co-ordinated approach for competitive advantage.

This means the minimisation of organisational boundaries which are described by *Butler* (1991) as 'abstractions'. *Kanter* (1990, p.9) refers to functional integration as being essential for effectiveness:

'Thinking across boundaries, or integrative thinking, is the ultimate entrepreneurial act... Call it holistic thinking. To see problems and opportunities integratively, is to see them as wholes related to larger wholes... . Blurring boundaries and challenging the categories permits new possibilities to emerge, like twisting a kaleidoscope to see the endless patterns that can be created from the same set of fragments'.

Champy (1995) agrees and further qualifies *Kanter's* contention by referring to functional integration as essential for an external customer focus. It follows that a functional approach enables a sustained advantage to be achieved or retained, adding value by '*the assembly of tasks and the way that each one relates to another*' - *Champy* (1995, p.112). This is encapsulated by *Porter* (1987) who states that '*corporate strategy is what makes the corporate whole add up to more than the sum of its business unit parts*'. In reality, functional integration is carried out in most organisations through teams and project management. The literature is clear on the benefits of functional integration in larger firms. *Womack and Jones* (1994) state that:

'by eliminating unnecessary steps, aligning all steps in an activity in a continuous flow, recombining labour into cross-functional teams dedicated to that activity, and continually striving for improvement, lean companies can develop, produce, and distribute products with half or less the human effort, space, tools, time and overall expense. They can also become vastly more flexible and responsive to customer desires'.

Cross functional integration also leads to greater flexibility in meeting customer needs, as argued by *Hirschhorn and Gilmore* (1992) when they state that:

'one of the premier challenges of leaders is to design more flexible organisations. Companies are replacing vertical hierarchies with horizontal networks: linking together traditional functions through inter-functional teams; and forming strategic alliances with suppliers, customers, and even competitors'.

However, examples of functional integration in the literature relate mainly to large firms. This is not surprising as SMEs generally do not divide tasks to the same extent as larger firms. The existing literature indicates that functional integration as part of the strategic planning process is positively associated with enhanced performance in large firms - *Ramanajum and Venkatraman* (1987), *Ramanujam et al* (1986), *Hammer* (1990). The importance of functional integration in small firms is confirmed by *Kargar and Parnell*

(1996). It should be noted that the author was unable to find another study which confirms the importance of functional integration in SMEs. Consequently, testing this characteristic in SMEs provides a new insight. Previous studies by *Ramanujam et al* (1986), *Kargar and Parnell* (1996) and *Ramanujam and Venkatraman* (1987) have used specific functions as attributes such as the marketing function and so on. However, as outlined earlier, the majority of studies concentrate on larger firms, which tend to have formal functional demarcations, whereas in SMEs a number of functions are often performed by a limited number of personnel. The exploratory group suggested that to ensure applicability to SMEs, functional intergration should be measured according to the degree of emphasis on the understanding of all the functions of the firm by employees, rather than on the degree of emphasis given to individual functions. Accordingly, the following attributes are used in this study:

- understanding of all functions of the firm by employees
- cross functional support
- functional co-ordination
- efforts to achieve functional agreement

Following the exploratory interviews the construct 'functional integration' was re-titled 'departmental co-operation' in the survey instrument (question 19). which was seen as more appropriate to SMEs

The use of analytical techniques refers to the use of techniques, concepts and models such as financial models, zero based budgeting, stakeholder analysis, scenarios/delphi techniques and forecasting/trend analysis as part of the strategic planning process - *Ramanujam et al* (1986), *Kargar and Parnell* (1996). In earlier years when the business environment was not as complex as today, analytical techniques were seen as cumbersome and unnecessary - *Hayes and Abernathy* (1980). This view has changed dramatically and a range of techniques are now considered essential, particularly in turbulent environmental conditions- *De Geus* (1997).

The use of analytical techniques receives a mixed reception in the literature. In a study conducted by *Ramanujam and Venkatraman* (1987), the use of techniques is not associated with better performance; whereas in a review of studies examining the

association between strategic planning and performance, *Wortman* (1986) suggests that the more complex issues could only be addressed by using sophisticated statistical techniques. Another view is given by *Hayes and Abernathy* (1980), who state that a reliance on techniques and principles can do more harm than good and in fact lead to a loss of competitiveness. It can be argued that the knowledge of techniques, models and concepts may not confer any long term advantage on any SME over other firms using similar approaches.

Many of the attributes of this characteristic outlined in the literature are arguably more suited to larger firms than SMEs. Accordingly, rather than refer to the degree of emphasis on specific techniques, this study seeks to ascertain the emphasis on :

- the use of analytical techniques
- the ability to use techniques
- the willingness to use external assistance to apply such techniques (question 21)

This approach ensures that the questions are relevant to SMEs and are easily understood.

Resources for the strategic planning process refers to the means by which the strategic plan is deployed - *King and Cleland* (1979), *Steiner* (1979), *Hamel and Prahalad* (1994). Specific resources include the physical and financial resources and the involvement of the chief executive, top management and line managers - *Ramanujam et al* (1986), *Kargar and Parnell* (1996). The role of the chief executive is seen as crucial as well as symbolic in the strategic planning process - *Collins and Moore* (1970), *Lorange* (1980) and *Bracker et al* (1988). However, in reality many managing directors tend to get embroiled in 'operational' rather than 'strategic' matters. This is confirmed by *Koch and Godden* (1996, p.84-85) who cite a *Booz-Allen and Hamilton* survey which indicates that *the 'overwhelming amount of time was spent internally'*, with senior managers spending *'about 60% of their time on internal matters'*, mostly reacting to past events *'usually things that have gone wrong'*.

The role of line management is also seen as critical in the attainment of competitive advantage - *Thomas et al* (1991), *Chan* (1993). This implies that line management must

be conversant with the dynamics, opportunities and threats present in the competitive environment to ensure an effective strategic planning process - *Thompson* (1993). The literature also emphasises the need for the involvement of operational staff in the strategic planning process- *Ramanujam and Venkatraman* (1987) and *Veliyath and Shortell* (1993). In conclusion, it is no surprise that the literature provides a sound basis for the attributes of resources for the strategic planning process based on the involvement and commitment of the managing director, management and staff. *Kargar and Parnell* (1996) stress the involvement of the Board of Directors of the firm. However, as many SMEs do not have a Board of Directors, this attribute was considered inappropriate for this study. Accordingly, this characteristic includes the degree of emphasis on the:

- time spent by the Managing Director
- involvement of line managers
- involvement of consultants
- the availability of relevant and adequate information from available sources
- other physical and financial resources
- involvement of ad hoc working groups

Following the exploratory interviews the construct 'resources for planning' was re-titled 'employee involvement' in the survey instrument (question 20), which was seen as more appropriate to SMEs.

Systems capability/creativity refers to how the firm anticipates and prepares to meet potential threats and opportunities. It refers to the ability to perceive or discover new and better ways to compete- *Porter* (1990). To remain at the forefront of business, companies need new thinking in addition to creativity. *De Geus* (1997, p.22) comments that '*unless companies accelerate the rate at which they learn, their primary assets will stagnate and their competitors will outpace them*'. The importance of new thinking is also shown by *Tushman and Nadler* (1986, p.74) when they state that:

'in today's business environment, there is no executive task more vital and demanding than that of sustained management of innovation and change... to compete in this ever-changing environment, companies must create new products, services and processes; to dominate they must adopt innovation as a way of corporate life'.

Similar points are made by *Sexton and Bowman-Upton* (1991) and *Atkinson et al* (1997).

Yet the literature indicates that many firms still believe that their existing ways and processes are sufficient for the next decade:

'a pattern emphasised ... is the degree to which powerful competitors not only resist innovative threats, but actually resist all efforts to understand them, preferring to further entrench their positions in the older products - Utterback cited in Peters (1997 p.78).

Systems capability/creativity enables SMEs to have greater *'flexibility, a higher ability to adapt and improve and less difficulty in accepting and implementing change'* - *Damanpour (1992)*. This is facilitated by the flexible internal systems of SMEs and the absence of bureaucratic constraints - *Acs and Audretsch (1988), Rothwell and Dodgson (1991)*. SMEs are renowned for their creativity and new product development- *Storey (1994), Barkham et al (1996) and Acs and Audretsch (1988)*. However, many SMEs still fail to see the opportunities and advantages that are open to them, such as the flexibility of customising products to the requirements of the consumer, an advantage adopted by larger firms - *Kotler (1989)*. Their failure to take such opportunities is paraphrased in *Peters (1997, p.91)* as *'you miss 100 percent of the shots you don't take'*. Failure to pursue a creativity approach is summed up by *Hamel and Prahalad (1994)* as the route to becoming *'a laggard'*. It is no surprise that systems capability/creativity is vital, to enable SMEs to face increased risks and achieve greater competence - *Buzzell and Gale (1987), Roper (1997)*. It also enables SMEs to achieve an enhanced ability to react positively to crises, which is central to growth and success - *Smallbone et al (1993)*.

The attributes of this characteristic for this study are based on the previously tested construct by *Kargar and Parnell (1996)* in small firms. Accordingly, this characteristic includes the degree of emphasis on the:

- ability to cope with surprises/crises/threats
- flexibility to adapt to unanticipated changes
- ability to identify new opportunities
- role in identifying key problem areas
- capacity to generate new ideas
- capacity to generate and evaluate a number of strategic alternatives
- anticipation and avoidance of barriers to strategy implementation

Following the exploratory interviews the construct heading 'systems capability or creativity' was changed to 'staff creativity' in the survey instrument(question 22), which was seen as more appropriate to SMEs.

Focus on control relates to the on-going process of measuring qualitative as well as quantitative aspects in both the internal and external environments. *Goold* (1991) states that control helps in the co-ordination and amendment of the strategic plan as well as being a motivating factor. In a joint article *Goold and Quinn* (1993) state:

'Research that we have carried out with over 50 companies in the UK, USA, Europe and Japan has convinced us that, for strategic planning to be worthwhile, companies must establish some form of strategic control process'.

Section 3.3 indicates that there is no consistent listing of attributes for this characteristic and only one study treats 'focus on control' as a separate characteristic - *Kargar and Parnell* (1996) (see table 3.11). A discussion on this characteristic during exploratory interviews with SME Managing Directors indicated that many of the attributes used by *Kargar and Parnell* are relevant to SMEs. However, some concern was expressed that the number of attributes give undue weight to this in comparison to other characteristics. The number of attributes are therefore reduced to include only those considered most appropriate to SMEs. Accordingly this characteristic is assessed on the degree of emphasis on the:

- value of the strategic plan as a control mechanism
- ability to communicate management thinking down the line
- ability to communicate staff thinking up the line
- value of a strategic plan as a control technique for monitoring performance
- value of a strategic plan as a mechanism for revising current strategy
- value of a strategic plan as a mechanism for managerial motivation
- value of a strategic plan as a mechanism for integrating functions

Following the exploratory interviews the construct 'focus on control' was changed to 'strategy - a control mechanism' in the survey instrument(question 23), which was seen as more appropriate to SMEs.

3.4.3 Strategic planning process characteristics - a summary

The characteristics of the strategic planning process together with their attributes derived in this chapter are summarised in table 3.12.

Table 3.12 Summary of the attributes of the strategic planning process characteristics

Characteristic	Attributes	Literature Source
Attention to Market Place and Customer Requirements	General economic and business conditions, regulatory/Government regulatory/Government competitive position/trends technological trends and capabilities customer trends/other	Hegarty and Hoffman (1987), Miles and Snow (1978) Aldrich (1979), Fahey and King(1977), Keegan (1974) Thoraas (1980), Ramanujam et al (1986), Veliyath and Shortell (1993), Andrews (1971), Stacey (1993), Porter (1980), Miller and Friesen (1982), Fiegenbaum, Hart and Schendel (1996), Ramanujam and Venkatraman (1987) and Kargar and Parnell (1996).
Attention to Product Delivery	Past performance of the firm strengths and weaknesses in -current products/services -marketing -general managerial ability -human resources/financial - diagnosis of past failures	Ramanujam et al (1986), Grant and King (1982), King and Cleland (1979), Lorange and Vancil (1977) Stevenson (1976), Steiner (1979), Camillus and Venkatraman (1984), Ramanujam and Venkatraman(1987), Pascale (1984), Kargar and Parnell (1996)
Departmental Co-operation	Understanding of all functions functional co-ordination cross functional support functional agreement efforts	Snow and Hrebriniak (1980), Hitt, Ireland and Palia (1982), Hitt, Ireland and Stadter (1982), Lorange (1980), Ramanujam et al. (1986), Ramanujam and Venkatraman (1987),
Resources for Strategy	Involvement of staff time spent by CEO involvement of staff managers	King and Cleland (1979), Steiner (1979) Westley and Mintzberg (1989), Guth and MacMillan (1986), Mintzberg (1990), Rhyne (1986), Wooldridge and Floyd (1990), Burgelman (1984), Quinn (1985), Ramanujam et al (1986) Ramanujam and Venkatraman (1976), Mintzberg et al. (1976) Wall and Wall (1985), Govindrajan (1986), Ramanujam and Venkatraman (1987) Veliyath and Shortell (1993) and Kargar and Parnell (1996)
Structured Approach - Analytical Techniques	Use of techniques ability to use techniques internally use of external assistance	Quinn (1980), Schwenk (1984), Grant and King (1982), Hofer and Schendel (1978), Hax and Majluf (1984) Ramanujam and Venkatraman (1987), Ramanujam et al (1986), Frederickson (1984) and Kargar and Parnell (1996).
Staff Creativity	Anticipate surprises and crises flexibility to adapt identify opportunities and key problem areas generate new ideas generate/evaluate alternatives anticipate/avoid barriers to strategy implementation	Ramanujam and Venkatraman (1987), Camillus (1975), Lorange and Vancil (1977), King and Cleland (1979), Greenley (1986) Shank, Niblock and Sandall (1973), Miles and Snow (1978), Segev (1989) and King (1983), Ramanujam et al (1986), Kargar and Parnell (1996).
Strategy- A Control Mechanism	Value as a control mechanism communication downwards communication upwards monitoring technique mechanism for revising current strategy, managerial motivation and integration of functions	Ramanujam and Venkatraman (1987), Goold (1991), Ramanujam et al (1986) and Kargar and Parnell (1996) Lorange (1988)

Table 3.13 compares the attributes deployed in this study, with the attributes used by *Kargar and Parnell (1996)*.

Table 3.13 The characteristics of strategic planning deployed by *Kargar and Parnell (1996)* compared with the constructs of this study

Characteristic	Attributes used by Kargar and Parnell	Proposed Attributes	Reasons for Variation
External Environment	analysis of investment opportunities deposits opportunities competition	General economic and business conditions, technological trends and capabilities; customer trends, performing Market Research	Kargar and Parnell study relates to banking. The proposed attributes have a strong basis in the literature and are seen as more appropriate to SMEs competitive position
Internal Environment	past performance strengths/weaknesses in current products, marketing, general managerial ability, human resources, financial diagnosis of past failures	Similar attributes as Kargar and Parnell	No variation
Functional Integration	marketing function finance Function personnel Function operations function	understanding of other functions functional co-ordination cross functional support information	SMEs may not have a distinct functional approach
Resources for Strategy	time spent by CEO involvement of line managers involvement of board members	time spent by CEO involvement of staff and managers	Broadly similar to Kargar and Parnell except for the omission of board member emphasis - not all SMEs have Boards of Directors
Structured Approach (analytical techniques)	financial models forecasting and trend analysis, Stakeholder analysis, portfolio analysis	use of techniques ability to use techniques internally use of external assistance	Many of the techniques used by Kargar and Parnell are more suitable to larger firms. The attributes proposed are seen as more suitable to SMEs
New Thinking and creative thinking	Anticipate surprises threats and crises flexibility to adapt and identify opportunities and problem areas generate new ideas, enhance innovation, generate and evaluate a no. of strategic alternatives, formulate goals for the banks competitive environment, anticipate, avoid and remove barriers to strategic implementation	anticipate surprises threats and crises flexibility to adapt and identify opportunities and problem areas generate new ideas enhance innovation	Broadly similar to attributes used by Kargar and Parnell, with the omission of generating a number of strategic alternatives, which is part of the external orientation dimension. Formulating goals relating to the competitive environment is also an attribute implicit in the external orientation dimension. barriers to strategy implementation is already covered in the resources for strategy attribute
Focus on control	value as a control mechanism ability to communicate management thinking communicate staff thinking aids the performance monitoring, aids strategy revision, motivates management, integrates functions	Same as Kargar and Parnell attributes	No variations

In identifying the characteristics of the strategic planning process, it is important to bear in mind that whilst each characteristic is supported by the literature, it is not clear which of the characteristics or a combination thereof, are significantly associated with enhanced performance. However, it could be argued that strategic orientation also influences the deployment of the strategic planning process. Strategic orientation is examined in the remaining section of this chapter.

3.5 Strategic orientation

An examination of the literature indicates that there are numerous schools of thought on the classification of firms according to the degree of emphasis that they give to characteristics that determine their strategic orientation. The main rationale behind the various schools of thought relate to the ability to predict the factors that have a potential impact on the firm's future - *Grant and King (1979)*. The main schools of thought in relation to strategic orientation are:

- Ansoff (1965)
- Porter (1980)
- Miles and Snow (1978)

Each of these schools of thought are discussed briefly in the following section.

Ansoff (1965) proposes a matrix of four strategic orientations: market penetration, product development, market development and diversification. However, this school of thought lacks comprehensiveness and does not provide for a holistic strategic approach. Its main focus is on extending the existing business strategy.

Porter (1980) outlines generic strategy models. The rationale for *Porters'* generic strategies is to enable firms to analyse the industry structure and determine a positioning stance. *Porter* classifies firms into those emphasising cost leadership (producing broadly similar goods as competitors but at more cost effective prices), differentiation (from the products of competitors by, for example, image, or quality) and focus (identifying the

markets that the firm intends to participate in). This categorisation focuses mainly on developing a business strategy and is encapsulated by Porter (1980 p. 33) as a:

'systematic way of examining all the activities a firm performs, and how they interact ... for analysing the sources of competitive advantage'.

Porter continues by stating that:

'the model reflects the firms history, its strategy, its approach to implementing its strategy and the underlying economies of the activities themselves' - Porter (1980 p.36).

It could be argued that this school of thought fails to address the qualitative and human resource aspects of industry analysis. Accordingly, this model is more appropriate to a stable environment rather than a dynamic changing environment.

Miles and Snow (1978) are the main protagonists of the classification of firms according to strategic orientation. They argue that firms can be categorised according to their dominant strategic objectives. *The Miles and Snow* model categorises firms into four main strategic orientations - the first three categories (prospector, defender and analyser) refer to strategic intention, whereas the last category (reactor) has less strategic motivation. Even though the typology was developed in 1978, it is still valid today. Interestingly, *Miles and Snow* carried out their study on a number of industrial sectors, including electronics, but their sample involved large firms. *Davig (1986)* confirms the *Miles and Snow* typology in the foundry and fabricated metals industrial sectors. The *Miles and Snow* typology is also validated by *Shortell and Zajac (1990)* in its administrative and entrepreneurial concepts, and as such gives a greater assurance as to its predictive qualities. In addition, the literature provides wide support for the *Miles and Snow* typology - *Hambrick (1983)*, *Snow and Hambrick (1980)*. An empirical study carried out by *Ibrahim (1993)* cited in *Naffziger and Mueller (1999)*, on the relationship between strategic type and performance using the *Miles and Snow* typology indicates *'that a niche strategy is by far the most effective strategy for small business'*. Other studies indicate that differentiation strategies are effective strategic types for small business' - *Naffziger and Mueller (1999)*. The *Miles and Snow* typology is examined in greater detail as shown in the next section.

3.5.1 The Miles and Snow typology

Miles and Snow (1978) outline a typology of strategic orientations of firms that emphasise their environmental factors and categorises them according to their strategic and cultural orientations. *Miles and Snow's* typology, when used cautiously with the knowledge of its shortcomings, provides numerous guidelines and information for building and refining organisational structure and decision-making processes to successfully implement strategies. The typology classifies firms as: 'prospectors', 'defenders', 'analysers' or 'reactors'. These categorisations are discussed briefly below:

Prospector firms are described as externally orientated firms, continually scanning the environment for opportunities and adjusting their 'fit' with the environment to maximise trends and potential changes. In addition, by their actions they often create change in an industrial sector. A distinguishing feature of 'prospector' type firms is the need for flexibility and freedom from constraining company rules and regulations, to achieve innovativeness, creativity and a rapid response - *Snow and Hrebiniak* (1980).

'Prospectors' are likely to be growing firms, content with higher risk elements as they seek to maximise market opportunities. They have little problem accepting change or strategic re-orientation. 'Prospectors' tend to create changes in their products or markets through extensive new product or market development. They also tend to have complex co-ordination mechanisms with decentralised control, a product structure with low division of labour and are to a large extent, shaped by the influence of marketing, research and development executives. 'Prospectors' differ from 'defender' types in that they perceive their environments as uncertain, while 'defenders' are more likely to view their environments as certain and stable. It is reasonable to expect that 'prospectors' prefer an uncertain environment to a certain stable environment. *Covin* (1991) uses the descriptive term 'entrepreneurial' for this category.

Defender type firms are internally orientated firms with narrow product market domains and are not unduly concerned about new opportunities, preferring to concentrate on existing markets and on improving operational efficiency. Usually companies categorised

as 'defenders' have advantages in production. *Miles and Snow* (1978 p.39), refer to the 'defender' strategy as:

'the creation of a narrow, stable domain... through a limited mix of products and customers and aggressive 'efforts' to protect the domain from competitors'.

'Defenders' type firms do not have the requirement to adapt to a dynamic environment and usually have the opportunity of a full and comprehensive analysis prior to decision making. They also have a singular orientation as their managers 'devote primary attention to improving the efficiency of their existing operations' - *Miles and Snow* (1978 p.29). The focus of 'defenders' is described as producing and distributing goods or services as efficiently as possible - *Miles and Snow* (1978). 'Defenders' tend to use ideas that are well established and avoid risk as much as possible. As such, while they are happy to achieve change, they feel more comfortable with existing strategies - *McDaniel and Kolari* (1987).

'Defender' type firms usually attempt to maintain present products or customer base in order to secure niches within their industries. Therefore, little or no new product/market development is undertaken. 'Defender' type firms tend to have simple co-ordination mechanisms with centralised control and have a functional structure with extensive division of labour. They are to a greater extent shaped by the influence of production and finance executives. *Covin* (1991) used the term 'conservative' for 'defender' type firms.

Analyser type firms operate in stable markets. routinely and efficiently. In unstable markets they monitor competitors for new ideas and try out the more promising ones. In other words, *Miles and Snow's* key supposition is that a firm's product and market lead to choices of how to compete (competitive advantage), to grow, and attain functional support. 'Analysers' are a hybrid category, taking some features from the 'defender' and 'prospector' types. Essentially, 'analysers' focus on efficiency and increased production when the market is stable and on innovation when the market is dynamic or uncertain - *Slater and Narver* (1993).

Reactor type firms perceive change and uncertainty, but are either unable or unwilling to take proactive measures to respond effectively. They react to the actions of their competitors only and do not have a strategic direction due to their preference for short

term rather than long term planning. It follows that any form of strategic change presents some difficulties for 'reactor' type firms. *Miles and Snow* refer to the actions of 'reactors' as inconsistent, a result of a lack of clear goals and direction. Consequently, they are unlikely to be proactive and are likely to delay responding to the external environment until it is absolutely necessary. *Conant et al* (1990) state that 'reactors' respond to the challenges of the market in an erratic manner. Essentially this is the management type of 'last resort' and could be categorised as continuous fire-fighting. A summary of the *Miles and Snow* organisational characteristics is provided in table 3.14.

Table 3.14 Organisational characteristics of the Miles and Snow typology (adapted from Barnes (1999)).

Type	Dominant strategic logic	Strategic characteristics
Prospector	Locate and exploit new product and market opportunities	Growth through product and market development market leader in innovation searching for new opportunities in the environment, and risk tolerant.
Analyser	Match new ventures to present shape of business	Two product-market domains; one changing, the other stable. Prefers incremental change to minimise risk, market follower in innovation.
Defender	Secure and stable niche in the market	Specialisation to serve existing markets, price and service used to defend current business, emphasis on planning, and risk aversion.
Reactor	Survival	Inconsistent adjustments in response changing external environment.

3.5.2 Relevance of Miles and Snow typology to this study

The *Miles and Snow* typology is used in this study to ascertain the perceptions of managing directors on the strategic orientation of their firms (question 15 in the survey questionnaire). This enables the author to obtain a preliminary view of the firm's strategic orientation. Based on an analysis of the Miles and Snow classification, each firm was asked to indicate the best 'fit' Miles and Snow type classification (questions 15 of the research questionnaire) that is most appropriate to their firm, based on the following options:

- my firm is continually seeking opportunities and using flexibility to adapt and respond rapidly and creatively to the changing external environment.
- my firm competes on the basis of price, quality, delivery or service, and operates efficiently based on a strong emphasis on maintaining existing markets.
- my firm focuses on efficient and increased production following a full analysis of directional strategy and how to compete.
- my firm reacts to the market place, based on observing the experiences of others, and a preference for the short term.

Strategic orientation is another way of looking at how an SME deals with the issue of 'fit' with its external environment. Every business could be said to have a strategic orientation even if by default, which influences its performance - *Miles and Snow (1978)*, *Joyce et al (1995)*. Strategic orientation categorisations are mainly used by researchers for 'analytical convenience' - *Hatten and Hatten (1987)*. However, the typology provides a useful means of looking at strategic planning process characteristics and can be used as a means towards deducing or predicting other traits- *Miller and Friesen (1978)*. In accordance with established practice the terms 'defender', 'prospecter', 'analyzer' and 'reactor' are not used in the questionnaire - *Langerak et al (1999)*. Instead, each strategic orientation is presented by way of an operational business description.

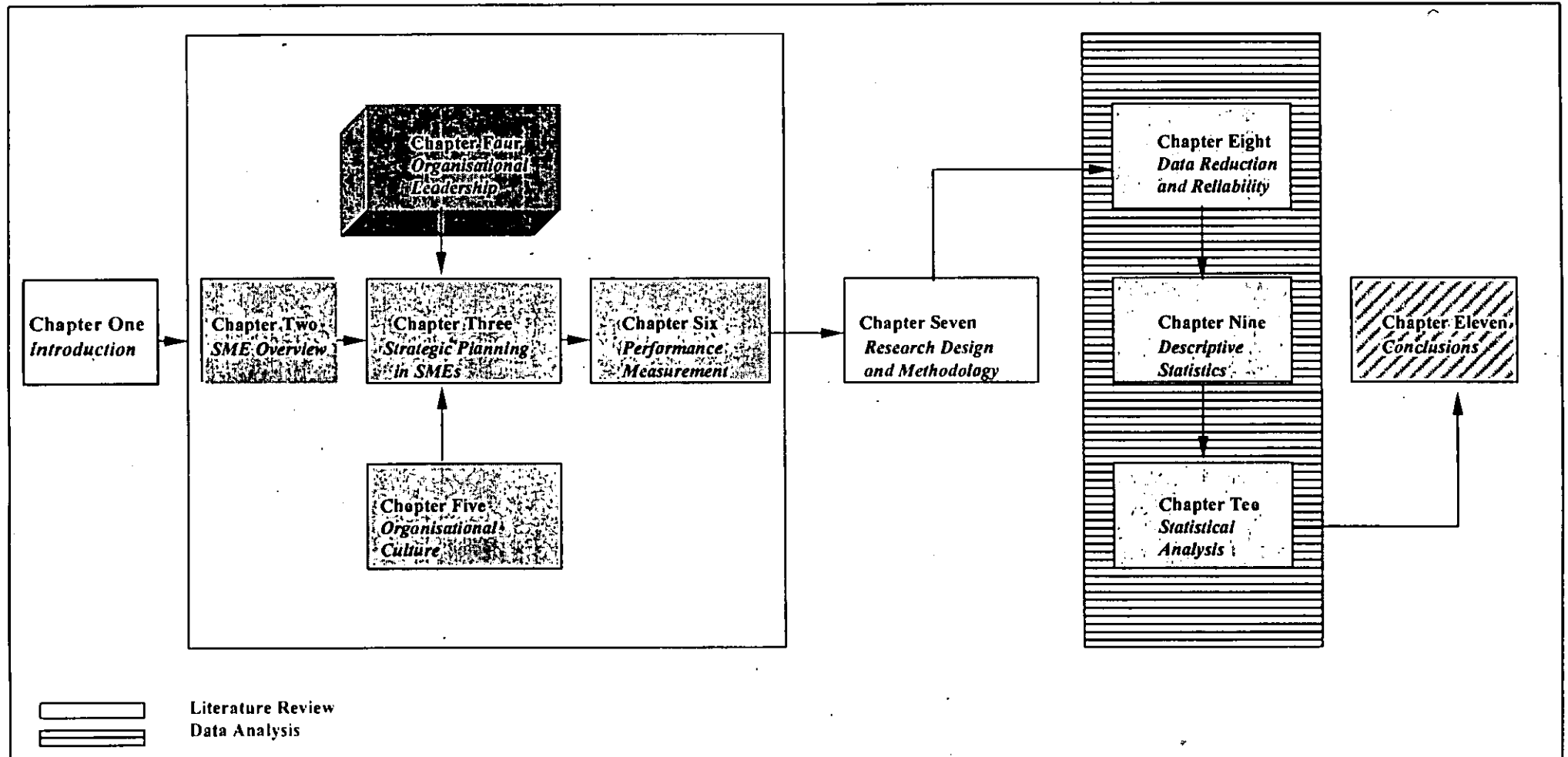
3.6 Concluding remarks

This chapter begins by setting the scene for the consideration of strategic planning in SMEs. It shows that the demands of the dynamic market environment are such that operational measures are no longer capable of enabling firms to attain/retain or gain competitive advantage. Section 3.1 outlines that emergent strategic planning is the only means by which SMEs can rationalise future choices and prepare for the future. SMEs can no longer rely on a 'trial and error' approach. The chapter considers the different meanings of strategic planning, and shows that there is no agreed definition. Following a literature review it was decided that the most appropriate definition for use in the study of SMEs is derived by *Johnson and Scholes (1997)*. Their definition is adopted for use in

this study. The chapter then proceeds by clarifying the distinctions between strategic content and strategic process, and establishes that strategic process will be utilised in this study as a surrogate measure of strategy. Existing studies on the association between strategic planning and organisational performance are reviewed. An analysis of previous studies indicates that there is insufficient evidence to either definitively accept or reject the hypothesis that the strategic planning process is associated with organisational performance.

Following a review of recently tested constructs on strategic planning process characteristics, the chapter derives seven key characteristics of strategic planning to be used in the survey questionnaire. Each characteristic is supported by the literature and is both relevant and easily understood by SMEs. The chapter continues by briefly discussing organisational capability, which is considered to be one of the main drivers of the strategic planning process. The chapter ends with a brief discussion of the main schools of thought on strategic orientation. Both the *Ansoff* and *Porter* schools of thought were discounted as being too restrictive - the *Ansoff* approach focuses on extending the business strategy, whereas the *Porter* approach focuses on developing the business strategy only. The strategic orientation model propounded by *Miles and Snow* is adopted for use in this study as it takes on board cultural as well as organisational traits.

**The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises
- Chapter Outline**



CHAPTER FOUR: AN OVERVIEW OF LEADERSHIP STYLES

4.0 Introduction

'Leadership is a reciprocal relationship between those who choose to lead and those who decide to follow' - Kouzes and Posner (1997).

The importance of adopting a strategic approach in the rapidly changing and dynamic environment is discussed in chapter 2. Chapter 3 is devoted to a review of strategic planning, establishing the characteristics of the strategic planning process and reviewing their association with organisational performance. However, the deployment of a strategic plan is influenced by a number of factors such as leadership - *Hickson et al* (1986). The literature indicates that leadership is a complex concept which is manifested in the high number of diverse and wide ranging research studies. Over twenty years ago, *Bass* (1981) found over 5,000 publications on leadership - it is reasonable to deduce that this total has increased dramatically since then. Despite extensive coverage in the literature, there is no one accepted definition of leadership. However, the literature indicates that in essence, leadership is described as the ability to get others to do something that they would otherwise be reluctant to do, or to do it with greater commitment and confidence. This generic description is consistent with the findings of *Yukl* (1994) and *Lim* (1997), which suggest that effective leadership is essential for the success of the strategic planning process in firms.

This chapter is devoted to understanding leadership and to deriving a means of assessing it. It is structured in four main parts as follows:

- derives and justifies a definition of leadership and clarifies the differences between leadership and management (section 4.1)
- reviews the principle studies on leadership and focuses on leadership style as a surrogate measure of leadership (section 4.2)
- examines the main behavioural styles and derives the attributes of each leadership style used later in this study (section 4.3)
- reviews the association between leadership and organisational performance (section 4.4)

4.1 Defining leadership

Clarifying the definition of leadership is not an easy task. *Stogdill* (1974 p.259) states there are 'almost as many definitions of leadership as there are persons who have attempted to define the concept'. A decade later the position had not changed - *Bennis and Nanus* (1985) note over 800 different definitions. Moreover, attempts to define leadership are broadly formulated according to the requirements of the various researchers in a multitude of studies. Such attempts include the examination of leadership traits, relationships, behavioural patterns and the yielding of influence.

Historically, the word 'leader' originated from an old European word 'laed', meaning 'path', 'road', 'course of a ship at sea,' or 'journey'. The term 'leadership' then evolved to mean 'accompanying people on a journey' guiding them to their destination - *Turner* (1998). A review of the literature reveals the following selected definitions of leadership as shown in table 4.1.

Table 4.1 Selected definitions of leadership

Author	Definition
Katz and Kahn (1978)	'the influential increment over and above mechanical compliance with the routine directives of the organisation'
Rauch and Behling (1984)	'the process of influencing the activities of an organised group towards goal achievement'
Peters and Austin (1985)	'unleashing energy, building, freeing and growing'
Richards and Engle (1986)	'articulating visions, embodying values, and creating the environment within which things can be accomplished'
Hersey and Blanchard (1988)	'attempts to influence the behaviour of an individual or group'
Yukl (1989)	'the process whereby one individual influences other group members towards the attainment of defined group or organisational goals'
Schein (1992)	'the ability to step outside the culture...to start evolutionary change processes that are more adaptive'
Wehrich and Koontz (1993)	'the art or process of influencing people so that they will strive willingly and enthusiastically toward the achievement of the group's mission'
Ackoff (1999)	'guiding, encouraging and facilitating others in the pursuit of ends by the use of means, both of which they have either selected or approved'

The definitions presented in table 4.1 are analysed using key words. The results of the analysis is presented in table 4.2. This suggests that despite no apparent similarities these definitions contain a number of common themes.

Table 4.2 Common themes of selected definitions of leadership

Author	Common themes	Influencing others	Formulating and deploying the strategic plan	Motivating, inspiring and directing others	Co-ordination
Katz and Kahn (1978)		√			
Rauch and Behling (1984)		√			√
Peters and Austin (1985)				√	
Richards and Engle (1986)		√	√	√	
Hersey and Blanchard (1988)		√		√	
Yukl (1989)		√	√	√	√
Schein (1992)				√	
Wehrich and Koontz (1993)		√	√	√	√
Ackoff (1999)		√		√	

4.2.1 Achieving a working definition of leadership

An analysis of the definitions of leadership indicates that whilst there is no common definition, a number of common themes exist as follows:

- influencing others
- the effective formulation and deployment of the strategic plan
- motivating, inspiring and directing others
- the co-ordination of activities

Two definitions contain all four selected common themes - Yukl (1989), Wehrich and Koontz (1993). Consideration of both of these definitions during the SME exploratory interviews indicated that the definition put forward by Wehrich and Koontz is clearer and more easily understood by SMEs. This definition builds on and broadens the definition of leadership given by Yukl (1989). It adds the words 'strive willingly and enthusiastically' in respect of the achievement of the organisational goals. The emphasis on 'willingness' and 'enthusiasm' was perceived by a number of Managing Directors as reflecting the essence of successful leadership. Campbell (1977) and Karmel (1978) suggest that a working definition should accord with the research aims and be likely to yield the information required. Accordingly, this definition was considered to be the most appropriate for use in this study. A literature review was carried out to ascertain the support for each of the following common themes of leadership as shown below:

Influencing others is one of the common themes in the definitions of leadership depicted in table 4.2. Yukl (1989) describes leadership as:

'the process whereby one individual influences other group members towards the attainment of defined group or organisational goals'.

Cialdini (1988) contends that staff accept influence from their leader for reasons of admiration or respect, rather than as a result of the position held by the leader. Accordingly, it could be argued that effective leadership could only be based on a positive relationship with staff members, involving loyalty and commitment. Senge (1990) refers to the example set by top management and the organisation's leadership as being paramount

'in any organisation led by influence, people are moved and convinced when they see a group of people at the top truly sharing a vision and strategy and modelling it in their behaviour'.

This has changed following the restructuring of many firms, as shown by Miles (1989 pp.9-28), when he states:

'In the newer, flatter, and leaner firms, management jobs are fewer, more demanding and, for the most part, more satisfying .. instead of being in charge of a division or department, the top executive of production, design or supply components is a general manager running a complete business itself. His or her staff must also share a broader vision'.

The important task for any leader is to ensure that leadership exists at all levels within the firm. This ensures that added attention is given to the core values and mission of the organisation and ensures greater motivational actions to enable the strategic plan to be achieved - *Senge* (1990). Arguably this involves sharing the vision for the future with all stakeholders, encouraging new ideas and ensuring that the critical factors for success are in place.

The effective formulation and deployment of the strategic plan is another one of the common themes of leadership identified in table 4.2. This is arguably a logical implication of the exertion of *influence* as it relates to the overall purpose of leadership. *Bennis and Nanus* (1985) suggest that the principle task of a leader is to ensure the effective deployment of the strategic plan. They also suggest that:

'to choose a vision, a leader must first have developed a mental image of a possible and desirable future state of the organisation... The critical point is that a vision articulates a view of a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists'.

In their study based on ninety interviews with senior managers responsible for strategic leadership, *Bennis and Nanus* (1985) suggest that leaders need vision to instil confidence, as well as the communication skills to share the vision and obtain commitment to its achievement. However, leadership also needs the ability to obtain the trust of the organisation's stakeholders. But effective leadership is more than this as *Bennis and Nanus* go on to say:

'if there is a spark of genius in the leadership function at all, it must lie in this transcending ability, a kind of magic, to assemble -- out of all the variety of images, signals, forecasts and alternatives - a clearly articulated vision of the future that is simple, easily understood clearly desirable and energising'.

It follows that leadership plays a critical role in formulating and deploying the strategic plan.

Motivating, inspiring and directing others could be argued to be at the root of effective leadership. Traditionally, such actions were expected from the top levels of the company only, but they are now encouraged at all levels. The shift in emphasis could be argued to have resulted from the widespread 'down sizing' or 'right sizing' that took place during the past decade. The importance of motivating, inspiring and directing others is clearly vital to the leadership process.

Bennis and Nanus (1985) encapsulate this by stating that:

'leaders are only as powerful as the ideas they can communicate. They inspire their followers to high levels of achievement by showing them how their work contributes to worthwhile ends. It is an emotional appeal to some of the most fundamental human needs - the need to be important, to make a difference, to feel useful, to be part of a successful and worthwhile enterprise'.

Co-ordinating activities is also considered to be a complex matter. It involves the need for a proactive approach by all employees to pay attention to how they work together, identify issues that block teamwork and consciously develop a pattern of working together - *Vaill (1991)*. It is considered to be an essential theme in the definition of leadership, as leaders strive to ensure that the workings of the organisation are co-ordinated and the functional integration/teamwork maximised - *Morgan (1989)*. However, it is argued that to be effective, leaders must recognise the competitive demands of the market place and ensure that the necessary actions are taken to maintain/retain competitive advantage. It could be argued that leadership style provides the means of ensuring that the strategic and operational aspects of the firm are fulfilled at the same time as the market requirements are met. In effect, leadership is a mechanism for the co-ordination of a holistic overview of the firm as it links the strategic processes with the culture of the firm in order to achieve corporate performance. However, *Kotter and Heskett (1992)* suggest that leadership is much more than co-ordination. They state that:

'without leadership, firms cannot adapt to a fast moving world. If organisations are going to live up to their potential, we must find, develop, and encourage more people to lead in the service of others. Excellent leadership from the top is the essential ingredient. This leadership empowers other managers and employees who see the need for change but have been constrained by the old culture. It also helps to win over the hearts and minds of others who have not yet recognised the necessity of change. In many

organisations today, providing this kind of leadership is surely the number one challenge for executives'.

Kotter and Heskett (1992) conclude that successful firms have effective leadership at the helm. They state that this leadership contains a number of common themes such as:

- a clear perception of a need for change
- effective communication of the vision for the future
- motivating others

Each of these common themes has a strong foundation in the literature. Accordingly, the following definition of leadership derived by *Wehrich and Koontz* (1993) is adopted for use in this study:

'the art or process of influencing people so that they will strive willingly and enthusiastically toward the achievement of the group's mission'.

4.1.2 Leadership compared with management

Arguably the meaning of the terms 'leadership' and 'management' are often confused, mixed up or juxtaposed. It is not surprising that both terms are considered to be 'interchangeable' in everyday life due to the perceived overlap that exists. Accordingly, this section aims to clarify the remit of both concepts. The more popular differentiation of leadership and management comes from *Bennis and Nanus* (1985 p.21) when they encapsulate the differences by saying that:

'managers are people who do things right and leaders are people who do the right thing'.

A broadly similar differentiation is put forward earlier by *Zaleznik* (1977), who contends that leadership is about the achievement of change, through changing the ways that people think about what is needed and achievable, whereas management relates to the operational details of implementing that change. These distinct differences are developed further in the literature by the various descriptions attributed to management. *Mullins* (1996) refers to management as taking place within a structured organisational setting and with prescribed roles, directed towards the attainment of aims and objectives. He

states that these aims are achievable through the efforts of other people based on established systems and procedures. As with leadership, there is no single definition of management. *Burnes* (1996) cites a useful description put forward by *Hales* (1986 p.102):

'Much of what managers do, is of necessity, an unreflective response to circumstances. The manager is less a slow and methodical decision maker, more a 'doer' who has to react rapidly to problems as they arise, 'think on his feet', take decisions in situ and develop a preference for concrete activities. This shows in the pace of managerial work and the short term span of most activities...'

The confusion between leadership and management is not helped by the literature. For example, leadership is included in a taxonomy of managerial roles by *Mintzberg* (1973). Leadership types are often described in terms of managerial practices - *Bass and Avolio* (1994). A middle road is taken by *Hinterhuber and Krauthammer* (1998), who state that leadership and management are complementary concepts. They elaborate on the differences as follows:

'leadership is more important than management. Leadership is a natural unforced ability to inspire people, to discover opportunities and to capitalise on them. Management is creative problem solving'

This 'middle road' sits comfortably with the contention that leaders and managers are not necessarily from different backgrounds - *Bass* (1990), *Kotter* (1988). A detailed comparison between management and leadership is provided in table 4.3 adapted from *Kotter* (1990):

Table 4.3 Comparing management and leadership

Activity	Management	Leadership
Creating an Agenda	Planning and budgeting - establishing detailed steps and timetables for achieving needed results, and then allocating the resources necessary to make that happen	Establishing direction - developing a vision of the future, often the distant future, and strategies for producing the changes needed to achieve that vision
Developing a human network to achieve the agenda	Organising and staffing - establishing some structure for accomplishing plan requirements, staffing that structure with individual, delegating responsibility and authority for carrying out the plan. Providing policies and procedures to help guide people, and creating methods or systems to monitor implementation	Aligning people - communicating the direction by words and deeds to all those whose co-operation may be needed so as to influence the creation of teams and coalitions that understand the vision and strategies, and accept their validity.
Execution	Controlling and problem solving - monitoring results vs. plan in some detail identifying deviations, and then planning and organising to solve these problems	Motivating and inspiring - energising people to overcome major political bureaucratic, and resource barriers to change by satisfying very basic, but often unfilled, human needs
Outcomes	Produces a degree of predictability and order, and has the potential of consistently producing key results expected by various stakeholders (e.g. for customers, always being on time, for stockholders, being on budget)	Produces change, often to a dramatic degree, and has the potential of producing extremely useful change (e.g., new products that customers want, new approaches to labour relations that help make a firm more competitive)

Based on Kotter, J.P., (1990), *A Force for Change - How Leadership Differs from Management*. NY: The Free Press.

Kotter (1990) summarises the differences in terms of four activities performed by both managers and leaders (see table 4.3). The differences according to Kotter rest both in the nature of the task and the expected outcomes. In essence, Kotter describes management as activity based (planning, budgeting, organising, human resource management, monitoring and control), whereas leadership is a people based activity (creating a vision for the organisation, the awareness and understanding of the vision and the achievement of commitment). This represents a much more focused differentiation than that of Watson (1983) who developed the 7-S's framework, which attributed strategy, structure and systems as being the primary domain of managers and style, staff, skills and shared goals, as being the primary role of leaders. Despite the increasing importance of leadership, Kotter (1990) remarks that firms are still *over-managed* and *under-led* and suggests that the real challenge is 'to combine strong leadership and strong management and use each to balance the other'. From a practitioner viewpoint, this inevitably means that in an ideal

world, people should be both managers and leaders, whereas in reality, few people combine both traits. This in turn means that ways have to be found to enable effective leaders to work with effective managers.

4.2 Leadership studies

Arguably the list below represents the key leadership studies conducted over the past four decades:

- *The Ohio State Leadership Studies* (1961)
- *Blake and Mouton* (1965)
- *University of Michigan Studies* (1974)
- *Adair* (1982)
- *Wright* (1996)
- *Yukl* (1997)
- *Wilderom and van den Berg* (1997).

Each of these studies will be examined briefly below.

The Ohio State Leadership Studies represent *Likert's* (1961) earlier research activities into leadership behaviour. These studies set out to develop a mechanism for measuring the behaviour of leaders in organisations and indicate that leadership behaviour is closely linked to organisational culture. The study outlines two dimensions of leadership. These are:

- (a) **Consideration** - this dimension includes mutual trust, respect, support and communication between the top management and the organisational staff,
- (b) **Initiating Structure** - this dimension includes the degree to which top management strive to put in place a structure to achieve the corporate strategy. It relates to the degree to which top management or the leadership define their corporate goal, their own role, the role of their staff and the group interactions necessary to achieve the overall mission.

The study concludes that both categories are independent behavioural types. Accordingly, leaders could conceivably place strong emphasis on one dimension and lesser emphasis on the other. The following year, *Fleishman and Harris* (1962) found that leaders emphasising a high degree of consideration receive lower levels of complaints, and their organisations have lower staff turnover. On the other hand, the results of emphasising the initiating structure dimension are higher turnover and a greater level of complaints. The *Likert* (1961) research is followed by studies examining the degree of assistance given to staff by leaders as well as concern for their general welfare - *Stogdill* (1974). A meta analysis of studies carried out by *Fisher and Edwards* (1988) indicates that the subordinates of leaders and managers that are considerate or supportive, are more satisfied in their work and happy with the behaviour of their manager/leader.

Blake and Mouton (1969) build on the Ohio State leadership studies and develop the 'managerial grid theory', which is used to match an individual's current leadership style with the environment in which they operate. It describes an effective leader as displaying a concern for both task and staff at the same time. The managerial grid is used to identify different styles of leadership. For example:

- low concern for both task and staff; where the minimum effort is required from staff to attain the objectives of the firm
- high concern for staff but a low concern for task; where the main objective is to achieve harmony based on social cohesion.
- high concern for task and a low concern for staff; where high productivity is the main goal, and staffing concerns are kept to a minimum.
- high concern for both task and staff; where the objective is to ensure that there are high levels of performance and high levels of job satisfaction.

Blake and Mouton (1969) clearly see task and staff concerns as not mutually exclusive and propound that the goal of effective leadership is the attainment of a high concern for both task and staff. The main advantage of the 'managerial grid theory' is its emphasis on leadership style rather than personal characteristics or traits. However, the managerial grid receives limited support in the literature - *Yukl* (1989). It is reasonable to argue that the lack of support for this theory probably arises from the difficulties in relating

leadership traits to organisational performance, in the absence of organisational characteristics.

The University of Michigan Studies were carried out by *Stogdill et al* (1974). The studies indicate that two main types of leadership behaviour apply to effective leaders. These are described briefly below:

a) *Task Orientated behaviour*. In this type, there is a clear divide between the leader and the subordinates in the carrying out of tasks. This leadership type could be said to be comparable with the 'initiating structure' of the *Ohio* study.

b) *Relations orientated behaviour*. In this case assistance and consideration for the subordinate are paramount to the achievement of the task in hand. This is broadly comparable with the 'consideration' dimension of the *Ohio* study.

Comparing the *Ohio* and *Michigan* studies it can be seen that there are close similarities between them. In both studies, leaders' emphasise 'initiating structure' which has as its main consideration the accomplishment of the task at hand. They deploy measures such as work organisation, guidelines, goal setting and the separation of employee roles in order to achieve it. Based on these two seminal works, leadership behaviour can be classified in different ways. For example, in the *Ohio* study leaders can have a low degree of 'consideration' orientation as well as a low degree of 'structure' orientation, or have a high degree of 'consideration' orientation and a high degree of 'structure' orientation. In addition, leadership could display a combination of both traits. Whilst no doubt, there are firms that can be matched to each combination, it is clear that in a generic sense, there is no one combination that leads to superior performance. It is therefore preferable to achieve a balanced approach avoiding any extremes in the emphasis of either trait.

Adair (1982) develops a model of leadership which expands on the previous studies. He argues that people in an organisation have three types of need, as follows:

- the task to be achieved
- maintenance of the social cohesion of the groups

- individual team member needs

He argues that these three types are interdependent and stresses the importance of an effective leader who has the ability to influence all three needs simultaneously.

Wright (1996) further expands the classifications of leadership behavioural types into four main leadership styles as shown in table 4.4.

Table 4.4 Expanded leadership styles

Leadership style	Main emphasis
Concern for task	where production or function is the primary concern of the leaders and where activities are geared accordingly
Concern for people	where the leader is primarily concerned about the needs development and welfare of the people in the organisation
Directive leadership	refers to the style where the leader makes decisions and expects others to carry them out.
Participative leadership	refers to the degree of sharing in the process of decision making or policy direction.

There are clear links between the *Wright, Ohio* and *Michigan* studies. The 'concern for people' and 'participative' dimensions are broadly similar to the 'consideration' dimension in the *Ohio* Study. Similarly, the 'directive leadership' and 'concern for tasks' styles are comparable with the earlier dimensions of 'initiating structure'. In effect, the *Wright* study adds the deployment of influence as a factor to the findings of *Michigan* and *Ohio* studies.

Yuhl (1997) reviews studies on leadership behaviour and propounds the following groupings of behaviour types:

- task orientated behaviour
- change orientated behaviour

Yukl (1997) represents one of the first studies to suggest that a broader behavioural classification is necessary than that proposed by the *Ohio* Study.

Wilderom and van den Berg (1997) in an empirical study of small firms derive four leadership styles as depicted in table 4.5.

Table 4.5 A Summary of leadership styles derived by *Wilderom and van den Berg (1997)*

Leadership Style	Main Emphasis :
Human and results orientated	provides for the concerns of employees while at the same time emphasising the business goals
Transformational	shows the degree of inspiration, consideration and assistance given to employees
Transactional	shows an exchange relationship between the leader and employees based on the benefits of co-operation to each party
Laissez faire	describes passive management or the absence of active management

Wilderom and van den Berg (1997) contend that effective leaders find ways to integrate task and people concerns and are 'able to reconcile seemingly conflicting demands'. The study suggests that a balanced 'human resources and transformational leadership style' impacts to a greater extent on organisational performance than a 'transactional style'. It also suggests that a laissez faire leadership style has the least impact on organisational performance.

This study builds on previous studies and in particular the *Ohio* and *Michigan* studies (task and staff orientations). It could be argued that the earlier studies are more appropriate to a stable environment, rather than a dynamic or turbulent environment as suggested by *Kotter (1990)*. However, it could also be argued that the expansion by *Wilderom and van den Berg (1997)* provides a leadership classification more suitable to a more dynamic and changing environment.

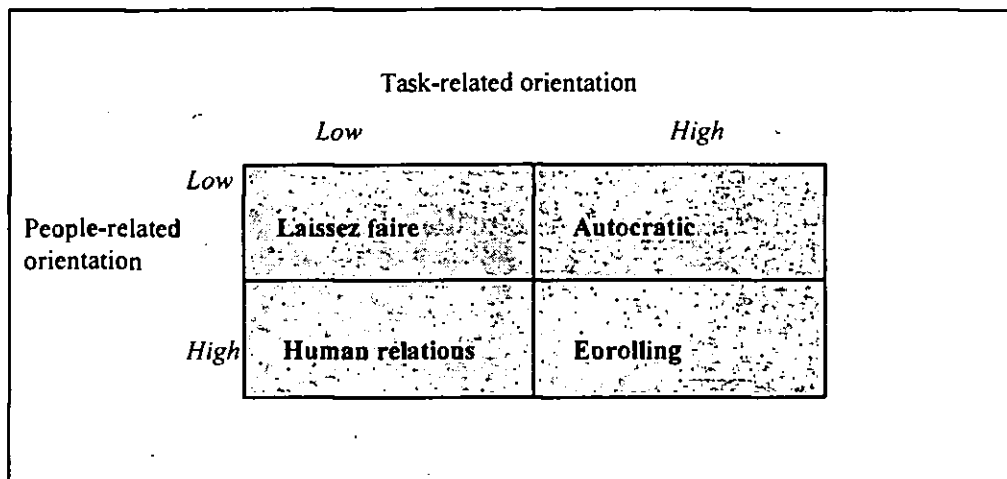
4.2.1 An analysis of the studies on leadership

The earlier studies focus on task and staff relations only - *The Ohio State Leadership Studies* (1961), *Blake and Mouton* (1965), and the *University of Michigan Studies* (1974). Interestingly, these studies were carried out independent of each other and nevertheless reach similar conclusions. *Adair* (1982) is one of the first studies to broaden the leadership types to include individual needs and social cohesion. This study is further elaborated on by the inclusion of directive and participative styles of leadership, in addition to the 'core' aspects of task and staff orientation by *Wright* (1996). It could be argued that this study represents a shift in emphasis from leadership roles to that of leadership behaviour types. The study is consistent with changes in the business environment, which lead to a trend towards shared responsibilities and clear accountabilities, a consensus in strategy formation and policy decisions and maximising the use of the organisation's talent- *Kiefer* (1994).

Building on the foundations established by previous studies, *Wilderom and van den Berg* (1997) continue the 'trend' established and investigate the impact of four leadership styles on performance. This approach is consistent with the contention that effective leadership results primarily from the traits of leaders or their practised behavioural patterns - *Stogdill* (1974). Nevertheless, all the studies examined, acknowledge that personal characteristics can influence the effectiveness of leadership. In effect, all the studies are complementary to a large extent. They are also consistent with the work of *Fiedler* (1967) who contends that there are two main leadership styles: *relationship orientated* and *task orientated*. In essence, relationship orientated leadership focuses on the interpersonal relationships that leaders have with their subordinates, whereas task orientated leaders focus on ensuring that the task is completed to the required standard. *Finlay* (2000) contends that 'these two leadership dimensions allow leaders to be categorised as using one of four broad styles'.

Figure 4.1 depicts the two main leadership dimensions and the four leadership styles.

Figure 4.1 Styles of Leadership



Source; [Finlay (2000, p. 102) adapted from Cook et al., (1977)].

Finlay (2000) states that leaders who are highly task orientated and with little consideration for the feelings of the group could be termed *autocratic*, whereas leaders with a high concern for the feelings of the group and a low concern for the task could be termed *human resource orientated*. He also states that leaders with a high emphasis on both people-related orientation and task-related orientation could be termed *enrolling* whereas leaders with a low emphasis on both dimensions could be classified as following a *laissez faire* style.

However, the determination of leadership traits is no easy task. Handy (1994) contends that there are no accepted guidelines for determining the type of leadership best suited to any company. Indeed, Yukl (1989) states that the identification of 'traits' for effective leadership is riddled with confusion, inconsistency and contradiction. The leadership styles derived by Wilderom and van den Berg could be argued to be similar to the four leadership styles distilled from the literature by Cook et al (1977) cited in Finlay (2000). For example, Wilderom and van den Berg use the term 'transactional' to describe firms with a high task-related orientation and a low people-related orientation and the term 'transformational' to describe firms with a high people-related orientation and a high task-related orientation. In a similar way to Cook et al, Wilderom and van den Berg term the remaining styles 'human relations' and 'laissez faire'. The Wilderom and van den Berg study is the only published work that the author could find on leadership in small

firms. In addition, the constructs were recently tested and validated and are therefore *prima facie* appropriate for use in this study. As this study is interested in the behavioural aspect of leadership, there is no need to consider other aspects such as the traits of leaders, or the power-influence aspects.

Accordingly, the following behavioural styles are derived as surrogate measures of leadership styles:

- transformational leadership
- transactional leadership
- human resources orientation
- laissez faire leadership

The use of leadership styles as a surrogate measure is consistent with the work of *Stodgill* (1974). A literature review was carried out to ascertain the basis for each of these leadership styles. This is presented in section 4.3.

4.3 Leadership styles

A review of the literature of the past decade, indicates a significant emphasis on the two main styles of leadership: transactional and transformational. It could be argued that these two styles have many similarities to the task and staff orientations depicted in the *Ohio, Michigan* and *Blake and Moulton* studies. Whilst leadership is classified as either transformational or transactional as early as 1978 by *Burns* (1978), the majority of studies on transformational leadership belong to the 1990s. Many studies refer to both transformational leadership and transactional leadership styles as being at opposite ends of the spectrum. This perception arises from the belief that transformational leadership style focuses on the motivation of staff by appealing to higher ideals and values. On the other hand, transactional leadership focuses on bureaucratic authority, stressing work assignments and the achievement of task oriented goals. Transactional leadership style could be argued to be based to a large extent on task completion and penalties for failure.

Tichy and Ulrich (1984 p.6) encapsulate the differences as follows:

'where transactional managers make only minor adjustments in the organisation's mission, structure and human resource management, transformational leaders not only make major changes in these three areas, but they evoke fundamental changes in the basic political and cultural systems of the organisation. The revamping of the political and cultural systems is what most distinguishes the transformational leader from the transactional one'

Whilst the quotation from Tichy and Ulrich appears to suggest that both transformational and transactional leadership styles are significantly different, Hater and Bass (1988) propound that the transformational style is a 'special case' of transactional style and that while both styles have similar goals, it is the process by which employees are motivated that differs, in the achievement of the stated objectives. Table 4.6 from Bass (1990) shows the main differences between transactional and transformational leadership types.

Table 4.6 Transformational and transactional leadership styles

Transactional style	Transformational style
<p><i>Contingent Reward:</i> contracts exchange of reward for effort, promises rewards for good performance, and recognises accomplishments</p>	<p><i>Charisma:</i> provides vision, and sense of mission, instils pride, gains respect and trust.</p>
<p><i>Managing by Exception:</i> watches and searches for expectations, deviations from rules and standards, and takes corrective actions</p>	<p><i>Inspiration:</i> communicates high expectation symbols to focus efforts, expresses important purposes in simple ways</p>
<p><i>Management by Exception:</i> intervenes only if the standards are not met.</p>	<p><i>Intellectual stimulation:</i> promotes intelligence, rationality, and careful problem solving.</p>
<p><i>Laissez-faire:</i> abdicates responsibilities, avoids making decisions</p>	<p><i>Individualised consideration:</i> gives personal attention, treats each employee individually, coaches and advises staff.</p>

Source: Bass, B.M., (1990), 'From transactional to transformational leadership - learning to share the vision' *Organisational Dynamics* Winter p.22.

The next section considers both styles in more detail to engender a deeper understanding of leadership types. Bass (1985) states that transactional and transformational styles are two separate dimensions of leadership and that leaders often adopt both styles at the same time. This is explained more clearly by Bass (1985) when he refers to transformational leadership as an extension of the transactional leadership style.

Transformational leadership style relates to the ability to undertake a major change in direction to achieve the vision set and to influence others even though 'certain sacrifices need to be made in pursuit of it' - *Ackoff (1999)*. A review of the literature indicates that a number of definitions are available. A selection of definitions is provided in table 4.7:

Table 4.7 Selected definitions of transformational leadership

Study	Definition
Burns (1978)	'leaders and followers raise one another to higher levels of morality and motivation'
Hater and Bass (1988)	'involves strong personal identification with the leader, joining in a shared vision of the future; or going beyond the self-interest exchange of rewards for compliance'
Yammarino and Bass (1990)	'articulates a realistic vision of the future that can be shared, stimulates subordinates intellectually, and pays attention to the differences among the subordinates'
Conger (1991)	'makes ordinary people do extraordinary things in the face of adversity'

Conger's definition is widely used as it arouses strong emotions and ensures that assistance is provided to facilitate the achievement of intended goals. In many ways, transformational leadership can be equated with the old analogy taken from motor racing, which refers to the inability to make a Volkswagen go as fast as a Porsche by pushing on the accelerator, without a radical re-design of the car. Clearly, if the re-design is radical, it will be necessary to obtain the commitment of a large number of people within the organisation to ensure its transformation. Total commitment is not easy to achieve, as shown by the following quote attributed to George Washington:

'One of the difficulties in bringing about change in an organisation, is that you must do so through the persons who have been most successful in that organisation, no matter how faulty the system or organisation is. To such persons... it is the best of all possible organisations, because look who was selected by it and look who succeeded most within it. Yet, these are the very people through whom we must bring about improvements'.

It can be argued that transformational leadership style has a number of clear attributes ranging from an emphasis on the need for change, by challenging current assumptions, external orientation and comparison with competitors; to creating a new vision for the

organisation, managing the transition, and finally obtaining the commitment from others to the change - *Tichy and Devanna (1986)*. *Conger (1991)* suggests that the essential ingredient in the transformational leadership style is the ability to define the direction of the organisation in a way that gives meaning and purpose to whatever actions leaders need from their followers. *Conger (1991 p.44)* states that:

'if you as a leader can make an appealing dream seem like tomorrow's reality, your subordinates will freely choose to follow you'.

A number of empirical studies investigate transformational leadership styles and determine common attributes - *Lim (1997)*, *Bass and Avolio (1989)* and *Kouzes and Posner (1987)*. The attributes used in these studies are outlined in table 4.8:

Table 4.8 Attributes of transformational leadership

Study	Lim (1997)	Bass and Avolio (1989)	Kouzes and Posner (1987)
Attributes	Gaining group commitment Intellectual stimulation Providing an appropriate role model Consideration for the individual	Inspiration and motivation Intellectual stimulation Idealised influence Individualised consideration	Inspiring a shared vision Challenging the process Modelling the way Encouraging the heart

The attributes outlined in table 4.8 have many similarities, such as inspired motivation, vision and the use of influence. These similarities are supported by the literature - *Yammarino and Bass (1990)*, *Bass (1990)*, and *Hirschhorn and Gilmore (1992)*. The literature also confirms that focusing on interpersonal behaviour and the more qualitative aspects of a firm's operation such as style, behaviour and shared vision are important aspects of leadership - *Mintzberg (1979)*, *Kotter (1990)*.

The attributes of transformational leadership identified by *Wilderom and van den Berg (1997)* elaborate on these common themes. In addition, the attributes are consistent with the rationale for the transformational leadership style (high task related orientation and high people-related orientation). Following the consideration of the attributes used by *Wilderom and van den Berg* during the exploratory interviews and the pilot study, the

attributes outlined in table 4.9 are used in this study to represent the transformational leadership style.

Table 4.9 The attributes of transformational leadership

Leadership style	Question	Attributes
Transformational	11a	Instil perfect trust
	11c	Encourage new ideas from employees
	11d	Introduces new projects and challenges
	11k	Promotes a clear vision for the future
	11m	Stimulates employees to support opinions with good arguments
	11v	Makes employees aware of important common values and ideals
	12b	Gives employees the feeling that mgt. can overcome any obstacle
	12c	Gives employees a sense of pride in working for this organisation
	12d	Shows an extraordinary ability in everything that they undertake
	12e	Focuses attention on performing even better
	12f	Is of the opinion that employees should learn for their mistakes(if any)
	12i	Fulfils promises with action
	12l	Sets ambitious targets for the organisation
	12p	Keeps an eye on mistakes
12q	Makes a powerful impression	

Transactional Leadership represents a style, where managers are paid to think and workers are paid to work, each defining and protecting their own territory. It is commonly described in the literature as involving a reward or benefit for doing something - *Bass* (1985), *Burns* (1978). It represents the traditional view of leadership, whereby the employee is paid to perform a task and should do so without querying its rationale. As a leadership style, it appeals more to personal self interest rather than the primacy of achieving corporate goals, although both terms are not necessarily exclusive - *Bass* (1985). It includes a marked reluctance to change with an emphasis on the rationale of maintaining the status quo. Transactional leadership style relies on control as the main element to ensure that the various tasks are effectively completed.

The literature indicates that the attributes of transactional leadership style are focused on a system of rewards dependant on the degree of performance achieved - *Bass* (1990). Following the consideration of the attributes used by *Wilderom and van den Berg* during

the exploratory interviews and the pilot study, the attributes outlined in table 4.10 are used in this study to represent the transactional leadership style. These attributes are consistent with the rationale for a transactional leadership style (high task related orientation and low people-related orientation).

Table 4.10 The attributes of transactional leadership

Leadership style	Question	Attributes
Transactional	11e	Pays attention to performance shortcomings that need attention
	11g	Emphasises the maintenance of standards
	11i	Offers the prospect of rewards for work
	11s	Agrees with employees on the rewards that they can look forward to if they do what has to be done
	11t	Focuses attention on irregularities... from what is expected of employees.
	11q	Tells employees criteria for performance related benefits
	12g	Is strongly convinced of their own opinion and values
	12j	Expects good performance from employees
	12k	Aims at reaching financial goals
	12s	Pursues its own interests

Human resources orientation refers to the degree of emphasis on staff relations by top management levels. The literature indicates that effective leaders find ways to integrate task and people concerns so that both can be satisfied to a considerable extent. All leaders need followers: *Lee (1991)* states that:

'without followers leaders cannot lead ... Without followers, even John Wayne becomes a solitary hero, or, given the right script, a comic figure, posturing on an empty stage'.

Thus leadership is a two-way process and whilst leaders influence their followers, their followers also have an influence upon them. It is clear, however, that effective leaders treat their employees well in terms of task and satisfaction criteria - *Hampden-Turner (1990)*. It could be argued that it is the employee's perception of the leader's behaviour that matters, rather than the leader's agenda. Following consideration of the attributes used by *Wilderom and van den Berg* during the exploratory interviews and the pilot study, the attributes outlined in table 4.11 are used in this study to represent the human resources orientated leadership style. In addition, the attributes are consistent with the rationale for

the human resources-related leadership style (low task related orientation and high people-related orientation).

Table 4.11 The attributes of the human resources orientated leadership style

Leadership style	Question	Attributes
Human and results Orientated	11h	Has an ear for matters that are important for employees
	11j	Gives advice to employees when they need it
	11o	Creates a feeling of working together on major assignments/missions
	11p	Shows employees how to look at problems from new angles
	11u	Tries to involve as many employees as possible in progressive changes within the organisation
	12a	Works actively for the benefit of both personnel and organisational goals
	12h	Is concerned with the organisational personnel and with competing firms.
	12m	Speak optimistically about the future
	12n	Is both performance and employee welfare orientated
	12r	Encourages co-operation

Laissez faire leadership style represents a passive approach by leaders, bordering on indifference, in relation to both task and staff concerns. It can be summarised as a behavioural style where the leaders abdicate responsibility and allow their subordinates to 'do their own thing'. This style is summarised in the following quotation from *Von Zumbach (1995)*:

'The laissez faire manager has little participation in the work of the team. He will supply information when it is needed, but subordinates have to come to him. Unlike other styles...this management style is highly reactive, deferring action until the point is reached when the manager has to intervene.'

Bass (1990) indicates a negative association between laissez-faire leadership and a variety of subordinate performance, effort and attitudinal indicators. This arguably implies that laissez-faire leadership is nearly always an inappropriate way to lead. It is included in the survey instrument to ensure that the constructs are as comprehensive as possible. Following consideration of the attributes used by *Wilderom and van den Berg* during the exploratory interviews and the pilot study, the attributes outlined in table 4.12 are used in this study to represent the laissez faire leadership style. The attributes are consistent with

the rationale for the laissez faire leadership style (low task related orientation and low people-related orientation).

Table 4.12 The attributes of laissez faire leadership

Leadership style	Question	Attributes
Laissez faire	11b	Only takes action when things go wrong
	11f	Only takes action when problems become serious
	11i	Does not trouble employees if they do not cause difficulty
	11n	Adheres to the saying 'do not intervene unnecessarily'
	11r	Does not attempt to improve matters as long as performance meets minimum demands
	12o	Avoids making decisions

4.4 An analysis of the importance of leadership

The impact of leadership on the success of organisations is well documented - *Motowidlo* (1992). The literature shows that leadership has a significant impact on performance - *Hart and Quinn* (1993) and *Keller* (1992). Other writers such as *Berkely Thomas* (1988, p.399) have no hesitation in saying that 'leader differences do account for performance variations within firms to a substantial degree'.

Studies carried out by *Bass* (1990) conclude that leadership impacts significantly on performance and that transformational leadership has the greatest impact, followed by transactional leadership style. Finally, *Bass* confirms that a further classification, laissez faire (passive), has the least impact on performance. *Wilderom and van den Berg* (1997) expand the dimensions of leadership to include human resources orientation and suggest that a mixture of transformational and human resources orientation types yield enhanced performance. This confirms a similar finding by *Keller* (1992). *Wilderom and van den Berg* (1997) suggest that there is a significant relationship between a 'balanced transformational' leadership style in top management and enhanced corporate performance. However, the word 'balanced' needs clarification. One possible explanation is put forward by *Hart and Quinn* (1993 p.544) as 'the mastery of diverse and seemingly

conflicting roles to deliver higher firm performance'. This definition is consistent with the various studies on leadership (see section 4.2). Accordingly, it is no surprise to note that *Davis et al* (1997) argue that a 'balanced' style is common sense as it aims to treat employees fairly, in terms of employee satisfaction and organisational productivity.

One of the first empirical studies carried out in the UK's cultural setting, by *Lim* (1997) indicates a positive association between transformational leadership and organisational performance. Other studies indicating an association between leadership and performance include *Kanter* (1983), *Peters and Austin* (1985), while no association is suggested by *Wagner and Gooding* (1987) and *Cotton et al* (1988).

Virtually all the studies focus on leadership in the context of large firms - *Begley and Boyd* (1986), and in the process attention seems to be directed at the Chief Executive as the main leadership influence - *Mintzberg* (1983). *Begley and Boyd* (1986) state that the role of the Chief Executive in the smaller firm is more significant as s/he is the controlling influence as regards decisions and strategic planning. Chief Executives exert an influence on the firm that is significant and which may be either good or bad - *Day and Lord* (1988), although *Hambrick and Mason* (1984) state that the environmental circumstances surrounding the firm dictate the leaders actions to a large degree. Studies carried out by *Alexander* (1985) conclude that strategic plans are deployed more effectively and successfully when the reasons for the decisions are explained in detail and when the various roles of the staff are clarified. The literature indicates that radical change can only be achieved through quality of ideas and commitment to their achievement rather than the position held in a firm.

4.5 Concluding remarks

This chapter seeks to define organisational leadership and to derive a working definition for use in this study. A review and analysis of the literature derives a working definition of leadership for this study based on the following themes:

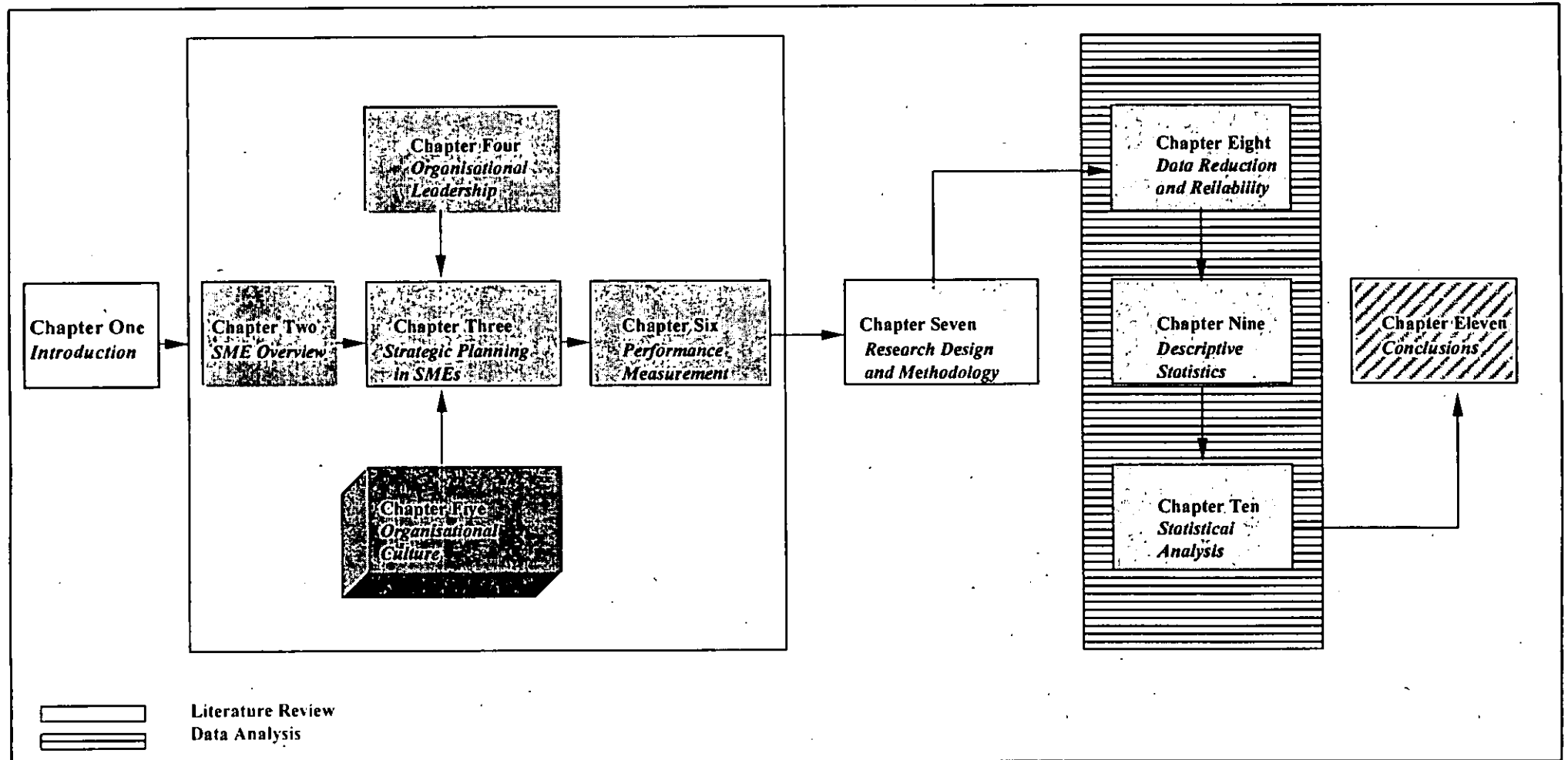
- influencing others
- formulating and deploying the strategic plan
- motivating, inspiring and directing others
- co-ordinating corporate activities

These themes include the emphasis given by the leader to the task and to the ability and welfare of the people undertaking the task - *Finlay (2000)*. They encompass the tenets of the various leadership studies. For example, a task orientated leader is likely to focus on the formulation and deployment of the strategic plan and the co-ordination of corporate activities, whereas a human relations orientated leader is likely to focus on the attitudes, feelings and personal well being of the people in the firm. Both the task and human relations orientated dimensions are used to derive the following leadership styles:

- human and results orientation,
- transformational,
- transactional,
- laissez faire.

These four organisational leadership styles are inferred using the attributes shown in tables 4.9, 4.10, 4.11 and 4.12 (see section 3, question 12 of the survey instrument). Whilst the survey instrument for this study is devised to ascertain the emphasis on leadership only, the exploratory interviews suggested that the section in the survey instrument should be headed 'leadership/management style' to ensure that SMEs of all sizes are able to perceive the relevance of the various questions.

The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises – Chapter Outline



CHAPTER FIVE: AN OVERVIEW OF ORGANISATIONAL CULTURE

5.0 Introduction

The importance of organisational culture is gaining in significance and is increasingly seen as a unifying force in organisational processes. It is seen as a potentially effective tool to manage organisations, particularly as other managerial and efficiency related initiatives seem to have yielded 'less than hoped for results' - *Smircich* (1983), *Harris and Ogbonna* (1999). In effect, culture is often seen as the conduit through which management can influence the strategic planning process. The literature contends that organisational culture directly impacts on the strategic planning process and affects organisational performance. Whilst a limited number of empirical studies have been carried out, the work relating to organisational culture is largely comprised of opinions, anecdotes and contentions. The small number of empirical studies relate mainly to larger firms. By implication, therefore, the definitions of organisational culture relate mainly to these larger firms and organisations. Whilst the role of culture in the implementation of new ideas, processes and systems in firms of all sizes is not disputed, little research exists on the impact of culture on small and medium sized firms. It is therefore not surprising that many academics and practitioners see culture as a blurred concept. In addition, this blurring is compounded by the absence of any indicators to signal a desirable culture for an SME. It is therefore important that culture and its role in SMEs is understood. In the absence of a clear understanding of culture, a means of deriving dimensions of culture and devising constructs is necessary for this study. Accordingly, this part of the study fills an important gap in the knowledge base.

The aim of this chapter is to provide a review of the extant literature on the context of organisational culture in SMEs. The chapter is structured in seven main parts. It:

- examines the definitions of organisational culture (section 5.1)
- reviews the main schools of thought on organisational culture (section 5.2)
- discusses the achievement of an appropriate culture (section 5.3)

- reviews the factors that influence organisational culture (section 5.4)
- discusses the 'strength' of culture (section 5.5)
- derives dimensions of culture appropriate to SMEs (section 5.6).

5.1 Definitions of organisational culture

Chapter four provides an overview of leadership styles. Many writers refer to leadership as a quantifiable aspect of 'the formal organisation' which is amenable to 'planned change'- *French and Bell (1990)*. On the other hand, organisational culture could be argued to be a qualitative aspect of both the 'formal and informal organisation'. Consequently obtaining an accepted definition of culture is a complex task. As one of the aims of this study is to ascertain the association between organisational culture and the strategic planning process, it is important that a working definition of organisational culture be derived. The working definition forms the basis for deriving the culture constructs and facilitates the examination of any association(s) of culture with the other variables in the study.

To explain the concept of culture within the overall organisational setting, *French and Bell (1990)* use the metaphor of an 'organisational iceberg' where the area above the water is visible and easy to see and measure, whereas the area below the water line is hidden. The hidden area contains the values, beliefs and basic understandings of the organisation. This does not mean that because it is hidden, it is not a powerful force in influencing the direction of the organisation but it does mean that what this area contains is often omitted, given cursory attention, or to quote *French and Bell (1990 p.18)* '*...not examined at all or partially examined*'. Yet these 'soft' aspects of the organisation often provide formidable barriers to the introduction of change, even if the change is intended to significantly benefit the organisation - *Morgan (1989)*. This implies that the successful completion of the strategic planning process is dependent on the 'informal' organisation, where obstacles can form significant barriers as well as facilitate deployment.

Culture is a term that most managers think they know well but each manager invariably has a different definition. It is not surprising that a large number of definitions of culture exist. Although there are many definitions, it is contended that there may not be any one accepted definition - Ott (1989, p.50). Indeed, Smircich (1983,p.339) states that confusion often arises as many of the definitions result from the potential overlap between organisational culture and the organisation itself. She provides a possible explanation by pointing out that the concept of organisational culture originates from anthropology where there is no consensus on its meaning.

Van Maanen and Schein (1979) refer to culture as:

'consisting broadly of long-standing rules of thumb, a somewhat special language, shared standards of relevance as to the critical aspects of the work that is being accomplished, matter of fact prejudices, models for social etiquette and demeanour, certain customs and rituals suggestive of how members are to relate to colleagues, subordinates, superiors and outsiders and a sort of residual category of some rather plain 'horse-sense' regarding what is appropriate and 'smart' behaviour within the organisation and what is not'.

Hofstede (1981 p.24), a renowned expert on organisational culture, defines culture as:

'...the collective programming of the mind which distinguishes one category of people from those of another. Culture in this sense is a system of collectively held views...'

A broadly similar definition is given by Marden (1996) who refers to organisational culture as *'the collective mental programming of the enterprise and its members. It is apparent in the way we do things around here'*. This description was later adapted to business organisations by Hofstede (1984, p.21) as *'the way things are done in the business'* to illustrate the firm's philosophy or character. Nevertheless, despite the large number of definitions and descriptions, a consensus on the definition appears to develop around the concept of shared key values and beliefs. Smircich (1983 p.345) refers to the consensus arising from the basis of culture focusing on the need for a sense of identity for organisational members, the generation of commitment to something larger than the self, the enhancement of the stability of the social system and as a means of guiding and shaping behaviour. Culture is also seen as a psychological concept rather than a management tool. In fact, a number of writers take up the psychological angle. For example, Schneider, Brief, and Guzzo, (1996) refer to culture as the underlying

psychological foundation of an organisation. *Starbuck* (1982 p.3) refers to organisational ideologies as:

'logically integrated clusters of beliefs, theories, world views values, goals, visions, expectations, plans, myths, stories, rituals, symbols and terminology'.

On the other hand, *Morgan* (1986 p.128) equates culture with the very existence of the organisation. He states that culture is a shared understanding that *'allows people to see and understand particular events, actions, objects, utterances, or situations in distinctive ways'*. The interpretation of the 'shared understanding' provides the basis for individual behaviour. A range of selected definitions are outlined in table 5.1, which indicate a shift in the emphasis on 'shared/accepted perceptions' prior to the 1990s to an emphasis on 'shared beliefs and values' in the present decade. An example of the underlying trends in defining culture can be seen from the definitions given by *Hofstede* (1984; 1990), which appear to indicate a change of definition. However, it can be argued that his definitions do not change, but evolve to use the more descriptive term of 'shared perceptions of daily practice' in place of the 'ways things are done'.

The literature indicates that there are three common themes in the definitions of organisational culture: beliefs and values, the way things are done and shared, and accepted perceptions. For example, earlier studies such as *Denison* (1984) *Deal and Kennedy* (1982) and *Hofstede* (1990) describe culture as the shared or accepted perceptions of the organisation. Another view put forward by *Van Maanen and Barley*, (1984), *Hofstede* (1984) and *Denison and Misha* (1995) describe culture as the way things are done. This is not a significant change from the earlier definitions and could be argued to be an extension of, rather than a change to, the original descriptions. In fact, the main protagonists of organisational culture *Hofstede* and *Denison*, describe culture using both definitions. The later studies conducted by *Gordon and di Tomassa*, (1992), *Kotter and Heskett* (1992), and *Wilderom and van den Berg* (1997) focus on beliefs and values to describe organisational culture. This approach is consistent with the work of *Chatman and Jehn* (1994 p.531) who argue that:

'organisational culture is only meaningful when there is high consensus among members about organisational values'.

Table 5.1 Selected definitions of organisational culture - common themes

Study	Common Themes			Overlap of themes 1-3.	
	Basis of definition	1. Beliefs/Values	2. The Way things are done		3. Shared/accepted perceptions
Denison (1984)	perceptions of organisational practices			√	
Deal and Kennedy (1982)	a pattern of beliefs and expectations shared by organisation members			√	
Smircich (1983)	the expression of unconscious process				√
Van Maanen and Barley (1984)	the way we do business around here		√		
Hofstede (1984)	the way things are done in the business'		√		
Schein (1985)	a pattern of basic assumptions				√
Hofstede et al (1990)	'shared perceptions of daily practice'			√	
Schein (1992)	'the residue of the learning process'				√
Gordon and Di Tomasso (1992)	shared and stable beliefs and values	√			
Kotter and Heskett (1992)	shared values and behavioural patterns	√			
Denison and Misha (1995)	core values		√		
Wilderom and van den Berg (1997)	shared perceptions and preferences				√

It is reasonable to assume that the definitions differ for the following reasons:

- organisational issues change over time and the definitions alter to reflect these changes - *Handy* (1994),
- the definitions tend to be based on the thinking of the core discipline that impacts on the organisation such as human resource management
- the definitions evolve as society itself changes

To achieve a working definition that provides for the future actions of an organisation, *Wilderom and van den Berg* (1997) encompass the *Hofstede et al* definition and broaden it further by including the perceived 'preferences' on how the organisation works and *should* work. Accordingly, for the purposes of this study, the *Wilderom and van den Berg* (1997) definition of culture is used:

'employees shared perceptions and preferences regarding ways in which the organisation works'.

This definition ensures a clear understanding of organisational culture and is consistent with the contention that the inclusion of beliefs and expectations produce norms that influence the behaviour of individuals and groups - *Schwartz and Davis* (1981).

5.2 The main schools of thought on organisational culture

Arguably the list below represents the main schools of thought on organisational culture:

- *Hofstede* (1980)
- *Deal and Kennedy* (1982)
- *Schein* (1985)
- *Handy* (1993)
- *Wilderom and van den Berg* (1997)

Each of these studies will be considered briefly below.

Hofstede's (1980) seminal work on organisational culture is used in most publications as the basis for a description of organisational culture. His study is based on the

classification of culture into five types, which he entitles *individualism*, or *collectivism*, *power distance*, *uncertainty avoidance*, *masculinity* or *femininity* and *long/short term orientation*. These are briefly described in the following sections.

Individualism/Collectivism refers to the extent of group integration in an organisation. *Hofstede* depicts 'individualist' organisations as those emphasising rewards as the principle motivating factor: whereas 'collectivist' organisations emphasise group interests, relationships between the group and the employer, and actions based on trust. The resultant consequences of an 'individualist' type organisation are based on the overriding criterion of 'mutual advantage'. On the other hand, the consequences of a 'collectivist' organisation are likely to result in a greater expectation that the organisation will have a more maternalistic approach to employees, influencing their well being and defending their interests. A 'collectivist' organisation is also more likely to have staff with a strong sense of loyalty and duty.

Power distance relates to the expectation and acceptance of the unequal distribution of power in an organisation. In a later study, *Hofstede* defines it as:

'the difference between the extent to which the boss can determine the behaviour of the subordinate and the extent to which the subordinate can determine the behaviour of the boss' - *Hofstede* (1994 p.72).

The impact of 'power distance' as a motivating force depends, to a large extent, on the perceptions of the employees. However power distance manifests itself in aspects such as, the degree of centralisation, the proportion of supervisory personnel to non-supervisory personnel, wage differentials, and employment status. For example, in an organisation where 'power distance' is not very significant, it is likely that a flatter organisational hierarchical system will be in place, greater consultation on decision making within the organisation is carried out and greater communication exists between management and staff. In organisations with significant power distances, it is likely that a hierarchical organisation style will exist and only an inner circle will have knowledge of what is happening. Employees outside the 'inner circle' will wait to be told what is happening or what to do. Arguably, in large organisations employees are likely to be somewhat in awe of the inner circle.

Uncertainty Avoidance refers to how the organisation views the future and whether it prefers to plan or just let events unfold. It refers to the tolerance of uncertainty and/or ambiguity. Tolerance of uncertainty varies and can be indicated by rule orientation, employee stability and stress - *Hofstede* (1994). If the emphasis is on uncertainty avoidance, it is likely that rules, regulations and constraints will be imposed, with the result that creativity is often reduced. In addition, where there is a strong uncertainty avoidance culture, there is likely to be more routine functions, which are a direct result of the hierarchical systems in place. Flexibility is likely to be rare and standardised procedural processes are likely to be the norm.

Various degrees of uncertainty create varying degrees of anxiety. Organisations tend to use rules and regulations to reduce internal uncertainty and increase predictability, as evidenced by dependence on bureaucracy or the reliance on expert knowledge - *Hofstede* (1994). A low emphasis on uncertainty avoidance is usually indicated by fewer written rules and the use of more generalist staff members. Low emphasis on 'uncertainty' also tends to manifest itself in greater managerial involvement in the strategic planning process and the willingness to take individual and risky decisions. However, it is also evidenced by high labour turnover and lower employee satisfaction scores. It could be argued that employee dissatisfaction arises from the inability to prepare for uncertainty. Where uncertainty avoidance is low, there is a greater likelihood that firms will have a strategic plan in place.

Masculinity/Femininity determines the degree to which an organisation is performance orientated. 'Masculinity' is a term applied to performance orientation, whereas 'femininity' relates to a more social relationship orientation. 'Masculinity' type companies are considered to focus more on strength or power whereas 'femininity' orientated companies are considered to be more egalitarian. For example, the term 'masculinity' often denotes earnings, recognition, advancement and challenge; whereas 'femininity' tends to denote terms such as good working relations with line management and co-operation with other colleagues and outside stakeholders. 'Masculinity' can also be associated with being tough and not showing emotions, as well as the right of firms to interfere in employees lives.

Long/short term orientation refers to the long or short term approach of the firm. Obviously, a firm does not engage in long term strategic planning if its concerns are only short term, or if they feel that reacting to the actions of others is the best course to follow. A culture that displays a long term orientation is likely to have established relationships and networks. A long term approach can manifest itself in the lowering of costs and the achievement of greater efficiency -*Hofstede* (1991 p.168).

Criticisms of *Hofstede's* work relate to its focus on employee orientation, based on open communication, empowerment and results. It can also be argued that *Hofstede* makes little reference to environmental factors, in the absence of which, employee orientation often means little. In addition, the emphasis on qualitative aspects makes comparisons more difficult. A recent study carried out by *Winch, Millar and Clifton* (1997) outline results that replicate *Hofstedes* findings on cultural values, but fail to support the predicted implications for behaviour. They indicate that '*the relationship between culture and behaviour might be more complicated than research to date suggests*'. It can be argued that there are a number of constraints in *Hofstede's* work resulting from the age of the research, it was carried out in the late 60's/early 70's, and from the sample used, which comprised a largely American influenced culture. Doubts are expressed by *Ryh Song and Lawrence* (1995) on the validity of *Hofstede's* methodology and by *Wilderom and van den Berg* (1997) on the '*serious methodological issue*' of the overlap between culture and leadership.

Deal and Kennedy (1982) categorise culture types based on two main considerations: the degree of risk arising from a firm's activities and the feedback received on the degree of success of the firm's strategic plan. They propound four main culture types: *tough guy macho* culture, the *work hard play hard* culture, the *bet-your-company* culture, and finally, the *process* culture. Each of these culture types are examined briefly in the following sections.

Tough guy macho culture refers to the individuals within an organisation that undertake high risk activities, based on tight time constraints. The rewards are usually high.

However, internal pressures may also be high. In essence, this culture type relies on high profile individuals, who could be described as 'self centred'.

Work hard/play hard culture is based on high volume production, assisted by 'fun' elements such as a motivational force. Normally, the risk element involved is low.

Bet-your-Company culture refers to long term investment type decisions, made on a bureaucratic basis. The high risk involved means that every step is taken with care and attention.

Process Culture refers to low risk activities in large bureaucratic organisations, where the individual's actions are part of a much larger process. As the feedback on the effectiveness of the individual's actions is usually very slow, staff tend to adopt a cautious attitude with much attention to detail.

Schein (1985) was one of the first authors to classify and categorise culture. He propounds the necessity to analyse organisational culture in order to enable the actions of an organisation and its employees/managers to be understood. He suggests that culture comprises three distinct levels: *artefacts, values and basic assumptions*. His contention is that basic assumptions are the essence of culture which are manifested in the values and behaviour of the organisation. *Schein (1985)* outlines these levels of culture in a continuum, ranging from the informal aspects which are often highly visible but indecipherable, to aspects that are invisible and preconscious. This view is consistent with the contention by *Pettigrew (1979)* that organisational culture is a 'family of concepts' which include 'assumptions', 'values', 'symbols', 'myths', 'beliefs' and 'rituals'. The continuum derived by *Schein (1985)* is depicted in figure 5.1.

Figure 5.1 Culture - a continuum of awareness

Levels of Culture	Continuum of Awareness
<p>Artefacts and Creations</p> <p>Technology, art, and visible and audible behavioural patterns</p>	<p>Visible but often not decipherable</p>
<p>Values</p> <p>Testable in the physical environment Testable only by social consensus</p>	<p>Greater level of awareness</p>
<p>Basic Assumptions</p> <p>Relationships to environment Nature of reality, time and space Nature of human activity Nature of human relationships</p>	<p>Taken for granted Invisible Preconscious</p>

Source : Adapted from Schein (1985 p.14).

In explaining this model, Schein (1985) states that the 'artefacts and creations' level is the most visible, whereas the second level 'the values' evolves as the organisation becomes established and grows. He stresses that the 'basic assumptions' level is the foundation of organisational culture. His reasoning for this is that basic assumptions are well established in most organisations. Basic assumptions also have a strong basis in the literature. To enable a better understanding of organisational culture, the following levels will be examined briefly; (a) *artefacts and creations*, (b) *values*, and (c) *basic assumptions*.

Artefacts and creations are described by Schein (1985) as the most visible level of organisational culture. Examples include a firm's physical infrastructure or social environment. In a later study, Ott (1989 p.24) encapsulates 'artefacts' as:

'material and non-material objects and patterns that intentionally or unintentionally communicate information about the organisations' technology, beliefs, values, assumptions and ways of doing things'.

It can be argued that 'material objects' relate to the physical aspects of an organisation such as its buildings, whereas 'material patterns' relate to the working environment and

include the degree of interactions within the physical confines of the building. Examples might include accessibility to other or higher ranking colleagues through 'open door' policies. Non material objects and patterns relate to the 'softer' aspects of the organisation and include aspects such as symbols, rituals, jargon and communication patterns - *Dandridge et al (1980), Hofstede et al (1990)*. Both material and non material objects and patterns are termed 'artefacts' as they communicate a message about the organisation. However, the non material aspects are more complex and more difficult to understand. For example, symbolism is used to '*reveal or make comprehensible the unconscious feelings, images and values that are inherent in that organisation*' - *Dandridge et al (1980)*. Other writers refer to the importance of symbols in enabling: '*employees to interpret and understand the organisation and their role in it, by providing information about status, power, commitment, motivation, control, values, and norms*' - *Daft (1983)*.

Rituals could be argued to be another factor that can have a significant influence on organisations and relate to the formal as well as the informal practices. Interestingly, *Schein (1985)* refers to the levels of artefacts as manifestations of culture rather than as attributes of culture, based on their importance in sustaining the organisational culture. This view is consistent with the work of *Morgan (1986); Hampden-Turner (1990); Schein (1992)*. It could be argued that the consideration of the artefacts' level, in the absence of the other levels of culture, gives a limited view only. For example, the 'values' and 'basic assumptions' dictate the role and usefulness of the 'artefacts' level.

Beliefs are consciously held cognitive views about the truth and reality, whereas a *value* is a conscious, affective desire or want - *Ott (1989)*. A value is like a belief but with an 'ought to' implication - *Ott (1989, p.39)*. Values are an indication of the firm's way of doing business and how they relate to their shareholders. It is accepted that values lie at the heart of culture - *Deal and Kennedy (1982)*. Values and beliefs evolve over time and include assumptions about the organisational environment, the managerial styles adopted by the organisation's leaders. Beliefs and values are referred to as 'recipes' by *Grinyer and Spender (1979)*. While 'recipes' may have achieved success in the past and have been faithfully adhered to by many managers, there is no guarantee that they will succeed

in the future. The danger of using 'recipes' is that they may blur managers' perceptions of problems/issues arising.

While values and beliefs differ from each other, they are also interdependent, as encapsulated by the quotation that '*adults may have thousands of beliefs, ..only hundreds of attitudes and a few dozen values*' - Gross (1987). The degree of interdependence is stressed by Ott (1989 p.79) when he refers to beliefs and values as the organisational 'ideology' comprising 'the pervasive and dominant sets of interrelated systems of thoughts, beliefs and/or values'. The consideration of values and beliefs on their own can be harmful unless influenced by positive leadership - there can be nothing more dangerous than a shared feeling of delusion - Kets de Vries (1980). However, Pettigrew (1979 p.574) states that culture cannot be seen in terms of just one value, attitude or norm and that 'culture treated as a unitary concept...lacks analytical bite'. To assist in the understanding of values, an example of key sets of values is depicted from Trompenaars and Hampden-Turner (1997) in table 5.2.

Table 5.2 Key sets of values

Universalism <i>based on abstract rules of behaviour</i>	←————→	Particularism <i>rule flexibility depending on circumstances</i>
Individualism <i>emphasis on the individual</i>	←————→	Communitarianism <i>Emphasis on the Community</i>
Neutral <i>Objective interventions</i>	←————→	Emotional <i>Emotional interventions</i>
Specific <i>task oriented and goal related</i>	←————→	Diffuse <i>broader than specific goals</i>
Achievement <i>judged on output</i>	←————→	Ascription <i>status, background and connections important</i>

Based on Trompenaars and Hampden-Turner (1997)

Trompenaars and Hampden-Turner (1997) suggest that a balance is needed between each continuum, to ensure that any negative aspects are avoided. However, all values are not mutually exclusive and there is no reason why an organisation could not, and should not, comprise more than one value - Gregory (1983). From an organisational viewpoint this is common, as many departments may have their own values and beliefs but also subscribe

to the corporate culture. Usually if a clash occurs, then the departmental behaviour gives way to the corporate culture. *Harris and Ogbonna (1999)* suggest that there has been a marked resurgence in research into culture as a pluralistic concept, rejecting the previous uni-dimensionality. The benefits of 'values' are also shown in an empirical study of twenty companies that outperform the national economy growth rate, based on their commitment to values - *Heller (1997)*.

Basic Assumptions are an influence on the organisational values and norms as well as its artefacts - *Hofstede (1980)* and *Schneider (1989)*. Clarification is provided by *Ott (1989)* who refers to assumptions as 'not only beliefs but also perceptions (interpretations of cognition's) and values and feelings (affects)'. The broad applicability of 'basic assumptions' to an organisation is outlined by *McGregor (1987 p.6)* who states that:

'Every managerial act rests on assumptions, generalisations, and hypotheses - that is to say, on theory. Our assumptions are frequently implicit, sometimes quite unconscious, often conflicting; nevertheless, they determine our predictions that if we do a, b will occur. Theory and practice are inseparable'.

It could be argued that the interplay of assumptions and values lead to greater cultural dynamism, which is more prevalent during periods of crises, which reinforces the importance of the use of assumptions during periods of rapid change. *Schein (1996)* contends that many of the problems in organisations arise from underestimating 'the importance of culture- shared norms, values and assumptions - in how organisations function'. *Wilson and Rosenfeld (1990 p.237)* share this point of view by emphasising that 'the pervasive nature of organisational culture cannot be stressed too much. It is likely to affect virtually all aspects of organisational life'.

Handy (1993) characterises organisational culture as the psychological relationship between employers and employees. He categorises culture into four main types: *power, role, task* and *person*. This categorisation is based on the differences between organisations in terms of power and control. Each of these culture types are examined briefly below.

Power culture relates to the degree of influence that emanates from a central power force or 'inner circle'. This implies that the influence of a few individuals determine the actions of others. A power culture is often found in smaller organisations where it operates in the absence of detailed procedures or processes.

Role culture refers to the degree of specialisation in an organisation and is often associated with bureaucracy. In this culture type, the work of the specialist units is co-ordinated by a small number of people, based on their position within the organisation. In essence, role culture is based on the power associated with the position of authority.

Task Culture relates to the achievement of a task based on maximising the achievements of the appropriate resources. The exercise of power based on expertise is an important component of this culture type.

Person culture refers to the central role of the individual within the organisational structure.

Wilderom and van den Berg (1997) review previous studies and structure their findings on the basis of the 'important structural variables' of the organisation and its 'internal aspects'. They derive the following dimensions of culture:- *empowerment, intergroup orientation, human resource orientation, improvement orientation and external orientation*. Each of these dimensions are briefly discussed below.

Empowerment represents the greater involvement of employees in the overall task. *Marcoulides and Heck* (1993) refer to empowerment as encompassing a generic aspect of the task structure as well as the level of horizontal differentiation. *Wilderom and van den Berg* (1997) argue against the inclusion of vertical integration on the basis that it relates more to leadership rather than to organisational culture. The likely manifestations of empowerment include a decentralised, informal and non standardised environment - *Spreitzer* (1995).

Intergroup Orientation relates to the overcoming of barriers to productive inter group communication and is seen as a means of achieving more effective organisational

working. This dimension is influenced to a significant degree by the degree of empowerment present within the task.

Human Resource Orientation is depicted in the literature as an essential element in organisational culture and relates to the way employees are treated within the organisation - *Gordon (1990), Quinn, (1988), Gordon and Di Tomasso (1992)*.

Improvement Orientation relates to changing organisational practices in order to achieve more competitive advantage. It denotes a shared high level of ambition, a concomitantly strong commitment to high-quality work, as well as a positive inclination towards organisational change- *Wilderom and van den Berg (1997)*.

External Orientation refers to the emphasis given to outside forces and influences and is outlined in the literature as one of the key aspects of organisational culture - *Wilderom and van den Berg (1997), Schein (1985) and Hofstede et al (1990)*.

5.2.1 Recent studies on organisational culture

Apart from the different schools of thought discussed in the previous section, a number of empirical studies have been conducted in the 1990s. Arguably the list below represents the main studies conducted over the past decade:

- *Hofstede et al (1990)*
- *Kotter and Heskett (1992)*
- *Gordon and Di Tomasso (1993)*
- *Marcoulidas and Heck (1993)*
- *Denison and Misha (1995)*

Each of these studies are discussed briefly below.

Hofstede et al (1990) study twenty organisational units of IBM focusing on the shared perceptions of daily practices. The study adopts the following types of culture:

- process or task orientation
- employee or job orientated

- open or closed systems
- loose or tight control
- normative or pragmatic approach
- parochial or professional focus

It could be argued that these culture types are an expansion of the original culture types derived by *Hofstede* (1980). However, in this study they include many items that could be argued to refer to leadership attitudes and styles. In fact *Hofstede et al* stated that '*key leaders undoubtedly shape organisational culture*'.

Kotter and Heskett's (1992) study of one hundred and seven large American firms examines organisational culture and its adaptability. The study concludes that an adaptive culture is associated with long term performance. As a result of their study, *Kotter and Heskett* (1992) suggest that culture should be considered at various levels and a differentiation made between the "visible" culture such as behaviour patterns and the "deep" culture of shared values.

Gordon and Di Tomasso (1993) refer to the paucity of studies on the impact of culture on organisational performance. They state that much of the work undertaken is based on '*arguments that are conceptual and anecdotal orcase studies without formal measurement of either performance or culture*'. In their empirical study, they examine organisational culture in eleven large American insurance firms, using the following attributes to describe culture:

- clarity of strategy/shared goals
- systematic decision making
- integration and communication
- innovation and risk taking
- accountability
- action orientation
- fairness of rewards
- development and promotion

The study concludes that organisational culture is associated with short term performance only.

Marcoulidas and Heck (1993) examine organisational culture in twenty six large American firms, using the following determinants of culture:

- the structure and purpose of the organisation
- organisational values
- organisational climate
- task organisation
- worker attitudes and goals

The study indicates that organisational culture is associated with organisational performance.

Denison and Misha (1995) investigate organisational culture in seven hundred and sixty-four large American firms. In addition, they also conduct five case studies. They use the following determinants of culture:

- involvement
- consistency
- adaptability
- mission and goals.

The study concludes that aspects such as mission and consistency are associated with overall performance. Involvement and adaptability, on the other hand, are associated with organisational growth.

Other examples exist in the literature showing the impact of culture on performance. For example, a study of the automobile industry concludes that successful companies owe their success as much to their overriding philosophy or culture as to their strategies - *Womack, Jones and Roos (1990)*. The results of this study are confirmed in empirical studies by *Kotter and Heskett (1992)* and *Vargas, Rivera and Cardenas (1997)*, which show that companies with strong values outperform companies that lack strong values. Table 5.3 depicts a summary of the empirical studies investigating the association between organisational culture and organisational performance. In a high profile non-empirical work, *Peters and Waterman (1982)* state that '*without exception, the dominance and coherence of culture within excellent organisations proved to be the essential quality of success*'. It can be argued that this statement is well underpinned by the empirical evidence to date.

Table 5.3 A Summary of the empirical studies investigating the association between culture and performance

Study	Sample used	Definition of culture	Dimensions of culture	Performance measures	Key results
Hofstede et al (1990)	Divisions of IBM (20 organisational units in 2 countries)	Shared perceptions of daily practices	<ol style="list-style-type: none"> 1. Process vs. task orientated 2. Employee vs. job oriented 3. Parochial vs. professional 4. Open system vs. closed system 5. Loose control vs. tight control 6. Normative vs. pragmatic 	Financial	Organisational culture impacts on performance
Gordon and DiTomasso (1992)	11 large US insurance firms	Shared and stable beliefs and values	<ol style="list-style-type: none"> 1. Clarity of strategy/shared goals 2. Systematic decision making 3. Integration/communication 4. Innovation/risk taking 5. Accountability 6. Action orientation 7. Fairness of rewards 8. development/promotion from within 	Financial	Culture strength and adaptability are associated with short term performance
Kotter and Heskett (1992)	207 large US firms	Shared values and behavioural patterns	<ol style="list-style-type: none"> 1. Strength 2. Strategy-culture fit 3. Adaptability 	Financial	An adaptive culture is associated with long term performance. Culture strength does not predict performance
Marcoulidas and Heck (1993)	26 large US firms	Perceived functioning, values and beliefs	<ol style="list-style-type: none"> 1. Organisation structure/purpose 2. Organisational values 3. Organisational climate 4. Task organisation 5. Worker attitudes/goals 	Volume and share of market Profit	Various aspects of culture are associated with performance
Dennison and Misha (1995)	764 large US firms and 5 case studies	Core values	<ol style="list-style-type: none"> 1. Involvement 2. Consistency 3. Adaptability 4. Mission 	Perceived performance and sales growth	Stable traits such as mission predict performance. Flexible traits such as involvement and adaptability are associated with organisational growth

Adapted from Wilderom and van den Berg (1997)

The importance of competitive advantage in the modern technological age depends on the speed with which firms keep pace with developments - *Tushman and O'Reilly*, (1997), and as such the principle driver of change is dependent on the culture of the organisation. Culture is also a means towards enhancing motivation and a 'steer' for the changes in behaviour that the organisation will tolerate. It is often a response to corporate "dilemmas" - *Smircich* (1983), *Hampden-Turner*, (1990). It could be argued that the failure of many of the management tools introduced in the 1980s and 1990s is a result of the influence of corporate culture placing a higher value on stability rather than change. The significance of culture is according to *Schwartz and Davis* (1981 p.35) '*...capable of blunting or significantly altering the intended impact of even well-thought out changes in an organisation*'.

It could be argued that while organisational culture is an important influence on strategic planning, non-cultural influences are also important. It is for this reason that *Brown* (1995) suggests that '*it is impossible to predict an organisation's strategy from knowledge of its culture alone*'. This view is consistent with *Smircich* (1983) who states that culture can be viewed either as an independent variable, for example, brought into the organisation, or as an internal variable. However, it is clear that culture is one of the more important influences on strategic planning and enables it to be expressed '*in much the same way as speech creates meaning in language*' - *Brown* (1995).

While the literature suggests that organisational culture is associated with strategic planning, the *Wilderom and van den Berg* investigation is the only example the author of this study was able to locate in relation to SMEs.

5.3 Achieving an appropriate culture

Achieving an 'appropriate culture' is a painstaking process in what can be described as the 'moving target' of business life. *Handy* (1986 p.188) remarks that:

'Not all cultures suit all purposes or people. Cultures are founded and built over the years by the dominant groups in an organisations. What suits them and the organisation at one stage is not necessarily appropriate for ever - strong though the culture may be'.

In fact, *Schein* (1985) argues that the first step in ensuring that a firm has the 'appropriate' corporate culture, is to understand its existing culture type and its underlying assumptions. However, it is also necessary to understand the context of the organisational culture and the factors impacting on it. The culture of firms differ markedly, often determined by the firm's activities - *Atkinson* (1990). Such differences are not surprising as each firm is:

'a bundle of interlocking processes overlaid by organisation policies, permeated by unwritten rules of behaviour, and constrained by its resource structures' - *Maira* (1996).

It could be argued that an appropriate culture will be influenced to a significant degree by the characteristics of the various industrial sectors and the changes impacting on them. For example, high technology firms may have a different culture from traditional heavy engineering firms. The literature indicates that attempts to change organisational culture can be a delicate process. A positive view of cultural change is given by *Barratt* (1990 p.23) when he states that *'values, beliefs and attitudes are learnt, can be managed and changed and potentially manipulated by management'*. *Bourgeois and Jemison* (1982) take a similar view and refer to the shaping of the way that people behave, interact and perform. However, not all authors are in agreement that culture can be changed. *Meek* (1988) contends that:

'culture as a whole cannot be manipulated, turned on or off, although it needs to be recognised that some are in a better position than others to intentionally influence aspects of it.... Culture should be regarded as something an organisation 'is' not something it 'has'; it is not an independent variable nor can it be created, discovered or destroyed by the whims of management'.

This point is supported by the contention that even though individuals with new or fresh assumptions join organisations, the established assumptions remain. *Daft and Weick* (1984, p.286) suggest that key individuals within an organisation often frustrate the introduction of changes to the culture. As culture represents the character of the organisation derived from the cumulative values and beliefs of all the employees, culture change may be a slow and tiring process.

It can, however, be argued that the management ethos has changed in recent years as egalitarianism has replaced bureaucracy. This has resulted in a lesser emphasis being placed on firm size and a greater emphasis on lean and flexible organisations - *Peters*

(1997). An influential factor in the changing management ethos is the concept of competition, which has resulted in firms both competing and co-operating with one another often at the same time - *Coopers and Lybrand* (1997). Another example of the changing management ethos relates to the organisation's strategic plan, which in previous decades was confined to a few influential individuals, whereas today, the emphasis is on greater awareness and empowerment - *Kanter* (1990). It could be argued that corporate culture has been re-defined in line with these changes and is continuing to re-define itself. This is consistent with the contention by *Stacey* (1996) that organisations evolve new systems and patterns of behaviour that 'fit' the emerging new systems. It can, therefore, be argued that culture evolves rather than is deliberately 'shaped'.

5.4 Factors influencing the organisational culture

Arguably every SME has an organisational culture which can be inferred from its structure, operation and approach to its overall strategy and mission. The culture of any organisation relates to its values and beliefs, which are often influenced by various factors including the company's founder - *Pettigrew* (1979), *Schein* (1985). The 'established organisation' tends to keep and build on the initial behaviour and values - *Daft and Weick* (1984). An example of this is the pride with which companies refer to the number of decades or even longer that they have been established. The portraits of its founders on the office walls of senior management re-enforce both employee perception and the culture itself. This pattern can be recognised in many firms as founding members seek to stress personal beliefs, values, and assumptions on a range of issues from the business strategy to the environment - *Kotter and Heskett*, (1992), *Robbins* (1992), *Brown* (1995). In addition to founding members, top managers also play a leading role in developing a company's ideology - *Beyer* (1981). As such it can be said that corporate ideology is heavily identified with top levels of management in the company - *Dunbar, Dutton, and Torbert* (1982), *Starbuck* (1982).

Culture is also influenced by people in the organisation, any professional bias that they may have and by the functions that they perform - *Schein*, (1992); *Kotter and Heskett*, (1992). As staff often identify more with their professional grouping than with their company, it is important that effective systems are in place to facilitate cross functional

working to overcome any adverse impact. Culture is influenced by the way the organisation's managers and leaders stress their priorities, goals and assumptions - *Schein, (1992)*.

It is often by trial and error that companies adapt their culture to the market place and to the external environment. However, once the basic beliefs are established, general interactions and inter relationships determine an organisation's culture - *Kotter and Heskett, (1992); Schein, (1992); Morgan, (1986); Hampden-Turner, (1990)*.

5.5 The 'strength' of culture

Deal and Kennedy (1982) describe cultural strength as the extent to which the organisational members share core values. They contend that it is possible to identify the strength of culture by the existence of symbols and artefacts that relate to the company's core values. There is no common definition of 'strength of culture'. However, it is often defined according to the coherence, homogeneity, stability and intensity, congruence, penetration and internalised control of the firm - *Gordan and Di Tomasso (1992)*.

The literature indicates that culture strength can be manifested in organisations in a number of ways such as a strong or weak culture types. While other manifestation types exist, strength is a concept used in a number of empirical studies - *Denison (1984), Gordon and Di Tomasso (1992), and Kotter and Heskett (1992)*. Accordingly, an understanding of 'cultural strength' is desirable in order to effect change. Not all organisational cultures are the same - '*organisational cultures differ markedly in terms of their relative strengths*' - *Brown (1995 p.74)*. The essential difference between both extremes of culture is that in an organisation with a strong culture, a clear understanding exists on how the organisation should operate. In addition, virtually all employees strongly support that understanding. In an organisation with a weak culture, it is likely that the converse applies, as often sub cultures compete with each other with the result that no one culture is dominant.

The literature reveals a number of studies outlining the benefits of a strong culture. Several researchers contend that a strong culture leads to organisational excellence or high performance - *Barney (1986), Wilderom and van den Berg (1997)*. More specifically, *Kotter and Heskett (1992)*, suggest that companies with a strong culture that

values employees, customers and shareholders, outperform all other companies. Generic advantages of a strong culture include the capability to enhance the 'fit' between their internal environment and the external environment -*Kotter and Heskett, (1992)*.

In an empirical study of insurance firms in the US, *Gordon and Di Tomasso (1992)* confirm that a strong culture '*regardless of content or substantive value*' is associated with increased asset and premium growth. This study supports the findings of *Denison (1990)*, that the strength of culture is predictive of short term performance. It could be argued that firms with a strong culture have an advantage in that they can adapt to the changing environment more easily, as their values and norms are both outward looking and related to their strategic aims and objectives.

As the culture of an organisation is seen by *Schein (1985)* as concentrating more on *why* things happen rather than *what* happens, it follows that the role of the organisation's leadership is crucial. *Peters and Waterman (1982)*, *Kanter (1983)* and *Deal and Kennedy (1982)* give the impression that power is the means by which leaders can control and manage the culture of the organisation. *Hassard and Sharifi (1989 p.11)* agree with these sentiments and add that any change programme must take into account the views of the firm's '*opinion leaders*'. This elaboration provides the vital link between organisational culture and leadership.

5.6 Deriving dimensions of culture appropriate to SMEs

Harris and Ogbonna (1999) contend that the characteristics and limitations of some forms of quantitative research preclude the exploration of certain aspects of organisational culture such as language and symbols. Accordingly, this study focuses on culture styles only. The *Wilderom and van den Berg (1997)* study follows a detailed review of previous studies and establishes 'new' styles/dimensions of culture. The new dimensions are tested and validated to gauge the perception of organisational culture. *Wilderom and van den Berg (1997)* acknowledge that whilst their new dimensions are not perfect, they are representative of an organisation's culture and cover most of its factors. Accordingly, they conclude that the dimensions derived are operationally sound and

robust. The tested dimensions have a theoretical and practical basis and overcome the shortcomings in *Hofstede's* approach. These dimensions are outlined in table 5.4.

Table 5.4 Dimensions of organisational culture derived by *Wilderom and van den Berg* (1997)

Dimension	Description
a) Empowerment	Employees have sufficient freedom and authority to make decisions. Low degrees of empowerment exist in highly centralised, formalised, standardised and specialised environments.
b) Intergroup Orientation	Efficient and pleasant relations between departments. Horizontal differentiation often creates barriers to cross functional communication.
c) Internal Orientation towards improvement	Continuous improvement and adjustment of internal affairs. This dimension gives a commitment to high quality work and the adoption of change.
d) External orientation	Dynamic/active relation with external parties and other external factors.
e) Human resources orientation	How the organisation deals with their employees.

The *Wilderom and van den Berg* dimensions have recently been tested and validated for use in small firms and are appropriate for use in this study. The five organisational culture types are inferred using the attributes shown in table 5.5. These are included in section 4, question 13 of the survey instrument.

Table 5.5 The dimensions of organisational culture and their attributes

Dimension	Question Attributes and position within question
Empowerment	13b Room for non managerial employees to make their own decisions 13d Assignment of interesting tasks to employees 13g Freedom for employees to depart from rules 13n Employees exert influence on important decisions regarding work 13p The opportunity for employees to bring forward ideas before decisions are made 13q Initiatives taken by employees to improve the way work is done
Intergroup Orientation	13a Exchange of information between departments 13e Useful co-operation between departments 13j Timely resolution of conflicts between departments 13m Useful meetings between heads of departments
Improvement Orientation	13k Talking about mistakes in order to learn from them 13z Quick implementation of sound proposals for change
External orientation	13c Active promotion of the organisation by its employees 13l Working to improve the local market position 13o The firm's future plans 13r Efforts contributing to exceptional performance of the firm 13t Active canvassing of new customers 13u This firm has the edge over local competitors 13w Quick reaction to developments in the market 13y Investigation of the needs and wishes of customers
Human resources orientation	13f Recognition of good performance by employees 13h Careful selection of new employees 13i Managers taking performance evaluation seriously 13s Thorough training of employees...in information gathering 13v Stimulation of creativity in employees 13x Thorough training of new employees

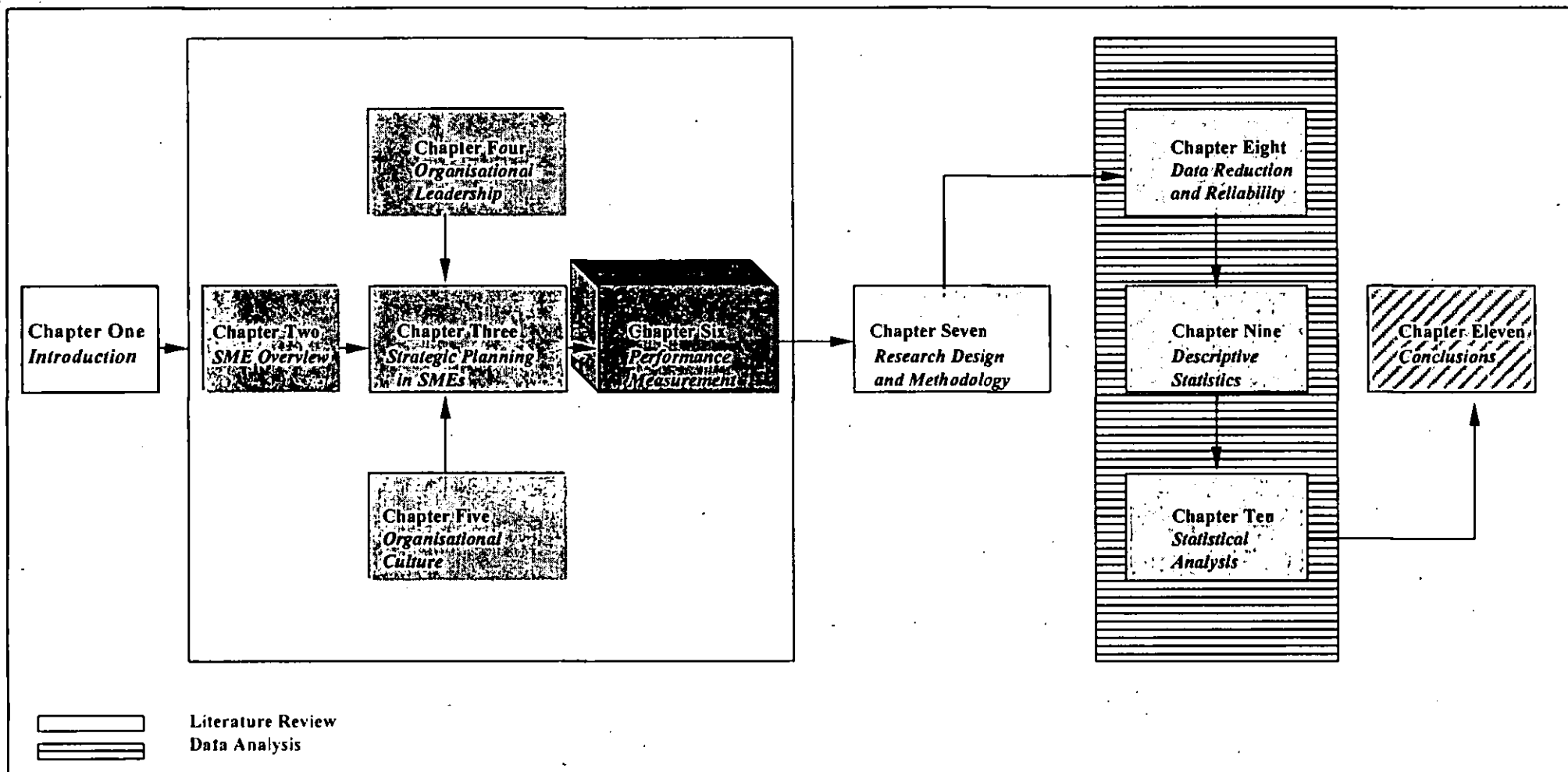
5.7 Concluding remarks

Organisational culture is a complex concept and one which is not always immediately visible or recognisable. It could be argued that despite the evidence of a number of empirical studies, the comment of *Peters and Waterman* (1982) that '*most businessmen's eyes glaze over when the talk turns to value systems, culture and the like*' is still true. *Schein* (1992) states that whilst external sources may seem to recognise the culture of the organisation, it is only when they talk with the staff of the organisation that they can understand all the aspects of the organisation's culture. However, it is only within the organisation's parameters that culture can be really understood.

This chapter examines selected definitions of organisational culture and adopts the definition provided by *Wilderom and van den Berg* (1997), which refers to employees' shared perceptions and preferences regarding the way in which the organisation works. This definition is comprehensive, up to date and has a strong foundation in the literature. The chapter outlines the basis of culture and describes its constituent parts, for example, artefacts, values and beliefs. Examples of a number of culture types are outlined and the importance of culture briefly examined. The chapter then derives a set of dimensions of organisational culture, based on the dimensions of culture tested and validated by *Wilderom and van den Berg* (1997).

Few existing studies consider the impact of culture on organisational performance in the UK - most studies relate to large firms in the United States. The author was able to locate only one study (conducted by *Wilderom and van den Berg*) that relates to SMEs. This study therefore, fills a gap in the knowledge base, as it concentrates on UK SMEs.

**The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises
– Chapter Outline**



CHAPTER SIX: PERFORMANCE MEASUREMENT IN SMEs

6.0 Introduction

As competition intensifies, performance measurement is emerging as a priority area for companies seeking success and growth - *Creelman (1996)*. *Neely et al (1994)* provide a rationale for this by referring to performance measurement as an effective means of ensuring the consistency of both decision making and actions, based on the widespread sharing of the firm's strategic objectives. A review of the literature indicates that there are two main types of performance measurement: 'traditional' financial performance measurement and a broader measurement system comprising a mixture of financial results and organisational effectiveness. While the importance of performance measurement is not in doubt, the crucial debate centres on aspects of how performance should be measured.

One of the objectives of this study is to examine the association between perceived organisational performance and the strategic planning process. Accordingly, this chapter is devoted to deriving a number of measures indicative of performance measurement for inclusion in the constructs. To do this, it reviews a number of performance measurement models. The intention is to use the various models to establish common themes of measurement, rather than test the applicability of any one model in SMEs. The rationale for the literature survey is discussed briefly in section 1.5 and in greater detail in section 7.1.

This chapter:

- examines the definitions of performance (section 6.1)
- reviews the main types of performance measurement (section 6.2),
- examines the extant literature on the principal models of performance measurement (section 6.3).
- considers the relevance of the existing models for SME performance measurement (section 6.4)
- derives performance measures appropriate to SMEs (section 6.5).

6.1 Defining performance

Performance is defined in the Concise Oxford Dictionary as the 'execution' or 'the carrying out of a task'. It is often taken to mean accomplishment, achievement, attainment, realisation or fulfilment. In business terms, performance focuses on outputs.

Sieger (1992 p.46) states that:

'a performance measure is one of the quantitative indicators used by management to judge how well one part - or all - of a company is doing'.

This description is taken further by *Flapper, Douwe and Stoop* (1996) when they refer to a performance measurement system as covering '*all aspects of performance that are relevant for the existence of an organisation as a whole*' and success as the '*way the organisation carries its objectives into effect*'. While this definition is broad ranging, in reality few SMEs can afford to measure a large number of factors. Arguably many SMEs avoid complex measurement systems as long as their annual financial results are broadly consistent with the organisational objectives. However, this can lead to potential problems as SMEs may not be aware of the directional changes needed.

Fitzgerald et al (1991) provide one of the first references linking performance measurement to strategy. They view performance measurement as '*a key factor in ensuring the successful implementation of a company's strategy*'. Continuing the connection between performance and strategic intent, *Seddon* (1991) argues that performance is much more than a time lagged target and is more concerned with what will happen in the future, rather than looking back to what has been accomplished in the past. *Kaplan and Norton* (1992) also emphasise the link between strategy and performance. They echo the sentiments of *Schroeder* (1989 p. 669) who states that - '*if you can not measure it then you can not manage it*'. It follows that the aspects measured are likely to get more attention than those that are not - *Globerson et al* (1991), *Eccles* (1991). While this may indicate a focused approach, the literature in general suggests that a wide ranging approach to performance measurement is needed. Nevertheless, while there are many contributions to the literature, there is little agreement on the elements comprising a comprehensive performance measurement system - *Moon and Fitzgerald* (1996).

6.2. Types of performance measurement

Over 30 years ago, *Skinner* (1969) suggested that the behaviour and ethos of an organisation and the deployment of its strategic plan, could be influenced by the performance measurements used. A review of the literature since then indicates that an effective performance measurement system should be based on the link between the measure(s) used and the strategic objectives of the firm. It is, therefore, reasonable to assume that performance measurement needs to cover a broad range of measures to reflect the objectives of the strategic plan. However, virtually all the studies carried out into performance measurement until the early 1990s concentrate on the 'traditional' single dimensional measure of finance/profitability, which *Donaldson and Lorsch* (1983) state are '*embedded in the firm's planning and decision making process*'. After the mid 1990s a noticeable trend can be seen in the movement from the 'traditional' single dimensional performance measurement to a broader range of financial and non-financial indicators of performance. Accordingly, the descriptions of performance measurement are classified in two main categories - the 'traditional' financial measures and a mixture of financial and non-financial measures. The remainder of this section will consider and critically evaluate both categories.

6.2.1 Traditional performance measures

Traditional performance measures based on financial indicators are well developed and popular. *Robinson* (1983) states that the attractiveness of financial measures as indicators of performance result from the availability of reasonably accurate financial data. Other reasons include:

- historical background - *Donaldson and Lorsch* (1983), *Fry* (1992), *Neely et al* (1995).
- ease of use - *Robinson* (1983), *Heap* (1992).

It could be argued that 'traditional' financial performance measures are considered to be an adequate performance measurement in most SMEs. However, they provide little

guidance on the various processes that determine overall financial success. Indeed, Kaplan and Norton (1992 p.79) suggest that:

'traditional performance measurement systems specify the particular actions that they want employees to take and then measure to see whether the employees have in fact taken those actions'.

This means that the specified aspects of a firm's performance receive attention and by implication, those aspects not specified may receive lesser attention.

The 'traditional' financial performance measurement system has a number of limitations, which include:

- the historic orientation of financial performance measures
- the different practices and methods of deriving aggregate financial data
- the restrictions arising from the use of quantitative data only

These limitations are briefly discussed below.

The historic orientation refers to a strong emphasis on past actions and historic time-lagged data. It could be argued that 'traditional' financial measures fail to recognise the changing nature of the business environment as they:

'remain anchored to an accounting model developed centuries ago for an environment of arms length transactions between independent entities' - Kaplan and Norton (1996).

Other authors put forward broadly similar arguments - Johnson and Kaplan (1987), Turney and Anderson (1989), Champy (1995). This implies that a new performance measurement system is needed to replace the financial indicators, which are no longer the *'foundation for performance measurement but one among a broader set of measures'* - Eccles (1991).

The different practices and methods of deriving aggregate financial data are arguably a major limitation of the 'traditional' financial measurement system. Doyle (1994) cautions against an over emphasis on financial data which he argues could be subjected to alteration or influenced in the short term, by measures such as cost cutting and efficiency related initiatives. While such practices and methods may be perfectly acceptable, they nevertheless could be used to present a potentially biased picture. This could potentially

hinder the comparison of results with the previous years results, as well as benchmarking comparisons with other firms. In any event, financial measures are often available in aggregate format only and consequently the information available is often of little use to functional operational issues - *Kaplan and Norton* (1996). *Brown and Laverick* (1994 p.90) caution against using financial data for comparison purposes with other SMEs, because of the potential for firms to deliberately '*paint a facade of the company in the colours that the company desires*'. Other authors concur and emphasise that the comparison of firms cannot be made on solely financial criteria - *Kaplan and Norton* (1992). Comparisons on the basis of financial measures only, could be counterproductive as data on privately held firms is often 'severely restricted', and potentially misleading, due to the varying accounting practices of small and medium sized firms - *Dess and Robinson* (1994). In any event, any comparison of performance with competitor firms is fraught with difficulties due to the scarcity and interpretation of available data - *Venkatraman and Ramanujam* (1986), *Nicholson, Rees and Brooks-Rooney* (1990), *Dalton et al* (1998).

It could be argued that the financial framework works well as long as financial measures capture the majority of value creating (or value destroying) activities that occur during quarterly or annual periods. The use of this framework becomes less valuable as more and more of an organisation's activities involve investments in relationships, technologies and capabilities that can not be valued in a historical-cost financial model. *Courtney, Kirkland and Viguerie* (1997) suggest that financial output measures are generally seen as short term measures appropriate for use in stable environments. They caution against relying on them as the sole measure of performance in the longer term.

The restrictions arising from the use of financial data only refer to the difficulty in interpreting aggregated financial data, and in particular identifying the principal factors influencing the success or failure of a firm. For example, *Hoffecker and Goldenberg* (1994), argue that financial measures ignore customer and competitive perspectives and fail to generate early warning signs of what was happening in the marketplace. They further argue that this could lead to organisations' missing trade-off's that are in the interests of the company. Another example is given by *Wisner and Fawcett* (1991p.7),

who criticise financial measurement for its inability to '*provide sufficient guidance in the formation of tactical decisions*'. This could be argued to result from the tendency to prioritise decisions based on financial considerations. A major survey by *Renaissance* (1996) concludes that '*overall, the majority of management systems are designed around short-term, control-orientated financial frameworks that are fundamentally tactical*'. The survey also indicates that departments' budgetary forecasts are the main drivers behind targets and not the firm's overall corporate goals. The emphasis on financial measurement may also mean that the views of financial staff on the future direction of the organisation are given more consideration than those of other disciplines - *Hart and Banbury* (1994).

Investment decisions may also be made on a number of arbitrary assumptions such as the treatment of the assets used for financial purposes. This approach may not always reflect the real life of the assets or the potential external investment opportunities - *Hoyes and Garvin* (1982). It follows that the use of financial measurements only, could result in the provision of information that is at best indicative of one dimension. This can be misleading if it measures a low priority dimension only. It can also lead to management having a 'false' view of the firm's performance, as it omits many intangible assets such as goodwill, organisational culture and organisational leadership. Another example of the shortcomings of a financial measurement approach is given by *Amidon* (1996), who states that:

'traditional financial accounting mechanisms fail to calculate or calibrate the most important resources of the firm - its intellectual capacity... and treat people as liabilities or expenses, instead of assets'.

A number of metaphors are used to demonstrate the folly of using exclusive financial measures. For example, navigating an aircraft with one measure of performance, driving a car using the rear view mirror only or concentrating on the scoreboard only in a football game - *Kaplan and Norton* (1996).

6.2.2 Financial and non financial indicators of performance measurement

As a means of overcoming the deficiencies of the 'traditional' financial performance measures discussed earlier, the need for an integrated system encompassing measures other than financial is taken up by *Eccles (1991)*, *Kaplan and Norton (1992)*. In a move to link performance to strategic planning, *Kaplan and Norton (1992)* state that performance measures, both financial and non-financial, should be derived from the organisation's strategic objectives, with the aim of 'articulating the strategy of the business'. The implication is that the performance measurement system should outline the factors that drive success rather than focus on financial returns. They suggest that the ability to compete on non-price factors is also important as firms seek to meet customer needs through improved design, manufacturing and marketing. In essence, they argue for the 'relegation' of the accounting function as a primary form of performance measurement. At the same time, other authors also argue for the inclusion of non financial measures and a widening of performance measures - *Lynch and Cross (1991)*, and *Fitzgerald et al (1991)*. Their rationale for a broader performance measurement approach is based on a conscious effort to avoid the short term approach of using financial measures only, which they see as inward looking and operationally orientated. This is consistent with the work of *Eccles (1991)* who argue that the traditional methods of performance measurement undermine attempts to have a customer-focused strategic plan. The literature indicates the following advantages of a broader system of measurement:

- it integrates financial and non financial information to ensure that the factors that determine success are enhanced - *Gluck, Kaufman and Walleck (1982)*, *Lynch and Cross (1991)*, *Barker (1995)* and *Creelman (1996)*
- it focuses on customer orientation and customer retention - *Fornell and Wernerfelt (1987)*, *Liswood (1989)*, *Reichheld and Sasser (1990)*, *Power (1991)*, *Reichheld (1996)*
- it emphasises customer satisfaction - *Kotler (1994)*, *Slywotsky and Shapiro (1993)* cited in *Heller (1997)*.
- it facilitates organisational learning and innovation - *Kaplan and Norton (1992)*.

However, the need to achieve a balance between financial and non financial objectives is not new and was outlined over a quarter of a century previously by *Drucker* (1963), as shown in the following quotation:

'in addition to balancing the immediate and the long range future, management also has to balance the objectives...Objectives in the key areas are the 'instrument panel' necessary to pilot the business enterprise. Without them management flies by the 'seat of its pants', without landmarks to steer by, without maps and without having flown the route before.. However, an instrument panel is no better than the pilot's ability to read and interpret it. In the case of management this means the ability to anticipate the future'.

Over thirty years later, the concept of multi dimensional performance measurement is receiving greater attention, as many authors contend that any credible model of performance measurement must have more than one criterion - *Veliyath and Shortell* (1993), *Brown and Laverick* (1994), and *Price Waterhouse* (1995). The literature outlining a number of financial and non financial performance models is reviewed in the next section.

6.3 The principal models of performance measurement

A suggested criteria for effective performance measurement is outlined by *Liu and Roth* (1996) which comprises linking performance to the firms' strategic objectives, future orientation and strategic control. In addition, they suggest that any performance measurement system should be clear and easily understood by all the firms' stakeholders. An evaluation of the literature identifies the following models that fulfil these criteria:

- *Kaplan and Norton* (1992),
- *Cross and Lynch* (1992)
- *Fitzgerald et al* (1991)

Each of these models are considered in greater detail in the remainder of this section.

Kaplan and Norton's balanced scorecard was developed in 1992 following a detailed study of 12 US companies at the leading edge of performance measurement, and also included input from various academics and consultants. Since then it has received

considerable attention from both industry and academia - *Butler et al* (1997). Despite this attention its use in the UK is considered to be negligible by *Hepworth* (1998).

The model consists of four quadrants;-

- financial perspective
- customer orientation based on how the firm is seen by its customers
- internal orientation
- learning/growth

Each of these quadrants are examined briefly below:

The financial perspective indicates the degree to which a company's strategic plan contributes to financial performance. *Kaplan and Norton* (1996) summarise financial measurement as the '*end in itself*', whereas they refer to non financial indicators as the '*means to this end*'. They see this perspective as an integrating element of the other three perspectives, which implies that the other perspectives are aligned with this perspective to ensure that the ultimate success indicator is measured by 'value added' activities in financial terms. Attributes of this dimension include generic measures such as a return on investment, cash flow or project profitability as depicted in figure 6.1.

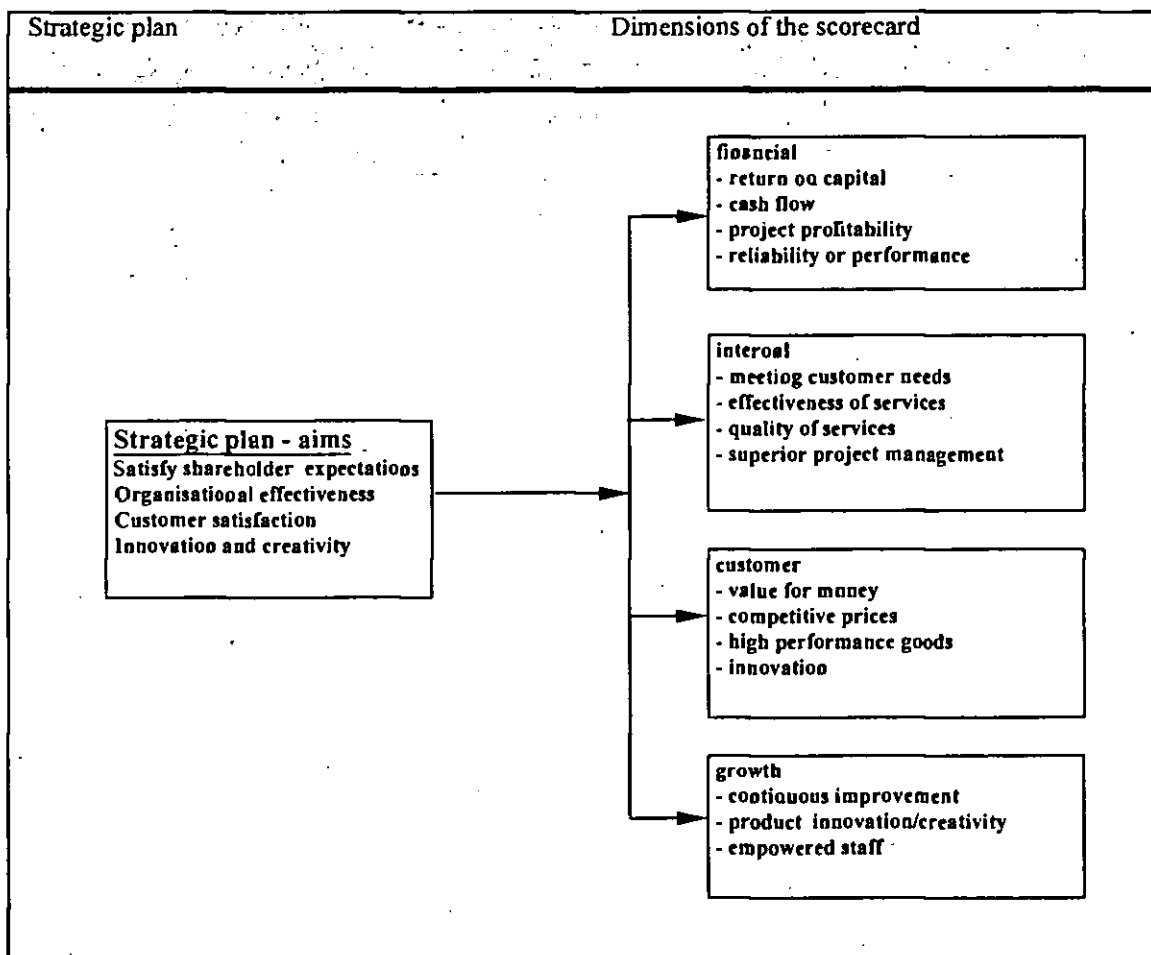
The customer perspective is intended to ensure that customer needs are clearly understood. The customer perspective is an important dimension in achieving market share, customer retention, customer acquisition, customer satisfaction and customer relations and image/reputation - *Kaplan and Norton* (1996). In essence, this dimension can be summarised as the way that the organisation is seen by its customers' and how it satisfies their demands and needs. Attributes of this dimension include the customers perception of the product based on criteria such as value for money, competitiveness, innovation or the degree of professionalism involved in its delivery, as depicted in figure 6.1.

The internal business process perspective refers to the critical internal processes that the firm must perform well, if it is to meet the objectives of customers and shareholders - *Kaplan and Norton* (1996). As an example, this perspective includes measures to improve quality, reduce cycle times, increase yields, maximise throughput and lower costs. In

other words this factor is related to the processes that an organisation must be good at to survive. Attributes of this dimension include product effectiveness, meeting customer needs and product quality as depicted in figure 6.1.

The learning and growth perspective identifies the actions necessary to create long term growth and improvement based on people, systems and organisational procedures - *Kaplan and Norton (1996)*. It could be argued that this perspective forms the basis for the first three perspectives, as it emphasises investment for the future in the form of innovation, creativity and learning. Attributes of this dimension include product innovation/creativity and staff empowerment as depicted in figure 6.1.

Figure 6.1 A practical example of a scorecard



Adapted from *Kaplan and Norton (1993)*.

Kaplan and Norton (1992) contend that their model emphasises a limited number of critical indicators that are necessary for effective performance measurement and stresses strategic planning and vision rather than control. They also suggest that the scorecard emphasises the use of both financial and non-financial information systems for all employees in the organisation. The term 'balanced scorecard' reflects the balance between short and long-term objectives, between financial and non financial measures, between lagging and leading indicators and between external and internal performance perspectives - *Kaplan and Norton (1996)*.

This is the only model that the author was able to identify that includes a company's intangible and intellectual assets, which are arguably as important as the traditional physical and tangible assets. The four quadrants outlined earlier in this section stress success factors such as financial viability, customer satisfaction (how customers view the firm), quality, innovation and staff development (improve and create value). However *Kaplan and Norton (1992 p.71)* state that '*no single measure can provide a clear performance target or focus attention on the critical areas of business*'. Essentially, *Kaplan and Norton* retain financial measurement as an integral part of the scorecard and complement it by adding value through the inclusion of the factors that assist its attainment. This method ensures a greater awareness of the company's vision as it develops actionable plans based on organisational needs. The financial dimension provides information on the actions taken, while the remaining three measures provide information that could be used to improve future financial performance. *Kaplan and Norton (1992 p.73)* state that the model brings together in a single report '*seemingly disparate elements of a company's competitive agenda*'.

However, the *balanced score card* has some drawbacks. As an example, it does not provide for the inclusion of other stakeholders interests such as suppliers and the community - *Kaplan and Norton (1996 p.34)*. They refer to the problems that can arise from *structural defects* and *organisational defects*. Nevertheless, it can be argued that the model provides a useful basis for generic performance measurement guidelines.

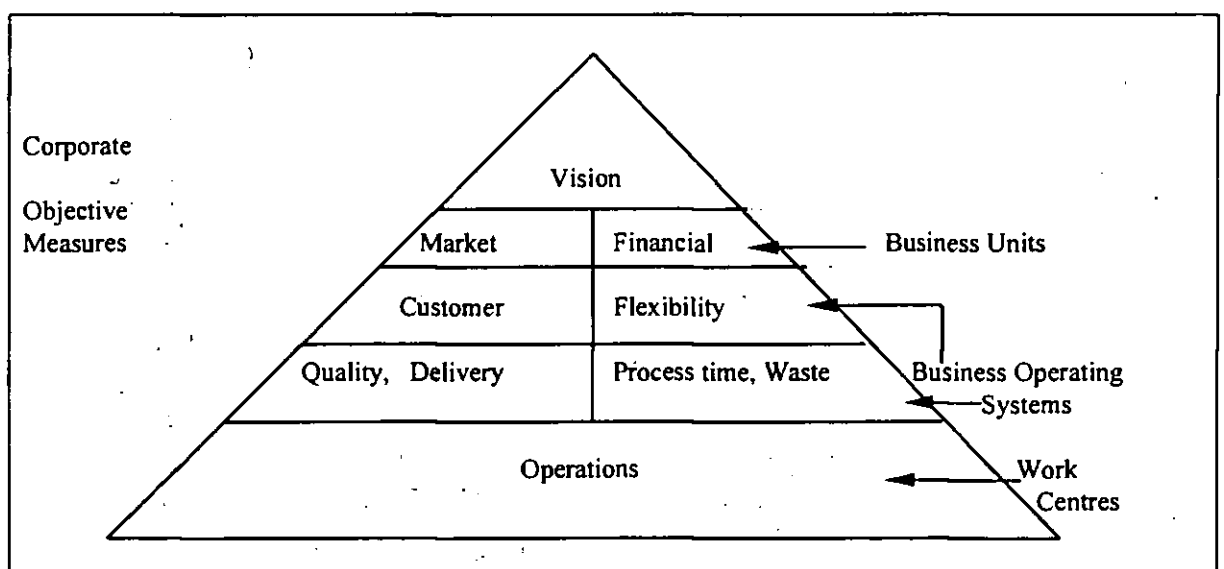
(b) Cross and Lynch - performance pyramid (strategic measurement analysis and reporting technique)

Cross and Lynch (1992) emphasise the need to link performance measurement to the corporate strategic plan by integrating financial and non-financial measures such as customer satisfaction, functional integration, and increased flexibility. They state that:

'performance measurement is the single most powerful tool to ensure success of business strategies. Driven by customers, aligned strategically, and integrated and instituted at the levels of the business unit, division or department, measures signal daily priorities for keeping managers and employees on track'.

Cross and Lynch (1992) refer to the requirements for managers to improve all aspects of day-to-day performance and suggest the need for a means of 'identifying, measuring and managing a few critical performance indicators' to ensure that corporate priorities are on the right track. They develop the *performance pyramid* to enable firms to understand, manage and improve the key performance attributes that lead to the achievement of their corporate objectives. The dimensions of the performance model and their respective attributes in relation to the business units, business operating system and the departments/work centres are depicted in Figure 6.2.

Figure 6.2 Performance pyramid



Based on *Cross and Lynch (1992)*

This model outlines nine dimensions on which performance can be assessed. It is a top-down model strategically, whereas performance measurement is assessed from the lowest levels upwards, linked to the strategic objectives. At all times, vertical and horizontal links between strategic goals and performance measurement are stressed. The pyramid comprises four levels:

- vision
- business unit level
- business operating systems and departments
- operational centres (front-line services)

Each of these levels are considered briefly below.

The vision level consists of the corporate vision which outlines the company's markets and how it competes - on price, breadth of product line and quality of sales force - *Cross and Lynch* (1992).

The business unit level outlines the firm's key result objectives and measures. At this level, business units consider the short term targets of finance (net capital and profit margin) and long term targets of growth and market share. *Cross and Lynch* (1992) state that financial measures are 'at best half the picture' and are dependent on market share in the first instance. The business unit level links the operating departments to the corporate vision. In addition, measures are integrated horizontally as well as vertically. All dimensions interact and *Cross and Lynch* (1992) point out that it is vital to understand how each level 'behaves and interacts'. It is the understanding of the interaction that determines the balance of trade offs that can be made, for example, the four key dimensions are divided into external and internal orientation measures and linked to the overall strategic vision. The left hand side of the diagram in relation to this level represents the measures of external effectiveness (customer satisfaction, perceived quality and effective delivery), whereas the right hand side represents the measures of internal effectiveness (flexibility - product development time and stock turnover, process time - cycle time and production time per unit, and waste - as a percentage of costs).

The operations level is linked to the business unit level. Each employee is expected to be able to tell how his/her actions impact on the organisation. In an earlier work, *Lynch and Cross* (1991) stress the effective communication of the corporate objectives down to the 'troops'.

It could be argued that this model has a number of advantages as it:

- aligns performance measures to the corporate strategy
- links the various levels of the organisation
- emphasises the importance of the operational levels

However, the model was considered during the exploratory interviews to be too complex and inappropriate for use in many SMEs. In addition, doubts were expressed that few SMEs have the operational layers propagated by the model. Concerns were also expressed that the model begins with a vision or strategic statement, which may not be established or formalised in many SMEs. In addition, the model fails to give sufficient emphasis to competition factors.

(c) Fitzgerald et al - Determinants and results model

Fitzgerald et al (1991) determine a model for the service industry to link strategic planning and capital budgeting. Their 'determinants and results' model provides for a feedback controlling mechanism which monitors progress against goals, plans, budgets and targets across the performance dimensions and attributes as shown in Figure 6.3.

Figure 6.3 Determinants and results performance model

Dimensions	Attributes
Competitive performance	Relative market share and position, sales growth and customer base.
Financial performance	Profitability, liquidity, capital structure and market ratio
Quality of service	Reliability, responsiveness, appearance, communication, competence.
Flexibility	Volume, delivery/speed and specification flexibility
Resource utilisation	Productivity and efficiency
Innovation	Performance of the innovation process, and performance of individual innovations.

The model derived by *Fitzgerald et al* (1991) encompasses both financial performance and non financial indicators. It is termed a 'determinants and results' model as it enables the consideration of factors that impact on the overall financial performance of the firm, such as quality, the use of resources, innovation and flexibility. The model is designed to consider the interactions between the various dimensions and provide information to enable any trade-offs to be made based on informed decision making. In a review of the determinants and results model, *Brignall and Ballantine* (1997) argue that interactions across the six dimensions are inevitable. They suggest a complex 'importance-performance matrix' to manage the various interactions. The model is designed for the service sector. However, it could be argued that there is no reason why it can not be used for performance measurement in manufacturing. Nevertheless, the exploratory interviews indicated that the model is too complex for use by SMEs. In any event, the model neglects to give explicit attention to efficiency and effectiveness aspects, which are important aspects of SME performance.

6.3.1 An analysis of the key models

While each model differs in some regards, there are common trends which focus on linking performance to the strategic objectives of the organisation. Figure 6.4 shows the commonalities of the performance measurement models. The central tenets of each model

are that performance must be linked to the strategic planning, and measured in terms of financial and non financial terms. *Neely* (1999) encapsulates the requirements of an effective performance system as having a balance of financial and non-financial measures, and external and internal measures. The common themes of the various models examined are depicted in figure 6.4.

Figure 6.4 Common themes of the main performance measurement models

Model	Balanced Scorecard	Performance Pyramid	Determinants and Results
Themes			
Results			
- profitability	√	√	√
- market position	√	√	√
Factors impacting on results			
- quality	√	√	√
- flexibility	√	√	√
- resource use	√	√	√
- innovation	√	√	√
- internal organisation	√	√	
- customer views	√	√	
- process time	√	√	
- cost	√	√	
- competitor actions		√	√

While each model attempts to link performance measurement to the corporate strategic plan, each model has some disadvantages (see section 6.3). For example, the *Kaplan and Norton* model fails to consider competitors, whereas both the *Lynch and Cross* and the *Fitzgerald et al* models are too complex for use in many SMEs. The author of this study was unable to find any reference in the literature to the relevance of any of the models outlined to SMEs.

6.4 The relevance of the principal performance measurement models to SMEs

The models are reviewed in order to guide the selection of performance measures appropriate to SMEs. They are not reviewed in order to select any one model for testing in this study. The literature indicates that the models reviewed are in use in large firms - *Kaplan and Norton (1993), Neely (1994)*. While the use of the attributes of the models in large firms provide a useful starting point, their relevance to SMEs still needs to be determined. The first stage is to establish the degree to which the performance measurement requirements of SMEs differ from large firms. In this regard, the literature clearly states that SMEs differ significantly from large businesses in their management - *Jennings and Beaver (1997), Storey and Westhead (1996)*. It is reasonable to assume that their performance requirements will also differ. *Storey and Westhead (1996)* remark that the impact of external uncertainty on small firms is usually manifested in a shorter term strategic planning approach rather than an emphasis on long term returns. This is consistent with the contention of *Glancey (1998)* that many SMEs do not have growth objectives. In the absence of both longer term strategic planning and the desire to grow/expand, *Gibb and Davies (1990)* stress the difficulty in developing a generalised technique for predicting the growth potential of the small firm with any degree of consistency.

Following a review of the extant literature since the *Bolton Report, Watson et al (1998)* conclude that there is no simple pattern to the achievement of success in SME performance and that the evidence points towards a complex set of interrelated factors. However, the literature is helpful in providing some guidelines for the way forward. *Chaston and Mangles (1997)* suggest that one possibility is to adopt a holistic view that the key characteristics exhibited by growth firms reflect the internal capabilities of the organisation. They continue by saying that if this is true, then an 'evaluation of the current capabilities of a firm could be used to define appropriate actions for enhancing the firm's future performance'. On a practical level, an empirical study carried out by *Coopers and Lybrand (1994)* indicates that successful SMEs perceive their markets as highly competitive and frequently use differentiation as the key advantage. They also conclude that technology driven solutions to deliver new or improved products are

essential and that the use of cross functional teams is very important in the search for improved productivity. Another guideline is provided by *Smallbone* (1991) who found that the more common problems affecting the performance of SMEs relate to marketing /selling the product and financial control.

SMEs have traditionally been lacking in their ability to derive comparative measures for performance monitoring and in addition lack the availability of managers' time to do so - *Curtis* (1983). This is a critical point as any performance management system depends on certain contingent variables: that is, the system must match the circumstances - *Otley* (1987). In addition, performance measurement has resource implications which many SMEs often find difficult to justify given the pressing operational pressures that often exist. It could be argued that SMEs need to achieve a balance between the time and efforts deployed in performance measurement and the likely results.

6.5 Deriving performance measurement indicators relevant to SMEs

While firms of all sizes use financial measures of performance, the literature indicates a strong case for the inclusion of non financial measurements in a broader scorecard type measurement system - *Kaplan and Norton*,(1992) *Brown and Laverick*, (1994), *Neeley* (1999). A broader performance measurement approach is consistent with the criteria for a performance measurement system propounded by *Hoffecker and Goldenberg* (1994) which suggests the consideration of the:

'vital signs of the company... and translate the organisations highest visions into individual performance measures that focus the organisation, highlight excellence, support competitive spirit, provide a foundation for continuous improvement and support the good of the organisation over the good of particular individuals or functions'.

A brief outline of all three models was considered during the exploratory interviews with SME managing directors and chief executives. While each model provides a useful insight into the successful operations of firms, each is limited in its ability to provide a predictive model of SME performance. The balanced scorecard was more favourably received than the others and was seen as more understandable, less complex and manageable. Four or five main measures were recommended during the exploratory

group interviews as sufficient for use in SMEs. This number is consistent with the work of *Neely et al* (1999), who stress the practical considerations of implementing the measures selected and using them to manage the business on an on-going basis.

While the focus group considered that individual company circumstances often require up to ten different measures, the four perspectives of the *Kaplan and Norton* model were considered to be the minimum number of measures to enable meaningful performance measurement to be undertaken. However, the exploratory interviews suggested that organisational capability should also be included as a performance criteria as organisations compete fundamentally on their capabilities. The literature indicates that the importance of organisational capability is well documented - *Pascale* (1984), *Ramanujam, Venkatraman & Camillus* (1986). Indeed, *Hayes & Upton* (1998) see organisational capability as the main driver for a successful corporate strategy. They refer to organisational capability as the basis from which smaller firms compete successfully with larger firms.

In an investigation of strategic planning system characteristics and planning effectiveness in small mature firms, *Kargar* (1996 p.21) states that a systems capability approach is central to organisational performance. Systems capability is defined as the '*organisation's ability to adapt to changes that are occurring and will occur in its environment*'. *Kargar* (1996) focuses systems capability on the creativity and control aspects of the planning system and in particular attributes such as innovation, aptitude for change and improvements to the company's activities. He states that cumulative improvement along these aspects is a distinct dimension of organisational performance and should '*be used as a reference point for evaluating planning effectiveness*'. However, it could be argued that organisational capability is also a driver of performance.

The five performance measures stressed during the exploratory interviews are consistent with the contention of *Russell* (1997) that a minimum of four/five key measures of performance are necessary. The advantage of using measures similar to those used by *Kaplan & Norton* in addition to organisational capability relate to a focus on both strategic and operational issues and the incorporation of both results and their determinants in equal degrees of importance.

The dimensions and attributes of performance used together with their foundation in the literature are shown in the table 6.1.

Table 6.1 A Summary of the dimensions of performance derived

Dimensions	Attributes	Literature Source
Financial	Predicting future trends Importance attached to financial measures Improved financial performance	<i>Drucker (1963), Covin and Slevin (1989), Venkatraman and Ramanujam ... (1986), Nicholson, Rees and Brooks Rooney (1990), Cross and Lynch (1991), Fitzgerald et al (1991), Kaplan and Norton (1992), Fry (1992), Heap (1992), Karger and Parnell (1996)</i>
Customer Orientation	Customer satisfaction Customer retention Market share	<i>Venkatraman and Ramanujam (1986), Fornell and Wernerfelt (1987), Liswood (1989), Nicholson, Rees and Brooks-Rooney (1990), Reichheld and Sasser (1990), Cross and Lynch (1991), Power (1991), Kaplan and Norton (1992), Iacoboucci et al (1994), Reichheld (1996).</i>
Organisational Effectiveness	Ability to evaluate alternatives Ability to avoid mistakes Improved budgetary process Enhanced managerial learning	<i>Lorange and Vancil (1977), Gluck, Kaufman and Walleck (1982), Shrivastava and Grant (1985), Ramanujam and Venkatraman (1987), Karger and Parnell (1996).</i>
Learning and growth	Manufacturing learning Introduction of new products compared to the main competitors	<i>Venkatraman and Ramanujam (1986), Senge (1990), Fitzgerald et al (1991), Kaplan and Norton (1992).</i>
Organisational Capability	Capability to: advertise/promote the products deliver a broad product line distribute products broadly respond to swings in volume make rapid design changes compete on price provide after sales service deliver products quickly provide high performance goods deliver goods on time offer consistent quality	<i>Anderson et al (1989), Mayer and Moore (1983), Hayes & Wheelwright (1984), Akkermans and Van Aken (1992), Hayes and Upton (1998) and Keuning (1998).</i>

The following aspects provide a mechanism to gauge the perceived performance management in SMEs:

Financial - implementation of a selected strategic decision on overall financial performance of firm (question 26 of the questionnaire)

Customer orientation - the impact of the selected strategy on customer satisfaction, customer retention or market share (question 27 of the questionnaire).

Organisational effectiveness - the impact of strategy on the degree of fulfilment of the prediction of future trends, the evaluation of alternatives base in relevant information, the avoidance of problem areas, the improvement of short term performance and the improvement of long term performance (question 28 of the questionnaire).

Learning/growth - the impact of the implementation of the strategy on manufacturing learning and the introduction of new products (question 29 of the questionnaire). The exploratory interviews with SMEs managers were used to finalise the design of the instrument,. The resultant questionnaire used a scale ranging from 'totally inadequate' to 'totally adequate', to measure managing directors' perceptions of the performance measures of their firms.

Organisational Capability - the impact of competitive capability factors on the overall performance of the firm (question 16 of the questionnaire).

6.6 Concluding remarks

This chapter reviews the main types of performance measurement - 'traditional' and financial/non financial measures. The chapter concludes that although the 'traditional' financial performance measures have a strong historical basis, they also have a number of limitations arising from the differing practices and methods of deriving aggregate financial data. A review of the extant literature reveals an increasing emphasis on the

need for a broader performance measurement system, an emphasis which began in the early 1990s.

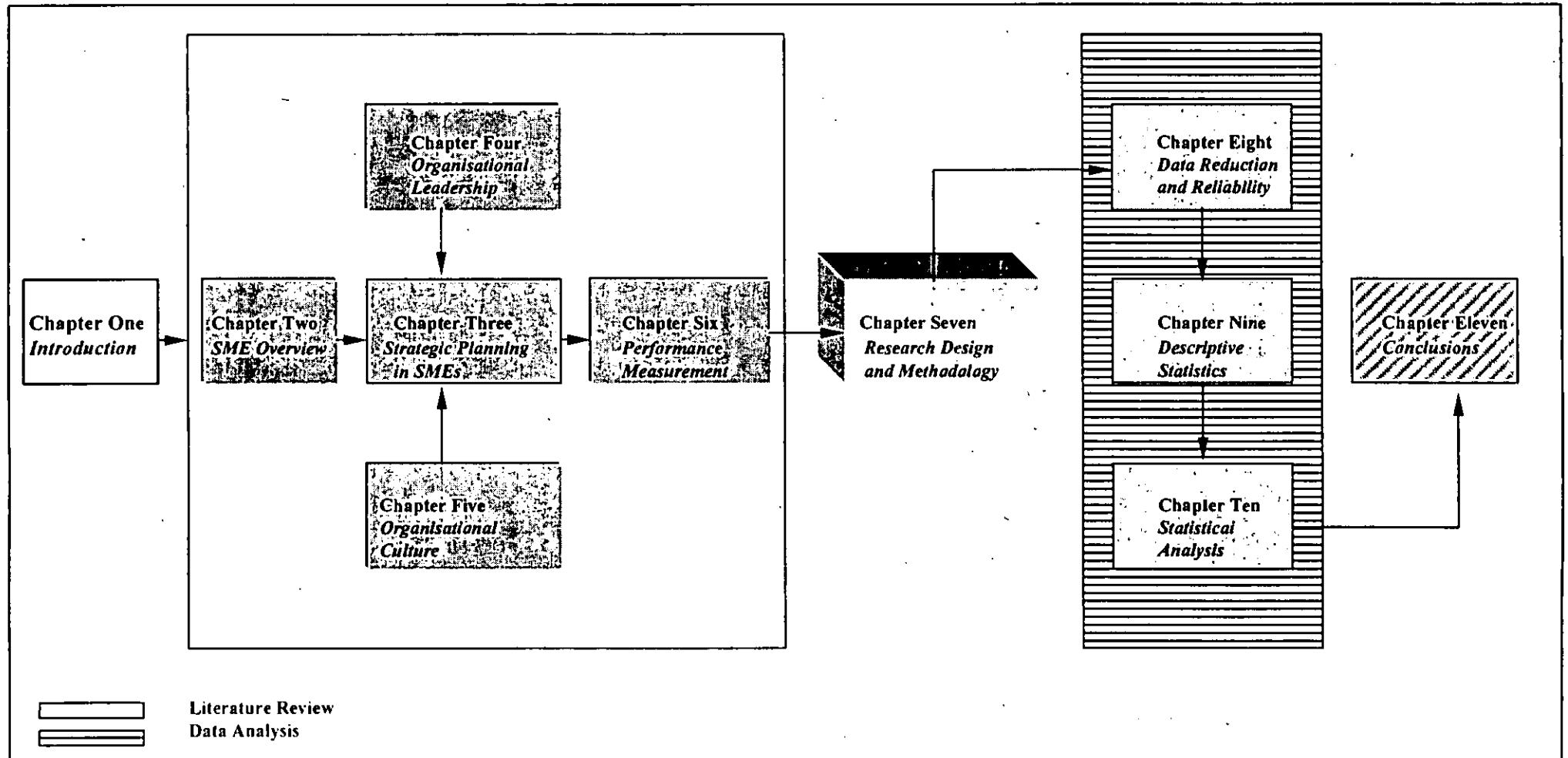
In an effort to derive suitable measures of perceived organisational performance for use in the constructs of this study, the three principal models of performance measurement, based on a predetermined selection criteria are reviewed. The chapter considers the relevance of the attributes of existing models for SME performance measurement and suggests that the addition of an additional performance measure *organisational capability* is necessary.

Accordingly, the following surrogate measures of performance are adopted:

- overall financial performance
- customer orientation
- organisational effectiveness
- learning and growth
- organisational capability

While these dimensions can be argued to be common to both large and small firms, they address the concerns expressed during the exploratory interviews and arguably address the particular needs of SMEs. Accordingly, they are deemed to be appropriate generic indicators of perceived performance.

The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises
 – Chapter Outline



CHAPTER SEVEN: RESEARCH DESIGN AND METHODOLOGY

7.0 Introduction

The proceeding chapters review the literature on the concepts of strategic planning, organisational culture, leadership and performance measurement and where possible examine these issues in the context of SMEs. As outlined in chapter one, the purpose of this study is to develop and test a deductive model based on the associations, if any, between culture and strategic planning, leadership and strategic planning, and between strategic planning and performance measurement. This study is based on manufacturing firms drawn from two distinct sectors: electronics and engineering. The electronics sector is included in this study as it represents high technology firms. Arguably, engineering firms are more traditional and often involve low technology. This chapter is devoted to discussing the research methodology deployed in this investigation. The chapter:

- discusses the broad research philosophies to enable an understanding of the context of this study (Section 7.1)
- considers the various research strategies in the light of the research philosophies (Section 7.2)
- outlines the research design and methods of data gathering (Section 7.3)
- describes the quantitative approaches used in the study (Section 7.4)

The research methodology is described in a logical rather than chronological manner. For example, parts of the literature review and exploratory interviews, were carried out simultaneously in order to provide the basis for the survey constructs.

7.1 Research philosophies

Business research is defined as '*the systematic, controlled, empirical, and critical investigation of the phenomena of interest to managerial decision makers*' - Davis and Consenza (1988 p.8). Veal (1992) simplifies this definition by referring to research as '*finding out and explaining*'. It could be argued that researching business related issues is rarely straightforward as a result of the complexity of organisational studies where:

'most of the crucial theoretical questions and substantive issues which define organisational analysis as an identifiable and viable field of study seem to be matters of considerable dispute, not to say deep controversy' Reed and Hughes (1993, p.1).

To enable an understanding of research design the main research philosophies are reviewed. Positivism and phenomenology are arguably the two main research philosophies - Burrell and Morgan (1979), Gill and Johnson (1991), Easterby-Smith et al (1991). Lazenby (1996) suggests that these two philosophies reflect essential differences in:

- their assumptions about the essence of the phenomena under examination (ontology)
- the grounds of knowledge (epistemology)
- the relationships between human beings (human nature)
- the way in which the 'real world' is investigated and 'knowledge' obtained (methodology).

The essential differences are depicted in figure 7.1 below;

Figure 7.1 A comparison of the positivist and phenomenological perspectives

	Positivist Perspective	Phenomenological Perspective
Core ontological assumptions	Reality as a concrete process	Reality as a social construction
Assumptions on human nature	Man as an adapter	Man as a social constructor
Basic epistemological stance	To study systems, process and change	To understand how social reality is created

Based on Morgan and Smircich (1980)

Burrell and Morgan (1979) contend that both positivism and phenomenology should be treated as separate entities as they 'generate quite different concepts and analytical tools'.

However, *Cooper and Emory* (1995) argue that research in the social sciences has greater difficulty demonstrating validity than scientific research, as 'physical scientists have been more rigorous in their concepts and research procedures'. They also contend that physical scientists are '*much more advanced in their theory development*'. Whilst this could be interpreted as implying that positivism is the only accepted research approach, *May* (1997) argues that the phenomenological approach is also a valid and accepted means of research. This is consistent with the work of *Cooper and Emory* (1995 pp.12-13) who outline six characteristics that can be used to define a '*scientific method*'. These characteristics are depicted in table 7.1.

Table 7.1 Defining scientific research

Characteristics	Rationale
1. The purpose of the research should be clearly defined and sharply delineated in terms as unambiguous as possible.	Any degree of ambiguity or lack of understanding can lead to reduced confidence in the findings.
2. The research procedures used should be described in sufficient detail to permit another researcher to repeat the research. Should reveal the sources of data and the means by which they were obtained.	To enable the validity and reliability of the data to be ascertained.
3. The procedural design of the research should be carefully planned to yield results that are as objective as possible.	To ensure confidence in the data analysis, avoid any personal bias and ensure reliability.
4. The researcher should report, with complete frankness flaws in procedural design and estimate their effect upon the findings.	To ensure that the impact of any potential flaws is minimised in relation to the study's validity and reliability.
5. Analysis of the data should be sufficiently adequate to reveal its significance and the methods of analysis should be appropriate.	To ensure that there are no doubts on the validity or reliability of the data.
6. Conclusions should be confined to those justified by the data of the research and limited to those for which data provide an adequate basis.	To ensure that all findings are supported by the data.

Based on *Cooper and Emory* (1995 p.12/13)

However, there are a number of other schools of thought on research philosophies which include *realism, subjectivity, idealism and post modernism*. These are not directly relevant to this research and therefore will not be considered further. Accordingly, this section briefly examines the two main research philosophies in order to provide some contextual background information, prior to a discussion of the research methods deployed in this study.

(a) **Positivism** is the main philosophical approach in the social sciences and refers to the use of scientific methods in the study of social phenomena - *Johnson (1983)*. It is a school of thought that is generally accepted in the literature. For example, *Cooper and Emory (1995, p.12)* state that '*good research uses scientific methods*'. *Johnson (1983, p.27)* encapsulates the essence of the positivist approach in the social sciences when he states that:

'...human behaviour is subject to the operation of laws of cause and effect, and the nature of these laws can be identified by the process of hypothesis-testing against empirical evidence'.

Gill and Johnson (1991, p. 32) have a similar view, and imply that the processes by which theories and hypotheses are tested are often rated as more important than the source of such theories, in the positivist approach. The essence of positivism is the identification of causal relationships - *Easterby-Smith et al (1991)* and *Gill and Johnson (1991)*. As such, *Saunders et al (1997)* state that a positivist approach involves:

- deducing the hypothesis from the theory
- expressing the hypothesis in operational terms
- testing the operational hypothesis
- examining the outcome
- if necessary, modifying the theory in the light of the outcome

Gill and Johnson (1991, p.132) state that a positivist approach requires a highly structured methodology to facilitate replication. They contend that positivism relates to:

- directly observable phenomena
- the testing of theories, in a hypothetico-deductive fashion, by their confrontation with the facts of a readily observable external world.

The advantages of a positivist approach centre on the relative ease of data collection, based on a clear theoretical focus at the outset. In addition, the researcher is in control of the research process and the data is relatively easy to compare with the findings of other studies - *Saunders et al* (1997). Positivism has a number of drawbacks such as, weaknesses in understanding social processes and difficulty in changing direction once the data collection process has started - *Saunders et al* (1997). Other drawbacks relate to the apparent gap between the approach and the reality of organisational decision making resulting from the influence of personal values - *Merton* (1967).

(b) Phenomenology can be contrasted with the positivist approach and is seen as an alternative philosophy. For example, the positivist philosophy focuses on the assumption that society has a real concrete existence and a systematic character based on order and regulation, whereas the phenomenological philosophy begins '*with the assumption that social world possesses a precarious ontological status*' - *Hassard* (1991). Phenomenology relates to the interpretation of social phenomena in terms of what is happening, by taking on board human actions and interactions rather than the scientific approach which typifies the positivist school of thought. *Lazenby* (1996) argues that:

'from this perspective, social reality, although possessing order and regulation, does not possess an external concrete form. Instead, it is the product of inter-subjective experience constructed by the human mind interacting in social situations'.

This view is consistent with the reservations of *Merton* (1967) in relation to the influence of personal values on organisational decision making. *Saunders et al* (1997) imply that a phenomenological approach overcomes such drawbacks as it encompasses an interpretation of people's experiences of the social phenomena. As such this approach facilitates the researcher to understand *what* is happening and *why* it is happening. It follows that the context within which events are occurring is important. *Easterby-Smith et al* (1991) contend that qualitative data is used to establish different views of phenomena and outline three main reasons to use this approach:

- it enables a more informed decision on the research design, and is:

'more than simply the methods by which data are collected and analysed. It is the overall configuration of a piece of research: what kind of evidence is gathered and from where, and how such evidence is interpreted in order to provide good answers to the basic research question'.

- it provides a more critical evaluation of research methods,
- it facilitates the research methods to counter potential constraints in the research process.

However, this approach has a number of drawbacks. First, data collection can be time consuming and therefore costly. Second, data analysis is often complex and patterns are difficult to identify - *Saunders et al* (1997).

7.1.1 Relating research methods to the research philosophies

Gill and Johnson (1991) suggest that the primary task of any researcher is to choose between the different approaches in making an area of interest researchable. This inevitably means evaluating the benefits and drawbacks of the various methodologies. *Gill and Johnson* (1991) give extensive consideration to the two methodologies outlined and present three evaluation criteria to assess their effectiveness: *internal validity*, *external validity* and *reliability*. *Yin* (1994) states that these tests are 'commonly used to establish the quality of any empirical social research'.

Each of these criteria are examined briefly below:

Internal validity refers to whether or not the 'causes' or 'stimuli' actually produce what has been interpreted as the 'effects' and 'responses'. It involves establishing the correct operational measures for the concepts being studied - *Yin* (1994), *Gill and Johnson* (1991).

External validity refers to the extent to which any research findings can be generalised or extrapolated beyond the immediate research sample or setting of the research. External validity involves establishing the domain to which a study's findings can be generalised - *Cooper and Emory* (1995). *Gill and Johnson* (1991) further subdivide this criterion into:

- population validity which relates to the ability to generalise the research from the sample to a wider population
- ecological validity which relates to the ability to generalise from the actual social context in which the research has taken place to other contexts and settings

Reliability involves demonstrating that the operations of the study can be repeated, with the same results. Operations in this case mean data collection procedures. Yin (1994) states that reliability is assured if 'a later investigator followed exactly the same procedures as described by an earlier investigator ... the later investigator should arrive at the same findings and conclusions'. The reliability of the exploratory interviews is enhanced by following the systematic process of qualitative transcript-based data analysis.

The next section seeks to ascertain the applicability of each of these criteria to the main research methods outlined by Gill and Johnson (1991): (a) ideal or laboratory experiments, (b) quasi experiments and action research, (c) surveys, and (d) ethnography.

(a) Ideal or laboratory experiments are highly structured as a result of the identification of independent and dependent variables which can be manipulated and compared with control groups. Cooper and Emory (1995, p.351) describe laboratory experiments as 'studies involving intervention by the researcher beyond that required for measurement'. The high degree of structure is ideal for replication (ascertaining reliability) and for establishing causal relationships (internal validity). This method has some problems in meeting the external validity criteria due to the small number of subjects involved which can potentially influence the population validity. Gill and Johnson (1991) suggest that this limitation can be overcome to some degree by the use of random sampling of the subjects. However, Gill and Johnson (1991 p. 122) raise some concerns in relation to this method when they state:

'... the ideal experiment, in gaining these strengths through its high degree of structure, loses or 'trades off' naturalism: experiments are low in ecological validity because of the artificial nature of the research process and the context created by their very structure. Such weaknesses raise the issue of the extent to which any conclusions from ideal experiments are mere artefacts of the research process and context and thus inapplicable to social contexts outside those in which the data has been collected'.

The ideal/laboratory method belongs to the positivist school of thought. The author of this study has been unable to find any example of where this method was recently used in the context of strategic planning.

(b) **Quasi-experiments and action research** focus on taking the research design of the ideal experiment out of the laboratory setting and into the field -*Gill and Johnson (1991)*.

Rapoport (1970, p.499) defines this approach as aiming:

'to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework'.

In this way, the degree of ecological validity can be enhanced. However, there is often a trade off as ecological validity can result in a decrease in internal validity, population validity and reliability. *Gill and Johnson (1996 p.123)* encapsulate this trade off as follows:

'here we confront the paradoxical relationship which exists between control and naturalism in research design. Through venturing into the field naturalism may be gained, but only at the expense of losing the ability to manipulate the incidence of independent variables and control the incidence of extraneous variables. Except on rare occasions, in action research it is usually much more difficult to manipulate the independent variable and assign subjects to matched and experimental groups'.

The author of this study was unable to find any example of where these methods are used in the context of strategic planning and organisational performance except in a limited way in relation to the consideration of the survey instrument during the exploratory interviews.

(c) **Surveys** are a common research methodology and are used in the majority of studies reviewed in chapter three. Surveys are the most appropriate methodology for this study as they offer the best prospect of obtaining the views of a large number of SME Managing Directors at a relatively low resource cost. The other research methods are rejected for varying reasons as outlined earlier. Surveys have considerable strength in relation to both population validity and reliability. *Gill and Johnson (1991)* suggest that *'by using highly structured questionnaires to gather data in a form that is quantitatively analysable,*

survey based research is usually regarded as easily replicable and hence reliable'. However, *Gill and Johnson (1991)* contend that there is a trade-off between the degrees of naturalism and structure. For example, in a highly structured survey, it is likely that respondents, while adhering to the conceptual and theoretical proforma of the research, have 'little opportunity ... to articulate the ways in which he or she personally conceptualises and understands the matters of interest' - *Gill and Johnson (1991)*. The survey instrument in this study is developed from the exploratory interviews. Arguably this foundation increases its naturalistic tendencies. In addition, the use of multivariate techniques during the pilot testing phase ensure the reliability of the survey instrument. The survey methodology enables the author to gain a general view of the perceptions of the respondents. *May (1997, p.104)* criticises the survey approach as it '*rules out the possibility of understanding the process by which people come to adopt particular values or behaviours*'. This potential drawback can be overcome by ensuring that the survey is grounded in theory.

(d) **Ethnography** is described by *Cooper and Emory (1995, p.119)* as 'the process of discovering how a cultural subgroup describes and structures its world to a street level'. Ethnography relates to the extensive study of a small number of cases. Arguably this approach may result in population validity problems. In contrast to the structured research methods outlined, ethnography focuses on induction and is unstructured. As such it has potential problems in replicability and reliability. However, *Gill and Johnson (1991)* state that the main strength of this method is to conduct the research in the everyday natural setting of the research subjects being investigated.

Gill and Johnson (1991) state that it is '*perhaps the most likely of all strategies to identify and include all the relevant variables in any subsequent theoretical analysis*'. Their rationale for this contention is that researchers have the opportunity to reflect on the data gathered and identify the relevant variables. This means that ethnography can have a high degree of internal validity. The author of this study was unable to find any studies conducted using ethnography in the strategic planning field. In any event, this method is unsuitable for a large scale nation-wide research investigation.

7.1.2 Selecting a research philosophy and method

This study aims to ascertain the associations between a number of variables based on information collected from a relatively large number of SMEs on a nation-wide basis, in order to test the model presented in section 1.2. It could be argued that organisations are essentially social phenomena, that is groups of people getting together for an agreed collective purpose. The use of a phenomenological approach in this study is consistent with the recognition in the literature that an effective research methodology must reflect the multifaceted nature of organisational reality - *Burrell and Morgan (1979)*. The phenomenological approach is also consistent with the need to consider many complex dimensions in the same study - *Daft and Wiginton (1979)*. The phenomenology approach has a major advantage over the positivist approach as identified by *Morgan (1986 p. 337)*:

'people who learn to read situations from different (theoretical) points of view have an advantage over those committed to a fixed position. For they are able to recognise the limitations of a given perspective. They can see how situations and problems can be framed and re-framed in different ways allowing new kinds of solutions to emerge'.

The positivist approach is rejected due to its primary emphasis on observable phenomena 'with any reference to the intangible or subjective being excluded as being meaningless' - *Gill and Johnson (1991 p.132)*. Positivism is based on knowledge being obtained through 'our neutral and passive registration of various sensory inputs' - *Gill and Johnson (1991 p.134)*.

While the research literature suggests that 'good research uses the scientific method' it is reasonable to suggest that this study uses a combination of a largely positivist approach and to a lesser degree a phenomenology approach. This approach is consistent with the hypothetico-deductive method as suggested by *Gill and Johnson (1991 p.32)*.

There is some concern on how to identify the best route to achieving a 'scientific approach'. The real issue lies on how to ensure that the objectivity of the research is robust. *Cooper and Emory (1995)* suggest that this goal can be achieved by following a rigorous research design process. Section 7.2 will consider in detail the research process.

7.2 Research design

The previous section considers the two main research methodologies and concludes that the phenomenological approach is appropriate for this study. This section examines the research design. Research design is well documented in the literature and is described as *'the framework or plan for a study used as a guide in collecting and analysing data. It is the blueprint that is followed in completing a study'* - Churchill (1991 p.127). Arguably research is a planned structured investigation to gather information in order to answer research questions.

There are two modes of research: inductive and deductive. In order to decide whether this study is deductive or inductive, it is essential that the exact starting point for the study is recognised. The inductive approach is based on the need to base explanations of social phenomena on observation and expertise - Gill and Johnson (1991). They contend that an inductive approach is more likely to lead to a more useful outcome as it *'involves moving from the 'plane' of observation of the empirical world to the construction of explanations and theories about what has been observed'*. Cooper and Emory (1995, p.27) refer to induction as drawing a *'conclusion from one or more particular facts or pieces of evidence'*. They describe an inductive approach where *'the task of research is largely to determine the nature of the evidence needed and to design methods by which to discover and measure this other evidence'*. In essence, an inductive approach reflects upon past experiences and uses the normalisation of abstract concepts, theories and generalisations to explain past experience and predict future events - Gill and Johnson (1991). Since the main aim of this study is to ascertain the association between leadership, culture, strategic planning and organisational performance in an integrated manner, it is necessary to develop a model using these concepts in relation to SMEs. Accordingly, this part of the study is inductive.

The remainder of the study relates to the testing of the model derived. The rationale for this stage is to establish the validity of the model. A deductive approach *'entails the development of a conceptual and theoretical structure prior to its testing through empirical observation'* - Gill and Johnson (1991). Cooper and Emory (1995, p.26) explain that a deductive approach refers to an approach where relationships are established between reasons and conclusions by way of empirical study. Essentially, a

deductive approach either proves or disproves the theory or hypotheses being investigated. Accordingly, it can be argued that inductive research refers to the process by which the theory is generated, whereas deductive research is the process by which the theory is tested. This study entails both approaches: the development of the model (inductive) and the testing of the model (deductive). The use of both approaches in research study is common. Indeed, *Buckley et al (1976)* cited in *Gallear (1999)* state that both approaches are present to some extent in all research projects.

7.2.1 Research strategy

The research strategy refers to the process by which data is obtained and analysed. Establishing the research strategy is an important part of the research process as it determines the nature and source of the data. *Buckley et al (1976)* cited in *Gallear (1999)* identify four main strategies (as distinct from research techniques):

- opinion research
- empirical research
- archival research
- analytical research

In deciding which research strategy to adopt, it is necessary to have regard to the research domain (the data source and environment). The literature review identifies gaps in the existing knowledge in each of the constituent parts of the model in relation to SMEs. A large and wide ranging national sample is likely to lead to a greater degree of consensus in relation to the various parts of the model.

A brief consideration of the various research strategies suggests that an opinion research approach is appropriate for this study. An analytic research approach is discounted as it relies on the 'internal logic' of the researcher and no reference is made to external data sources. An archival research approach is also discounted as it is concerned with documented and historical data. In addition, it is clear from the literature review that this approach is unsuitable as evidenced by the lack of clarity on the issues under investigation. However, an archival approach is used to a limited extent in the

formulation of the inductive model. An empirical research approach is also discounted as it focuses on what actually happened as opposed to what Managing Directors perceive happen. In addition, this approach is impractical for the following reasons:

- the need to witness factual situations
- the need to focus on the past events rather than the present
- the significant resources required
- the impracticalities of conducting a large scale National survey due to the geographical locations of respondents

The remaining research strategy 'opinion research' is preferred as it overcomes the disadvantages and failings of the previous three research approaches. The advantages of this approach include:

- the ability to survey a large sample, thereby enhancing the likelihood of obtaining findings that can be generalised
- the methodology is established for the administration of this approach
- statistical packages such as SPSS are available to analyse the data

Opinion research is a common approach used in the majority of studies investigating the impact of strategic planning on organisational performance and on the associations between culture and leadership on strategic planning (see chapters 3, 4, and 5). The literature accepts that the use of opinions or perceptions is a valid approach.

For example, *Unwin* cited in *Gill and Johnson* (1991) states:

'we are continually bombarded by sensations and stimuli and we project on to those inputs a form and substance that derives from within, from our cognitive processing mechanisms'.

They also argue that perceptions enable us to make sense out of sensations. The objectives of this study are to ascertain the associations between the factors in the inductive model and are consistent with the phenomenology school. This was reinforced by the use of exploratory interviews in the early stages of the study. The investigation of organisational culture and leadership factors in SMEs could only have

been considered by using a phenomenological approach. The author ensured that the design and execution of this research project fully complies with the characteristics of scientific research outlined in table 7.1. This ensures as far as possible, that every step is taken to minimise any methodological weaknesses and potential biases. There are no reasons to suggest that the respondents opinions are not based on factual experiences. In addition, the use of opinion research is consistent with the phenomenological research philosophy (see section 7.1)

7.2.2 Approaches to research

The literature classifies the main approaches to research as; (a) *exploratory* or (b) *descriptive* - Churchill (1991). These two classifications are briefly discussed below:

(a) **Exploratory research** attempts to obtain insights into problem areas and the development of innovative approaches. Robson (1993 p 42) sees exploratory research as identifying clear methods of expressing complex issues by finding out '*what is happening; to seek new insights; to ask questions and to assess phenomena in a new light*'. As such, it is no surprise that it is widely used as an elementary framework for research issues, often based on secondary data, which is used as the basis for further exploration of the issues and problems - Robson (1993), Yin (1994). Exploratory research is mainly based on a review of the literature, discussions with experts in the field and focus group interviews - Emory and Cooper (1991). This study involves exploratory research in the early stages during the exploratory group discussions to provide a clear understanding of the key components of the model.

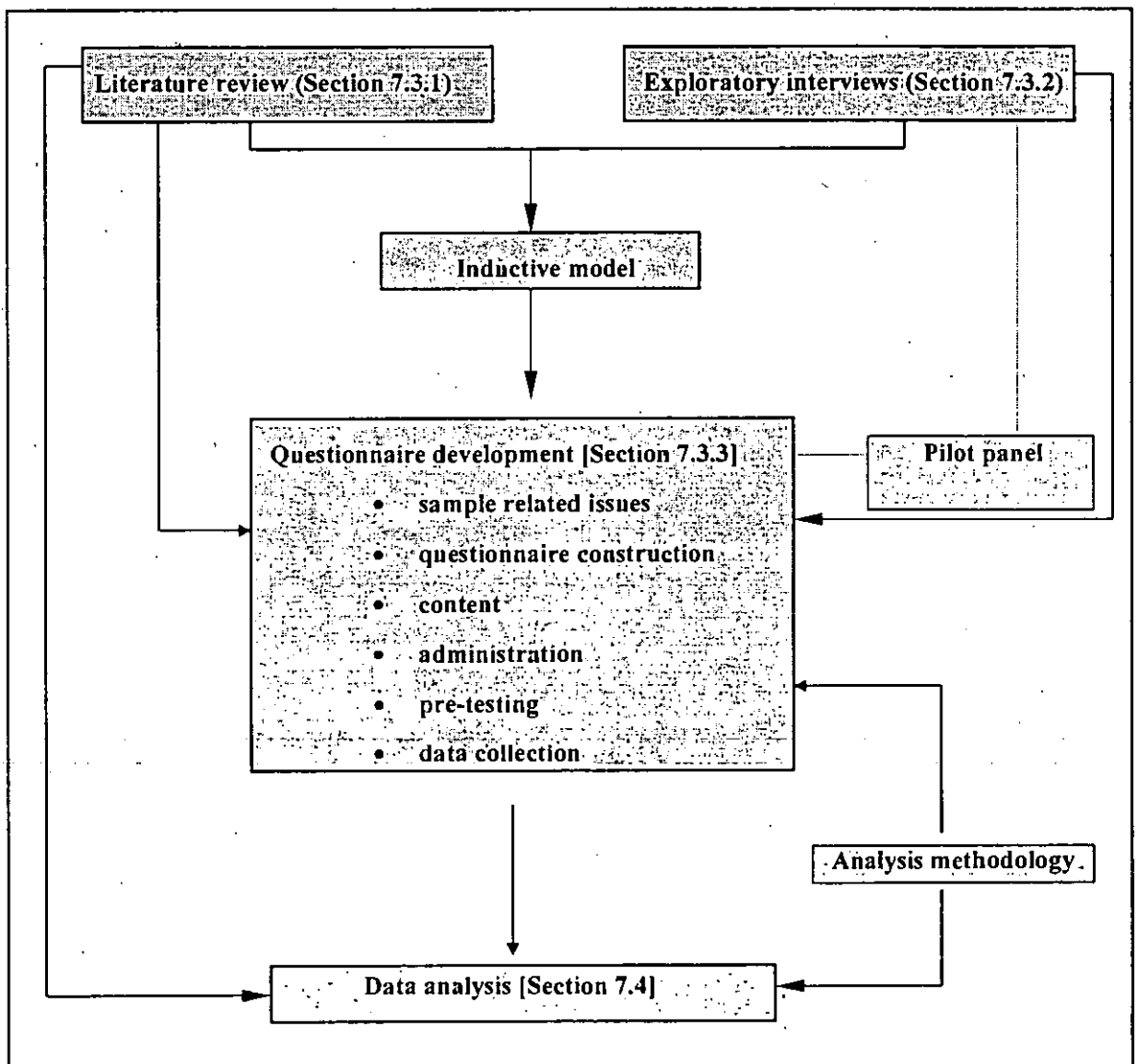
(b) **Descriptive research** is defined by Robson (1993 p.4) as '*an accurate profile of persons, events or situations*' - Descriptive research allows the collection of a large amount of data from a large sample of the population at an economical cost. The literature indicated that surveys are '*appropriate for a descriptive phase*' - Yin (1994). This study contains both exploratory and descriptive research approaches.

This study contains both exploratory and descriptive research approaches.

7.3 The Research methodology

The remainder of the chapter concentrates on the development and deployment of the research survey and outlines the research design adopted for this study. Figure 7.2 outlines the process involved.

Figure 7.2 The research design



7.3.1 Literature review

The importance of a literature review as the first stage of research is outlined by *Bell* (1987) as a catalyst for new ideas and an important foundation for the research questions and the theoretical framework of the study. *Howard and Sharpe* (1983) regard a literature review as being crucial in the refinement of the ideas for the project. This is followed by *Veal* (1992 p.32) who argues that a literature review enables the researcher to *identify concepts clearly and measure them accurately*. An extensive literature review is necessary to identify the relevant published research. A variety of databases are used to identify the key publications in these areas since 1988.

The objectives of the literature review are to:

- examine the definitions of the concepts being examined and where appropriate develop definitions to guide this study
- establish the characteristics of the concepts
- review the existing instruments and studies
- justify the use of additional questions
- provide a background and basis for the exploratory interviews

The outlines of the literature review are presented in chapters 3,4,5 and 6. The majority of the studies focus on larger firms. Therefore, it is necessary to ascertain, as part of the exploratory research, the views of practising SME Managing Directors and to understand their perception of the key concepts and issues addressed in this study. The next stage is described as the exploratory stage and includes the exploration, identification and clarification of the various factors associated with each concept of the inductive model.

7.3.2. Exploratory stage

A number of different sources of exploratory information are outlined by *Yin* (1994) which include: documentation, archival records, interviews, direct observation, participant observation and physical artefacts. Due to resource implications, the nature of the project and the time frame available, both observation and participation are beyond

the scope of this study. Accordingly, the main form of evidence is based on reports from informants (individual interviews and discussions). The rationale for undertaking exploratory research is to ensure a clear understanding of the relevant issues based on access to quality data - *Gummesson (1991)*.

At the initial stages of the study, focus group discussions using a panel of SME Managing Directors drawn from employer representative bodies are considered (invitation letter to participate is attached as appendix 7.1).

The criteria for firms to participate in the exploratory interviews include:

- firms should be SMEs (as described in Chapter 3)
- operating within the engineering or electronics sectors (SIC codes 37 and 38 - *Central Statistics Office (1979)*)
- have been in business for at least 5 years (this criterion ensures that they have developed a reasonable structure and have survived their potentially most turbulent years - *Pickle and Abrahamson (1976)*)
- are located within a reasonable travelling distance of the Business School.

The Confederation of British Industry (CBI) and the North London Chamber of Commerce (NLCC) were invited to join the exploratory group interviews on the basis of their involvement with a wide range of manufacturing SMEs. The CBI manufacturers' action group is important as it contains representatives from a wide geographic area throughout the UK and as such is appropriate as a 'sounding board' for a nationally based study. The involvement of the NLCC gives a more 'localised' aspect to the preliminary study explorations. In accordance with recognised practice, the Managing Directors were interviewed, until a redundancy stage was reached in the exploration of concepts. This approach is referred to as 'theoretical saturation' by *Eisenhardt (1989)* and 'minimalist learning' by *Glaser and Strauss (1967)*. *Eisenhardt (1989)* provides a guideline for the number of exploratory interviews desirable and states that while there is '*no ideal number of cases, a number between 4 and 10 usually works well*'. He suggests that less than four cases is insufficient, whereas over ten cases may add to the complexity of the research rather than simplify it due to the large volume of data generated. The decision to conduct exploratory interviews with a limited number of companies is justified in this study, on

the basis that sufficient 'depth' is obtained as evidenced by the earlier than expected redundancy stage. However, difficulties were experienced arranging further focus group sessions due to the workload of Managing Directors, as well as their geographic locations throughout the UK. Accordingly, a series of individual interviews with SME Managing Directors was chosen as an alternative source of information. Seven individual interviews were conducted with Managing Directors on a semi structured interview/free ranging basis.

Kahn and Cannell (1957) cited in Saunders et al (1997) describe an interview as 'a purposeful discussion between two or more people'. Easterby-Smith (1991) encapsulates the advantages of interviews as:

- the flexibility of the number of questions that can be asked
- the adaptability of the questions to meet the subjective nature of many concepts
- the enabling of participants to describe the concepts from their own perspective
- the meeting of objectives of the exploratory stage by enabling supplementary questions to be framed in order to probe for further information
- the enabling of the interviewer to note non verbal behaviour, which contributes to the achievement of 'rich' and 'complete' data

In addition, by using individual interviews in the familiar working surroundings of the Managing Directors, it is felt that more 'enterprising' suggestions were forthcoming. Individual interviews were also seen as the best way to maximise the time available to discuss the principal concepts and their attributes. However, interviews also have a number of disadvantages such as time constraints, non standardised wording and resource implications. *Bourque and Fielder (1995) suggest that a further disadvantage is the possibility of the interviewer influencing the respondents. In order to overcome any potential bias, the first set of interviews were conducted in the presence of the author's academic supervisor.*

While interviews can be carried out in a number of ways ranging from structured to free ranging -*Colwell, (1990), Kinnear and Taylor, (1996)*, the format adopted for this study is a hybrid mixture of both semi-structured and free ranging to ensure a frank and free flowing discussion. As well as having distinct advantages this method avoids the inherent

difficulties that inevitably arise in focus groups such as varying degrees of knowledge/expertise, cultural differences between group members, dominating group members, or peer group pressure.

At the beginning of each interview, permission was sought from each participant to record the proceedings (all Managing Directors acceded to this request), to enable the interviewer to concentrate on responses, develop themes and make brief notes. Individual managing director interviews were more structured than would otherwise be the case in a traditional focus group of five to twelve participants. All participants were helpful, open and frank. The impression was gained that senior level interviewees of their rank and position do not need, nor welcome, the anonymity of being part of a group interviews or feel more open or uninhibited as part of a group. This observation is consistent with the findings of *Crabtree et al* (1993), *Krueger* (1994). Topic guides were formulated to enable the interview to have an order of questioning, but in most cases a flexible approach was adopted to ensure that the interviewees' views were recorded in the order they perceived as important to them.

The framework for the exploratory interviews with SME Managing Directors is attached as appendix 7.2. Prior to the interviews, desk research was carried out to ascertain the suitability of all companies based on their size, sector and nature of business. Open-ended questions were used to gain an overview of the company through examining its history and development, business areas and structure. The rationale underlying the study was clearly outlined and incorporated the types of issues to be explored, for example, strategic planning, performance measurements, cultural and managerial orientation aspects to enable the company's approach to be analysed and evaluated. A definition of the concept under consideration, for example, strategic planning, was given, and the managing directors were asked to describe actions undertaken by them that came within the definition. In addition, they were encouraged to draw on their experiences and to add, modify or delete item(s).

The analysis of the transcribed interviews confirmed the importance of the themes included in the conceptual model. After five interviews, it became evident that these themes were common ones, and the interviews were modified accordingly. In brief the exploratory interviews confirmed the inductive model. Seven interviews were conducted.

The objectives of this stage were:

- to identify the characteristics of strategic planning in use
- to identify the dimensions of organisational culture in use
- to identify the styles of leadership in use
- to identify the main contingency factors facing SMEs
- to investigate the associations between the concepts outlined

The themes outlined as important by the exploratory groups mirror those derived from the literature review. Accordingly, the exploratory interviews confirm the importance of the themes outlined by recent studies as outlined in chapters 3,4,5 and 6.

7.3.3 Questionnaire development

Saunders et al (1997) suggest that questionnaires can be self-administered (postal) or interviewer-administered (telephone questionnaires or face-to-face structured interviews). As this is a national study, it is vital that a wide geographical spread of respondents is obtained. A cost comparison with other methods is provided by *Bourque and Fielder* (1995 p.9), who suggest that:

'given the same-length questionnaire and same objective, a completed questionnaire administered by mail costs approximately 50% less than one administered by telephone and 75% less than one administered by personal interview'.

Self-administered questionnaires were chosen as they:

- enable a wider geographical area to be covered than other methods
- are cost effective
- can include a significant number of questions
- can be completed in less than 6 weeks (even allowing for follow ups)

This study is amenable to research using questionnaires and many of its component areas have been previously researched in this way (see chapters 3,4,5 and 6). The exploratory

interviews and the pilot study indicate that Managing Directors of SMEs are favourably disposed to a postal questionnaire rather than a face-to-face interview or a telephone administered questionnaire. It could be argued that Managing Directors have significant experience of completing various types of questionnaire returns. In addition, they have a strong interest in the areas under examination. Accordingly, the author was confident that a detailed and lengthy questionnaire would be favourably received. Nevertheless, the questionnaire design stage was given detailed consideration as shown in the next section. The literature, for example, *Bourque and Fielder (1995)*, *Saunders et al (1997)* suggest that the following issues need to be considered during the design stage of questionnaire surveys:

- sample-related issues
- questionnaire Construction
- content
- administration
- pre-testing the survey

Each of these five actions are described in greater detail below:

Sample-related issues can be categorised as probability or non probability sampling - *Cooper and Emory (1995)*. Probability sampling is defined as '*a controlled procedure that assures that each population element is given a known nonzero chance of selection*' - *Cooper and Emory (1995 p.202)*. Probability or representative sampling is normally used for surveys and questionnaires, whereas non probability sampling is mainly used for case studies - *Saunders et al (1997)*.

Saunders et al (1997) suggest that the '*larger your sample size, the lower the likely error is generalising to the population.*' Probability sampling is used in this study and accordingly the following actions are taken:

- a suitable sampling frame is identified
- the sample size is determined
- the most appropriate sampling method is chosen
- a check is carried out that the sample is representative of the population.

To identify potential respondents for participation in the study, sample criteria were established similar to the criteria outlined in section 7.3.2. While no one directory provides an entirely suitable sampling frame, a random sample was available from a reputable commercial firm. As there are 14,842 electronic/engineering SMEs in the UK (DTI 1996), it was necessary to consider a sampling methodology. The main sampling types available are *simple random sampling* and *stratified random sampling*- Saunders *et al* (1997).

Practical considerations largely guided the choice of the two industrial sectors examined. The aim was to identify industries that were economically important and where it was possible to find many small and medium sized firms. Furthermore, it was important that the two sectors provided a significant contrast in terms of product maturity. Following careful consideration SIC37 and SIC 38 were chosen. Both sectors are economically important and both have a large number of small and medium sized firms.

The firms included in the sample belong to the following subsections of SIC 37:

- 3711 - Motor vehicles and passengers car bodies
- 3713 - Truck and bus bodies
- 3714 - Motor vehicle parts
- 3715 - Truck Trailers
- 3751 - Motor cycles, bicycles, and parts

The above sectors serve industries producing mature products and are therefore more likely to produce standard products.

In terms of SIC 38, the following sub-sectors were covered by the study:

- 3811 - Engineering, laboratory, scientific and research instruments and associated equipment
- 3822 - Automatic controls for regulating residential and commercial environments and appliances
- 3823 - Industrial instruments for measurement, display and control of process variables; and related products
- 3824 - Totalising fluid meters and counting devices
- 3825 - Instruments for measuring and testing of electricity and electrical signals
- 3829- Measuring and controlling
- 3841- Surgical and medical instruments and apparatus
- 3873- Watches, clocks, clockwork operated devices and parts

The above sector's products are likely to be less mature and have a shorter life cycle.

Simple random sampling is suitable for a large sample frame, selected on a wide geographical basis and can be undertaken at a modest cost. This sampling methodology allows the selection of an unbiased sample, but a potential drawback relates to the potential for a section of the population to be over or under represented, due to the random nature of the technique - *Saunders et al (1997)*.

⇒ *Stratified random sampling*, on the other hand, ensures that the sample used is representative of the population of manufacturing SMEs and divides the data into strata sets based on employment numbers. The advantage of random stratified sampling is that there is an increased likelihood that each sample will be representative and is represented proportionally within the study based on the distinct strata within the study. However, differential response rates often require re-weighting, which can be a complex process.

Random sampling was chosen due to the large sample size and the wide geographic spread of the respondents. The possibility of a low response rate meant that additional efforts were necessary to ensure a reasonable response rate. The sample frame was governed by the confidence level needed in the data, for example, the level of certainty that the data characteristics represent the characteristics of the entire number of firms in the sectors chosen - a margin of error 5% is tolerable. However, there is no set way of deciding on a sample, and ultimately it is based on the concluding analysis of the researcher - *Hoinville and Jowell (1978)*.

The pilot study provided a starting point for the calculation of the likely response rate. However, the pilot results need to be treated with a degree of caution as the pilot group comprised members of the CBI and North London Chamber of Commerce Manufacturing Groups. The response rate of 80% is exceptional and could be argued to result from the interest of Managing Directors' in the study, the size of the companies involved and the characteristics of the Managing Directors' that responded.

As the population size in this study is known, the size of the sample can be estimated using the following formula - *Ryan (1995 p.179)*:

$$n = \frac{N s^2}{(N-1) \frac{B^2}{z^2} + s^2}$$

where

- n = sample
- N = population size
- s = standard deviation or estimate
- B = allowable error
- z = z score based on desired confidence level

Accordingly, 171 completed and analysable questionnaires were estimated to be the minimum requirement to ensure that the data was comprehensive, robust and capable of ensuring a defensible analysis of the findings. Interestingly, *Folz (1996, p.49)* states that:

'as long as the population is relatively large, the proportion of the population sampled does not have a big impact on precision, because it is the absolute size of the sample rather than the size of the sample fraction, that determines precision'.

Questionnaire construction relates to the formulation of an outline of the information sought. In the case of this study, the nature of the variables are defined by the conceptual model outlined in chapter one, a review of the extant literature and by the exploratory interviews. In designing the content, *Bourque and Fielder (1995 p.27)* suggest that:

'ideally the surveyor structures the questionnaire so that everyone answers every question. This can be doneby the creation of closed-ended response lists for every question'.

As many of the concepts in this study are complex, it is important that the questions used are clear and easily understood. *Bryman (1989)* suggests that clear and unambiguous content can be achieved by framing questions in a neutral fashion, so as not to bias the response. Following the literature review, a number of drafts of the survey instrument, covering letter and feedback forms were developed (appendix 7.3). Each draft was considered by a number of colleagues and amended where necessary. However, the literature clearly states that a pilot survey is vital in the development of a survey instrument - *Gill and Johnson (1991)*, *Bourque and Fielder (1995)*, *Saunders et al (1997)*. The pilot survey was administered to twenty managing directors of

manufacturing SMEs. Having established the content of each individual question, the next stage was to decide on the form of response required. Likert-type scale measurements are commonly used and are easily analysable using statistical packages - *Gill and Johnson (1991)*. This involves 'providing people with statements and asking them to indicate how strongly they agree or disagree' - *De Vaus (1996 p.88)*. A five point scale is suggested based on the constructs of previous studies - *Kargar and Parnell (1996)* and *Wilderom and van den Berg (1997)*. A five point scale was selected as respondents often find difficulties distinguishing between values on scales of more than five points - *Saunders et al (1997)*. *Bourque and Fielder (1995)* suggest that an effective questionnaire needs to be constructed to allow a smooth transition from one section to another. In addition they suggest that clear instructions must be given in relation to the completion of the questionnaire as a whole. The author adheres to these suggestions in this study.

The Content is enhanced by the number of established constructs available which can be adapted for this study, for example,

- strategic planning - *Kargar and Parnell (1996)*
- organisational culture - *Wilderom and van den Berg (1997)*
- organisational leadership - *Wilderom and van den Berg (1997)*
- organisational performance - *Kaplan and Norton (1992)*

Each of these areas are examined briefly below:

Strategic planning is discussed in chapter three. Constructs examining the association between strategic planning and corporate performance are developed by *Ramanujam and Venkatraman (1987)*, *Veliyath and Shortell (1993)* and *Kargar and Parnell (1996)*.

However, the *Kargar and Parnell* survey is the only construct developed so far that examines the characteristics of the strategic planning process in SMEs. *Kargar and Parnell* acknowledge that their framework is based on the *Ramanujam and Venkatraman* and *Veliyath and Shortell* studies. It is tested and validated and proven to be robust. While its applicability to manufacturing has not been tested, the individual interviews with SME Managing Directors indicate that its characteristics are relevant to their firms' and encompass the main issues of importance to SMEs. Accordingly, the constructs of the *Kargar and Parnell* study are adapted for use in the current study - with slight

modifications and re-wording to some questions. The final questionnaire asked respondents to indicate their firms perceived emphasis (on a 1-5 scale from 'no emphasis' to 'strong emphasis') on each of 41 attributes that comprise seven characteristics of the strategic planning process.

Organisational leadership is discussed in chapter four. The literature suggests that leadership is associated with strategic planning- *Hart and Quinn (1993)*, *Berkely Thomas (1988)*. However, the author could identify only one construct that was tested in SMEs - *Wilderom and van den Berg (1997)*. Accordingly, the constructs of the *Wilderom and van den Berg* study are adapted for use in the current study - with some modifications and re-wording. The finalised questionnaire for this study asked respondents to indicate their firms perceived emphasis (on a 1-5 scale from 'a very small extent' to 'a very great extent') on each of 41 attributes that represent the four characteristics of organisational leadership.

Organisational culture is discussed in chapter five and the seminal works of *Schein (1985)* and *Hofstede (1980)* are considered. In addition, a recent study by *Wilderom and van den Berg (1997)* which developed, tested and validated revised constructs appropriate to SMEs is considered. The *Wilderom and van den Berg* constructs attempt to measure the emphasis on five main types of organisational culture. A literature review provides adequate justification for the use of these culture types in SMEs. The finalised questionnaire asks respondents to indicate their firms perceived emphasis (on a 1-5 scale from 'a very small extent' to 'a very great extent') on each of 26 attributes that represent the five characteristics of organisational culture.

Organisational performance is examined in chapter six. The extant literature indicates that organisational performance tends to be measured on the basis of financial results/profitability rather than on a multidimensional basis - *Brown and Laverick (1994)*, *Lynch and Cross (1991)*, *Fitzgerald et al (1991)*, and *Kaplan and Norton (1992)*. However, while there is no consensus on performance measurement, there is a compelling case for the use of a multi dimensional approach based on financial performance, customer orientation, organisational effectiveness and innovation or

creativity. Organisational capability is also included as a performance characteristic following its inclusion in earlier studies - *Kargar and Parnell (1996), Kargar (1996)*.

Appendix 7.4 contains the questionnaire used.

Administration relates to the establishment of the boundaries for the study. The next stage is to decide how the information should be gathered. *May (1997)* refers to this stage as turning the hypotheses into '*questions that respondents can understand and are able to answer*'. The advanced nature of the operationalisation of the constructs suggests that a structured questionnaire is appropriate. However, *Bourque and Fielder (1995)* suggest that short rather than long questionnaires tend to be more effective. They imply that the length of the questionnaire is related to the degree of complexity of the research objectives and even in a study with relatively simple objectives, only a small range of data can be collected. In designing the final questionnaire, a trade off is made between the number of questions to be included and the likelihood of a reasonable response rate. *De Vaus (1996)* suggests that the maximum length is about 12 pages in order to achieve a reasonable response rate. The final questionnaire for this study is eight sides of A4 paper and therefore well within the limits suggested by *De Vaus*. As a result of the longer than intended questionnaire, only closed-ended questions are included as a means of ensuring a reasonable response rate. Close-ended questionnaires are less time consuming than open-ended questions. A justification for this approach is encapsulated by *Bourque and Fielder (1995 pp.17/18)* when they state that:

'the number of possible responses to a question must be limited to a number that can be readily assimilated by respondents and from which they can reasonably select those that apply to them'.

While the literature seems adamant that the length of the questionnaire affects the response rate - *Saunders et al (1997)*, the exploratory interviews indicated that a significant number of questions were necessary for this study. Nevertheless, to ensure that Managing Directors were not discouraged by the questionnaire length, guidelines outlined by *Huber and Power (1985)* were taken into account in the formulation of the questionnaire, to ensure that:

- employers did not have unnecessary disincentives to respond to the questionnaire by guaranteeing anonymity and confidentiality

- the length of time managing directors are to be expected to spend completing the questionnaire was clearly outlined
- the usefulness of participating in the survey was explained
- a copy of the completed findings was offered to all respondents

Pre testing the constructs is essential to ensure content validity - *Converse and Presser (1986)*. *Cooper and Emory (1995)* suggest that '*the determination of content validity is judgmental*'. Nevertheless, to ensure that the questionnaire meets the aims of this study, the survey instrument was pilot tested.

A pilot survey is intended to ascertain if:

'changes are necessary before the start of the full-scale study. The pre-test provides a means of catching and solving unforeseen problems in the administration of the questionnaire, such as the phrasing and sequence of questions or its length. It may also indicate the need for additional questions or the elimination of others' - *Kidder (1981)* cited in *May (1997 p.93)*.

The literature suggests that the pilot should be tested on '*people who resemble the types of people to whom the questionnaire will finally be given*' - *De Vaus (1996 p.103)*. The pilot testing has the following objectives:

- to establish the likelihood that the survey instrument will be completed by respondents in broadly similar circumstances to those of the pilot group
- to establish that the questions are clear and understood
- to ascertain that the instructions for completion are adequate
- to ensure that the format of the questionnaire is user-friendly
- to check practical issues such as data coding
- to ensure that the final instrument contains relevant questions only

Accordingly, the questionnaire was forwarded to the Managing Directors of 20 SMEs drawn from the CBI and NLCC panel members involved in manufacturing firms from the electronics and engineering sectors. In addition, face-to-face interviews were conducted

with two of the Managing Directors that responded, based on established guidelines. This helped to validate the questionnaire and ensure common response patterns. The personal interviews enabled the author to query aspects of the Managing Directors' responses. For example, some managing directors may perceive the instructions for the pilot survey to be too lengthy and therefore unlikely to be read. Personal interviews also enabled the author to identify the reasons why some questions were left unanswered, for example a small number were perceived as being relatively unimportant to SMEs.

To ensure that as many of the pilot questionnaires were returned, each participating managing director was telephoned to encourage a response. This had the added advantage of giving the opportunity of responding over the telephone. This opportunity gave the interviewer the opportunity to probe for more 'qualitative data' and seek detailed feedback on the 'feeling' of the Managing Director in relation to how other industrialists might view the survey instrument. Twenty pilot questionnaires were issued, of which fifteen were directly returned, giving an initial response rate of 75%. A further questionnaire was responded to, over the telephone, giving an overall response rate of 80%. The highly satisfactory response rate was probably enhanced by the involvement of members of the CBI and North London Chamber of Commerce SME manufacturing panels.

To get the response rate in perspective, it is useful to bear in mind that many Managing Directors suffer from an overload of questionnaires of various types, as well as requests to participate in research - *Bryman*, (1988 p.15). This was confirmed in the discussions held with Managing Directors during the exploratory stage. In the circumstances, the response rate is very satisfactory, especially when compared with other studies using postal questionnaires - *Hodgkinson*, (1990) and *Hambrick, Geletkanyecz and Frederickson* (1993). It is contended that the response rate is higher than expected as a result of the layout of the questionnaire instrument, which is based on previously tested professional survey forms. The results of the pilot questionnaire are shown in appendix 7.5. The main findings are summarised. In the light of the results of the pilot survey, a number of minor alterations were made to the survey instrument such as:

- the removal of some redundant or ambiguous questions
- the addition of new categories of response to some questions

- the revision of the structure of some of the questions

The detailed revisions are also outlined in appendix 7.5.

Following the interest shown by the participants in the pilot survey, it was decided that a broad summary of the results would be forwarded to all respondents. This action showed that the time spent in exploratory interviews and completing the pilot questionnaire was not wasted, and also gave the opportunity for any Managing Director to again re-visit the questionnaire and give feedback on any of the amendment made. No feedback was received. A non response analysis was conducted to determine the extent to which non respondents differed from respondents. Of the five respondents that did not reply by post, two were continually out of the country, two were 'too busy' and the remaining one replied over the telephone. The initial exploratory interviews clarified the concepts and indicated a number of potential associations between the variables. Consequently, driven by the exploratory interviews and the extant literature, the conceptual model was confirmed.

Field work - data collection - the need to have an effective and efficient administration and deployment of the questionnaire is well documented -*Dillman* (1978). At an early stage, interviewer-administered questionnaires were deemed to be impractical due to the geographic spread of the respondents, the potential for interviewer bias and time/resource constraints. Consequently, a postal questionnaire was adopted for this study. The rationale for targeting the Managing Directors of SMEs is twofold. First, the majority of questionnaire studies on SMEs are conducted on the basis of one respondent, usually the most senior person within the firm, as shown in table 7.2. The author was unable to locate a study on SMEs that involved more than one respondent, in a questionnaire based survey. Second, the literature strongly supports the targeting of the Chief Executives or Managing Directors. *Hambrick* (1981) suggests that the Chief Executive's perceptions of the firm's strategy are more likely to align with external strategic measures.

Hambrick (1981 p.271) states that:

'researchers who attempt to identify an organisation's 'actual' strategy by asking executives other than the chief executives may receive considerably less accurate information than might have been presumably assumed'.

In particular, the literature states that the views of the Chief Executive are likely to be the best available, if the business is small or specialised - Powell (1992), Birley and Westhead (1990). However, there is no way that the researcher can state with a high degree of certainty that the Managing Director completed the questionnaire form personally, and did not delegate the task - Moser and Kalton (1971), Bryman (1989). There is also no way of knowing the order in which the questionnaires were completed by the respondents nor the time taken in the completion of the questionnaire or sections of the questionnaire- Moser and Kalton (1971).

It is also not possible to take steps to ensure that the questionnaire is completed by the intended respondent. This is an inherent weakness in postal surveys. However, postal surveys are used extensively in management research and are considered a valid and acceptable approach.

Table 7.2 Questionnaire surveys of SMEs involving managing director level respondents

STUDY	LEVEL OF RESPONDENT	STUDY DETAILS
Robinson and Pearce (1983)	chief executives	the impact of strategy on performance
Rhyne (1985)	most senior responsible for corporate planning	the effects of Corporate planning, on performance
Bracker and Pearson (1986)	owners/managers	the degree of planning refinement
Ramanujam and Venkatraman (1987)	senior managers	the impact of strategy on performance
Baker et al (1993)	chief executives	the impact of strategic planning on profitability
Joyce, Seaman and Woods (1995)	general managers, owners, partners, managing directors.	the impact of strategy on performance
Kargar and Parnell (1996)	chief executives	the impact of strategic planning on performance
Naffziger and Mueller (1999)	owners and managers	the impact of strategic planning in small firms

In accordance with the suggestion of *Bourque and Fielder* (1996), all Managing Directors were sent a signed covering letter from the Director of Research at Middlesex University Business School (appendix 7.6) containing details of the survey, its rationale and objectives, and an indication of the likely time that the questionnaire would require to complete. The objectives of this stage were achieved through a self-administered postal questionnaire to the Managing Directors of 1,000 SMEs nationally. The questionnaire was forwarded to all participants in early May 1998. In accordance with accepted practice, a postcard reminder was sent to all firms in the sample after one month - *Dillman* (1978), *Murphy et al* (1991). In addition, each firm was contacted by telephone, in order to encourage a response.

Telephoning each firm in the sample had three main advantages:

- it eliminated a significant number of companies that were not in manufacturing or did not comply with the study criteria,
- it enabled the database to be amended to indicate the correct name of the Managing Director,
- it identified a number of companies that did not have the time or resources to respond.

In addition, it could be argued that the telephone calls were instrumental in encouraging a response and gave the opportunity of responding over the telephone. No managing director choose to respond in this manner. The calls, however, enabled the author to absorb some 'qualitative data' about some companies that was later used in the final reminder to further encourage a response. The literature showed that response rates can vary for postal questionnaires arising from factors such as: a refusal to respond, the ineligibility to respond and the failure to make contact with the respondent. The literature provides some guidelines on a probable response rate of between 10-12% - *Hambrick, Geletkanycz and Frederickson* (1993), and 30% - *Owen and Jones* (1990). The mean of these estimates is 22.5%.

From the initial mailing of 1,000 questionnaires, it was found that 298 firms were not SMEs, had ceased operations, or were not contactable. The effective size of the sample was, therefore, 702 SMEs. 194 completed and usable questionnaires were received. The response rate was in excess of the typical response rate outlined by *Bourque and Fielder*

(1995), who state that without incentives, a survey of the general community is unlikely to have a response rate higher than 20%. The response rate of 27.64% was slightly in excess of the mean of estimates suggested by *Owen and Jones (1990)*, *Saunders, et al (1997)*. On receipt of the completed questionnaires the following checks were carried out to ascertain that respondents :

- complied with the criteria for classification as an SME
- operate within the sub-sectors of SIC 37 and 38 selected for the study
- are over 5 years in existence
- responded in a manner that indicated a thoughtful and true response

Each of these aspects will be elaborated on in the following section.

Meeting the criteria for SME classification

Each of the responses were checked to ensure that they complied with the criteria for classification as an SME. Question 2 of the questionnaire was used to ascertain the number of employees in the firm. Eight firms indicated that their employee numbers exceeded 250, and were therefore omitted from further analysis.

During the follow up telephone calls, respondents were asked if their firm was independent or a subsidiary firm. Where respondents indicated that their firm was a subsidiary, further probing questions were asked to ascertain if both the holding firm and the subsidiary could be classified as an SME according to the criteria. This resulted in a further 43 responses being considered as unsuitable for use in this study as their holding companies were large multinational firms.

Operating within the selected SIC37 and SIC38 sub-sectors

Each respondent was asked to indicate which SIC category was appropriate to their firm. 58 firms indicated that their activities overlapped and could be considered to be both electronics and engineering orientated. Further probing questions were used to ascertain the appropriate categorisation. It was possible to categorise 31 firms according to the sub-sectors used. However, 27 firms clearly belonged to other sub-sectors and were consequently omitted from further analysis.

Firms over 5 years in existence

The database provider was asked to provide contact names of firms established over 5 years (to ensure that they had developed a reasonable managerial structure and had survived their potentially most turbulent years). However, the follow up telephone calls indicated that thirteen firms were start-up firms in operation for less than two years. These firms were, therefore, omitted from any further analysis.

Responded in a thoughtful and true manner

Each response was checked to ascertain if there was sufficient variation within the completed questionnaire to indicate that it was completed in a 'thoughtful and true manner'. Fourteen questionnaires indicated that the majority of responses were completed in a uniform manner with little variation in the responses. Each of these firms was telephoned to ascertain the extent of effort devoted to the questionnaire and to ascertain the validity of the responses. Each managing director was engaged in conversation, which focused on a number of generic questions such as the items included in their strategic plan. Based on the consistency in the replies, it was clear that twelve firms had completed the questionnaire in a 'thoughtful and true manner'. However, it was also clear from the inconsistent responses and the comments of the remaining two managing directors that their responses were given 'to get the questionnaire off their desks'. Accordingly, these two responses were omitted from further analysis.

The breakdown of the responses received according to employee size is provided in table 7.3.

Table 7.3 Survey response data

Firm size	1-9	10-20	21-50	51-99	100-250	Total
Electronics and Engineering Sectors	22	24	56	47	45	194

There are potentially many reasons for non response to a postal questionnaire. For example, questions might be 'unclear, too intrusive, provide insufficient responses or appear to be similar to previously answered questions' - *De Vaus* (1996 p.101). Other

reasons given by *De Vaus*, include questionnaire layout, which can lead to accidental non response. A more fundamental reason for non response is given by *Bryman* (1989), who refers to some firms having:

- suspicions about the researchers motives,
- a reluctance to divulge information
- concerns for the resource implications in questionnaire completion.

It is important to measure the degree of non response to eliminate any source of bias within the sample. As outlined in the previous page, each SME was contacted by telephone to encourage participation in the study. Despite every effort, 504 firms did not submit a completed survey questionnaire. Various reasons were given for non participation as follows:

- 299 firms indicated that they lacked the time and resources needed to complete the survey
- 108 firms indicated that it was company policy not to participate in surveys
- 51 firms expressed a reluctance to divulge information
- the author was unable to contact the managing director or his/her deputy of 29 firms after four separate attempts
- 21 firms refused to participate with no particular reason given

The degree of non response was measured using the following formula -*Ryan* (1995 p.179):

$$R = \frac{r}{n}$$

where R = response rate
n = original sample
r = the number of respondents

Using this formula, the response rate is 27.5% and the non response rate is 62.5%. *Ryan* (1995) explains that the:

'seriousness of the non response bias depends upon the extent to which the population mean of the non-response stratum differs from that of the response stratum'.

Taken together with the number of valid responses this suggests that response bias is not a serious problem and does not invalidate the results. The previous sections outline how

the survey instrument was developed and administered. The next stage outlines how the questionnaire responses were analysed.

7.4 Quantitative data analysis

After the completion of the data generation phase, the questionnaires received were coded and analysed using the SPSS statistical package. Figure 7.3 presents a summary of the statistical techniques which are used in the data analysis phase.

Figure 7.3 Summary of the statistical techniques used in the data analysis

- (i) Descriptive techniques (Section 7.4.1)
- (ii) The reliability of scales (Section 7.4.2)
- (iii) Testing for scale validity (Section 7.4.3)
- (iv) Correlation analysis to detect potential underlying relationships (Section 7.4.4)
- (v) Factor analysis and principal component analysis (Section 7.4.5)
- (vi) Canonical correlation analysis to identify linear associations between variables (Section 7.4.6)
- (vii) Wilcoxon test (Section 7.4.7)

The next section provides a description of the statistical methods used and justifies their use. *Reid and Andereck* (1989 p.24) suggest that:

'much research either ignores or fails to clearly report useful descriptive statistics ... many readers may be aware that ANOVA is used, but others might profit by a brief description of the statistical method and reasons why its use is appropriate in a particular context. A short technique description also forces researcher accountability and allows readers to evaluate the appropriateness of statistical tests used'

7.4.1 Descriptive techniques

Descriptive research 'deals with questions of *what* things are like, not *why* they are that way - *De Vaus* (1996). The importance of descriptive statistics is stressed by *De Vaus*, who states that '*unless we have described something accurately and thoroughly, attempts*

to explain it will be misplaced'. Accordingly, to enable comparisons and to explore in greater detail the survey findings, descriptive statistics are outlined in chapter nine.

The most frequently used descriptive technique is the mean score for the data in the sample. Other techniques include significance testing, using the chi-square to test whether two variables are significantly associated. For example, in cases where the probability of obtaining the test statistic by chance are very low, then the relationship is deemed significant. The use of the chi-square is relevant in this study, as the sample size is relatively large.

7.4.2 Reliability of scales

The procedures used to analyse the responses include the determination of the reliability of the instrument. In particular, question 10 (operating environment), questions 11 and 12 (leadership/management style), 13 (Culture), 16 (organisational capability - performance), 17-23 (strategic planning) and 26-29 (organisational performance) are tested for their ability to yield a significant factor structure. Reliability is referred to by *Litwin (1995 p.6)* as '*a statistical measure of how reproducible the survey instrument's data are*'.

Reliability is the degree to which the items give a consistent result and is a function of the number of independent measures. The importance of establishing the reliability of the instrument is stressed by *Bohrstedt (1983)*. The instrument could be said to have a high degree of reliability when there is a significant association between responses to each of the attributes. In effect, it is '*an indicator of how well the different items measure the same issue*' *Litwin (1995 p.21)*.

Internal consistency is established using Cronbach's Alpha, and factor analysis which are outlined in detail in all statistics textbooks and described briefly later in this chapter. Cronbach's Alpha Coefficient - *Cronbach (1951)* is used to test the scale reliability. This measures the correlations that exist for each possible way of splitting a set of items in half. Cronbach's alpha can be obtained from a variance/covariance matrix or by evaluating the average correlations among items in a scale - *Sakakibara et al (1993)*. The alpha co-

efficient 'represents the most widely used and most general form of internal consistency estimate' - Murphy and Davidshofer (1994 p.83). Nunnally (1978) states that a Cronbachs Alpha value of 0.7 is adequate for internal consistency reliability while Jones and James (1979) contend that a broader band of alpha value ranging from 0.44 to 0.81 is adequate as the alpha value tends to give a conservative estimate of the scales reliability. SPSS 6.1 is used to calculate Cronbachs alpha using the guidelines that at least 3 items are included in each scale in order to cover it adequately.

7.4.3 Testing for scale validity

The previous section briefly examines scale reliability. However, Gill and Johnson (1991) suggest that '*reliability does not necessarily imply validity, whereas if the measure is valid it will be reliable*'. Validity refers to the degree to which the instrument meets the purpose for which it was designed- Sakakibara et al (1993). Reliability testing is also described as the degree that the dimensions are free from error and can yield consistent results - Zikmund (1994). Although all of the characteristics used in each section of the questionnaire are well supported in the literature, it is still necessary to carry out validity testing to enable the author to have confidence in the ability of the constructs to establish the associations between leadership, culture, contingency factors and strategic planning, and between strategic planning and corporate performance. Validity can be expressed in terms of (a) content validity and (b) construct validity - De Vaus (1996). The following sections briefly explain the distinction between content and construct validity.

(a) **Content validity** is a qualitative judgement based on a review of the literature and ensuring that the instrument adequately covers the information that it is designed to measure. It is the '*extent to which the indicators measure the different aspects of the concept*' - De Vaus (1996 p.56). To ensure content validity, each measure is derived from the literature and analysed for its relevance, clarity and meaning during individual interviews with SME Managing Directors, and subsequently, during the pilot phase of the study.

(b) **Construct validity** refers to the degree to which the instrument measures the underlying construct that it is designed to measure and indicates whether the combination of items in a scale truly represent the characteristics of the construct of interest - *Sakakibara et al* (1993 p.187). Construct Validity can be convergent (the extent to which the survey correlates with factors or variables with which it should correlate), and discriminant (the extent to which it does not correlate with factors with which it should not correlate) - *Cooper and Emory* (1995). Examples of sources of evidence for construct validity include:

- experts' judgements that the content of the survey directly relates to the area of interest,
- an analysis of the internal consistency of the survey (see above),
- feedback from survey respondents about their responses to the survey in order to obtain information about the "goodness" of the items as shown in the pilot survey,
- statistical analyses such as factor analysis which will be outlined later in this chapter.

This study uses a mixture of all four types. For example, the exploratory interviews used the expert judgement of practising Managing Directors/industry representatives to ensure that the content of the survey was of direct interest to manufacturing SMEs in the electronics and engineering sectors. The internal consistency is established using Cronbach's Alpha as outlined in section 7.4.2. The pilot survey is based on responses from twenty managing directors of SMEs from the electronics and engineering sectors. The responses give useful feedback on the 'goodness' of the items included in the constructs. Statistical analysis is also widely used - see later in this chapter.

7.4.4 Correlation analysis

Correlation analysis is used to measure the strength of relationship between variables. The co-efficient of correlation shows the strength of the relationship, for example, if the relationship is perfect and one measure follows exactly from another, then the correlation

is given the value of 1.00. On the other hand if there is no relationship, then the correlation is said to have a value of 0.00. If two measures are the exact opposites of each other, then the relationship is negative with a value of -1.00.

A correlation co-efficient is significant when it is sufficiently different from zero to exclude the possibility that the correlation between the two measures is achieved by chance. The *significance level* of say 0.01 is termed the remaining risk that the similarity could have occurred by accident. In other words, there is a one in a hundred risk of this happening.

7.4.5 Factor analysis

Factor analysis is used to reveal underlying common themes and also as a means of data reduction. The most frequently used factor analysis type for these purposes is principal component analysis - *Bryman and Cramer* (1994). In this study principal component analysis is used to transform the sets of variables into a composition of linear combinations of variables. The literature suggests that interpretability and eigenvalues can be used to determine the number of factors - *Nunnally* (1978). *Kline* (1994 p.28) points out that the main aim of factor analysis is to 'simplify a matrix of correlation such that they can be explained in terms of a few underlying factors'. *Norusis* (1990 p.321) refers to factor analysis as a mechanism to 'identify a relatively small number of factors that can be used to represent relationships among sets of many interrelated variables'. However, the interpretation of the results of factor analysis requires a high degree of value judgement as factor analysis is '*something of an art, and is certainly not as objective as other statistical methods*' - *Manly* (1994 p.105).

A scale has validity if all the characteristics load onto one factor. It follows that if more than one factor emerges then the scale measures more than one construct - *Sakakibara et al* (1993). In a case where the scale loads on to more than one factor, a decision must be made whether to subdivide the factor into two or more factors or to eliminate the attributes as 'unwanted nuisance factors' - *Sakakibara et al* (1993). However, a guideline exists in that all factors with eigenvalues of over 1 are retained - *Kim and Mueller* (1978) as are all attributes in that factor over 0.6. Some authors consider that retaining factor

loadings over 0.6 is being a little conservative, and suggest that factors with a loading of over 0.320 should be interpreted- *Tabachnick and Fidell* (1996). This is broadly in line with the suggestion of *Kline* (1994 p.6) who report that '*factor loadings are high if they are greater than 0.6... and moderately high if they are above 0.3*'.

Accordingly, all factor loadings above 0.6 are retained for analysis.

7.4.6 Canonical correlation analysis

Following the establishment of the construct validity and reliability of the instrument, the next stage is to outline the methodology for establishing the association or relationships between the factors using canonical correlation analysis. *Ramanujam and Venkatramen* (1987) compare the three main ways of data analysis of interrelationships - factor analysis of the two sets followed by correlation analysis, separate multiple regression analysis for each dimension of strategic planning effectiveness, and canonical correlation. They choose canonical correlation as '*it is more insightful*', and discount factor analysis followed by correlation analysis as being too restrictive. Canonical correlation is a statistical technique for studying the association between two variables to form linear combinations of the variables that have maximum correlation. As the aims and objectives of this study are to identify the associations, if any, between the variables, then it is deemed to be the most appropriate technique for analysis of the data. A precedent exists from the use of canonical correlation analysis in previous studies that examine the impact of strategic planning on organisational performance - *Ramanujam and Venkatramen* (1987) and *Kargar and Parnell* (1996). The process of canonical correlation involves finding the set of coefficients that give the maximum correlation, followed by a set that was orthogonal to the first and had the next largest correlation and so on. *Kargar and Parnell* (1996) refer to the advantages of canonical correlation as '*lying in its multivariate (and integrated) treatment of the effectiveness and predictor dimensions*'. *Kargar and Parnell* (1996) refer to the contention by *Farnell* (1982) that a canonical correlation is:

'an inflated measure of the underlying relationship, since it is the purpose of canonical analysis to maximise the relationship between linear combinations of the two sets of variables'. Accordingly, it was necessary to '*examine the nature of the canonical variates themselves, and the extent to which they capture the information in the original variables*'.

Fornell (1982) cited in Kargar and Parnell (1996) states that cross loadings are believed to be the most direct measure of the relationships between the criterion and predictor dimensions, while canonical loadings are considered to be more meaningful as indices of relative importance in contributing to the observed canonical relationship. Lambert and Durand (1975) cited in Ramanujam and Venkatramen (1987) state that 'for purposes of comparison loading values of 0.30 and above are sufficient for drawing inferences about criterion-predictor relationships'. Canonical roots can also be interpreted by examining the simple correlations between the canonical variates (or factors) and the variables in each set. These correlations are also called canonical factor loadings. The logic here is that variables that are highly correlated with a canonical variate have more in common with it. The degree of variance can be inferred from the proportion of variance extracted from each set of variables by a particular root by looking at the canonical factor loadings. By squaring the correlations, the resulting numbers reflect the proportion of variance accounted for in each variable. The canonical correlation analyses can be performed using the CANCELL programme in SPSS - Nie et al (1975). The SPSS CANCELL programme is used in this study.

7.4.7 Wilcoxon test

To ascertain the difference of emphasis on the various selected attributes of strategic planning, leadership and organisational culture, a comparison of the mean scores is carried out between high and low performing companies. Each set of scores are subjected to the non parametric Wilcoxon test. The *Wilcoxon* test uses the information about the size of the differences between two pairs such as the emphasis given to selected attributes of the various factors by high performing companies and low performing companies. *Blalock (1979 pp.265-266) cited in Kargar and Blumenthal (1994) states that 'for moderate and large samples. The power efficiency of the Wilcoxon test is approximately 95% as compared with the t-tests'.*

The rationale behind using a non parametric test is based on the following considerations, firstly, the data sample is based on questions using a *Likert-type* scale which emphasise the median rather than the mean. Secondly, the Wilcoxon test was effectively used by *Kargar and Parnell (1996)* in their analysis. The hypotheses were tested by analysing the

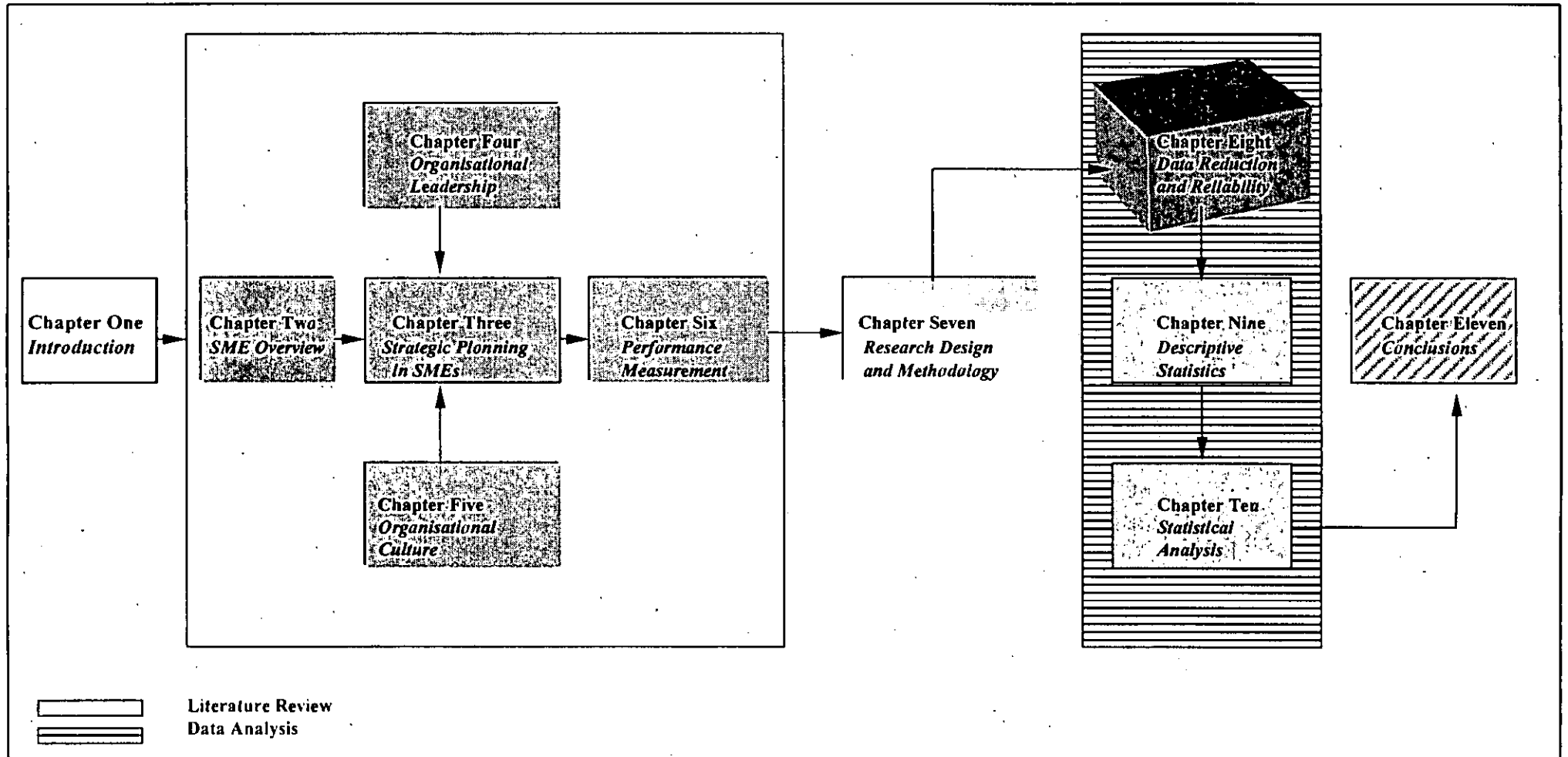
different emphasis on each of the attributes that indicate a strong association with strategic planning and its subsequent impact on organisational performance. A null hypotheses that there is no difference on the emphasis of the various attributes between high performing companies and low performing companies was tested by using the Wilcoxon test.

7.5 Concluding remarks

The methodology is largely prescribed by previous studies that examine broadly similar constructs, and is therefore relatively straightforward. The first stage of the research was to conduct an extensive literature review. This is followed by a series of individual exploratory interviews, based on a pre-selected criteria, to ascertain the issues of major importance facing SMEs. Both of these stages support the development of the conceptual model. The next stage is the consideration of the most effective way of data collection. A postal survey is seen as the most appropriate mechanism. In the development of the initial survey instrument, the researcher is fortunate in that a number of research instruments are available, that can be adapted for use in this study. However, following the piloting of the survey instrument a number of amendments are made to the draft questionnaire. The questionnaire seeks to measure the perceptions of managing directors on the emphasis given to the concepts in the model. The research questions are formally outlined and analysed in Chapter 9.

The response to the final questionnaire was subjected to a number of statistical analytical techniques. As a first step, a range of descriptive statistics are generated. The next step entails the determination of the reliability and validity of the survey constructs, which are ascertained by the use of factor analysis. The range of associations between variables is ascertained using canonical correlation analysis and the final testing of the model is subjected to the Wilcoxon test to ascertain the differences in overall perceived performance between firms placing a significant emphasis on culture, leadership and corporate strategy and firms placing a lesser emphasis on these factors.

The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises – Chapter Outline



CHAPTER EIGHT: DATA REDUCTION AND RELIABILITY

8.0 Introduction

The previous chapters outline the processes utilised in the development of the survey instrument and the methodology for the analysis of the data. This chapter reports the results of the data reduction analysis undertaken. The main concepts in the questionnaire consist of 129 variables which reduced to 34 factors comprising 111 variables. In the case of large questionnaires such as this one, it is usual to attempt a reduction of the data using factor analysis. This in turn, facilitates a more effective data analysis. The survey instrument comprises the following eight main sections:

- section 1 (questions 1-9) company information and product type
- section 2 (question 10) the operating environment
- section 3 (questions 11 and 12) organisational leadership
- section 4 (question 13) organisational culture
- sections 5-7 (questions 14-25) the strategic planning process
- section 8 (questions 26-29) performance measures.

As discussed in section 7.4.5, principal component analysis method was used for this purpose. The method deployed to test the reliability of the data is described in section 7.4.2. As previously tested and validated constructs were used, no attempt was made to test the validity of the constructs again. The chapter is structured in five main parts:

- leadership style (section 8.1)
- organisational culture (section 8.2)
- the strategic planning process (section 8.3)
- performance measures (section 8.4)
- contingency factors (section 8.5)

8.1 Leadership style

This section outlines the analysis of the responses of the Managing Directors' perception of their firms' leadership styles. It refers to Section 3 of the questionnaire (questions 11

and 12). This section is divided into 41 statements describing the attributes of the leadership styles derived by *Wilderom and van den Berg (1997)* as shown in table 8.1. In their validated and tested instrument, *Wilderom and van den Berg (1997)* use ten attributes to characterise transactional leadership, fifteen attributes to characterise transformational style, ten attributes to characterise human resources style and six attributes to characterise laissez faire leadership style.

Table 8.1 Leadership styles derived by *Wilderom and van den Berg (1997)*

Style	Description
(a) Transactional	indicating an exchange relationship between leader and employees based solely on the costs and benefits calculations of both parties
(b) Transformational	based on charisma, inspiration, intellectual stimulation and attention of leaders for individual employees
(c) Human/results	taking into account both the concerns of employees and the need to provide business or organisational results.
(d) Laissez faire	essentially indicating the absence of active management.

Permission was received from Professor Wilderom to use similar constructs which were subjected to slight modification for use in this study. Emphasis on the specific leadership attributes are based on a five point Likert-type scale ranging from *a very small extent (=1) to a very great extent (=5)*. As virtually the same instrument as that tested and validated by *Wilderom and van den Berg* is used, factor analysis is carried out on the attributes of each leadership style rather than on all the 41 attributes to ascertain if the number of attributes can be reduced further in this sample. Tables 8.2, 8.4, 8.6 and 8.8 report the results of factor analysis on responses to questions 11 and 12. Attributes with a factor loading of over 0.6 (see section 7.4.5) are shown in bold type. Communalities and eigenvalues are provided in tables 8.3, 8.5, 8.7, and 8.9.

(a) Transactional leadership style

Tables 8.2 and 8.3 report the results of the factor analysis (varimax rotated factor matrix) on the transactional leadership dimension. Variables with high factor loadings in excess

of 0.6 are highlighted in bold type. The alpha score of .6785 is higher than that suggested by Jones and James (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.2 the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results, which indicate that the data is highly suitable for factor analysis. The factor analysis generates four distinct factors - *rewards, standards, performance and own interests*. Table 8.3 shows the eigenvalues and communalities which indicate that there is good evidence for the strength of the structure underlying the individual variables. All the variables have high communalities (50% or more), which imply that the factor structure explains the majority of the variance in the remaining variables. The four factors jointly explain 64% of the overall variance.

Table 8. 2 Factor analysis of transactional leadership style responses

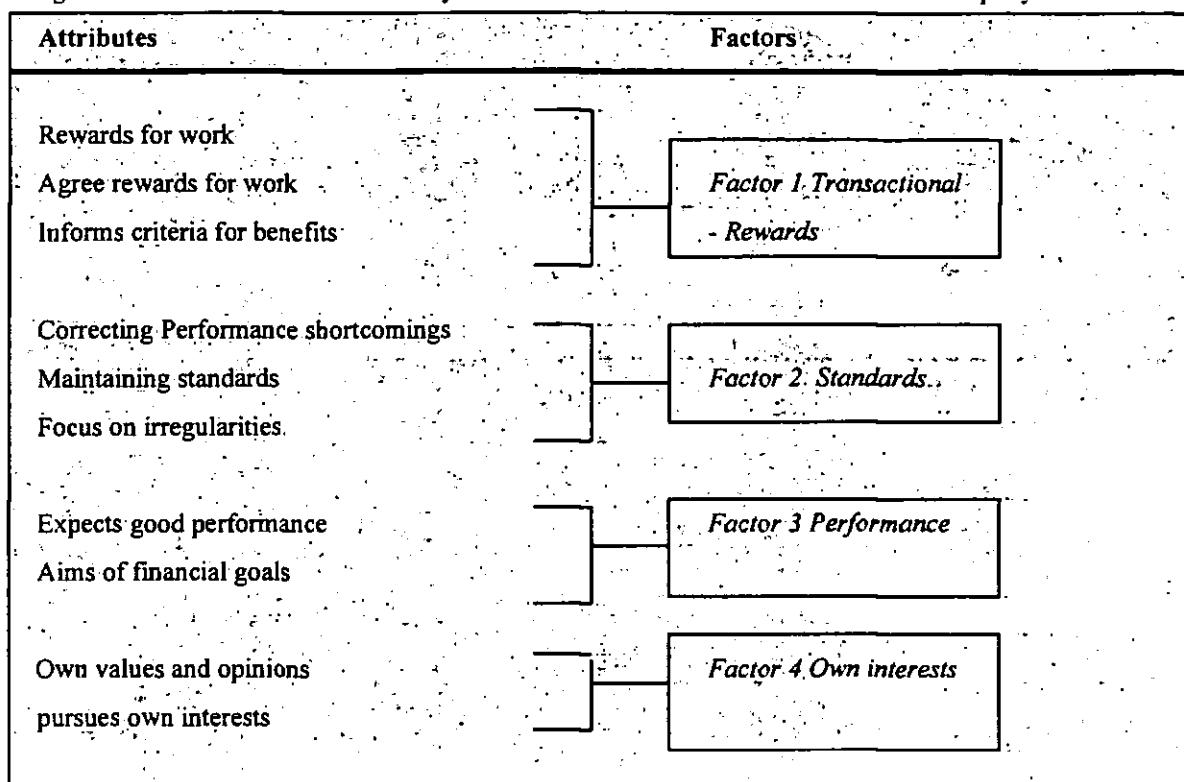
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .68141 Bartlett Test of Sphericity = 305.41028, Significance = .0000 VARIMAX converged in 7 iterations				
Attributes	Factor.1	Factor.2	Factor.3	Factor.4
Pays attention to performance shortcomings that need correction	.16409	.69268	.34424	.03445
Emphasises the maintenance of standards	.00821	.74647	.21611	-.16438
Offers the prospect of rewards for work	.81092	.03912	.13703	-.07371
Agrees with employees on the rewards that they can look forward to if they do what has to be done	.77792	.12131	-.01075	.05256
Focuses attention on irregularities, exceptions, and deviation from what is expected of employees.	.29466	.64697	-.35227	.29314
Tells employees criteria for performance related benefits	.81479	.12543	.05876	-.01346
Is strongly convinced of their own opinion and values	.08352	.00365	.14248	.72328
Expects good performance from employees	.07813	.13042	.73514	.28010
Aims at reaching financial goals	.08501	.15644	.80008	.01210
Pursues its own interests	-.11791	-.01753	.04958	.72499

Table 8.3 Variable communalities and factor eigenvalues for transactional leadership-style responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Pays attention to performance shortcomings that need correction	.62642	1	2.62046	26.2
Emphasises the maintenance of standards	.63101	2	1.56406	15.6
Offers the prospect of rewards for work	.68334	3	1.15231	11.5
Agrees with employees on the rewards that they can look forward to if they do what has to be done	.62276	4	1.03206	10.3
			Total Variance	63.6
Focuses attention on irregularities, exceptions and deviations from what is expected of employees.	.71542			
Tells employees criteria for performance related benefits.	.68326			
Is strongly convinced of their own opinion and values	.55043			
Expects good performance from employees	.64200			
Aims at reaching financial goals	.67198			
Pursues its own interests	.54228			

An analysis of the transactional leadership style indicates that the attributes load on to 4 factors as shown in figure 8.1. Each of the attributes outlined in bold have a factor loading in excess of 0.6. Based on the interpretation of the guidelines on factor analysis this implies that the factor structure is robust. Factor one can be described as *transactional-rewards*, while factor two is concerned with *standards*, factor three with *performance* and factor four with *own interests*. Accordingly, these four new variables are added to the working data set. Factor one comprises questions 3, 4 and 6 which typify the nature of the transactional leadership type as described in section 4.3. It is therefore no surprise to note that factor one accounts for a higher percentage of the variance than any of the emerging new factors. The results of the factor analysis on the transactional leadership attributes are represented pictorially in figure 8.1.

Figure 8.1 The results of factor analysis on the attributes of transactional leadership style



(b) Transformational leadership style

Tables 8.4 and 8.5 report the results of the factor analysis on the attributes representing the transformational leadership dimension. Variables with high factor loadings in excess of 0.6 are highlighted in bold type. The alpha score of .6763 is higher than that suggested by Jones and James (1979) and indicates a high degree of internal reliability (see section 7.4.2). The alpha score is at the higher end of the range suggested by Jones and James (1979). As shown in table 8.4, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results, which indicate that the data is highly suitable for factor analysis. The factor analysis generates four distinct factors - *competence, creativity, vision and mistakes focus*. Table 8.5 shows the eigenvalues and communalities, which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The four factors jointly explain 56% of the overall variance.

Table 8.4 Factor analysis of transformational leadership style responses

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .85756 Bartlett Test of Sphericity = 741.88492, Significance = .0000 VARIMAX converged in 6 iterations				
Attributes	Factor 1	Factor 2	Factor 3	Factor 4
Instil perfect trust	.66915	.32530	-.20303	-.07560
Encourage new ideas from employees	.13912	.81047	.07562	-.03595
Introduces new projects and challenges	.15994	.67002	.17297	.11710
Promotes a clear vision for the future	.16090	.41788	.60789	-.04578
Stimulates employees to support opinions with good arguments	.21151	.73250	.07075	.19164
Makes employees aware of important common values and ideals	.31213	.47174	.32570	.30128
Gives employees the feeling that management can overcome any obstacle	.77134	.08322	.10755	.12848
Gives employees a sense of pride in working for this organisation	.48636	.18944	.37987	.05263
Shows an extraordinary ability in everything that they undertake	.70715	.17578	.15282	.11930
Focuses attention on performing even better	.17716	.05811	.52794	-.02521
Is of the opinion that employees should learn for their mistakes(if any)	.01100	.20988	.19972	.66225
Fulfils promises with action	.54782	.26053	.30735	.09609
Sets ambitious targets for the organisation	-.01194	.04465	.75754	.19888
Keeps an eye on mistakes	.21301	.01873	-.10890	.79798
Makes a powerful impression	.61858	.02964	.22214	-.45515

Table 8.5 Variable communalities and factor eigenvalues for transformational leadership-style responses

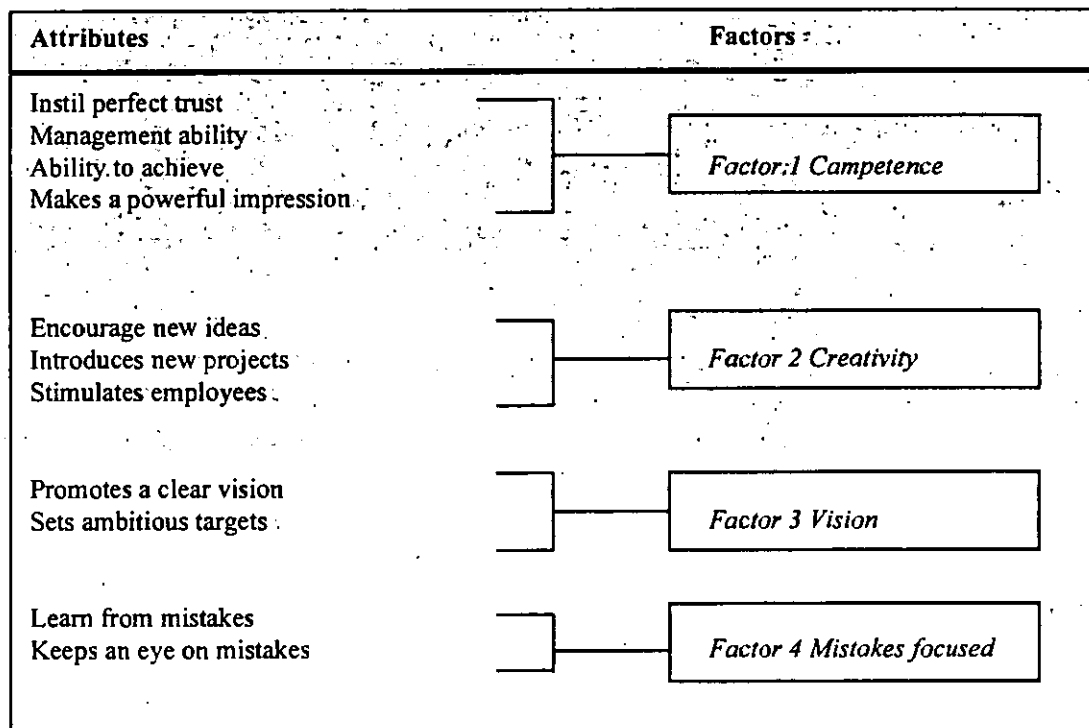
Attributes	Communality	Factor	Eigenvalue	% of var.
Instil perfect trust	.60052	1	4.76546	31.8
Encourage new ideas from employees	.68323	2	1.37735	9.2
Introduces new projects and challenges	.51814	3	1.22893	8.2
Promotes a clear vision for the future	.57214	4	1.03682	6.9
			<u>Total Variance</u>	<u>56.1</u>
Stimulates employees to support opinions with good arguments	.62302			
Makes employees aware of important common values and ideals	.53512			
Gives employees the feeling that management can overcome any obstacle	.62997			
Gives employees a sense of pride in working for this organisation	.41950			
Shows an extraordinary ability in everything that they undertake	.56885			
Focuses attention on performing even better	.31412			
Is of the opinion that employees should learn for their mistakes	.52263			
Fulfils promises with action	.47168			
Sets ambitious targets for the organisation	.61555			
Keeps an eye on mistakes	.69435			
Makes a powerful impression	.64003			

An analysis of the transformational leadership style indicates that the attributes load on to 4 factors as shown in figure 8.2. Based on the interpretation of the guidelines on factor analysis results (see section 7.4.5), all attributes with *high* factor loadings in excess of 0.6 are retained for further analysis. Factor one can be described as *competence*, while factor

two is concerned with *creativity*, factor three with *vision*, and factor four with *mistakes focus*. Each factor contains attributes that typify the nature of the transformational leadership type as described in section 4.3.

Accordingly, four new variables based on the factors derived are added to the working data set. For example, questions 1, 7, 9 and 15 are combined to form a new variable *competence leadership style*. Figure 8.2 depicts the results pictorially.

Figure 8.2 The results of factor analysis on the attributes of transformational leadership style



(c) Human resources leadership style

Tables 8.6 and 8.7 report the results of the factor analysis on the human resources leadership dimension. Variables with high factor loadings in excess of 0.6 are highlighted in bold type. The alpha score of .8424 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.6, the Bartlett test and the Kaiser-Meyer-Olkin model produce highly significant results, which indicates that the data is highly suitable for factor analysis.

The factor analysis generates two distinct factors - *employee focused* and *competing for the future*.

Table 8.7 shows the eigenvalues and communalities, which indicate that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), which imply that the factor structure explains the majority of the variance in the remaining variables. The two factors explain 52% of the overall variance.

Table 8.6 Factor analysis of the human resources leadership style responses

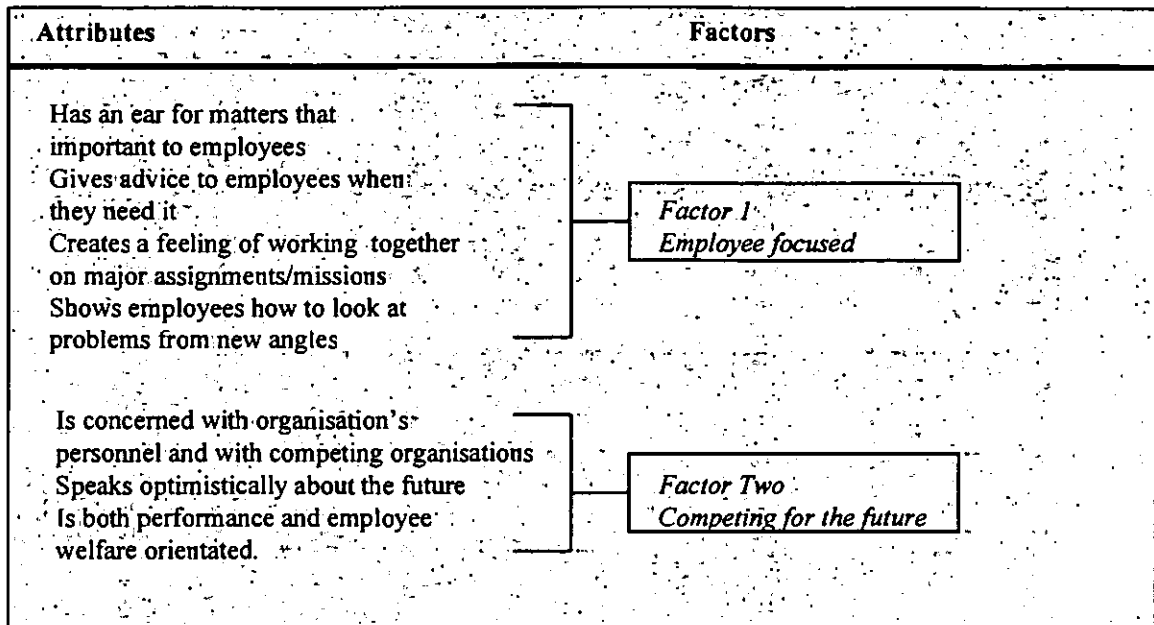
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .86242 Bartlett Test of Sphericity = 564.29927, Significance = .0000 Varimax converged in 3 iterations		
Attributes	Factor 1	Factor 2
Has an ear for matters that are important to employees	.61595	.11113
Gives advice to employees when they need it	.65462	.29004
Creates a feeling of working together on major assignments	.75102	.09649
Shows employees how to look at problems from new angles	.73610	.18376
Tries to involve as many employees as possible in progressive changes within the organisation	.59392	.41622
Works actively for the benefit of both personnel and organisational goals	.45299	.48669
Is concerned with the organisation's personnel and with competing organisations.	.24643	.67313
Speaks optimistically about the future	-.02701	.80409
Is both performance and employee welfare orientated	.28778	.63704
Encourages co-operation	.50446	.52793

Table 8.7 Variable communalities and factor eigenvalues for human resources style leadership responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Has an ear for matters that are important to employees	.39174	1	4.15308	41.5
		2	1.05125	10.5
		Total Variance		52.0
Gives advice to employees when they need it	.51265			
Creates a feeling of working together on major assignments/missions	.57334			
Shows employees how to look at problems from new angles	.57562			
Tries to involve as many employees as possible in progressive changes within the organisation	.52597			
Works actively for the benefit of both personnel and organisational goals	.44207			
Is concerned with the organisation's personnel and with competing organisations.	.51384			
Speak optimistically about the future	.64728			
Is both performance and employee welfare orientated	.48863			
Encourages co-operation	.53319			

The factor analysis indicates that the attributes of the human resources style load on to two factors 'employee focused' and 'competing for the future'. Based on the interpretation of the guidelines on factor analysis results it can be concluded that the factor structure is robust. These two characteristics are added to the working data set. For example, questions 1-4 are combined to form a new variable *employee focused leadership style*. Figure 8.3 depicts the results pictorially.

Figure 8.3 The results of factor analysis on the attributes of the human resources leadership style



(d) Laissez faire leadership style

Tables 8.8 and 8.9 report the results of the factor analysis on the laissez faire leadership dimension. Variables with high factor loadings in excess of 0.6 are highlighted in bold type. The alpha score of .6087 is higher than that suggested by Jones and James (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.8, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicates that the data is highly suitable for factor analysis. The factor analysis produces two distinct factors - *reactive style* and *passive style*. Table 8.9 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables had high communalities (50% or more), which implies that the factor structure explains the majority of the variance in the remaining variables. The two factors explain 54% of the overall variance. Based on the interpretation of the guidelines on factor analysis results it can be concluded that the factor structure is robust.

Table 8.8 Factor analysis of the laissez-faire leadership style responses

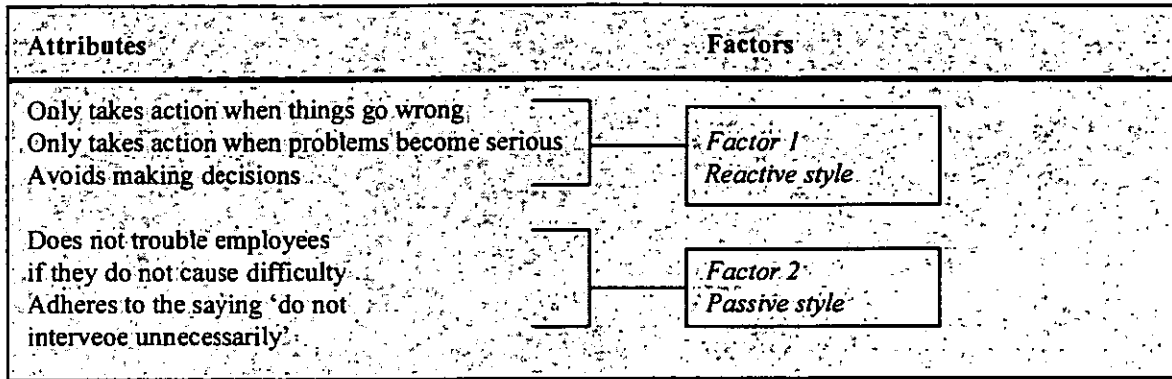
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .62431 Bartlett Test of Sphericity = 126.17374, Significance = .0000 VARIMAX converged in 3 iterations		
Attributes	Factor 1	Factor 2
Only takes action when things go wrong	.81213	.01355
Only takes action when problems become serious	.72029	.05678
Does not trouble employees if they do not cause difficulty	.12021	.75200
Adheres to the saying 'do not intervene unnecessarily'	-.08782	.77251
Does not attempt to improve matters as long as performance meets minimum demands	.58436	.31814
Avoids making decisions	.61612	-.28620

Table 8.9 Variable communalities and factor eigenvalues for laissez-faire leadership-style responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Only takes action when things go wrong	.65810	1	1.93227	32.2
Only takes action when problems become serious	.51387	2	1.33465	22.2
			Total variance	54.4
Does not trouble employees if they do not cause difficulty	.57911			
Adheres to the saying 'do not intervene unnecessarily'	.60859			
Does not attempt to improve matters as long as performance meets minimum demands	.44652			
Avoids making decisions	.46072			

The results are expressed pictorially in figure 8.4.

Figure 8.4 The results of factor analysis on the attributes of laissez faire leadership Style



Accordingly, two new variables representing the laissez faire dimension are added to the working data set for subsequent analysis. For example, questions 1, 2 and 6 are combined to form a new variable *reactive leadership style*, while questions 3 and 4 are combined to form the variable *passive leadership style*. Both *reactive* and *passive* leadership styles contain variables that are consistent with the *laissez-faire leadership style*.

8.1.1 Leadership style - discussion

The examination of the factor analysis shows that each of the four leadership styles derived by *Wilderom and van den Berg* (1997) load up to give more than one factor. For example, the transactional leadership style loads on to four factors representing *rewards style, the maintenance of standards, performance attainment and own interests*. The analyses indicates that the reliability of the individual variables is acceptable. All of the variables have high communalities (50% or more), which indicates that the factor structure explains the majority of the variance in the remaining variables. The eigenvalues indicate that over 63.6% of the variance is explained by the factors in the transactional style, 56.1% of the variance by the factors in the transformational style, 52% of the variance by the factors of the human resources style and 54.4% of the variance is explained by the factors of the laissez faire style. Accordingly, it is reasonable to conclude that the dimensions of leadership styles derived cover the concept of leadership adequately in manufacturing SMEs.

8.2 Organisational culture

This section reports the analysis of the responses of the managing directors' perception of their firms' organisational culture and refers to Section 4 of the questionnaire. This section contains 26 statements that are used to describe the five main types of organisational culture derived by *Wilderom and van den Berg* (1997).

Table 8.10 The dimensions of organisational culture derived by *Wilderom and van den Berg* (1997)

Dimensions	Description
(a) Empowerment	employees are allowed sufficient freedom and authority to make decisions
(b) External orientation	dynamic/active relations with external parties and other external factors
(c) Human resources	how the organisation deals with their employees
(d) Inter group orientation	efficient and pleasant relations between departments
(e) Improvement orientation	continuous improvement/adjustment of internal affairs

Permission was given by Professor Wilderom to use similar constructs which were modified for use in this study. The attributes of organisational culture dimensions are based on a five point Likert-type scale ranging from *a very small extent (=1) to a very great extent (=5)*.

Tables 8.11, 8.13, 8.15, 8.17 and 8.19 report the results of factor analysis on the responses to question 13. In accordance with the guidelines for the interpretation of the results of factor analysis (section 7.4.5), attributes with a high factor loading of 0.6 and over are retained for further analysis. These attributes are shown in bold type. Communalities and eigenvalues are shown in tables 8.12, 8.14, 8.16, 8.18 and 8.20.

a) Empowerment culture

Table 8.11 reports the results of the factor analysis on the empowerment culture type. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .7437 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.11 the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *empowerment* culture style. Table 8.12 shows the eigenvalues and communalities which indicate that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor *empowerment style* explains 52% of the overall variance.

Table 8.11 Factor analysis of empowerment culture style responses

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .78634 Bartlett Test of Sphericity = 229.02214, Significance = .0000.	
Attributes	Factor 1
Room for managerial employees to make their own decisions	.78159
Assignment of interesting tasks to employees	.65586
Employees exert influence on important decisions regarding work	.75668
The opportunity for employees to bring forward ideas before decisions are made	.77171
Freedom for employees to depart from the rules	.62520

Table 8.12 Variable communalities and factor eigenvalues for empowerment culture-style responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Room for managerial employees to make own decisions	.61088	1	2.60000	52.0
Assignment of interesting tasks to employees	.43015			
Employees exert influence on important decisions regarding work	.57256			
The opportunity for employees to bring forward ideas before decisions are made	.59553			
Freedom for employees to depart from the rules	.39087			

The results of the factor analysis indicate that the attributes of the empowerment culture style load on to one factor which is consistent with the empowerment culture style derived by *Wilderom and van den Berg (1997)*.

(b) External orientation culture style

Tables 8.13 and 8.14 report the results of the factor analysis on the external orientation culture style. Four variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .7327 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.13, the Bartlett test and the Kaiser-Meyer-Olkin model produce highly significant results, which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *external orientation* culture style. Table 8.14 shows the eigenvalues and communalities, which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. Accordingly, it is possible to conclude that the factor structure is robust: The derived factor *external orientation* explains 59% of the overall variance.

Table 8.13 Factor analysis of external orientation culture style responses

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .82346 Bartlett Test of Sphericity = 312.44885, Significance = .0000.	
Attributes	Factor 1
Active canvassing of new customers	.61086
Working to improve the local market position	.61227
Quick reaction to developments in the market	.69368
This firm has an edge over local competitors	.60185
Investigation of the needs and wishes of customers	.69939
Thorough training of employees in systematically gathering information in what customers want to see improved	.73013
Active promotion of the organisation by its employees	.60147
The firm's future plans	.60881

Table 8.14 Variable communalities and factor eigenvalues for external orientation culture-style responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Active canvassing of new customers	.29253	1	3.12889	59.1
Working to improve the local market position	.52487			
Quick reaction to developments in the market	.58119			
This firm has an edge over local competitors	.55029			
Investigation of the needs and wishes of customers	.58914			
Thorough training of employees in systematically gathering information in what customers want to see improved	.53309			
Active promotion of the organisation by its employees	.29319			
The firm's future plans	.31458			

The results of the factor analysis indicate that the attributes of the external orientation style load on to one factor which is consistent with the external orientation culture style derived by *Wilderom and van den Berg* (1997).

(c) Human resources culture style

Tables 8.15 and 8.16 report the results of the factor analysis on the human resources culture style. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .6398 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.15, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *human resources* culture style. Table 8.16 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. Accordingly, it is possible to conclude that the factor structure is robust. The derived factor explains 48% of the overall variance.

Table 8.15 Factor analysis of human resources culture style responses

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .78271 Bartlett Test of Sphericity = 175.43516, Significance = .0000.	
Attributes	Factor 1
Managers taking performance evaluation seriously	.73080
Careful selection of new employees	.64152
Recognition of good performance by employees	.68835
Stimulation of creativity in employees	.68303
Thorough training of employees	.73159

Table 8.16 Variable communalities and factor eigenvalues for human resources orientation culture-style responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Managers taking performance evaluation seriously	.53407	1	2.42119	48.4
Careful selection of new employees	.41155			
Recognition of good performance by employees	.51382			
Stimulation of creativity in employees	.56653			
Thorough training of employees	.53522			

The results of the factor analysis indicate that all the attributes of the human resources culture style load on to one factor which is consistent with the human resources culture style derived by *Wilderom and van den Berg (1997)*.

(d) Inter group culture style

Tables 8.17 and 8.18 report the results of the factor analysis on the intergroup culture style. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .6785 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As indicated in table 8.17, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *empowerment* culture style. Table 8.18 shows the eigenvalues and communalities, which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. Accordingly, it is possible to conclude that the factor structure is robust. The derived factor explains 55% of the overall variance.

Table 8.17 Factor analysis of Intergroup culture style responses

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .69954 Bartlett Test of Sphericity = 167.67895, Significance = .0000.	
Attributes	Factor 1
Exchange of information between departments	.76741
Useful co-operation between departments	.84069
Timely resolution of conflicts between departments	.69736
Useful meetings between heads of departments	.65366

Table 8.18 Variable communalities and factor eigenvalues for the intergroup culture-style responses

Attributes	Communality	Factor	Eigenvalue	% of var.
Exchange of information between departments	.58891	1	2.20925	55.2
Useful co-operation between departments	.70676			
Timely resolution of conflicts between departments	.58631			
Useful meetings between heads of departments	.42727			

The results of the factor analysis indicate that all the attributes of the intergroup style load onto one factor. This finding is consistent with the intergroup culture style derived by *Wilderom and van den Berg (1997)*.

(e) Improvement culture style

Tables 8.19 and 8.20 report the results of the factor analysis on the improvement culture style. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .6785 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.19, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicates that the data is highly suitable for factor analysis. Table 8.20 shows the

eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 53% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.19 Factor analysis of improvement culture style responses

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .71112 Bartlett Test of Sphericity = 138.93902, Significance = .0000.	
Attributes	Factor 1
Talking about mistakes in order to learn from them	.76571
Quick implementation of sound proposals for change	.68941
Initiatives taken by employees to improve the way in which the work is done	.75796
Efforts contributing to exceptional performance of the firm	.70776

Table 8.20 Variable communalities and factor eigenvalues for the improvement orientation culture-style responses

Attributes	Communality	Factor	Eigenvalue	% of var
Talking about mistakes in order to learn from them	.58632	1	2.13704	53.4
Quick implementation of sound proposals for change	.47528			
Initiatives taken by employees to improve the way in which the work is done	.57451			
Efforts contributing to exceptional performance of the firm	.50093			

The results of the factor analysis indicate that all the attributes of the improvement orientation style load onto one factor. This finding is consistent with the improvement culture style derived by *Wilderom and van den Berg (1997)*.

8.2.1 Organisational culture - discussion

The attributes of the dimensions of organisational culture derived by *Wilderom and van den Berg* (1997) are factor analysed and confirmed in respect of this sample. The results indicate that each style has a good level of internal consistency reliability. Each of the attributes indicates a high factor loading in excess of 0.6. The majority of the variables have high communalities (50% or greater), implying that the factor structure explains the majority of the variance in the remaining variables. In addition, evidence from the eigenvalues shows that a considerable proportion of the overall variance is explained by the factor in each style. Accordingly, it is reasonable to conclude that the dimensions derived cover the concept of organisational culture adequately in manufacturing SMEs.

8.3 Strategic planning

This section focuses on the characteristics of strategic planning and relates to questions 17 to 23 in the questionnaire. The specific strategic planning characteristics are taken from a tested construct obtained from *Kargar and Parnell* (1996) and based on a five point Likert-type scale ranging from *no emphasis (=1)* to *a great emphasis (=5)*. Each of the characteristics and their attributes are confirmed by the exploratory interviews and supported by the literature review. Tables 8.21, 8.23, 8.25, 8.27, 8.29, 8.31 and 8.33 report the results of factor analysis on responses to questions 17-23. Communalities and eigenvalues are shown in tables 8.22, 8.24, 8.26, 8.28, 8.30, 8.32 and 8.34.

(a) Internal orientation

Tables 8.21 and 8.22 report the results of the factor analysis on the internal orientation of the firm. In the questionnaire, question 17 is entitled 'Attention to Product Delivery' rather than internal orientation as the exploratory group interviews felt that this was a more meaningful title to SMEs. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .6465 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.21, the Bartlett test and the Kaiser-Meyer-Olkin model

produce significant results which indicate that the data is highly suitable for factor analysis. Table 8.22 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The two factors explain 54% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.21 Factor analysis of internal orientation

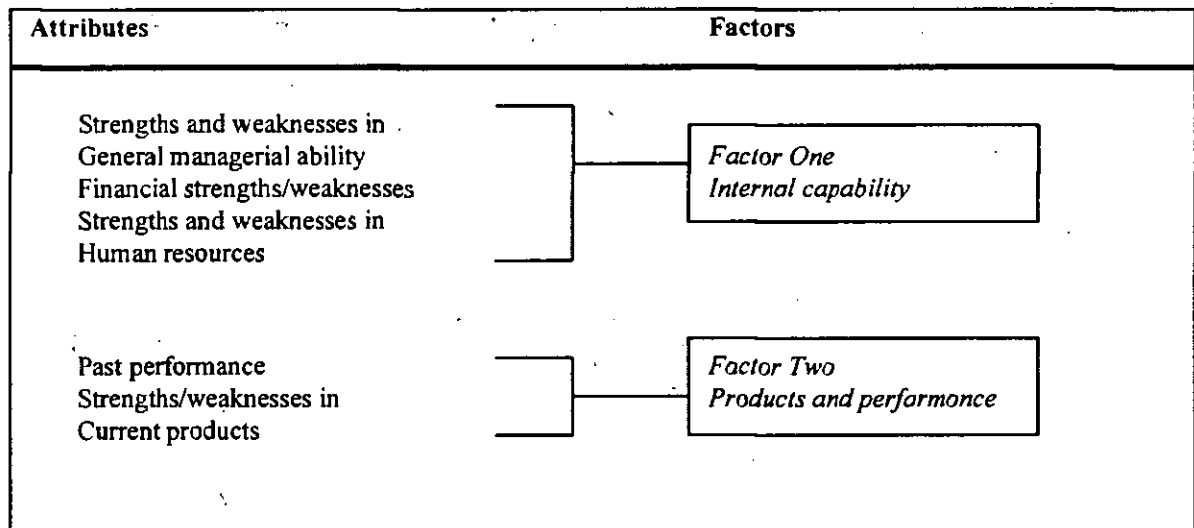
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .69118 Bartlett Test of Sphericity = 252.96139, Significance = .0000. VARIMAX converged in 3 iterations.		
Attributes	Factor 1	Factor 2
Diagnostic assessment of past performance	.48778	.37801
Past performance	-.06995	.75899
Strengths and weaknesses in general managerial ability	.81085	.22752
Financial strengths/weaknesses	.68303	.17728
Strengths and weaknesses in human resources	.80786	-.14135
Strengths/weaknesses in marketing	.37855	.55170
Strengths/weaknesses in current products	.08878	.62880

Table 8.22 Variable communalities and factor eigenvalues for internal orientation

Attributes	Communality	Factor	Eigenvalue	% of var.
Diagnostic assessment of past performance	.56642	1	2.58474	36.9
Past performance	.58097	2	1.19341	17.0
			<u>Total variance</u>	<u>53.9</u>
Strengths and weaknesses in general managerial ability	.70925			
Financial strengths/weaknesses	.59796			
Strengths and weaknesses in human resources	.67262			
Strengths/weaknesses in marketing	.44767			
Strengths and weaknesses in current products	.50327			

An analysis of the internal orientation characteristic of strategic planning indicates that the attributes load on to two factors as shown in figure 8.5. These factors can be described as *internal capability* and *products and performance*. The factors are represented pictorially in figure 8.5.

Figure 8.5 The results of factor analysis on the attributes of internal orientation



The results indicate that the strongest component of the perception of *internal capability* by managing directors relates to the attributes of factor one (36.9% of the variance). This is not surprising as it could be argued that these attributes typify internal orientation as outlined in section 3.3.2. This analysis is consistent with the internal orientation characteristic derived by *Kargar and Parnell (1996)*

The second factor relates to *products and performance* and accounts for 17% of the variance. The two new variables (*internal capability* and *products and performance*) are added to the working data set.

(b) External orientation

Tables 8.23 and 8.24 report the results of the factor analysis on the external orientation characteristic of strategic planning. In the questionnaire, question 18 is entitled 'Attention to Market Place/Customer Requirements' rather than external orientation as the exploratory interviews indicated that it was a more meaningful title to SMEs. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .7379 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.23, the Bartlett test and the Kaiser-Meyer-Olkin model produces significant results which indicates that the data is highly suitable for factor analysis. The factor analysis confirms the *external orientation* characteristic of strategic planning. Table 8.24 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 59% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.23 Factor analysis of external orientation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .71161 Bartlett Test of Sphericity = 84.10435, Significance = .0000.	
Attributes	Factor 1
Analysis of current competitive position and trends	.67514
Customer trends	.61417
General economic and business conditions	.66061
Regulatory and Government issues	.60498
Technological trends and capabilities	.61394

Table 8.24 Variable communalities and factor eigenvalues for external orientation

Variable	Commuality	Factor	Eigenvalue	% of var.
Analysis of current competitive position and trends	.65581	1	2.94102	58.8
Customer trends	.62967			
General economic and business conditions	.63640			
Regulatory and Government issues	.64221			
Technological trends and capabilities	.67690			

The results of the factor analysis indicate that all the attributes of the external orientation characteristic of strategic planning load on to one factor. This is consistent with the external orientation characteristic derived by *Kargar and Parnell (1996)*.

(c) Departmental co-operation

Tables 8.25 and 8.26 report the results of the factor analysis on the departmental co-operation characteristic of strategic planning. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type). The alpha score of .6785 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.25 there is a high degree of internal consistency reliability. The Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *departmental co-operation* characteristic of strategic planning. Table 8.26 shows the eigenvalues and communalities which indicate that there is good evidence for the strength of the structure underlying the individual variables. All the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 72% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.25 Factor analysis of departmental co-operation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .79853 Bartlett Test of Sphericity = 392.94043, Significance = .0000.	
Attributes	Factor 1
Efforts to achieve functional agreement	.87605
Functional co-ordination	.88184
Understanding of all functions by employees	.79560
Cross functional support	.84634

Table 8.26 Variable communalities and factor eigenvalues for departmental co-operation

Attributes	Communality	Factor	Eigenvalue	% of var.
Efforts to achieve functional agreement	.76746	1	2.89436	72.4
Functional co-ordination	.77764			
Understanding of all functions by employees	.63298			
Cross functional support	.71628			

The results of the factor analysis indicate that all the attributes of the departmental co-operation characteristic of strategic planning load on to one factor. This finding is consistent with the departmental co-operation characteristic of strategic planning derived by *Kargar and Parnell (1996)*.

(d) Resources for strategy

Tables 8.27 and 8.28 report the results of the factor analysis on the resources for strategy characteristic of strategic planning. In the questionnaire, question 20 is entitled 'Employee Involvement' rather than resources for strategy as the exploratory focus group felt that that it is a more meaningful title to SMEs. The alpha score of .7705 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.30, the Bartlett test and the Kaiser-Meyer-Olkin model produce highly significant results which indicate that the data is

highly suitable for factor analysis. The factor analysis generates two distinct factors *resources for strategy* and *management time*. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type).

Table 8.28 shows the eigenvalues and communalities which indicate that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. Further evidence from the eigenvalues indicates that the two factors explain 54% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.27 Factor analysis of resources for strategy

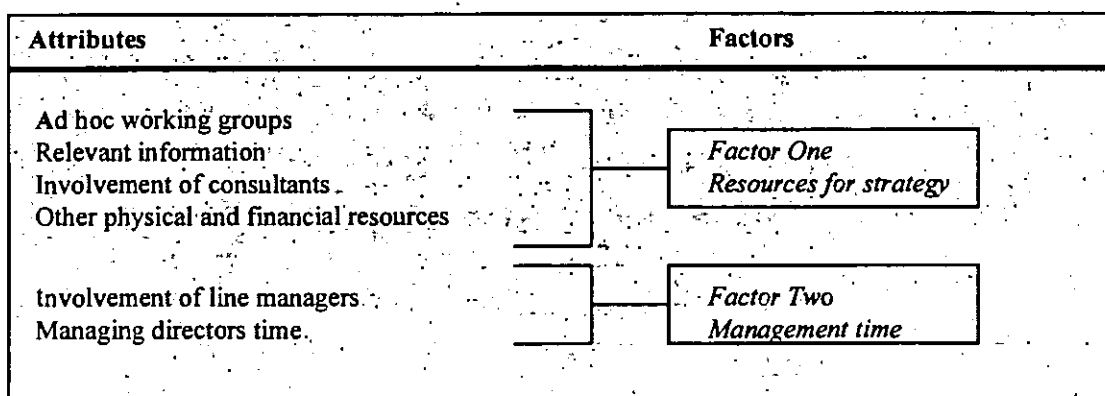
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .67398 Bartlett Test of Sphericity = 117.59077, Significance = .0000. VARIMAX converged in 3 iterations		
Attributes	Factor 1	Factor 2
Ad hoc working groups	.61820	.03668
Relevant information	.60331	.35436
Involvement of consultants	.64246	-.14480
Involvement of line managers	.23789	.74187
Managing directors' time	-.11997	.80848
Other physical and financial resources	.77569	.15658

Table 8.28 Variable communalities and factor eigenvalues for resources for strategy

Variable	Communality	Factor	Eigenvalue	% of var.
Ad hoc working groups	.38352	1	2.01679	33.6
Relevant information	.58955	2	<u>1.19120</u>	<u>19.9</u>
			Total variance	53.5
Involvement of consultants	.43372			
Involvement of line managers	.60696			
Managing directors' time	.66803			
Other physical and financial resources	.62622			

An analysis of the *resources for strategy* characteristic of strategic planning indicates that the attributes load on to two factors which can be described as *resources for strategy* and *management time*. The results indicate that the strongest component of the characteristic relates to the attributes of factor one, which comprises all the attributes except the attributes relating to the managing directors and line manager involvement. The results are shown pictorially in figure 8.6.

Figure 8.6 The results of factor analysis on the attributes of resources for strategy



Two new variables representing *resources for strategy* and *management time* are added to the working data set.

(e) Use of analytical techniques

Tables 8.29 and 8.30 report the results of the factor analysis on the use of analytical techniques characteristic of strategic planning. In the questionnaire, question 21 is entitled 'Use of Structured/Analytical Approach' rather than analytical techniques as the exploratory focus group felt that it was a more meaningful title to SMEs. The alpha score of .8779 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2).

As shown in table 8.29, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicates that the data is highly suitable for factor analysis. The factor analysis confirms the *use of analytical techniques* characteristic of strategic planning. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type).

Table 8.30 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 68% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.29 Factor analysis - use of analytical techniques

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .60276 Bartlett Test of Sphericity = 197.63622, Significance = .0000.	
Attributes	Factor
Ability to use techniques	.89707
Willingness to seek outside assistance	.64960
Use of analytical techniques	.89641

Table 8.30 Variable communalities and factor eigenvalues for the use of analytical techniques.

Attributes	Communality	Factor	Eigenvalue	% of var.
Ability to use techniques	.80473	1	2.03025	67.7
Willingness to seek outside assistance	.42198			
Use of analytical techniques	.80354			

The results of the factor analysis indicate that the attributes of the use of analytical techniques characteristic of strategic planning load on to one factor which is consistent with the derived analytical techniques characteristic by *Kargar and Parnell (1996)*.

(f) Staff creativity

Tables 8.31 and 8.32 report the results of the factor analysis on the staff creativity characteristic of strategic planning. The alpha score of .9000 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.31, the Bartlett test and the Kaiser-Meyer-Olkin model produce highly significant results which indicate that the data is highly suitable for factor

analysis. The factor analysis confirms the *staff creativity* characteristic of strategic planning. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type).

Table 8.32 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 52% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.31 Factor analysis - staff creativity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .79377; Bartlett Test of Sphericity = 520.83921, Significance = .0000.	
Attributes	Factor 1
Anticipating and avoiding barriers to implementation.	.73552
Ability to cope with surprises/crises/threats	.73272
Evaluation of alternatives	.69054
Capacity to generate new ideas	.71117
Identify key problems	.64844
Ability to identify new opportunities	.72505
Flexibility to adapt to unanticipated changes	.77464

Table 8.32 Variable communalities and factor eigenvalues for staff creativity

Attributes	Communality	Factor	Eigenvalue	% of var.
Anticipating and avoiding barriers to implementation	.54099	1	3.60671	51.5
Ability to cope with surprises/crises/threats	.53688			
Evaluation of alternative strategies	.47685			
Capacity to generate new ideas	.50576			
Identify key problems	.42047			
Ability to identify new opportunities	.52569			
Flexibility to adapt to unanticipated changes	.60006			

The results of the factor analysis indicates that all the attributes of the *staff creativity* characteristic of strategic planning load on to one factor which is consistent with the derived staff creativity characteristic by *Kargar and Parnell (1996)*.

(g) Strategy as a control mechanism

Tables 8.33 and 8.34 report the results of the factor analysis on the strategy as a control mechanism characteristic of strategic planning. The alpha score of .8639 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.33, the Bartlett test and the Kaiser-Meyer-Olkin model produce highly significant results which indicates that the data is highly suitable for factor analysis. The factor analysis confirms the *strategy as a control mechanism* characteristic of strategic planning. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type).

Table 8.34 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 51% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.33 Factor analysis - strategy as a control mechanism

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .82531 Bartlett Test of Sphericity = 485.54837, Significance = .0000.	
Attributes	Factor 1
Value as a control mechanism	.60986
Ability to communicate management thinking down the line	.71715
Communicate staff thinking up the line	.69043
A control technique for monitoring performance	.75326
A mechanism for revising current strategy	.72026
A mechanism for managerial motivation	.74774
A mechanism for integrating functions	.75610

Table 8.34 Variable communalities and factor eigenvalues for strategy a control mechanism

Attributes	Communality	Factor	Eigenvalue	% var.
Value as a control mechanism	.37193	1	3.57990	51.1
Ability to communicate management thinking down the line	.51430			
Communicate staff thinking up the line	.47670			
A control technique for monitoring performance	.56740			
A mechanism for revising current strategy	.51878			
A mechanism for managerial motivation	.55911			
A mechanism for integrating functions	.57168			

The results of the factor analysis indicate that the attributes of the *strategy as a control mechanism* characteristic of strategic planning load on to one factor, which is consistent with the derived strategy as a control mechanism characteristic by *Kargar and Parnell* (1996).

8.3.1 Strategic planning - concluding remarks

The analysis of the responses indicates nine distinct strategic planning characteristics. The attributes of each strategic planning characteristic derived by *Kargar and Parnell*

(1996) with the exception of '*internal capability orientation*' and '*resources for strategy*', load on to one factor. However, in these exceptions it is evident from the variable communalities and from the eigenvalues, that the principal original characteristic is a much stronger factor than the other 'factors' emerging. Tables 8.22, 8.24, 8.26, 8.28, 8.29, 8.31 and 8.33 confirm the satisfactory structure underpinning the individual variables. The majority of the variables have high communalities (50% or more), which indicates that the factor structure explains the majority of the variance in the remaining variables in each characteristic.

On reflection, all the attributes validated during the pilot stage are confirmed by the final results (all attributes have high factor loadings). The high Bartlett Test of Sphericity and Kaiser-Meyer-Olkin model statistics show that there is a satisfactory level of reliability and validity for each variable. Accordingly, it is reasonable to conclude that the characteristics of strategic planning derived cover strategic planning adequately in manufacturing SMEs.

8.4 Performance measurement

Organisational performance is measured by five measures. Four of the measures are based on the concept of a balanced score card developed by *Kaplan and Norton (1992)* and the remaining characteristic relating to organisational capability is based on the exploratory group discussions. The performance measures were modified by the exploratory interviews and each of the resultant measures confirmed by the literature review. The final performance measures derived are:

- (a) financial performance
- (b) customer orientation
- (c) organisational effectiveness
- (d) learning and growth
- (e) organisational capability.

An overview of each of these dimensions is given in section 6.4. Organisational capability is added as an additional performance measure as it can be classified as both a performance measure and a driver of performance (see section 6.5). Organisation

capability is measured using attributes to determine the capability to design, provide, promote and deliver the product as well as the capability to provide after sales service. Accordingly, questions 16, 26,27,28 and 29 of the questionnaire relate to performance measures.

(a) Financial performance

The opinions of the SME Managing Directors or Chief Executives are used to assess the degree to which the implementation of the strategic decision impact on the overall financial performance of the firm. Data reduction on this measure is not appropriate at this stage as this dimension contains only one attribute.

(b) Customer orientation

Tables 8.35 and 8.36 report the results of the factor analysis on the customer orientation dimension of organisational performance. The alpha score of .8725 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.35, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *customer orientation* factor. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type).

Table 8.36 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 64% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.35 Factor analysis - customer orientation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .61568 Bartlett Test of Sphericity = 126.07847, Significance = .0000.	
Attributes	Factor 1
Customer satisfaction	.79168
Customer retention	.87385
Market share	.72697

Table 8.36 Variable communalities and factor eigenvalues for customer orientation

Attributes	Communality	Factor	Eigenvalue	% of var.
Customer satisfaction	.62676	1	1.91887	64.0
Customer retention	.76362			
Market share	.52848			

(e) Organisational effectiveness

Tables 8.37 and 8.38 report the results of the factor analysis on the organisational effectiveness characteristic of organisational performance. The alpha score of .7930 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.37, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis produces two distinct factors, *organisational effectiveness* and *short term needs*. All the variables have high factor loadings in excess of 0.6 (highlighted in bold type).

Table 8.38 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The two

factors explain 62% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.37 Factor analysis - organisational effectiveness

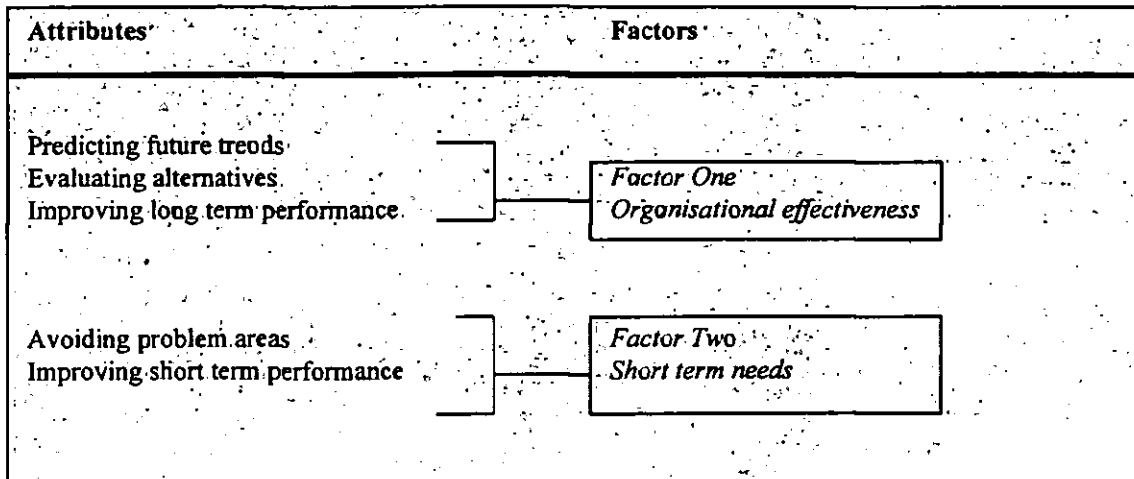
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .60981		
Bartlett Test of Sphericity = 134.73714, Significance = .0000.		
VARIMAX converged in 3 iterations		
Attributes	Factor 1	Factor 2
Predicting future trends	.89256	-.05456
Evaluating alternatives	.68491	.22111
Avoiding problem areas	.14313	.78051
Improving short term performance	.12766	.80588
Improving long term performance	.60494	.32511

Table 8.38 Variable communalities and factor eigenvalues for organisational effectiveness

Attributes	Communality	Factor	Eigenvalue	% of var.
Predicting future trends	.79964	1	2.05066	41.0
Evaluating alternatives	.51799	2	1.01025	20.2
Avoiding problem areas	.62968		<u>Total Variance</u>	<u>62.2%</u>
Improving short term performance	.66574			
Improving long term performance	.44786			

The results of the factor analysis indicate that the attributes of organisational effectiveness as a characteristic of performance measurement load on to two factors, which are shown pictorially in figure 8.7.

Figure 8.7 The results of factor analysis on the attributes of organisational effectiveness



Two new variables representing *organisational effectiveness* and *short term needs* are added to the working data set.

(d) Learning and growth

Tables 8.39 and 8.40 report the results of the factor analysis on the learning and growth dimension of organisational performance. The alpha score of .8164 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.39, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms the *learning and growth* measure of performance. Table 8.40 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. All the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The derived factor explains 67% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.39 Factor analysis - learning and growth

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .50000	
Bartlett Test of Sphericity = 23.83677, Significance = .0000.	
Attributes	Factor 1
Manufacturing learning	.81918
Introduction of new products	.81918

Table 8.40 Variable communalities and factor eigenvalues for learning and growth

Attributes	Communality	Factor	Eigenvalue	% of var.
Manufacturing learning	.67105	1	1.34211	67.1
Introduction of new products	.67105			

The results of the factor analysis indicate that the attributes of *learning and growth* as a measure of performance load on to one factor.

(e) Organisational capability

Tables 8.41 and 8.42 report the results of the factor analysis on the organisational capability measure of performance. The alpha score of .7094 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). As shown in table 8.41, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicates that the data is highly suitable for factor analysis. The factor analysis confirms three distinct factors, *meeting customer needs, quality goods on time and after sales service*.

Table 8.42 shows the eigenvalues and communalities which indicate that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The three factors explain 55% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.41 Factor analysis - organisational capability

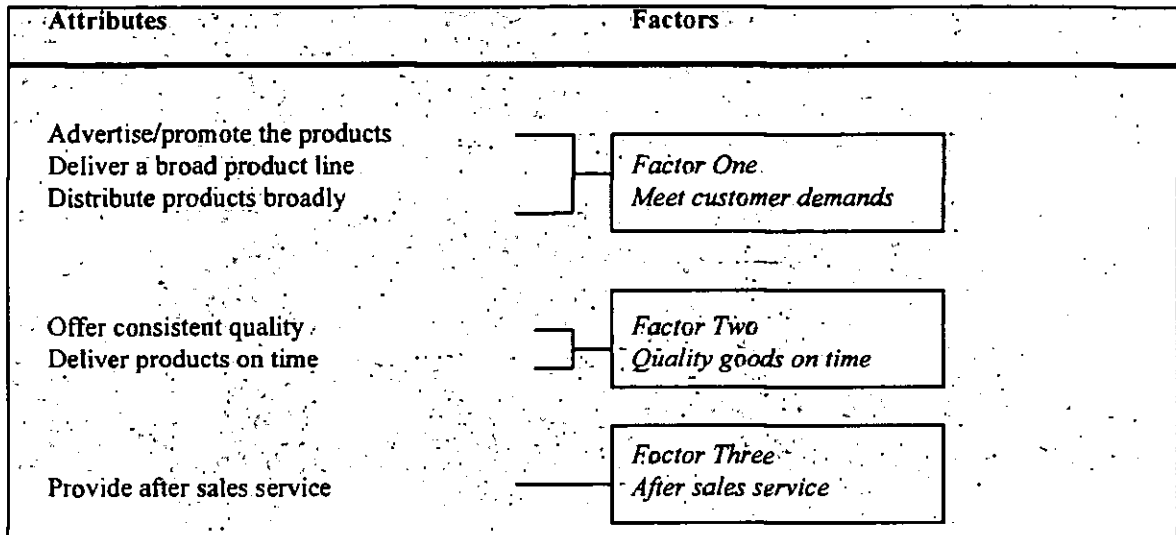
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .67479 Bartlett Test of Sphericity = 498.79869, Significance = .0000. VARIMAX converged in 6 iterations			
Capability to :-	Factor 1	Factor 2	Factor 3
Advertise/promote the products	.75256	.07661	.35170
Provide after sales service	.35938	.15782	.69913
Deliver a broad product line	.74528	.14848	-.14892
Make rapid design changes	.18275	.39283	.10397
Distribute products broadly	.81987	.16641	.09385
Provide high performance products	-.05112	.55945	.55682
Compete on price	.03672	.22081	.56914
Deliver products quickly	.28302	.59954	-.24408
Offer consistent quality	.06068	.73848	-.02125
Respond to swings in volume	.48873	.25778	.45169
Deliver products on time	.11506	.81418	-.13115

Table 8.42 Variable communalities and factor eigenvalues for organisational capability

Attributes	Communality	Factor	Eigenvalue	% of var.
Advertise/promote the products	.69590	1	3.11584	28.3
Provide after sales service	.64285	2	1.63204	14.8
Deliver a broad product line	.59966	3	<u>1.34869</u>	<u>12.3</u>
Make rapid design changes	.19852		Total Variance	55.3%
Distribute products broadly	.70869			
Provide high performance products	.62566			
Compete on price	.37403			
Deliver products quickly	.49912			
Offer consistent quality	.54948			
Respond to swings in volume	.50933			
Deliver products on time	.69332			

The results of the factor analysis indicate that the attributes of organisational capability as a characteristic of performance measurement load on to three factors as shown in figure 8.8.

Figure 8.8 The results of factor analysis on the attributes of organisational capability



Accordingly, three new variables representing the capability to *meet customer demands*, provide *quality goods on time* and *provide after sales service* are added to the working data set.

8.4.1 Performance measurement - discussion

Each of the five previously tested performance measurement characteristics - *financial performance*, *customer orientation*, *organisational effectiveness*, *learning/growth* and *organisational capability* are factor analysed. The analysis indicates that organisational effectiveness factors load on to two separate factors (*organisational effectiveness and short terms needs*), while *organisational capability* yields three separate factors (*meeting customer demands*, providing *quality goods on time* and providing *after sales service*).

All the attributes were validated during the pilot stage. Only one attribute is not supported by the final results. This attribute relates to the capability to make rapid design changes and may be explained by the inclusion of broadly similar attributes under the learning and growth dimension. Accordingly, it is reasonable to conclude that the measures of

performance derived cover the concept of organisational performance adequately in manufacturing SMEs.

8.5 Contingency factors

This section examines a number of contingency factors that are perceived as influencing the deployment of strategic planning. These are:

- (a) barriers to strategy implementation
- (b) the perceived operating environment
- (c) the formality of strategy in SMEs.

This section will focus on data reduction in relation to both the barriers to strategy implementation and the perceived operating environment. The formality of strategy in SMEs contains only one question and will be examined further in chapter 9.

(a) Strategic planning implementation barriers

Question 24 outlines eight barriers to the effective deployment of strategy and seeks the views of SME managing directors on their importance. The alpha score of .8543 is higher than that suggested by *Jones and James* (1979) and indicates a high degree of internal reliability (see section 7.4.2). Tables 8.43 and 8.44 report the results of the factor analysis on the strategic planning implementation barriers. As shown in table 8.43, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms two distinct factors, *internal barriers and external barriers*.

Table 8.44 shows the eigenvalues and communalities which indicate that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the remaining variables. The two factors explain 63% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.43 Factor analysis - strategy implementation barriers

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .83239 Bartlett Test of Sphericity = 643.26346; Significance = .0000 Varimax converged in 3 iterations		
Attributes	Factor 1	Factor 2
Communication was inadequate	.85544	.21956
Crises distracted attention from implementation	.49116	.54460
Implementation took longer than anticipated	.22873	.79292
Employees capabilities were not enough	.75140	.21340
Overall goals of strategy were not well enough understood by staff	.78462	.19894
Co-ordination of implementation was not effective enough	.76879	.24635
Unanticipated problems arose	.30820	.76389
External factors impacted in implementation	.08679	.63182

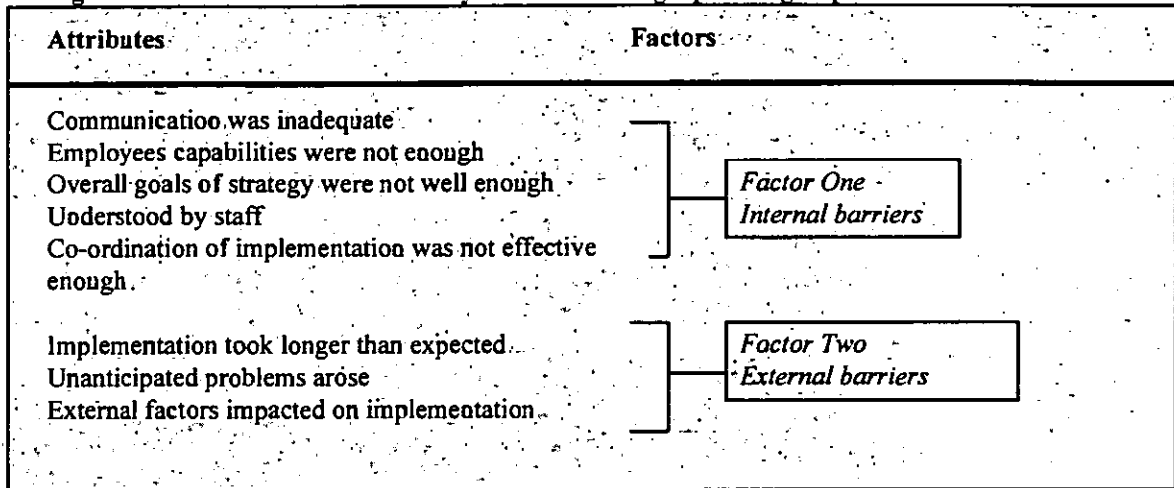
Table 8.44 Variable communalities and factor eigenvalues -strategy implementation barriers

Attributes	Communality	Factor	Eigenvalue	% of var.
Communication was inadequate	.68104	1	3.98775	49.8
		2	1.01341	12.7
		Total		62.5
Crises distracted attention from implementation	.67852			
Implementation took longer than anticipated	.65172			
Employees capabilities were not enough	.53783			
Overall goals of strategy were not well enough understood by staff	.61014			
Co-ordination of implementation was not effective enough	.40673			
Unanticipated problems arose	.65521			
External factors impacted in implementation	.77998			

The results of the factor analysis can be categorised as two main factors, *internal barriers* and *external barriers*. Accordingly, variables representing *internal* and *external*

barriers are added to the working data set. The results are shown graphically in figure 8.9.

Figure 8.9 The results of factor analysis on the strategic planning implementation barriers



(b) The operating environment

Section 2 of the survey instrument refers to the operating environment. This section contains question 10 which is divided into 10 statements that describe the firm's operating environment. The alpha score of .6318 is higher than that suggested by *Jones and James (1979)* and indicates a high degree of internal reliability (see section 7.4.2). The attributes of the perceived 'operating environment' are subjected to factor analysis to establish if the number of attributes can be reduced to a smaller number of principal attributes. The results are reported in tables 8.45 and 8.46. As shown in table 8.45, the Bartlett test and the Kaiser-Meyer-Olkin model produce significant results which indicate that the data is highly suitable for factor analysis. The factor analysis confirms two distinct factors, *dynamic and changing environment*, and *market threats*. The attribute *stable environment/little threat* is interpreted as an unstable environment arising from its factor loading of -.086590. Table 8.46 shows the eigenvalues and communalities which indicates that there is good evidence for the strength of the structure underlying the individual variables. The majority of the variables have high communalities (50% or more), implying that the factor structure explains the majority of the variance in the

remaining variables. The two factors explain 51% of the overall variance. Accordingly, it is possible to conclude that the factor structure is robust.

Table 8.45 Factor analysis on the attributes of the operating environment

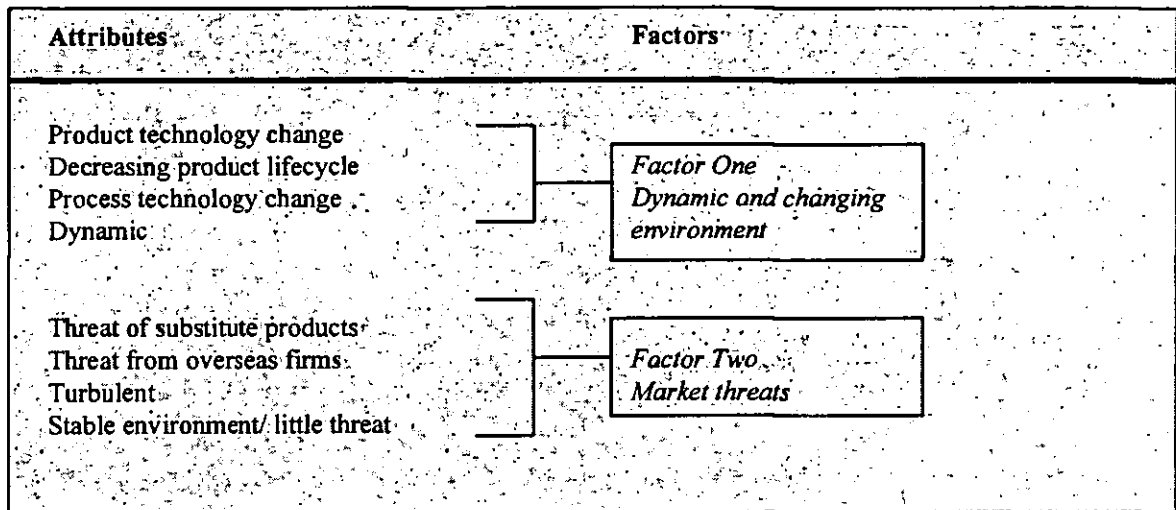
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .71010 Bartlett Test of Sphericity = 468.20738, Significance = .0000. Varimax converged in 3 iterations		
Attributes	Factor 1	Factor 2
Product technology change	.79826	.19787
Decreasing product life cycle	.63907	.21000
Threat of substitute products	.27853	.63473
Threat from overseas firms	.18064	.63988
Process technology change	.76815	-.00711
Changing regulatory environment	.52098	.15063
Dynamic	.62530	-.01390
Threat of new firms	.11268	.43294
Stable environment/ little threat	.09554	-.86590
Turbulent	.02066	.70700

Table 8.46 Variable communalities and factor eigenvalues - operating environment

Attributes	Communality	Factor	Eigenvalue	% of var.
Product technology change	.67638	1	3.05485	33.5
		2	1.77592	17.8
Decreasing product life cycle	.49713	Total		51.3
Threat of substitute products	.48046			
Threat from overseas firms	.44208			
Process technology change	.59011			
Changing regulatory environment	.29411			
Dynamic	.39119			
Threat of new firms	.20013			
Stable environment/ little threat	.75891			
Turbulent	.50028			

The results are shown graphically in figure 8.10.

Figure 8.10 The results of factor analysis on the attributes of the operating environment



8.6 Concluding remarks

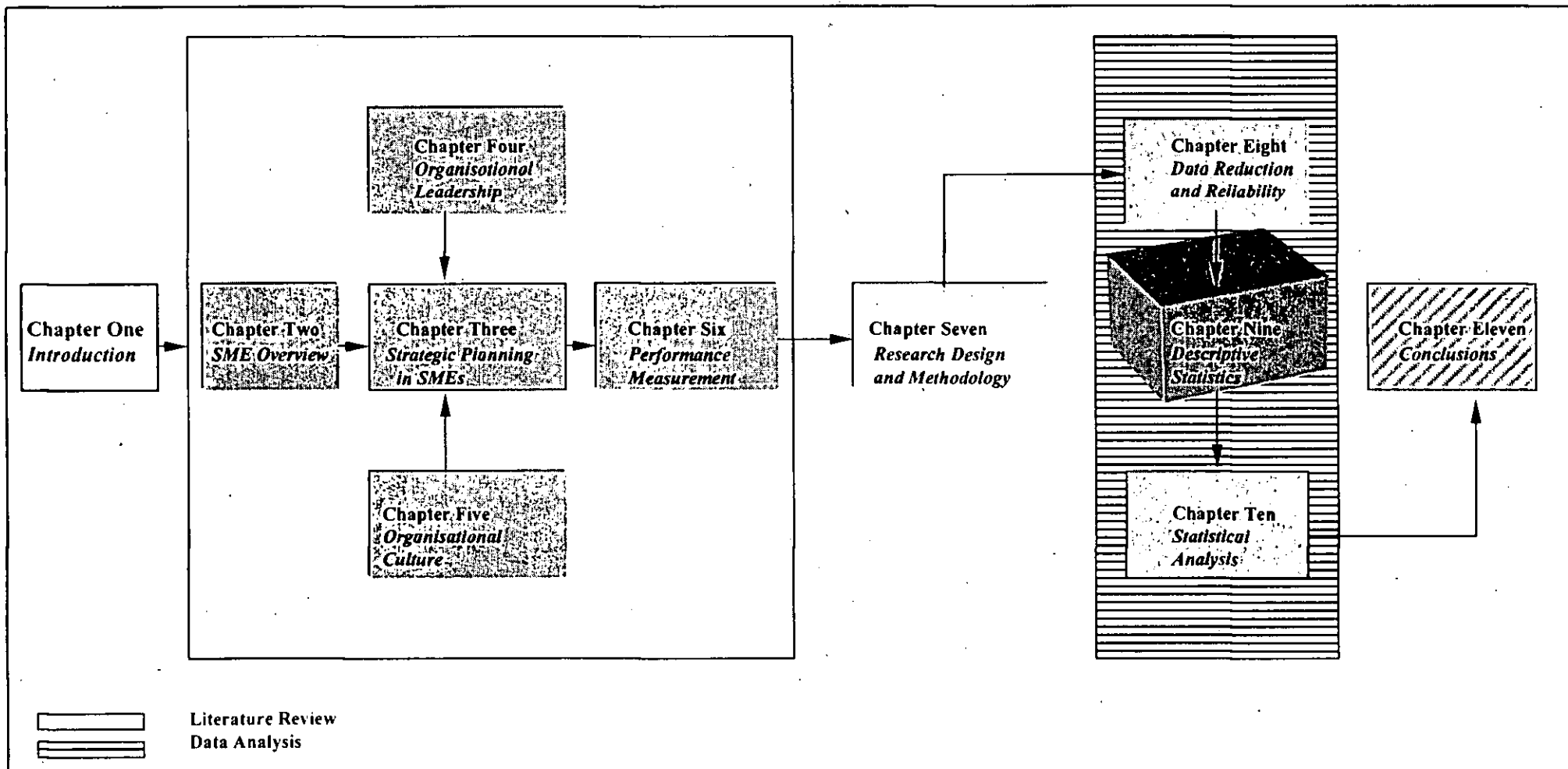
This chapter focuses on data reduction and reliability. It also provides an overview of the characteristics of the various concepts. The results indicate that the survey instrument has a high degree of internal reliability. In all cases, the alpha scores are in excess of .6000 which is highly satisfactory (see section 7.4.2). In addition, both the Bartlett Test of Sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy produce significant results, which indicate that the data is highly suitable for factor analysis.

Established constructs tested in small firms in the banking sector in two separate studies conducted in the United States and Europe respectively are used as the basis for the constructs. The analysis indicates that the majority of the factors are confirmed in this study. However, the factors differ in varying degrees between banking and manufacturing as shown as depicted in table 8.47.

Table 8.47 A summary of the concepts and their derived factors

Concept	Original dimension/characteristic	Derived dimensions/characteristics
Leadership	Transactional	Transactional - rewards Maintenance of standards Performance focused Own interests
	Transformational	Competence Creativity Vision Mistakes focused
	Human resources	Employee focused Competing for the future
	Laissez faire	Reactive Passive
Culture	Empowerment	Empowerment
	External orientation	External orientation
	Human resources	Human resources
	Intergroup orientation	Intergroup orientation
	Improvement orientation	Improvement orientation
Strategic planning process	Internal orientation	Internal capability Products and performance
	External orientation	External orientation
	Departmental co-operation	Departmental co-operation
	Resources for strategy	Resources for strategy Management time
	Use of analytical techniques	Use of analytical techniques
	Staff creativity	Staff creativity
	Strategy as a control mechanism	Strategy as a control mechanism
Organisational performance	Financial performance	Financial performance
	Customer orientation	Customer orientation
	Organisational effectiveness	Organisational effectiveness Short term needs
	Learning and growth	Learning and growth
	Organisational capability	Meet customer demands Quality goods on time After sales service

**The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises
– Chapter Outline**



CHAPTER NINE : DESCRIPTIVE STATISTICS

9.0 Introduction

Descriptive statistics are frequently used in these types of studies. Descriptive statistics are defined by *Weiss and Hassett* (1993) as '*methods for organising and summarising information in a clear and effective way*'. Descriptive statistics include the construction of graphs, charts and tables as well as the calculation of various descriptive measures such as averages - *Weiss and Hassett* (1993.p.2). In this chapter, the main statistical tool used is the *mean* score which is defined as '*the sum of the data divided by the number of pieces of data*' - *Weiss and Hassett* (1993 p.70). The *mean* score is chosen as it takes into account every piece of data in a data set whereas the *median* and the *mode* focus on the middle value in an ordered list and the most frequent data value respectively. The independent variables are size (number of employees), the operating environment (dynamic or market focused), status (independent or subsidiary), standard industrial classification (electronics or engineering) and perceived market share (increased, decreased or static).

The chapter is structured in eight parts. It:

- examines the sample characteristics and contingency factors (section 9.1)
- presents an overview of the strategies deployed in SMEs over the past three years (section 9.2)
- briefly discusses the strategic orientation of the respondent firms (section 9.3)
- examines the impact of the contingency factors on leadership, culture and strategic planning process (sections 9.4, 9.5 and 9.6)
- considers the relationship between the degree of strategic planning formality and the barriers to strategic planning implementation and success (section 9.7)
- examines the impact of the contingency factors on organisational performance (section 9.8)

It is important to note that while a large number of tables analysing various sections of the data were derived, it is only possible to include the tables relevant to the main hypotheses in this chapter.

9.1 Sample characteristics and contingency factors

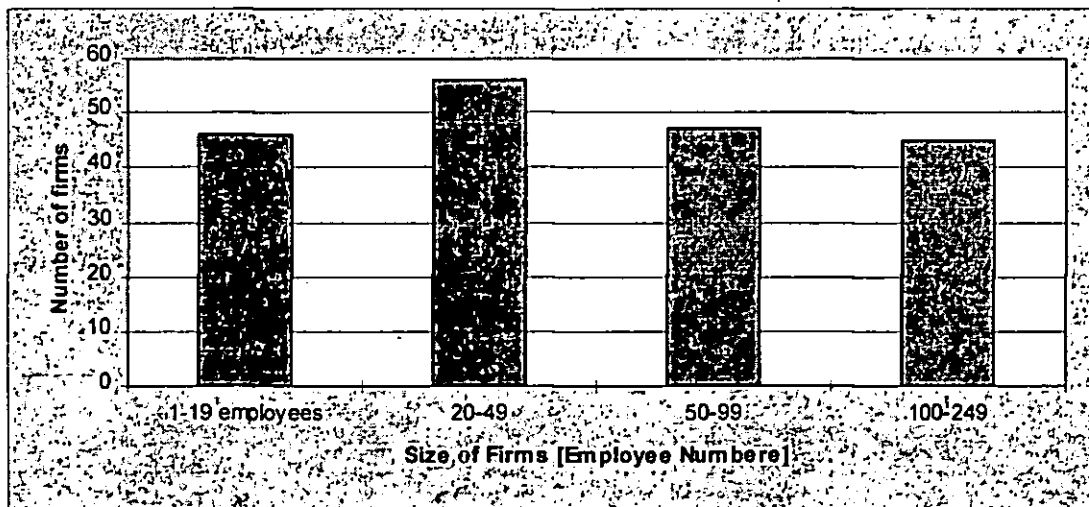
This section examines:

- the response rate and the size of respondent firms based on the number of employees (section 9.1.1)
- financial turnover of respondent firms (section 9.1.2)
- analysis of respondents according to industrial classification (section 9.1.3)
- market status of the respondent firms (section 9.1.4)
- product type as a percentage of total sales (section 9.1.5)
- ownership (section 9.1.6)
- age of respondent firms (section 9.1.7)
- age and gender of managing directors (section 9.1.8)
- analysis of the operating environment (section 9.1.9)

9.1.1 Response rate and size of respondent firms

The sample comprises 194 valid responses which represents a response rate of 27.5% (See section 7.3.) An analysis of the responses based on the number of employees in each SME is depicted in figure 9.1.

Figure 9.1 Number and size of respondent firms

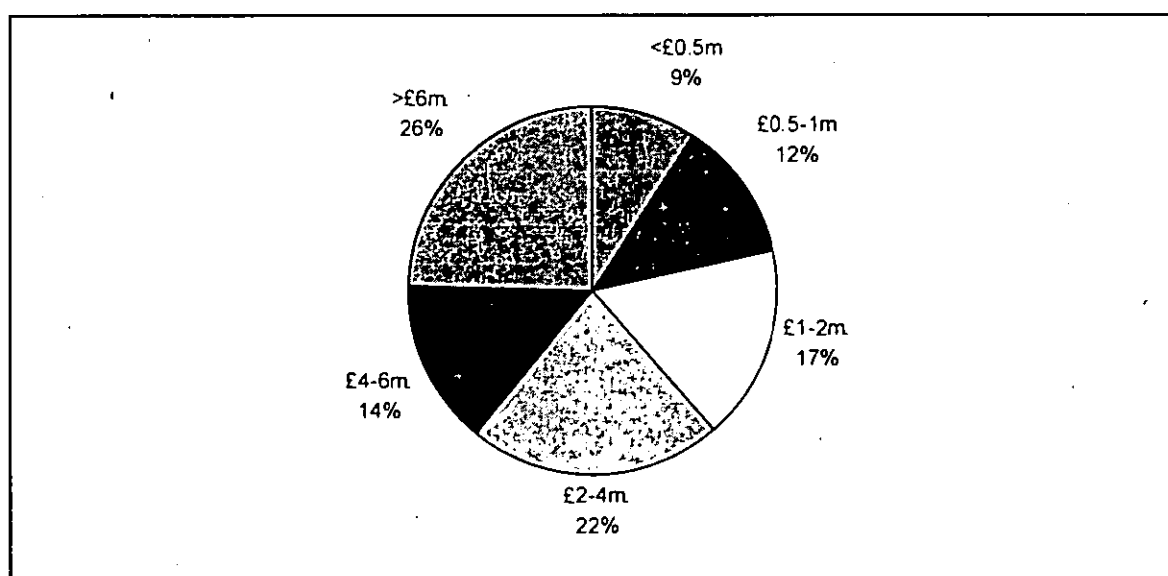


While the number of firms with 1-19 employees accounts for over 82% of all manufacturing firms in the UK (see section 2.2.3), the response rate for this category in this study is only 23.7%. It could be reasonably expected in a random sample, that a much higher sample of firms in this size bracket would respond. Smaller firms, however, are often constrained by resource restrictions in completing and returning questionnaires. This was confirmed by the follow up telephone calls when the Managing Directors of firms employing fewer than twenty employees, cited lack of time or resources as the reason for their non response. However, this did not result in a serious problem of bias in the data (see section 7.3.3). Figure 9.1 indicates that the majority of respondent firms are in the size categories employing between 20 and 100 employees (53%), despite being drawn from only 13% of the total manufacturing SMEs in the UK. This response rate can be interpreted as reflecting the greater capacity of these firms to respond, based on the likelihood that they have more advanced administrative systems and organisational methods than smaller firms. It is important to note that although the sample does not precisely mirror the population, there are nevertheless, enough cases in each size category to facilitate meaningful analysis.

9.1.2 Financial turnover of respondent firms

Figure 9.2 depicts the range of financial turnover for the respondent firms.

Figure 9.2 Financial turnover categories and % of firms in each category

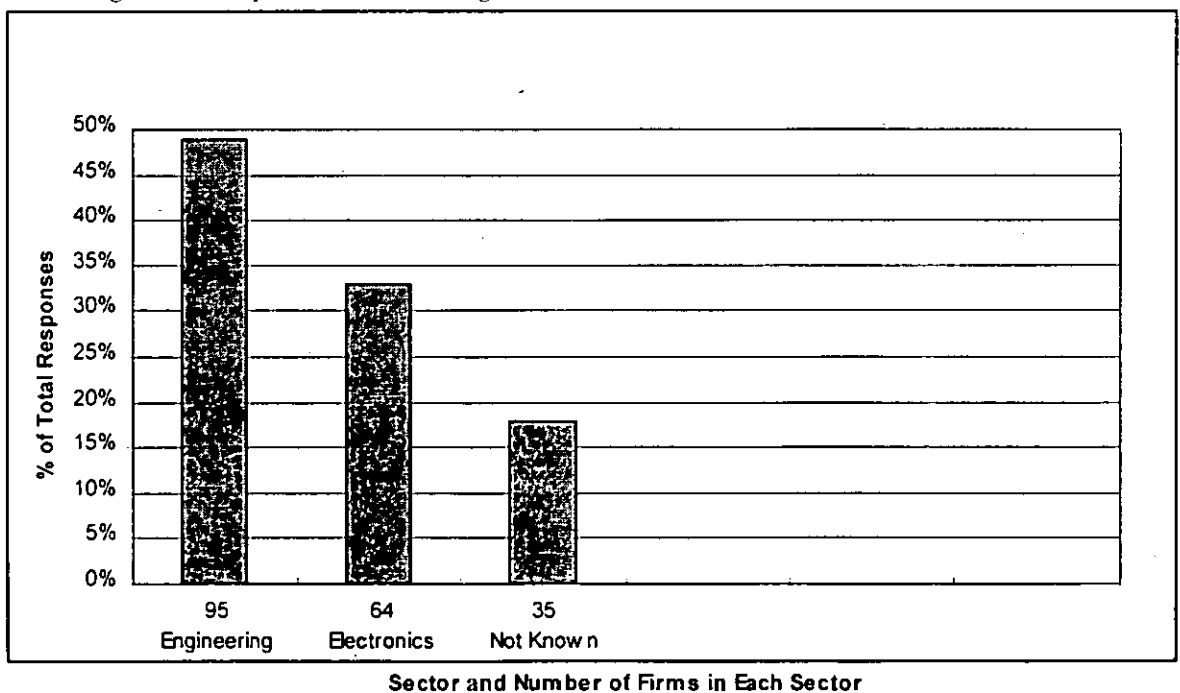


The analysis indicates that 79% of the respondent firms have a turnover in excess of £1 million per annum. The finding is not surprising as only firms established over five years are included in the survey.

9.1.3 Respondents by industrial classification

Respondents are categorised according to industrial classification (engineering or electronics). The rationale for this is to enable a comparison to be made between a traditional sector such as engineering, often making low-cost, undifferentiated products and a high technology sector making higher value-added products such as electronics. It could be argued that newer high technology firms have additional investment, new technology, higher management capability and more highly skilled employees, which influence the formulation and deployment of their strategic planning. As the original survey instrument does not contain questions relating to industrial classification or status, the responses are obtained by telephone from each organisation independently. It is not possible to classify 35 completed questionnaires returned anonymously. Figure 9.3 depicts the response rate according to industrial sector. Clearly, there are enough responses in each cell to facilitate a meaning analysis.

Figure 9.3 Response rate according to industrial sector



9.1.4 Perceived market status of respondent firms

Question 5 seeks information on the market status of the respondent firms based on whether they perceive their current market to be increasing, decreasing or remaining static. The analysis of the market status (percentage of total firms in each size category) is outlined in table 9.1.

Table 9.1 Market status of firms responding

Firm Size	Increased	Decreased	Remained Static	Total (%)
1-19	44%	17%	39%	100%
20-49	60%	13%	27%	100%
50-99	64%	17%	23%	100%
100-250	71%	9%	20%	100%
Number of firms and % of all Firms	108 55.7%	35 18.0%	51 26.3%	194 Firms 100%

The analysis indicates that over 55% of the SMEs surveyed perceive their market share has increased. However, the perceived market status differs according to firm size. For example, 71% of the firms in the 100-250 employee category perceive their market share has increased compared, with 44% of firms in the 1-19 size category. The analysis also indicates that a lower percentage of larger firms than smaller firms perceive a static market share. A possible explanation for this variance is the desire by a number of small organisations to remain at current production levels (see section 2.3).

9.1.5 Product type as a proportion of total sales

Question 4 seeks information on the value of exports as a proportion of total sales. The analysis indicates that only 17.5% of firms export over 50% of their products while 20% of firms are not involved in exporting any output. This suggests that SMEs are largely concerned with local markets. However, as local markets are increasingly targeted by competitors, it could be argued that a greater emphasis on innovation will be needed to compete in the future. A more detailed analysis of the responses to this question indicates

that firm size does not impact on the proportion of total sales exported. This finding is somewhat surprising as it is logical to assume that larger firms might be more export oriented. A chi-square test indicates that there is no association between the sector classification and the tendency to export ($\chi^2=20.40$, $df=13$, $p=.18568$).

Question 6 seeks information on the value of mature products as a percentage of the value of total sales. The results indicate that only 38% of firms rely on mature products for over 50% of their total sales; whereas 20% of firms rely on mature products for over 76% of their sales. A more detailed analysis shows that size is not a factor. A chi-square test indicates that there is no association between the sector classification and a reliance on mature products ($\chi^2=23.01$, $df.=24$, $p=.51892$).

Questions 7 and 8 seek information on the value of standard and customised products as a percentage of the value of total sales. In effect, question 7 is the other side of the coin to question 8. The analysis of the proportion of firms in each size category is shown in tables 9.2 and 9.3.

Table 9.2 Value of standard products as a % of total sales

Firm Size	% of Total Sales					Total
	0%	1-25%	26-50%	51-75%	>76%	
1-19	19%	21%	12%	14%	34%	100%
20-49	11%	23%	16%	25%	25%	100%
50-99	5%	35%	18%	14%	28%	100%
100-250	13%	17%	31%	18%	21%	100%

Table 9.3 Value of customised products as a % of total sales

Firm Size	% of Total Sales					Total
	0%	1-25%	26-50%	51-75%	>76%	
1-19	21%	40%	12%	5%	22%	100%
20-49	11%	23%	16%	15%	25%	100%
50-99	5%	35%	18%	14%	28%	100%
100-250	5%	34%	23%	8%	30%	100%

A chi-square test indicates that there is no association between the sector classification and a reliance on standard products ($\chi^2=20.22$, $df=26$, $p=.78116$) or a reliance on customised products ($\chi^2=19.58$, $df=25$, $p=.76825$). Whilst the literature indicates that many SMEs are capable of developing new products more effectively and rapidly than larger firms - *Acs and Preston (1997)*, table 9.2 indicates that firms employing fewer than 20 employees tend to rely on standard products to a significant extent, whereas larger firms (employing 100-250 employees) have a greater reliance on customised products. Less than a third of firms employing fewer than 20 employees rely on customised goods for the majority (over 50%) of their sales. This implies a reluctance on the part of smaller firms to change and move away from standard or mature products. This reluctance may result from a lack of awareness of customer expectations as suggested by *Neeley, Gregory and Platts (1995)*. This could be argued to be a missed opportunity by many SMEs as they fail to maximise their inherent advantages by moving away from standardised products. This calls into question the small organisations' contribution to innovation. On the other hand, it is not unusual for small firms to produce parts and components for larger firms, thus constraining their scope for innovation.

A chi-square test indicates that there is no association between ownership and a reliance on standard products ($\chi^2=24.11$, $df=15$, $p=.16323$) or a reliance on customised products ($\chi^2 =25.85$, $df=14$, $p=.12706$).

Question 9 refers to investment in research and development as a percentage of total sales. Table 9.4 summarises the responses.

Table 9.4 Value of R&D as a % of total sales

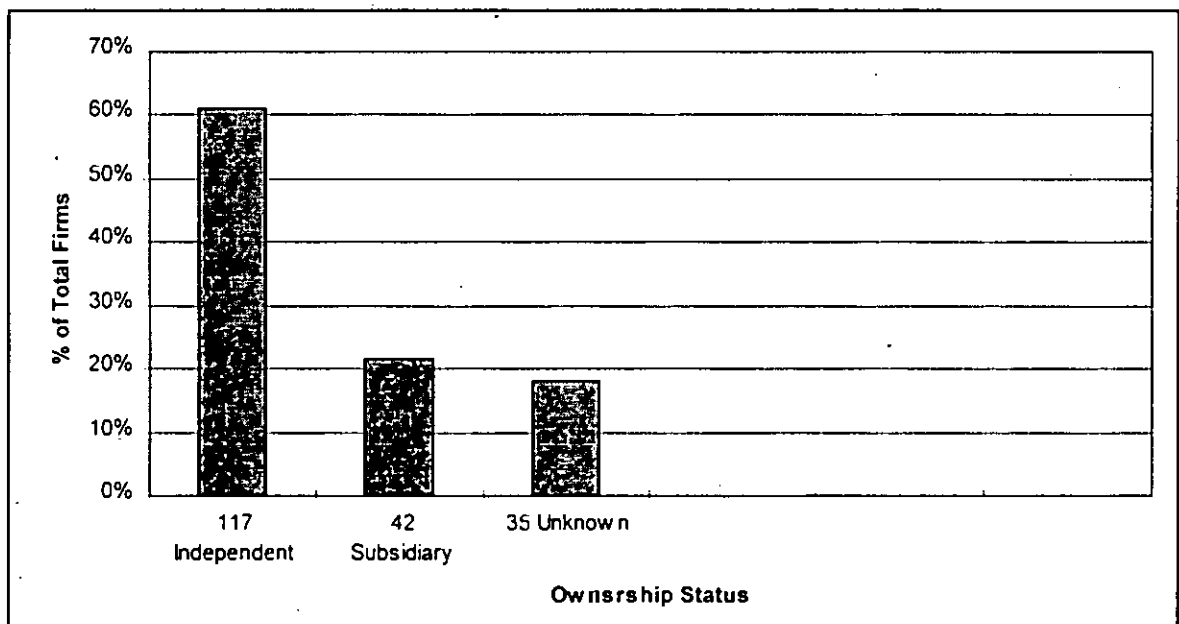
Firm Size	% of Total Sales					Total
	0%	1-25%	26-50%	51-75%	76%	
1-19	28	68	4	-	-	100%
20-49	35	65	-	-	-	100%
50-99	32	68	-	-	-	100%
100-250	35	65	-	-	-	100%

Table 9.4 indicates that smaller firms (with 1-19 employees) have a greater investment in research and development than other SMEs. Whilst this finding is not consistent with the analysis of tables 9.2 and 9.3, it is reasonable to suggest that smaller firms involved in the electronics sector have a greater degree of innovation than firms in general. However, a chi square test shows no association between sector type and the propensity to invest in research and development ($\chi^2=20.79$, $df=22$, $p=.53369$). A further chi-square test indicates that there is no association between ownership and investment in research and development ($\chi^2=10.69$, $df=11$, $p=.46983$).

9.1.6 Ownership

Details of the ownership status of the respondent firms (independent or subsidiary) was obtained in a follow up telephone survey. This information enables a comparison to be made between independently owned firms and subsidiary firms, in relation to culture, leadership styles and the strategic planning processes of the firm. Figure 9.4 summarises the breakdown of firms according to ownership status.

Figure 9.4 Ownership status of the respondent firms



9.1.7 Age of respondent firms

The first question in the questionnaire asks respondents to indicate the year that their company was established. The replies indicate a broad spread of dates from 1837 to 1994. Table 9.5 summaries the analysis using arbitrary age groupings. It shows the number of firms in each age grouping for each of the industrial sectors covered by this study.

Table 9.5 Age of respondent firms

Age Grouping	% of Firms	Number of Firms by Sector	
		Engineering	Electronics
5-10 years	18.8	37	22
11-20 years	22.0	22	19
21-50 years	41.4	18	12
51-100 years	14.1	13	11
>100 years	3.7	5	0

n = 159

All the SMEs surveyed are established over 5 years and are thought likely to have developed a reasonable structure and survived their potentially most turbulent years - *Pickle and Abrahamson (1976)*. A chi-square test ($\chi^2=59.95$, $df=63$, $p=.58501$) indicates that the sample of electronics firms does not differ significantly from the sample of engineering firms in relation to the period established.

9.1.8 Age and gender of managing directors

Table 9.6 briefly summarises the responses to Managing Director profile questions (questions 1 and 2 in the further information section of page 11 of the questionnaire).

Table 9.6 Managing director profile characteristics

Gender and age of Managing Directors			Firm type (n=159)	
Gender	Number	Percentage	Engineering	Electronics
Male	180	92.8%	89	59
Female	14	7.2% n=194	6	5
Age				
Under 24 Years	2	1.0%	2	-
25-29 years	9	4.6%	3	3
30-39 years	30	15.5%	18	7
40-49 years	53	27.3%	22	22
50-59 years	75	38.7%	37	24
over 60 years	25	12.9% n=194	13	8

Table 9.6 indicates that over 21% of SME Managing Directors are less than 40 years old. It also shows that 66% of Managing Directors are aged between 40 and 60 years old with nearly 13% aged over 60 years. Interestingly, whilst it might be expected that the younger managing directors would be involved in the electronics sector, the analysis indicates that the age profile in both sectors is broadly similar. A chi square test indicates no association between the age of the managing director and the sector ($\chi^2 = 4.95$, $df=5$, $p=.42264$). A further chi-square test indicates that there is no association between the age of the managing director and ownership ($\chi^2 = 4.40$, $df=5$, $p=.49243$).

The analysis of this table implies that many Managing Directors are likely to retire over the next decade and that consideration will need to be given to recruiting replacements. Indeed, the author notes that since the return of the questionnaire and the follow up telephone call seeking additional information (six months later), five Managing Directors have retired.

9.1.9 The operating environment

Following data reduction (see section 8.5), the analysis indicates that 55.2% of SMEs perceive their operating environment as *dynamic and changing*, and 44.8% of SMEs perceive their operating environment as *market threats focused*. The breakdown by firm size is shown in table 9.7.

Table 9.7 Perception of the operating environment by firm size (no. of employees)

Firm Size	Perception of Operating Environment	
	Dynamic and changiog	Market Threats
1-9	59%	41%
10-19	51%	49%
20-49	54%	46%
50-99	62%	38%
100-199	55%	45%
200-249	43%	57%

n= 194

An analysis of table 9.7 indicates that smaller firms (1-9 employees) perceive their operating environment as *dynamic and changing* whereas a majority of medium sized firms (employing between 200 and 249 employees) perceive their operating environment as *market threats focused*. All other firm sizes display a mixed picture. A more detailed analysis of each of the attributes used to assess the perception of the operating environment is outlined in table 9.8.

Table 9.8 The operating environment - firm size

Attribute	Mean	Standard deviation	Mean Scores			
			Firm Size [Number of Employees]			
			1-19	20-49	50-99	100-249
Threat of UK firms entering the market	2.55	1.147	2.630	2.339	2.581	2.578
Stable environment posing little threats	2.70	1.144	2.826	2.750	2.511	2.711
A decreasing product life cycle	2.82	1.255	2.793	2.732	2.943	2.800
Changing regulatory environment	3.12	1.218	3.065	3.089	3.234	3.089
Threat of substitute goods	3.13	1.231	3.087	3.232	3.213	3.272
Turbulent environment	3.19	1.234	3.174	3.054	3.085	3.178
Threat from overseas firms	3.20	1.300	3.196	3.018	3.319	3.267
Technological change in processes	3.30	1.108	3.304	3.250	3.213	3.467
Dynamic environment	3.34	1.086	3.109	3.304	3.443	3.400
Technological change in products	3.40	1.112	3.500	3.446	3.362	3.289

Table 9.8 indicates that size (employee numbers) is not a factor in the operating environment. A further analysis examines whether the perception of the operating environment is associated with factors such as firm status, standard industrial classification, or perceived market share. This analysis is depicted in table 9.9.

Table 9.9 The operating environment - status, sector and market share

Attribute	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronic	Engineering	Up	Down	Static
Threat of UK firms entering the market	2.691	2.328	2.410	2.737	2.829	2.435	2.588
Stable environment posing little threats	2.769	2.688	2.692	2.705	2.029	2.880	2.784
A decreasing product life cycle	2.906	3.031	3.003	2.968	2.943	2.824	2.745
Changing regulatory environment	3.120	3.281	3.181	3.147	3.343	3.130	2.941
Threat of substitute goods	3.060	3.172	3.126	3.148	3.371	3.074	3.039
Turbulent environment	3.154	3.266	3.196	3.179	3.743	3.074	3.159
Threat from overseas firms	3.128	3.141	3.202	3.326	3.400	3.167	3.098
Technological change in processes	3.359	3.453	3.399	3.284	3.314	3.398	3.098
Dynamic environment	3.333	3.358	3.369	3.358	3.171	3.472	3.176
Technological change in products	3.393	3.453	3.458	3.316	3.371	3.426	3.373

Table 9.9 indicates that there is no significant difference in the perception of the operating environment by independent firms compared with subsidiary firms. It is reasonable to suggest that both independent and subsidiary firms are aware of the changes in the operating environment. The analysis indicates that there is no significant difference in the perception of the operating environment by firms in electronics sector compared with the engineering sector. An interesting finding is that engineering firms have a greater fear of new firms from the UK and Overseas entering their markets. It could be argued that engineering firms perceive that their existing markets are vulnerable to competition.

Table 9.9 also summarises the analysis of the perception of the operating environment according to the perceived market status of the SMEs (increased, reduced or static). The analysis indicates that firms with a perceived increased market share, have a higher emphasis on the importance of the majority of attributes of the operating environment. This could indicate that a greater awareness and attention is given to the problems and changes in the operating environment. There are no significant differences in the perception of the operating environment by firms with a perceived decreased or static market share.

Table 9.9 indicates that in general, managing directors' perceive *technological change in products*, *technological change in processes*, and a *dynamic environment* to be the most important aspects describing the environment within which their firms operate. The Managing Directors' of all SME size categories give similar emphasis to these three attributes. Similarly, these three attributes are also perceived as receiving the strongest emphasis by independent and subsidiary firms and by firms in both the electronic and engineering sectors. However, firms with a perceived increased market share indicate a lower emphasis on these factors and a higher emphasis on attributes such as threats from substitute goods and threats from overseas.

The attribute *decreasing product life cycle* shows a broader dispersion which is consistent with the findings of table 9.2 (standard product production) and table 9.3 (customised product production). Table 9.8 indicates that the attributes relating to technological change in products and processes and a dynamic environment show a less dispersed

standard deviation score which is consistent with their inclusion in the variable *dynamic and changing environment* (section 8.5).

However, the most frequently cited cause for concern relates to the *threat of overseas firms entering the market* (cited by 50% of respondents to be important or very important). This probably arises from greater world trade and globalisation as outlined in section 2.3.3. This attribute has the highest standard deviation indicating a broad dispersion. Interestingly, the threats of overseas and new UK firms entering the market are feared to a lesser extent by electronic firms than engineering firms. This could be argued to indicate that electronics' firms are more confident in facing the market place. Subsidiary and engineering firms indicate a lesser degree of emphasis on the threat of UK firms entering the market but a much higher emphasis on the threat from overseas firms. This indicates that UK firms are less confident when faced with global competition. However, it could be argued that the perception of potential threats from overseas firms is often based on inadequate information. An analysis is also carried out on the perception of the operating environment by firms that perceive their operating environment as *dynamic and changing* or *market threats focused*. The result is summarised in table 9.10.

Table 9.10 Perceived operating environment and market share

Perceived Operating Environment	Perceived Market Share			Total
	Increased	Decreased	Remained Static	
Dynamic and changing	30%	12%	13%	55%
Market threats	26%	6%	13%	45%
Total	56%	18%	26%	100%

Table 9.10 indicates that the majority of firms perceiving their environment as either *dynamic and changing* or *market threats* perceive an increase in their market share. Firms which perceive a decreased market share, account for less than 20% of the total responses. A further 26% of firms indicate a perceived static market share. This analysis indicates that generally SMEs compete effectively in both types of operating environment.

9.2 An overview of the strategic plans deployed by SMEs

Part A of question 14 seeks to ascertain the most important strategies that respondents have deployed over the previous 3 years. The analysis shows that the five most frequent strategies are: *the introduction of new products, serving larger firms/geographic markets more effectively and efficiently, the expansion of operations, the provision of a unique product on an industry wide basis and the introduction of new products into existing markets*. The analysis is presented in table 9.11.

Table 9.11 Types of strategies deployed

Strategies deployed	% of Firms
a) Introduced a new product	20.8
b) Expanded operations	13.9
c) Discontinued a product range	1.0
d) Established networks/alliances	4.1
e) Increased market share in existing markets by increased promotion	7.2
f) Introduced new products in old market	9.8
g) Introduced new products in new market	7.7
h) Offered on an industry wide basis unique products or services	10.8
i) Diversification	5.7
j) Serving a particular larger group/firm, a segment of product line, or a geographic market more effectively or efficiently	19.0

n=194

Table 9.11 indicates that only one fifth of firms introduced a new product, which implies that the organisations in this sample have a low degree of innovation and product development. The finding is consistent with the analysis of section 9.1.5, which indicates that less than a third of firms rely on customised products for over 50% of their sales, whereas nearly half the respondents rely on standard products for over 50% of their sales. In addition, nearly a fifth of the respondent organisations have no investment in research and development. A further analysis based on firm size was carried out. The analysis is presented in table 9.12.

Table 9.12 Types of strategy deployed according to firm size

Strategies deployed	Size Categories			
	1-19	20-49	50-99	100-249
a) Introduced a new product	30.4	17.9	23.4	20.0
b) Expanded operations	5.3	12.5	12.8	26.7
c) Discontinued a product range	-	-	2.1	2.2
d) Established networks/alliances	6.5	6.8	8.5	2.2
e) Increased market share in existing markets by increased promotion	6.5	10.7	8.5	6.7
f) Introduced new products in old market	17.4	8.9	6.4	11.1
g) Introduced new products in new market	4.8	8.4	10.6	11.1
h) Offered on an industry wide basis unique products or services	11.9	8.9	12.8	8.9
i) Diversification	-	22.3	4.3	8.9
j) Serving a particular larger group/firm, a segment of product line, or a geographic market more effectively or efficiently	19.2	3.6	10.6	2.2

n=194

Table 9.12 indicates that small firms emphasise the introduction of new products. This finding is consistent with the contention by *Acs and Preston (1997)* that small firms are likely to have a higher degree of innovation than medium or large sized firms. However, the analysis indicates that small firms focus on the introduction of new products to old markets rather than seek new markets. This could be argued to result from their lack of external orientation.

The expansion of operations by over a quarter of firms in the 100-249 employee category is no surprise. Firms in this size category tend to be more established and therefore have the resources for expansion. The analysis also indicates that nearly a fifth of small firms focus on serving a large group/firm more effectively and efficiently. This finding is consistent with the contention in section 9.1.5, that small firms frequently produce parts and components for larger firms.

Part B of question 14 seeks to ascertain the extent of the formality of strategic planning in manufacturing SMEs and compares this with other studies. The literature shows that formalised strategies are rare in SMEs and usually account for only 1 in 6 firms - *McKiernan and Morris (1994)*. This study shows that 58.2% (113 SMEs) have a written

strategic plan. Arguably this could be considered high in the light of the comments by *McKiernan and Morris (1994)*. The remaining 41.8% (81 SMEs) of respondents indicate that they do not have a written strategic plan. A possible explanation for the high number of SMEs with written strategic plans may relate to their degree of independence - 71% of subsidiary firms have written strategic plans compared with 54% of independent firms. A chi square test indicates an association between firm ownership and the propensity to have a written strategy ($\chi^2= 3.93$, $df=1$, $p <0.05$). A further chi square test indicates that there is no association between firm size and industrial sector ($\chi^2= 4.73$, $df=1$, $p=.49157$).

Part C of question 14 focuses on the contents of the written strategies deployed. The main aspects include *a strategic plan covering at least 3 years into the future* (85% of firms), *the specification of goals/objectives* (86% of firms), *action plans for major functional areas of the firm* (65% of firms) and *the identification of future resources required* (65% of firms). Table 9.13 depicts the aspects included in the formalised strategic planning process. There is no association between firm size and the content of the formalised plans.

Table 9.13 The content of formalised strategic plans

Aspect	% of firms
a) Covered at least 3 years into the future	85
b) The specification of objectives and goals	86
c) Other possible alternative strategies	43
d) Action plans for the major functional areas of the firm	65
e) Identified the future resources required	65
f) Procedures for anticipating or detecting errors in, or failures of the plan and for preventing or correcting them on a continual basis.	33
g) Some attempt to account for factors outside the immediate environment of the firm.	47

These findings are consistent with the literature and in particular the characteristics of strategic planning derived by *Ramanujam et al (1986)* and *Ramanujam and Venkatraman (1987)*. The use of strategic planning to prepare for the future is well documented in the literature - *Jauch and Glueck, (1988)*. Other authors also acknowledge the importance of

the future in strategic planning - *Johnson and Scholes* (1997), and *Steiner* (1979) as outlined in section 3.2.5. Accordingly, it is no surprise to find that 85% of firms use their strategic planning processes to plan at least three years into the future. Objectives and goals are well documented as an integral part of the strategic process for many decades - see for example, *Chandler* (1962), *Ghobadian* (1993) and *Proctor* (1997). Objectives and goals are shown in a recent study by *Roper* (1997) to have a significant impact on growth and profitability. Accordingly, the finding that 86% of firms specify objectives and goals in their strategic planning is not surprising. It does, however, raise some concerns that 14% do not specify objectives or goals.

The low emphasis (43% of firms) given to evaluating other alternative strategies is also a cause for concern. The evaluation of alternative strategies is well documented in the literature - *Schwenk and Shrader*, (1993), *Steiner*, (1979), *Ramanujam et al.* (1986) and *Kargar and Parnell*, (1996). A possible explanation for the failure to evaluate alternative strategies could relate to a lack of resources.

Action plans are another established major component of strategic planning - *Drucker* (1969) and *Henderson* (1989). They are incorporated into the strategic plan by 65% of firms. The identification of the future resources required is another established component of strategic planning - (see section 3.2.1). Yet, 35% of firms appear to prepare strategic plans without considering the resources needed for deployment. This could imply that the strategic plan is a 'paper exercise' only, and consequently of limited use. This implication is given some credibility by the failure of 67% to emphasise the need to detect and correct any failures or shortcomings in their strategic plan. The literature strongly emphasises the need to monitor the progress of the strategic plan - *Lyles et al.* (1993), *Kargar and Parnell* (1996) and *Ramanujam et al.* (1986).

Finally, the lack of emphasis by 53% of firms on factors outside the immediate environment of the firm, seems to defeat the objective of strategic planning. The importance of the external environment is seen as an established part of strategic planning by *Burns and Stalker* (1961) and a key part of the definition of strategy (see table 3.1). It is a common thread running through the literature (see section 3.2.1) and arguably its importance can not and should not be understated. However, a possible explanation for its

absence from the strategic plans of over half the firms, may in part be explained by a significant number of firms producing parts and components for larger firms, thus reducing the emphasis on external orientation.

9.3 Strategic orientation

Section 6 refers to the Managing Directors' perceived strategic orientation based on a series of statements that correspond to the orientation categories in the *Miles and Snow* typology which is discussed in section 3.5.1. It is another way of looking at how SMEs deal with their external and internal environments. The analysis of the responses is outlined in table 9.14.

Table 9.14 Strategic orientation types

Stated Strategic type	No. of firms	% of firms	Breakdown by Firm Size			
			1-19	20-49	50-99	100-249
Prospector	93	47.4	41.3	51.8	53.2	42.2
Defender	86	44.8	58.7	42.8	38.3	42.2
Analyser	10	5.2	-	3.6	2.1	13.3
Reactor	5	2.6	-	1.8	6.4	2.3 n=194
Total	194	100.0%	100%	100%	100%	100%

The analysis indicates that 47.4% of the respondent firms perceive themselves as 'prospector' style firms. Table 9.1 indicates that over half the firms have an increased market share. These firms could be classified as 'growing,' which is a criterion for 'prospector' firms. In addition, 55% of firms perceive their operating environment as 'dynamic and changing' (see table 9.10). This is the environment type preferred by 'prospector' type firms (see section 3.6.1). However, an important trait of 'prospector' type firms is their reliance on innovation and product development. The analysis indicates that only 32% of firms rely on customised products for over 50% of their sales (table 9.3) and that only 20.8% of firms introduced new products during the previous three years

(table 9.11). Accordingly, it is possible to conclude that not all 'prospector' type firms are innovation orientated.

Section 3.6.1 outlines that 'defender' type firms prefer to concentrate on existing markets and focus on operational efficiency. They are likely to view threats to their existing markets with concern. Table 9.13 indicates that 44% of firms perceive themselves as 'defender' type firms. A similar proportion of firms perceive the environment as 'market threats focused'- which is the environment type preferred by 'defender' type firms. 'Defenders' rely on narrow product lines and are more concerned with serving existing market more efficiently than with new opportunities. Interestingly, over 44% of firms rely on standard products for over 50% of their sales (table 9.2).

Table 9.13 also indicates that 5.2% of firms perceive themselves as 'analyser' type firms. Section 3.6.1 refers to 'analysers' as a 'hybrid category' taking some of their features from both the 'prospector' and 'defender' type firms. Finally, the table indicates that a mere 2.6% of firms consider themselves to be 'reactor' type firms. 'Reactor' style firms are likely to react to events in the operating environment and have a preference for short term actions. A chi-square test indicates no association between the *Miles and Snow* typology and the attributes of organisational capability with the exception of *the provision of high performance products* ($\chi^2=53.21$, $df=8$, $p=.0000$). An analysis of the mean scores indicates that prospector type firms emphasise the importance of this attribute to a higher degree than other firms (mean score 4.38 compared with mean scores of 3.92, 3.70 and 3.65 for defender, analyser and reactor type firms respectively). This finding is consistent with the innovation ethos of prospector type firms.

9.4 Contingency factors and leadership style

In chapter four (section 4.3) four main leadership styles are outlined. These are transactional, transformational, human resources and laissez faire styles. This section will consider the emphasis given by the respondents to each of these leadership styles and consider the relationships between the main contingency factors outlined in section 9.1 and the attributes of each leadership style.

9.4.1 Transactional leadership style

Tables 9.15 and 9.16 outline the emphasis on the attributes of the transactional leadership style and impact of the contingency factors on its attributes. It should be noted that all the attributes of this style are retained (in four separate styles) following data reduction. Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5= a very great extent).

Table 9.15 Transactional leadership style - firm size and environment

Attribute	Mean	Standard deviation	Size [Number of Employees]				Operating Environment	
			1-19	20-49	50-100	100-250	Dynamic	Market threats
Pays attention to performance shortcomings that need correction	3.727	.906	3.761	3.732	3.787	3.622	3.810	3.614
Emphasises the maintenance of standards	3.923	.881	3.943	3.929	3.723	4.133	3.895	3.943
Offers the prospect of rewards for work	3.381	1.124	3.513	3.268	3.362	3.533	3.648	3.368
Agrees with employees on the rewards that they can look forward to if they do what has to be done	2.871	1.165	2.891	2.571	2.872	3.044	3.019	2.893
Focuses attention on irregularities, exceptions, and deviation from what is expected	3.041	.991	3.043	2.875	2.957	3.323	3.077	3.000
Tells employees criteria for performance related benefits	2.943	1.347	2.787	2.727	3.155	3.150	3.183	2.655
Is strongly convinced of their own opinion and values	3.371	.868	3.304	3.304	3.532	3.356	3.371	3.387
Expects good performance from employees	4.263	.634	4.435	4.214	4.277	4.133	4.276	4.239
Aims at reaching financial goals	4.227	.769	3.967	4.109	4.298	4.244	4.229	4.216
Pursues its own interests	2.490	1.135	2.370	2.357	2.447	2.644	2.476	2.477

Table 9.16 Transactional leadership style -status, sector and market share

Attribute	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronic	Engineering	Up	Down	Same
Pays attention to performance shortcomings that need correction	3.744	3.734	3.735	3.705	3.822	3.657	3.549
Emphasises the maintenance of standards	3.897	3.828	3.828	3.926	3.926	3.886	3.941
Offers the prospect of rewards for work	3.427	3.531	3.531	3.389	3.519	3.400	3.178
Agrees with employees on the rewards that they can look forward to if they do what has to be done	2.949	3.063	3.063	2.821	3.056	2.800	2.867
Focuses attention on irregularities, exceptions, and deviation from what is expected	3.060	3.125	3.125	3.063	3.102	3.200	2.804
Tells employees criteria for performance related benefits	2.983	3.063	3.063	2.915	3.226	2.829	2.431
Is strongly convinced of their own opinion and values	3.410	3.310	3.313	3.337	3.528	3.114	3.211
Expects good performance from employees	4.231	4.344	4.345	4.295	4.306	4.286	4.157
Aims at reaching financial goals	4.162	4.219	4.269	4.295	4.250	4.257	4.157
Pursues its own interests	2.453	2.469	2.469	2.432	2.528	2.514	2.392

The analysis indicates that the relationship between the contingency factors used in this study and the degree of emphasis placed on the different attributes of transactional leadership is not significant. While there may be other factors that influence the transactional leadership style, it is not clear from this study what they are. It is reasonable to suggest that the perceived market share is a possible contributory factor, as SMEs with a perceived increased market share emphasise the attributes of transactional leadership to a greater extent than other firms.

The analysis is consistent with the factor analysis conducted in section 8.1 which yields four factors: *reward's style*, *the maintenance of standards*, *performance focused* and finally, *own interests*. The *reward's style* attribute has standard deviation scores over 1.000 indicating a wide dispersion, the *maintenance of standards* attributes has lower standard deviations indicating a less broadly based dispersion, whereas the *performance focused style* has a narrow dispersion. Finally, the *own interest's style* attributes are wide ranging which indicates diversity between the two attributes.

9.4.2 Transformational leadership style

Tables 9.17 and 9.18 outline the emphasis on the attributes of the transformational leadership dimension and the impact of the contingency factors on the various attributes. It should be noted that the attributes of this dimension are reduced to eleven (outlined in bold type) during the data reduction stage (see section 8.1). Emphasis on the attributes is measured on a likert-type scale (1 = very small extent, 5 = a very great extent).

Table 9.17 Transformational leadership style - firm size and environment

Attribute	Mean	Standard deviation	Size (Number of Employees)				Operating Environment	
			1-19	20-49	50-100	100-250	Dynamic	Market threats
Instil perfect trust	3.625	0.809	3.598	3.661	3.478	3.489	3.606	3.644
Encourage new ideas	3.562	1.022	3.478	3.598	3.298	3.422	3.790	3.273
Introduces new projects	3.613	0.939	3.499	3.589	3.596	3.667	3.810	3.364
Promotes a clear vision	3.320	1.078	3.143	3.464	3.179	3.578	3.410	3.194
Stimulates employees	3.335	0.931	3.478	3.286	3.319	3.262	3.581	3.023
Common values and ideals	3.230	1.008	3.287	3.296	3.253	3.389	3.348	3.366
Management ability	3.361	0.835	3.674	3.375	3.128	3.267	3.276	3.193
Sense of pride to employees	3.316	0.825	3.426	3.368	3.232	3.333	3.343	3.368
Ability to achieve	3.062	0.825	3.269	3.143	2.854	2.956	3.057	3.068
Focuses attention on performing even better	3.394	0.976	3.388	3.243	3.211	3.300	3.681	3.257
Learn from mistakes	3.825	0.939	3.800	3.804	3.809	3.689	3.857	3.773
Fulfils promises with action	3.311	0.845	3.355	3.450	3.233	3.300	3.376	3.439
Sets ambitious targets for the organisation	3.722	0.947	3.677	3.679	3.617	4.044	3.810	3.614
Keeps an eye on mistakes	3.593	0.878	3.533	3.464	3.681	3.622	3.600	3.568
Makes a powerful impression	3.392	0.894	3.119	3.268	3.319	3.556	3.390	3.386

Table 9.18 Transformational leadership style - status, sector and market share

Attribute and reference	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronic	Engineering	Up	Down	Same
Instil perfect trust	3.707	3.794	3.765	3.711	3.670	3.543	3.588
Encourage new ideas	3.615	3.578	3.577	3.602	3.620	3.486	3.655
Introduces new projects	3.718	3.688	3.604	3.693	3.806	3.371	3.490
Promotes a clear vision	3.299	3.344	3.267	3.300	3.389	3.371	3.373
Stimulates employees	3.359	3.375	3.334	3.382	3.454	3.229	3.273
Common values and ideals	3.707	3.766	3.642	3.689	3.796	3.571	3.157
Management ability	3.410	3.328	3.352	3.277	3.454	3.114	3.330
Sense of pride to employees	3.761	3.625	3.684	3.694	3.769	3.600	3.686
Ability to achieve	3.111	3.109	3.104	3.118	3.167	2.850	2.950
Focuses attention on performing even better	3.949	3.963	3.966	3.951	3.759	3.486	4.076
Learn from mistakes	3.949	3.906	3.977	3.867	3.917	3.571	3.807
Fulfils promises with action	3.692	3.813	3.711	3.696	3.769	3.714	3.588
Sets ambitious targets for the organisation	3.581	3.500	3.531	3.582	3.815	3.629	3.588
Keeps an eye on mistakes	3.701	3.578	3.655	3.704	3.731	3.571	3.314
Makes a powerful impression	3.419	3.375	3.440	3.399	3.611	3.098	3.132

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of transformational leadership. While there may be other factors that influence the transformational leadership style, it is not clear from this study what they are. However, it is reasonable to suggest that the perceived market share is a possible contributory factor as SMEs with a perceived increased market share appear to emphasise the attributes of transformational leadership to a greater extent than other firms.

The analysis indicates that a strong emphasis is given by the majority of firms to all the attributes of this leadership style. All of the attributes closely resemble the criteria for transformational leadership devised by *Bass* (1990) outlined in table 4.6. The standard deviations for each of the attributes in all the dimensions are clustered into four groupings consistent with the categorisation of the transformational style into the following styles: *competence, creativity, vision, and mistakes focused*.

9.4.3 Human Resources leadership style

Tables 9.19 and 9.20 outline the emphasis on the attributes of the human resources leadership style and the impact of the contingency factors on the various attributes. The human relations leadership style derived by *Wilderom and van den Berg (1997)* contains ten attributes which reduce to seven (outlined in bold type) and loaded onto two factors during the data reduction stage of this study (see section 8.1). Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5= a very great extent).

Table 9.19 Human resources leadership style - firm size and environment

Attribute	Mean	Standard deviation	Size (Number of Employees)				Operating Environment	
			1-19	20-49	50-100	100-250	Dynamic	Market threats
Has an ear for matters that are important for employees	3.660	.921	3.783	3.714	3.532	3.600	3.650	3.609
Gives advice to employees when they need it	3.789	.877	3.957	3.804	3.596	3.800	3.778	3.859
Creates a feeling of working together on major assignments	3.706	.906	3.913	3.768	3.468	3.667	3.753	3.672
Shows employees how to look at problems from new angles	3.309	1.006	3.565	3.464	3.128	3.044	3.385	3.438
Tries to involve as many employees as possible in progressive changes within the organisation	3.593	.941	3.587	3.607	3.447	3.733	3.365	3.641
Works actively for the benefit of both personnel and organisational goals	3.851	.715	3.804	4.036	3.723	3.800	3.795	3.906
Is concerned with the organisational personnel and with competing organisations.	3.593	.819	3.674	3.464	3.660	3.600	3.650	3.672
Speak optimistically about the future	3.928	.805	3.870	3.875	3.915	4.067	3.915	4.000
Is both performance and employee welfare orientated	3.747	.883	3.717	3.911	3.681	3.644	3.709	3.781
Encourages co-operation	3.948	.819	4.109	3.946	3.957	3.778	3.991	3.999

Table 9.20 Human resources leadership style - status, sector and market share

Attribute	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronic	Engineering	Up	Down	Same
Has an ear for matters that are important for employees	3.609	3.716	3.686	3.614	3.630	3.943	3.529
Gives advice to employees when they need it	3.858	3.789	3.867	3.682	3.815	3.829	3.706
Creates a feeling of working together on major assignments	3.672	3.726	3.686	3.716	3.796	3.486	3.667
Shows employees how to look at problems from new angles	3.438	3.353	3.838	3.284	3.324	3.257	3.314
Tries to involve as many employees as possible in progressive changes within the organisation	3.641	3.684	3.956	3.737	3.657	3.571	3.471
Works actively for the benefit of both personnel and organisational goals	3.956	3.737	3.857	3.830	3.907	3.771	3.784
Is concerned with the organisational personnel and with competing organisations.	3.695	3.455	3.672	3.653	3.713	3.427	3.451
Speak optimistically about the future	3.924	3.920	3.999	3.893	4.028	3.886	3.745
Is both performance and employee welfare orientated	3.838	3.636	3.781	3.705	3.815	3.600	3.706
Encourages co-operation	4.010	3.864	3.999	3.968	4.102	3.714	3.784

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of human resource leadership style. The analysis indicates that the majority of all attributes have a mean score in excess of 3.5 and have received great emphasis from the majority of firms in respect of all the contingency factors. The standard deviation scores are consistent with the factor analysis (section 8.1) and indicates that the attributes of the *employee focused* factor has a broader dispersion than the attributes of the *competing for the future* factor.

9.4.4 Laissez faire leadership style

Tables 9.21 and 9.22 outline the emphasis on the attributes of the laissez faire leadership dimension and the impact of the contingency factors on the various attributes. The laissez faire leadership style derived by *Wilderom and van den Berg (1997)* contains six attributes which reduce to two factors (five attributes in bold type) during the data

reduction stage (see section 8.1). Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5= a very great extent).

Table 9.21 Laissez-faire leadership style - firm size and environment

Attribute and reference	Mean	Standard deviation	Size [Number of Employees]				Operating Environment	
			1-19	20-49	50-100	100-250	Dynamic	Market threat
Takes action when things go wrong	2.464	1.102	2.370	2.446	2.426	2.622	2.419	2.159
Takes action when problems become serious	2.211	1.102	2.217	2.321	2.170	2.111	2.267	2.300
Does not trouble employees if they do not cause difficulty	3.418	1.066	3.457	3.536	3.298	3.356	3.496	3.341
Adheres to the saying 'do not intervene unnecessarily'	3.088	1.100	3.109	3.054	2.936	3.267	3.076	3.091
Does not attempt to improve matters as long as performance meet minimum demands	2.222	1.006	2.152	2.321	2.234	2.156	2.238	2.216
Avoids making decisions	1.732	0.950	1.630	1.589	1.681	2.067	1.762	1.705

Table 9.22 Laissez-faire leadership style - status, sector and market share

Attribute	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronic	Engineering	Up	Down	Same
Takes action when things go wrong	2.299	2.484	2.484	2.421	2.324	2.457	2.765
Takes action when problems become serious	2.103	2.262	2.267	2.300	2.167	2.257	2.275
Does not trouble employees if they do not cause difficulty	3.504	3.375	3.495	3.341	3.481	3.257	3.392
Adheres to the saying 'do not intervene unnecessarily'	3.231	3.234	3.076	3.091	3.296	2.681	2.922
Does not attempt to improve matters as long as performance meet minimum demands	2.171	2.188	2.238	2.216	2.120	2.400	2.314
Avoids making decisions	1.650	1.719	1.762	1.705	1.565	1.862	1.900

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of laissez faire leadership style. The analysis indicates that the majority of firms perceive a very small or small emphasis on the attributes of the laissez faire leadership style. This is not surprising, as it is a style where leaders tend to abdicate responsibility and allow their subordinates to do whatever they chose. The analysis indicates that the majority of firms emphasise the attributes of this characteristic to a very small or a small extent as shown by the wide dispersion in the standard deviation scores.

9.4.5 Leadership style - concluding remarks

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the various leadership styles. While there may be other factors that influence the various styles of leadership, it is not clear from this study what they are. The analysis is conducted on the four main leadership styles derived by *Wilderom and van den Berg* (1997). The mean score dispersions are consistent with the twelve leadership styles derived following data reduction (see section 8.1).

9.5 Contingency factors and organisational culture

Chapter five outlines five main styles of organisational culture derived by *Wilderom and van den Berg* (1997) - empowerment style, external orientation, human resources style, intergroup culture and improvement style. Each style is confirmed by the factor analysis on its attributes (see section 8.2). This section considers the emphasis given by the respondents to each of these organisational culture styles and considers the relationships between the main contingency factors outlined in section 9.1 and the attributes of each culture style.

9.5.1 Empowerment culture dimension

Tables 9.23 and 9.24 outline the emphasis on the attributes of the empowerment culture dimension and the impact of the contingency factors on the various attributes. The original dimension contains five attributes which load onto one factor during the data reduction stage (see section 8.2). Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5= a very great extent).

Table 9.23 Empowerment culture type - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Operating Environment	
			1-19	20-49	50-99	100-250	Dynamic Market threats	
Room for non-managerial employees to make their own decisions	3.186	.931	3.609	3.143	2.979	3.022	3.448	2.864
Assignment of interesting tasks to employees	3.273	.841	3.587	3.107	3.149	3.289	3.438	3.068
Employees exert influence on important work decisions	3.119	.934	3.348	3.108	2.915	3.111	3.286	3.190
The opportunity for employees to bring forward ideas before decisions are made	3.423	.931	3.674	3.357	3.213	3.467	3.570	3.205
Freedom for employees to depart from the rules	2.457	1.013	2.565	2.411	2.596	2.267	2.771	2.672

Table 9.24 Empowerment culture type - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Room for non managerial employees to make their own decisions	3.197	3.359	3.354	3.137	3.148	3.286	3.196
Assignment of interesting tasks to employees	3.359	3.264	3.189	3.253	3.315	3.257	3.196
Employees exert influence on important work decisions	3.137	3.172	3.197	3.105	3.130	3.029	3.157
The Opportunity for employees to bring forward ideas before decisions are made	3.487	3.563	3.459	3.421	3.417	3.457	3.275
Freedom for employees to depart from the rules	2.487	2.453	2.391	2.461	2.398	2.400	2.627

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the empowerment culture style. Table 9.23 indicates that all the attributes except one in the overall response by all firms have a mean score in excess of 3, which implies that they are emphasised to a great extent. The standard deviation scores indicate a narrow dispersion except for the attribute *freedom for employees to depart from the rules*. It could be argued that this attribute differs from the other attributes and represents working outside accepted rules rather than within existing guidelines. Each of the attributes typifies the empowerment style derived by *Wilderom and van den Berg (1997)*.

9.5.2 External orientation culture dimension

Tables 9.25 and 9.26 outline the emphasis on the attributes of the external orientation culture dimension and the impact of the contingency factors on the various attributes. The original dimension contains eight attributes which load onto one factor during the data reduction stage (see section 8.2). Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5= a very great extent).

Table 9.25 External orientation culture type - firm size and environment

Attributes	Mean	Standard deviation	Firm Size (Employee Numbers)				Operating Environment	
			1-19	20-49	50-99	100-250	Dynamic Market threats	
Active canvassing of new customers	3.351	1.073	2.957	3.464	3.426	3.533	3.457	3.227
Working to improve the local market position	3.603	1.029	3.630	3.696	3.404	3.667	3.638	3.557
Quick reaction to developments in the market	3.464	1.039	3.500	3.286	3.553	3.556	3.590	3.295
This firm has the edge over local competitors	3.521	1.097	3.522	3.554	3.362	3.644	3.514	3.534
Investigation of the needs and wishes of customers	3.691	0.937	3.826	3.804	3.589	3.622	3.714	3.648
Thorough training of employees in systematically gathering information in what customers want improved	2.974	1.094	2.957	3.161	3.574	3.178	3.096	2.836
Active promotion of the organisation by its employees	3.139	0.995	3.391	2.989	2.936	3.356	3.324	2.990
The firm's future plans	3.314	1.096	3.174	3.357	3.255	3.467	3.533	3.045

Table 9.26 External orientation culture type - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Active canvassing of new customers	3.350	3.328	3.411	3.368	3.463	3.200	3.216
Working to improve the local market position	3.667	3.625	3.634	3.611	3.787	3.343	3.392
Quick reaction to developments in the market	3.444	3.453	3.488	3.442	3.676	3.171	3.216
This firm has the edge over local competitors	3.581	3.609	3.634	3.558	3.675	3.257	3.373
Investigation of the needs and wishes of customers	3.667	3.828	3.632	3.547	3.704	3.543	3.765
Thorough training of employees in systematically gathering information in what customers want improved	2.974	3.063	2.981	2.863	3.074	2.971	2.765
Active promotion of the organisation by its employees	3.060	3.172	3.162	3.137	3.296	3.000	2.902
The firm's future plans	3.316	3.438	3.305	3.263	3.343	3.371	3.216

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the external orientation culture style. The main finding from this analysis is that the market share or general economic condition may have an influence on external orientation culture, as indicated by the greater emphasis placed on this by firms having a perceived increased market share on each of the attributes. The analysis indicates that firms employing fewer than 20 employees tend to emphasise the attribute *active canvassing of new customers* to a lesser degree than larger firms. This can be explained by factors such as a lack of capacity to produce more or the reluctance to grow. The analysis also shows that the attribute *active promotion of the organisation* is emphasised to a greater degree by firms employing 1-19 and over 100 employees. A possible explanation is that firms employing between 20 and 99 have become established and may not have the capability or resources to take on additional work at this stage in their growth cycle.

The analysis shows that all the attributes except one in the overall response (all firms) have a mean score in excess of 3, which indicates that they are emphasised to a great extent. The standard deviation scores are broadly similar and represent a moderate to large dispersion in the response data.

9.5.3. Human resources culture dimension

Tables 9.27 and 9.28 outline the emphasis on the attributes of the human resources culture dimension and the impact of the contingency factors on the various attributes. The original dimension contains five attributes which load onto one factor during the data reduction stage (see section 8.2). Emphasis on the attributes is measured on a Likert-type scale (1=very small extent, 5= a very great extent).

Table 9.27 Human resources culture style - firm size and environment

Attributes	Mean	Standard deviation	Size (Number of Employees)				Operating Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Managers taking performance evaluation seriously	3.418	1.051	3.391	3.411	3.277	3.600	3.505	3.395
Careful selection of new employees	3.923	0.851	4.043	4.018	3.760	3.956	3.971	3.852
Recognition of good performance by employees	3.608	0.852	3.739	3.607	3.574	3.511	3.686	3.500
Stimulation of creativity in employees	3.072	0.873	3.130	3.054	2.972	3.244	3.238	2.964
Thorough training of employees	3.381	1.012	3.348	3.589	3.255	3.289	3.410	3.300

Table 9.28 Human resources culture type - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Managers taking performance evaluation seriously	3.402	3.438	3.481	3.474	3.556	3.429	3.118
Careful selection of new employees	3.923	3.984	3.962	3.905	3.981	4.114	3.667
Recognition of good performance by employees	3.632	3.672	3.591	3.568	3.759	3.400	3.431
Stimulation of creativity in employees	3.085	3.172	3.073	3.042	3.148	2.800	3.098
Thorough training of employees	3.327	3.422	3.370	3.379	3.398	3.414	3.314

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of the human resources culture style. Table 9.27 indicates that all the attributes in the overall response (all firms)

have a mean score in excess of 3, which implies that they are emphasised to a great extent.

9.5.4 Intergroup culture dimension

Tables 9.29 and 9.30 outline the emphasis on the attributes of the intergroup culture dimension and the impact of the contingency factors on the various attributes. The original dimension contains four attributes which load onto one factor during the data reduction stage (see section 8.2). Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5 = a very great extent).

Table 9.29 Intergroup culture style - firm size and environment

Attributes	Mean	Standard deviation	Size [Employee Numbers]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Exchange of information between departments	3.711	0.761	3.978	3.750	3.611	3.600	3.819	3.580
Useful co-operation between departments	3.598	0.810	3.717	3.643	3.526	3.600	3.667	3.511
Timely resolution of conflicts between departments	3.552	0.982	3.804	3.429	3.511	3.489	3.533	3.557
Useful meetings between heads of departments	3.655	0.987	3.565	3.464	3.596	4.044	3.714	3.580

Table 9.30 Intergroup culture type - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Exchange of information between departments	3.726	3.781	3.673	3.663	3.713	3.743	3.686
Useful co-operation between departments	3.615	3.672	3.601	3.547	3.667	3.400	3.588
Timely resolution of conflicts between departments	3.581	3.453	3.659	3.621	3.657	3.314	3.490
Useful meetings between heads of departments	3.701	3.719	3.696	3.684	3.769	3.514	3.510

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the intergroup culture style. The only significant finding is the higher degree of emphasis that firms

employing over 100 employees place on *useful meetings between heads of departments*. Table 9.29 indicates that all the attributes in the overall response (all firms) have a mean score in excess of 3 which implies that they are emphasised to a great extent. The dispersion of the responses to each attribute are broadly similar and indicate a narrow dispersion range.

9.5.5 Improvement culture dimension

Tables 9.31 and 9.32 outline the emphasis on the attributes of the *improvement* or *internal orientation* culture dimension and the impact of the contingency factors on the various attributes. The original dimension contains four attributes which load onto one factor during the data reduction stage (see section 8.2). Emphasis on the attributes is measured on a 'Likert-type' scale (1=very small extent, 5= a very great extent).

Table 9.31 Improvement culture style - firm size and environment

Attributes	Mean	Standard deviation	Size (Number of employees)				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Talking about the mistakes in order to learn from them	3.593	0.924	3.717	3.696	3.504	3.533	3.590	3.591
Quick implementation of sound proposals	3.495	0.940	3.413	3.536	3.383	3.644	3.495	3.489
Initiatives taken by employees to improve the way in which the work is done	3.376	0.915	3.522	3.411	3.298	3.267	3.562	3.148
Efforts contributing to exceptional performance of the firm	3.299	0.935	3.391	3.232	3.191	3.400	3.429	3.136

Table 9.32 Improvement culture type - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Talking about the mistakes in order to learn from them	3.590	3.656	3.541	3.505	3.630	3.544	3.549
Quick implementation of sound proposals	3.556	3.750	3.403	3.326	3.546	3.286	3.529
Initiatives taken by employees to improve the way the work is done	3.402	3.484	3.379	3.358	3.417	3.200	3.412
Efforts contributing to exceptional performance of the firm	3.308	3.297	3.308	3.284	3.491	3.171	2.980

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of the human resources culture style. Table 9.31 indicates that all the attributes have a mean score in excess of 3 which implies that they are emphasised to a great extent.

9.5.6. Organisational culture - concluding remarks

In this sample, there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the various styles of organisational culture. An analysis of the attributes of each culture style shows that the majority of firms indicate that they perceive the attributes of each organisational culture style to a 'great extent' or 'a very great extent'. This is consistent with the standard deviation scores which indicates a narrow dispersion of the data.

9.6 Contingency factors and the strategic planning process

Chapter three outlines seven main characteristics of strategic planning derived by *Kargar and Parnell (1996)* - *internal orientation, external orientation, departmental co-operation, resources for strategy, the use of analytical techniques, staff creativity, and strategy as a control mechanism*. This section considers the emphasis given by the respondents to each of these characteristics and considers the relationships between the main contingency factors outlined in section 9.1 and the attributes of each characteristic.

9.6.1 Internal orientation

Tables 9.33 and 9.34 outline the emphasis on the attributes of the internal orientation characteristic of the strategic planning process and dimension and the impact of the contingency factors on the various attributes. The original dimension contains seven attributes which reduces to five (outlined in bold type) to form two factors (see section 8.3). Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1= no emphasis).

Table 9.33 Internal orientation strategy characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic Market threats	
Diagnostic assessment of past performance	3.407	1.193	3.043	3.543	3.170	3.844	3.514	3.273
Past Performance	3.758	0.915	3.478	3.768	3.745	4.044	3.781	3.727
Strengths and weaknesses in general managerial ability	3.340	1.052	3.065	3.482	3.255	3.533	3.295	3.375
Financial strengths/weaknesses	3.381	1.151	3.370	3.411	3.277	3.467	3.390	3.364
Strengths and weaknesses in human resources	3.433	0.996	3.370	3.460	3.477	3.444	3.410	3.413
Strengths and weaknesses in Marketing	3.608	1.024	3.283	3.679	3.830	3.622	3.705	3.489
Strengths and weaknesses in current products	4.093	0.756	4.022	4.018	4.106	4.244	4.219	3.943

Table 9.34 Internal Orientation strategy characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Diagnostic assessment of past performance	3.427	3.597	3.594	3.295	3.519	3.229	3.294
Past Performance	3.821	3.723	3.719	3.905	3.815	3.886	3.549
Strengths and weaknesses in general managerial ability	3.342	3.361	3.359	3.337	3.463	3.200	3.176
Financial strengths/weaknesses	3.325	3.342	3.344	3.379	3.528	3.286	3.137
Strengths and weaknesses in human resources	3.444	3.460	3.469	3.421	3.551	3.114	3.412
Strengths and weaknesses in Marketing	3.590	3.615	3.641	3.642	3.611	3.829	3.451
Strengths and weaknesses in current products	4.068	4.101	4.125	4.126	4.157	4.029	4.000

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of the internal orientation characteristic of the strategic planning process. Table 9.34 indicates that all the attributes have a mean score in excess of 3 which implies that they are emphasised strongly. An assessment of table 9.33 is consistent with the factor analysis in section 8.3, which indicates that internal orientation comprises two separate variables; *internal capability* and *products and performance*. Both of these variables typify the internal orientation characteristic of strategic planning developed by *Kargar and Parnell (1996)*.

The analysis indicates that firms employing over 100 employees place a greater emphasis on the review of past performance, which is not surprising given that they are likely to be more established and have procedures for monitoring performance established over a number of years.

9.6.2 External orientation

Tables 9.35 and 9.36 outline the emphasis on the attributes of the external orientation characteristic of the strategic planning process and the impact of the contingency factors on the various attributes. The original characteristic contains five attributes which load onto one factor during the data reduction stage (see section 8.3). Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1= no emphasis).

Table 9.35 External Orientation strategy characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Analysis of current competitive position and trends	3.887	0.954	3.696	3.804	3.957	4.111	4.057	3.670
Customer trends	4.160	0.755	3.978	4.107	4.319	4.244	4.276	4.011
General economic and business conditions	3.727	0.956	3.630	3.696	3.787	3.800	3.933	3.466
Regulatory and Government issues	2.768	1.175	2.739	2.893	2.766	2.644	2.905	2.580
Technological trends and Capabilities	3.861	1.051	3.783	3.875	3.809	3.978	4.105	3.557

Table 9.36 External Orientation strategy characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Analysis of current competitive position and trends	3.855	3.874	3.859	3.947	3.833	4.000	3.922
Customer trends	4.137	4.198	4.234	4.221	4.139	4.114	4.235
General economic and business conditions	3.677	3.723	3.719	3.758	3.657	3.971	3.706
Regulatory and Government issues	2.624	2.899	2.984	2.537	2.778	2.771	2.745
Technological trends and Capabilities	3.803	4.089	4.141	3.674	3.954	3.800	3.706

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the external orientation characteristic of the strategic planning process. Table 9.35 indicates that all the attributes in the overall response (all firms) except one, have a mean score in excess of 3 which indicates that they are emphasised strongly. More than 50% of firms strongly emphasise the attributes of the characteristic. The standard deviation scores indicate a narrow dispersion in the responses in the majority of the attributes. These attributes typify the external orientation characteristic of strategic planning outlined in section 3.4.1. It is not surprising that the majority of SMEs tend to place a weak emphasis on government and regulatory issues. It could be argued that while such issues are relevant to SMEs, they are ranked lower than other attributes in order of priority. However, it should be noted that firms with a perceived dynamic and changing operating environment emphasise these attributes to a much higher degree than firms in a 'market threats' type environment.

9.6.3 Departmental co-operation

Tables 9.37 and 9.38 outline the emphasis on the attributes of the departmental co-operation characteristic of the strategic planning process dimension and the impact of the contingency factors on the various attributes. The original dimension contains four attributes which load onto one factor during the data reduction stage (see section 8.3).

Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1= no emphasis).

Table 9.37 Departmental co-operation strategy characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Efforts to achieve functional agreement	3.644	0.912	3.652	3.714	3.553	3.644	3.619	3.659
Functional co-ordination	3.686	0.893	3.717	3.607	3.638	3.800	3.675	3.670
Understanding of all functions by employees	3.582	0.867	3.609	3.643	3.383	3.689	3.600	3.557
Cross functional support	3.763	0.873	3.652	3.786	3.553	4.067	3.819	3.693

Table 9.38 Departmental co-operation strategy characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Efforts to achieve functional agreement	3.726	3.781	3.767	3.611	3.648	3.743	3.568
Functional co-ordination	3.735	3.816	3.859	3.621	3.741	3.686	3.569
Understanding of all functions by employees	3.667	3.718	3.781	3.537	3.565	3.600	3.608
Cross functional support	3.786	3.798	3.813	3.747	3.750	3.800	3.765

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of the departmental co-operation characteristic of the strategic planning process. Table 9.37 indicates that all the attributes in the overall response (all firms) have a mean score in excess of 3, which implies that they are emphasised strongly. More than 50% of firms strongly emphasise the attributes of the dimension, which is confirmed by the narrow dispersion of the data as evidenced by the standard deviation scores. These attributes typify the departmental co-operation characteristic of strategic planning outlined in section 3.4.2.

9.6.4 Resources for strategy

Tables 9.39 and 9.40 outline the emphasis on the attributes of the resources for strategy characteristic of the strategic planning process and the impact of the contingency factors on the various attributes. The original dimension contains six attributes which load onto two factors during the data reduction stage (see section 8.3). Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1= no emphasis).

Table 9.39 Resources for strategy characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size (Number of Employees)				Operating Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Ad hoc working groups	2.572	1.318	1.957	2.482	2.936	2.933	2.521	2.406
Relevant information	3.613	0.927	3.652	3.643	3.617	3.533	3.607	3.594
Involvement of Consultants	1.990	1.178	2.130	1.839	1.936	2.089	2.000	1.703
Involvement of Line Managers	4.005	0.849	3.565	4.089	4.149	4.200	4.017	4.031
Managing Director's time	4.330	0.758	4.217	4.446	4.447	4.178	4.359	4.578
Other physical and financial resources	3.268	1.053	3.065	3.196	3.277	3.506	3.239	3.250

Table 9.40 Resources for strategy characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Ad hoc working groups	2.800	2.294	2.406	2.758	2.657	2.229	2.629
Relevant information	3.781	3.586	3.594	3.674	3.630	3.600	3.588
Involvement of Consultants	1.867	2.148	1.703	2.084	2.130	1.771	1.843
Involvement of Line Managers	4.111	3.984	4.031	4.042	4.046	3.971	3.941
Managing Director's time	4.324	4.300	4.578	4.189	4.352	4.400	4.235
Other physical and financial resources	3.333	3.193	3.250	3.337	3.380	3.114	3.137

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of the resources for strategy characteristic of the strategic planning process. The only significant finding is that firms employing fewer than 20 employees and to a lesser extent firms employing between 20 and 49 employees, place a lesser emphasis on ad hoc working groups and the involvement of line managers. It could be argued that this finding is not surprising as larger firms (employing over 50 employees) tend to have a greater tendency to use ad hoc working groups due to their tendency to have broader functionally based organisational structures. Interestingly, the mean scores for all responses indicate that the most important resources for SMEs are the managing directors' time and the involvement of line managers. This finding is consistent with the analysis of the literature (see section 3.4.2).

Table 9.39 indicates that all the attributes in the overall response (all firms) except two, have mean scores in excess of 3, which implies that they are emphasised strongly. More than 50% of firms strongly emphasise all the attributes in this characteristic. These attributes typify the resources for strategy characteristic of strategic planning outlined in section 3.4.2. Figure 8.6 indicates that resources for strategy yields two separate categories entitled *resources for strategy* and *management time*. The standard deviation scores confirm the categorisation of the resources for strategy characteristic into two separate variables.

9.6.5 Use of analytical techniques

Tables 9.41 and 9.42 outline the emphasis on the attributes of the 'use of analytical techniques' characteristic of the strategic planning process dimension and the impact of the contingency factors on the various attributes. The original dimension contains three attributes, which load onto one factor during the data reduction stage (section 8.3). Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1=no emphasis).

Table 9.41 Analytical techniques strategy characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Ability to use techniques	2.624	1.164	2.304	2.679	2.489	3.022	2.943	2.814
Willingness to seek outside assistance	2.686	1.238	2.652	2.607	2.574	2.934	2.781	2.557
Use of analytical techniques	2.701	1.167	2.475	2.839	2.553	2.933	2.952	2.398

Table 9.42 Analytical techniques strategy characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Ability to use techniques	2.547	2.695	2.750	2.674	2.667	2.686	2.490
Willingness to seek outside assistance	2.607	2.504	2.516	2.800	2.676	2.629	2.745
Use of analytical techniques	2.675	2.718	2.781	2.768	2.787	2.600	2.588

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the use of analytical techniques characteristic of the strategic planning process. It is not unexpected to learn that firms employing fewer than 20 employees place a lesser emphasis on the ability to use analytical techniques than larger firms. Table 9.41 indicates that all the attributes have a mean score of less than 3, which indicates that they receive little emphasis. The standard deviation scores also indicates a wide dispersion in the data responses. This finding is consistent with the literature where the use of analytical techniques is seen as the least important characteristic of strategic planning - *Kargar and*

Parnell (1996). Other authors suggest that the use of analytical techniques in SMEs may be harmful rather than useful (see section 3.4.2).

9.6.6 Staff creativity

Tables 9.43 and 9.44 outline the emphasis on the attributes of the staff creativity characteristic of the strategic planning process dimension and the impact of the contingency factors on the various attributes. The original dimension contains seven attributes, which load onto one factor during the data reduction stage (section 8.3). Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1=no emphasis).

Table 9.43 Staff creativity strategy characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Anticipating and avoiding barriers to implementation	3.351	1.044	3.435	3.250	3.319	3.422	3.505	3.179
Ability to cope with surprises/crises/threats	3.495	0.978	3.261	3.518	3.574	3.622	3.610	3.352
Evaluation of alternatives	3.510	0.951	3.630	3.554	3.340	3.511	3.705	3.273
Capacity to generate new ideas	3.758	0.965	3.870	3.696	3.638	3.844	3.867	3.614
Identify key problems	3.593	0.941	3.478	3.500	3.702	3.711	3.657	3.500
Ability to identify new opportunities	4.031	0.875	4.000	3.982	4.043	4.111	4.152	3.875
Flexibility to adapt to unanticipated changes	3.711	0.927	3.654	3.642	3.702	3.844	3.781	3.625

Table 9.44 Staff creativity strategy characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electrooics	Engioeering	Up	Down	Same
Anticipating and avoiding barriers to implementation	3.427	3.426	3.422	3.379	3.407	3.171	3.353
Ability to cope with surprises/crises/threats	3.564	3.534	3.500	3.516	3.574	3.514	3.314
Evaluation of alternatives	3.462	3.582	3.594	3.400	3.583	3.371	3.451
Capacity to generate new ideas	3.821	3.806	3.781	3.821	3.870	3.514	3.686
Identify key problems	3.611	3.598	3.594	3.621	3.685	3.457	3.490
Ability to identify new opportunities	4.026	4.028	4.031	4.063	4.139	3.886	3.902
Flexibility to adapt to unanticipated changes	3.829	3.796	3.766	3.716	3.788	3.714	3.569

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the staff creativity characteristic of the strategic planning process.

Table 9.43 indicates that all the attributes, have a mean score in excess of 3, which indicates that they are emphasised strongly. The standard deviation scores also indicate a narrow dispersion in the data. Interestingly, the most important attribute is the *ability to identify new opportunities*. This finding is consistent with the literature (see section 3.4.2). More than 50% of firms strongly emphasise the majority of the attributes of the dimension. These attributes typify the staff creativity characteristic of strategic planning outlined in section 3.4.2.

9.6.7 Strategy as a control mechanism

Tables 9.45 and 9.46 outline the emphasis on the attributes of the staff creativity characteristic of the strategic planning process and the impact of the contingency factors on the various attributes. The original characteristic contains seven attributes, which load onto one factor during the data reduction stage (see section 8.3). Emphasis on the attributes is measured on a 'Likert-type' scale (5=strong emphasis, 1= no emphasis).

Table 9.45 Strategy as a control mechanism characteristic - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Value as a control mechanism	3.228	1.036	3.217	3.214	3.174	3.311	3.429	2.977
Ability to communicate management thinking down the line	3.552	0.992	3.457	3.607	3.468	3.667	3.619	3.466
Communicate management thinking up the line	3.356	1.044	3.174	3.357	3.362	3.533	3.486	3.196
A control technique for monitoring performance	3.108	1.098	2.848	3.071	3.004	3.533	3.267	2.909
A mechanism for revising current strategy	3.216	0.984	3.022	3.232	3.149	3.467	3.348	2.932
A mechanism for managerial motivation	3.247	1.023	3.174	3.321	3.277	3.200	3.390	3.057
A mechanism for integrating functions	3.005	0.952	2.891	3.125	2.979	3.000	3.076	2.909

Table 9.46 Strategy as a control mechanism characteristic - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Dnwn	Same
Value as a control mechanism	3.164	3.198	3.219	3.383	3.243	3.257	3.176
Ability to communicate management thinking down the line	3.590	3.618	3.625	3.632	3.537	3.743	3.451
Communicate management thinking up the line	3.376	3.337	3.328	3.484	3.472	3.200	3.216
A control technique for monitoring performance	3.111	3.110	3.109	3.242	3.194	3.000	3.000
A mechanism for revising current strategy	3.205	3.224	3.234	3.316	3.296	3.171	3.078
A mechanism for managerial motivation	3.256	3.398	3.469	3.242	3.213	3.343	3.255
A mechanism for integrating functions	2.966	3.018	3.063	3.011	2.991	3.000	3.039

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the different attributes of the strategy as a control mechanism characteristic of the strategic planning process. The only significant finding which is not unexpected relates to the lesser emphasis placed on the communication of management thinking up the line in firms employing fewer than 20 employees.

The mean scores for the entire response are all in excess of 3, which implies that a strong emphasis is given to each attribute. In particular, the ability to communicate management thinking down the line receives the strongest emphasis, whereas attributes indicating control, integration, strategy revision or motivation receive lesser emphasis.

9.6.8 Contingency factors and strategic planning - concluding remarks

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on different attributes of any of the characteristics of the strategic planning process. The descriptive statistics indicate that the majority of firms place a strong emphasis on the following characteristics of strategic planning: *internal orientation, external orientation, departmental co-operation, resources*

for strategy and staff creativity. However, a small number of SMEs indicate a lesser emphasis on the use of analytical techniques and on strategy as a control mechanism. The standard deviation scores are consistent with the variables derived in chapter 8.

9.7 Formality and barriers to strategy implementation/success

In an effort to identify the factors that influence the performance of SMEs, a further analysis is carried out on the impact of the formality of the strategic plan and the perceived barriers to its implementation and its success.

9.7.1 Strategy implementation barriers

Table 9.47 outlines the main implementation barriers to the effective deployment of strategic planning dimension and the impact of the contingency factors on the various attributes.

Table 9.47 Strategy implementation barriers - formality/unwritten strategy

Attribute	Mean	Standard deviation	Formality of Strategy - Mean Scores	
			Formal Strategy	Unwritten Strategy
Communication was inadequate	2.253	.935	2.248	2.259
Crises distracted attention from implementation	2.510	1.112	2.442	2.605
Implementation took longer than anticipated	3.340	1.032	3.425	3.222
Employees capabilities were not enough	2.495	1.069	2.540	2.432
Overall goals of strategy were not well enough understood by staff	2.150	.918	2.186	2.099
Co-ordination of implementation was not effective enough	2.660	.986	2.637	2.691
Unanticipated problems arose	2.910	.917	2.894	2.926
External factors impacted in implementation	2.871	1.091	3.062	2.605

In this sample there appears to be no significant relationship between the formality of strategic planning or the lack of a written strategic plan, on the degree of emphasis placed on the different barriers to the implementation of a firm's strategy. However, the analysis

indicates that the perceived key strategic planning process barriers are related to implementation taking longer than anticipated, followed by unanticipated problems and external factors. These findings are consistent with the exploratory interviews, where Managing Directors stress the impact of unanticipated problems and external factors on the effective deployment of strategic planning. However, the majority of firms perceive barriers to implementation such as inadequate communication and the lack of clarity of the strategic goals to be either a minor problem or non-existent. This is in contrast to the exploratory interviews where they are perceived to be a major cause for concern for SMEs. This study has shown that these concerns are unfounded in this sample. Table 9.47 is consistent with the findings of section 8.5 where the barriers to strategic implementation are categorised as 'internal' and 'external' orientated.

9.7.2 Strategic planning formality and perceived success

Question 25 seeks to ascertain the perceptions of managing directors on the success of their strategic planning, measured according to the degree to which its deployment fulfilled the initial goals and objectives of the strategy and/or the achievement of the financial results expected. Finally, it seeks to ascertain the perception of the deployment of strategic planning within the resources allocated for that purpose. Table 9.48 provides a summary of the responses.

Table 9.48 Strategy implementation success - strategic planning formality

Attribute	Mean	Standard deviation	Strategic Planning Formality - Mean Scores	
			Formal Strategy	Unwritten Strategy
Initial goals and objectives of the strategy	3.784	.758	3.619	3.605
financial results expected	3.546	.888	3.549	3.543
deployed within the resources allocated	3.613	.827	3.850	3.691

The mean scores in table 9.48 indicate that the majority of firms perceive the impact of strategy implementation as having fulfilled or entirely fulfilled their goals/objectives and financial expectations. A further analysis was carried out to ascertain perceptions according to firm size, as shown in table 9.49.

Table 9.49 Degrees of success in the deployment of strategic planning according to size band

Employee Size Band	Achieved*		
	Initial Goals/objectives	Financial Results Expected	Deployment within resources allocated
1-9	72.7%	45.4%	50.0%
10-19	66.6%	54.1%	70.9%
20-49	58.9%	50.0%	51.0%
50-99	63.8%	42.5%	48.9%
100-199	77.5%	67.8%	67.9%
200-249	78.6%	77.5%	64.3% n=194

* includes all firms indicating that the achievement level was either fulfilled or entirely fulfilled (checked as 4 or 5 in question 25).

The analysis indicates that the achievement of the initial goals/objectives of the strategic plan varies according to the size of firm. Micro and medium sized firms employing over 100 employees indicate a perceived success rate of over 70%, whereas firms with between 10-100 employees perceive a lower success rate. This could be explained by larger firms having more defined goals and the resources to ensure their effective achievement. Firms with a lower perceived success rate (10-100 employees) have increasingly diverse objectives and may not have the resources to ensure a greater focus.

The achievement of the 'financial results expected' shows greater diversity according to firm size. For example, less than half of the micro firms responding perceive the achievement of financial results as either fulfilled or entirely fulfilled, whereas over 78% of firms with between 200 - 249 employees perceive the achievement of financial results as fulfilled or entirely fulfilled. It could be argued that either the financial expectations of firms with fewer than ten staff are over ambitious, or greater alignment is needed between goals/objectives and financial returns. At the other end of the employee size bands, firms with over 200 employees perceive over 78% of their initial goals/objectives to be achieved and also over 77% of their expected financial results. This indicates that larger SMEs have greater resources to plan for and deploy their strategic plans, often based on more comprehensive information.

Finally, the deployment of strategic planning processes within the resources allocated also shows a marked difference between firm sizes. Half of the micro firms perceive deployment within the resources allocated whereas the figure for firms with 100-249 employees is over 60%. The most marked difference is between micro firms and firms with 10-19 employees with a rating of 50% and 70.9% respectively. This indicates that micro firms have less success in the deployment of strategic planning. This can be explained by a variety of reasons such as inexperience or inaccurate estimates, whereas firms with 10-19 employees tend to be more established and have a tight hierarchical span of control. This contrasts with the next size band (20-49) where the success rate drops to 50% probably due to the introduction of a greater functional approach. The next section examines the impact of strategic planning on a range of performance measures such as financial performance, customer orientation, organisational effectiveness, learning and growth and organisational capability.

9.8 Performance measurement

Tables 9.50 and 9.51 outline the impact of contingency factors on measures of performance. The overall financial performance measure contains only one attribute and is measured using a 'Likert-type' scale (5= very positive impact, 1= very negative impact). Customer orientation contains three attributes which load onto one factor during the data reduction stage (see section 8.3). Organisational Effectiveness contain five attributes which load onto two factors (organisational effectiveness and short term needs) during the data reduction stage (see section 8.3). Learning and Growth contains only two attributes which load onto one factor during the data reduction stage (see section 8.3). Emphasis on these three performance measurements attributes are measured on a 'Likert-type' scale (5=entirely fulfilled, 1= entirely unfulfilled).

Table 9.50 Performance measurement - firm size and environment

Attribute	Mean	Standard deviation	Size [Number of Employees]				Operating Environment	
			1-19	20-49	50-99	100-249	Dynamic	Market threats
Financial performance	4.041	.807	4.065	4.089	3.957	4.044	4.057	4.045
Customer satisfaction	3.974	.606	3.957	4.000	3.957	4.044	3.962	3.989
Customer retention	4.021	.770	4.022	4.036	3.915	3.978	4.048	3.985
Market share	3.747	.743	3.804	3.625	3.617	4.111	3.695	3.818
Predicting future trends	3.392	.789	3.370	3.779	3.128	3.978	3.229	3.295
Evaluating alternatives	3.160	.846	3.087	3.707	3.255	3.400	3.276	3.011
Avoiding problem areas	3.263	.760	3.761	3.625	3.766	3.200	3.771	3.852
Improving short term performance	3.485	.859	3.478	3.214	3.404	4.133	3.467	3.307
Improving long term performance	3.809	.775	3.478	3.518	3.489	3.511	3.467	3.511
Manufacturing learning	3.474	.853	3.326	3.625	3.596	3.444	3.524	3.420
Introduction of new products	3.674	.851	3.326	3.625	3.596	3.444	3.867	3.466

Table 9.51 Performance measurement - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Financial performance	4.009	4.078	4.048	4.042	4.148	3.857	3.941
Customer satisfaction	4.034	4.044	4.047	3.895	4.074	3.686	3.961
Customer retention	4.111	4.102	4.094	4.021	4.093	3.829	4.000
Market share	3.761	3.706	3.688	3.800	3.954	3.486	3.490
Predicting future trends	3.282	3.375	3.375	3.263	3.315	3.257	3.157
Evaluating alternatives	3.239	3.549	3.719	3.084	3.250	2.971	3.098
Avoiding problem areas	3.821	3.719	3.453	3.905	4.028	3.600	3.490
Improving short term performance	3.462	3.453	3.456	3.421	3.519	3.229	3.235
Improving long term performance	3.496	3.406	3.354	3.568	3.667	3.143	3.333
Manufacturing learning	3.538	3.439	3.438	3.579	3.579	3.457	3.392
Introduction of new products	3.726	3.797	3.797	3.726	3.824	3.514	3.510

The analysis indicates that 84% of firms perceive a positive or very positive impact of strategic planning on their overall financial performance. The number of firms perceiving strategy to have a negative impact on overall financial performance is only eleven firms, which is less than 6% of the total responses. Interestingly, table 9.50 indicates that *financial performance, customer retention and customer satisfaction* receive the highest emphasis in every size grouping. This finding shows that SMEs emphasise performance based on financial and non financial criteria, which is consistent with the literature (see section 6.2.2).

In relation to customer orientation, the results indicate that the majority of firms perceive each attribute to be either fulfilled or entirely fulfilled. The standard deviation scores indicate a narrow dispersion of the data, which shows that the majority of respondents are concentrated near the mean score.

In relation to organisational effectiveness, the results indicate that the contingency factors are mainly associated with the fulfilling of the objectives of improving long and short term performance, followed by predicting future trends.

In relation to learning/growth, the results indicate that the majority of firms perceive that strategic planning either fulfils or entirely fulfils the attributes of manufacturing learning and the introduction of new products.

Organisational capability is also included as an indicator of performance. This is supported by the extant literature - *Kargar and Parnell (1996)*, *Kargar (1996)*. It contains eleven attributes which load onto three factors (*meeting customers demands, the provision of quality goods on time and after sales service*) during the data reduction stage (see section 8.4). Emphasis on the attributes is measured on a 'Likert-type' scale (5=entirely fulfilled, 1= entirely unfulfilled).

Table 9.52 Organisational capability - firm size and environment

Attributes	Mean	Standard deviation	Size [Number of Employees]				Environment	
			1-19	20-49	50-99	100-250	Dynamic	Market threats
Advertise/promote products	3.155	1.146	3.804	3.321	3.319	3.133	3.314	2.977
Provide after sales service	4.062	0.995	4.174	4.036	3.936	4.111	4.105	4.034
Deliver a broad product line	3.335	1.145	3.261	3.357	3.191	3.533	3.371	3.307
Make rapid design changes	3.948	1.066	3.891	3.893	4.064	3.956	4.109	3.659
Distribute products broadly	3.345	1.182	2.913	3.589	3.468	3.356	3.533	3.136
Provide high performance goods	4.211	0.928	4.326	4.125	4.234	4.178	4.324	4.068
Compete on price	3.948	0.838	3.913	4.018	3.979	3.867	3.952	3.943
Deliver products quickly	4.186	0.844	4.217	4.214	4.021	4.289	4.257	4.091
Offer consistent quality	4.655	0.575	4.500	4.643	4.681	4.800	4.676	4.625
Respond to swings in volume	3.521	1.019	3.348	3.589	3.617	3.511	3.524	3.511
Deliver products on time	4.649	0.611	4.630	4.679	4.596	4.689	4.705	4.580

Table 9.53 Organisational capability - status, sector and market share

Attributes	Status		SIC Code		Market Share		
	Independent	Subsidiary	Electronics	Engineering	Up	Down	Same
Advertise/promote products	3.179	3.200	3.194	3.257	3.194	3.257	3.000
Provide after sales service	4.171	4.141	4.141	4.053	4.194	3.857	3.922
Deliver a broad product line	3.368	3.234	3.234	3.432	3.324	3.400	3.314
Make rapid design changes	4.026	4.125	4.130	3.884	4.037	3.743	3.902
Distribute products broadly	3.291	3.375	3.363	3.379	3.306	3.514	3.314
Provide high performance goods	4.239	4.266	4.256	4.179	4.343	4.057	4.039
Compete on price	3.906	3.906	3.934	3.968	3.852	3.971	4.137
Deliver products quickly	4.239	4.016	4.003	3.960	4.204	4.286	4.255
Offer consistent quality	4.632	4.594	4.625	4.695	4.704	4.543	4.627
Respond to swings in volume	3.513	3.484	3.531	3.600	3.537	3.514	3.490
Deliver products on time	4.632	4.625	4.675	4.716	4.630	4.686	4.667

In this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the various attributes of organisational capability. The only significant finding which is not unexpected relates to the lesser degree of emphasis given by firms with fewer than twenty employees to the capability to distribute products broadly. In addition, the mean scores for all respondents indicate that the capability to *offer consistent quality, deliver products on time and provide after sales services* receives greater emphasis than other attributes.

9.8.1 Performance measurement - concluding remarks

The analysis of the performance measurement dimensions (table 9.49) indicates that the majority of firms perceives that the implementation of strategic planning fulfils their initial goals and objectives and to a lesser extent delivers the expected financial results. A more detailed analysis indicates the importance of the following dimensions: overall financial performance, customer orientation, performance trends, learning/growth, meeting customer demands and the provision of quality products.

9.9 Descriptive statistics - concluding remarks

Descriptive statistics are deployed to examine the relationship between strategic planning, organisational culture, leadership and performance measurement with contingency factors such as size (based on the number of employees), the operating environment (dynamic or market threats focused), status (independently owned or a subsidiary), industrial classification (electronics or engineering) and perceived market share (increased, decreased or static).

The chapter begins by examining the product type as a proportion of total sales (see section 9.1.5). The analysis indicates that none of the contingency factors impact on the product type (mature, standard or customised), the proportion of total sales exported or the propensity to invest in research and development. The chapter continues by examining the types of strategies introduced over the previous three years. The five most frequent strategies are: *the introduction of new products, serving larger firms/geographic markets more effectively and efficiently, the expansion of operations, the provision of a unique product on an industry wide basis and the introduction of new products into existing markets.*

The analysis indicates that the type of strategy tends to differ dependant on organisation size. For example, small firms (with 1-19 employees) emphasise the introduction of new products but tend to introduce new products to old markets rather than seek new markets. In addition, small firms focus on serving a large group/firm more effectively and efficiently. This finding is no surprise as small firms frequently produce parts and components for larger firms. On the other hand, firms in the 100-249 employee category tend to emphasise the expansion of operations.

Contrary to the existing literature, this study shows that the proportion of firms with a formal strategic plan (58%) is relatively high, which can be explained in part by the firm status (71% of subsidiary firms have written strategic plans compared with 54% of independent firms). The chapter also examines the content of formal strategies and shows that the more common elements for all SME size categories, include the duration of the plan (covering at least 3 years), the specification of goals/objectives, action plans for major functional areas of the firm and the identification of future resources required. The

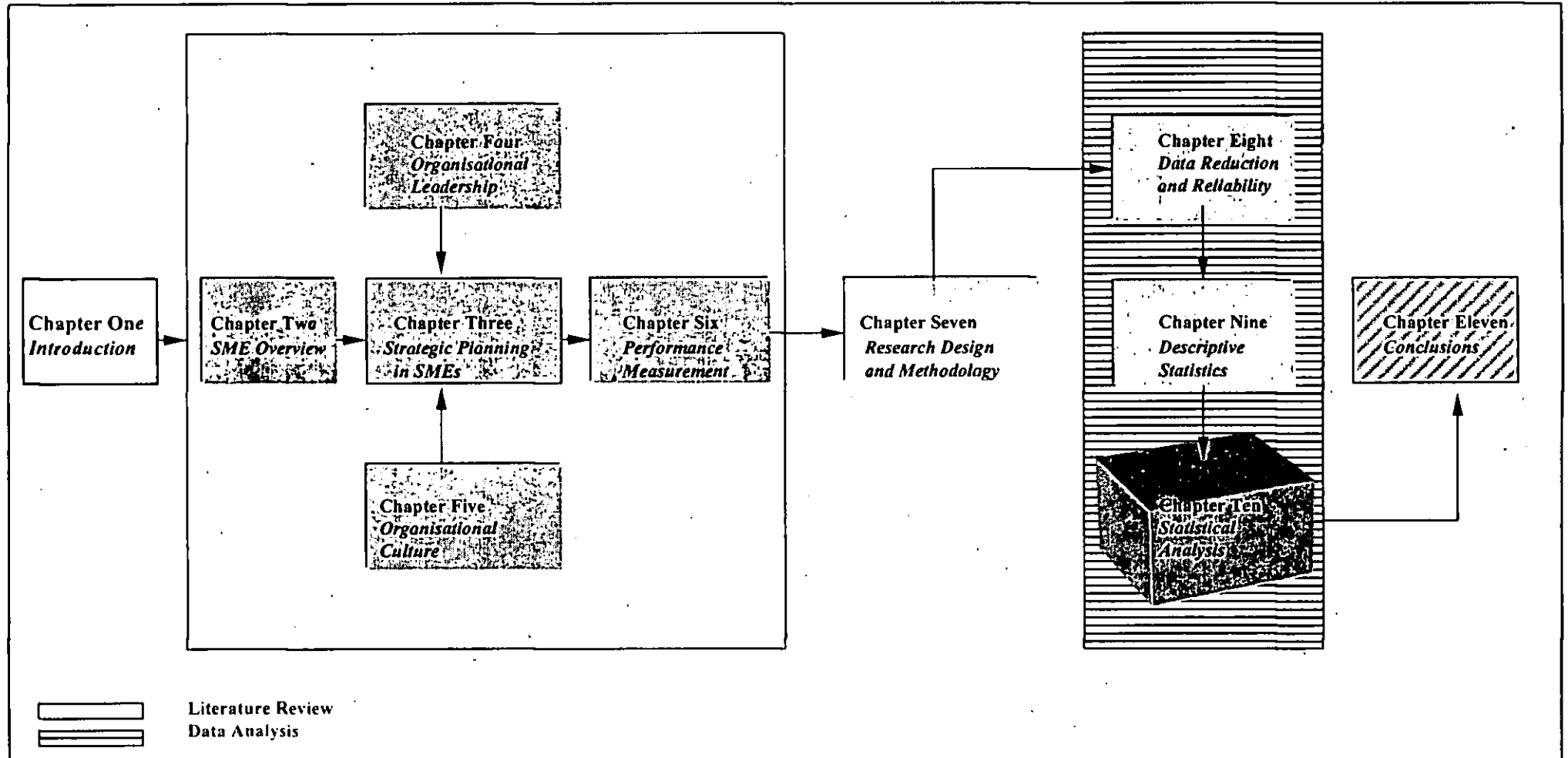
analysis indicates that over half the respondents fail to account for factors outside the immediate environment of the firm. This failure seems to defeat the objective of strategic planning and can only be explained by a significant number of firms producing parts and components for larger firms. Even then, it is still a cause for concern. The chapter also examines the strategic orientation of SMEs using the Miles and Snow typology (see section 9.3). It indicates that 47.4% of the respondent firms perceive themselves as 'prospector' style firms, while 44% of firms perceive themselves as 'defender' type firms. Only 5.2% and 2.6% of firms perceive themselves as 'analyser' and 'reactor' type firms, respectively.

The remainder of the chapter examines the main concepts in the deductive model: strategic planning, organisational culture, leadership and performance measurement. The descriptive statistics confirm that SMEs place a significant emphasis on the transactional, transformational, human resources leadership styles derived by *Wilderom and van den Berg* (1997). Lesser emphasis is placed by SMEs in all size groupings on the laissez faire leadership style. This is not surprising as it is a style where leaders tend to abdicate responsibility and allow their subordinates to do whatever they chose. The descriptive statistics also confirm that SMEs place a significant emphasis on all the organisational culture styles derived *Wilderom and van den Berg* (1997). The chapter shows that the seven main characteristics of strategic planning derived by *Kargar and Parnell* (1996) are emphasised in all SME size groupings to a significant degree with the exception of the characteristic *analytical techniques* and the *involvement of consultants* attribute of the *resources for strategy* characteristic.

The analysis of performance measurement indicates that all attributes are emphasised to a significant extent by the SMEs in each size category. The highest degree of emphasis is on financial performance, customer satisfaction and customer retention.

The analysis indicates that in this sample there appears to be no significant relationship between the contingency factors and the degree of emphasis placed on the attributes of strategic planning, organisational culture, leadership or the indicators of performance. Whilst there may be other factors that influence these concepts, it is not clear from this study what they are.

**The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises
- Chapter Outline**



CHAPTER TEN: HYPOTHESIS TESTING AND FINDINGS

10.0 Introduction

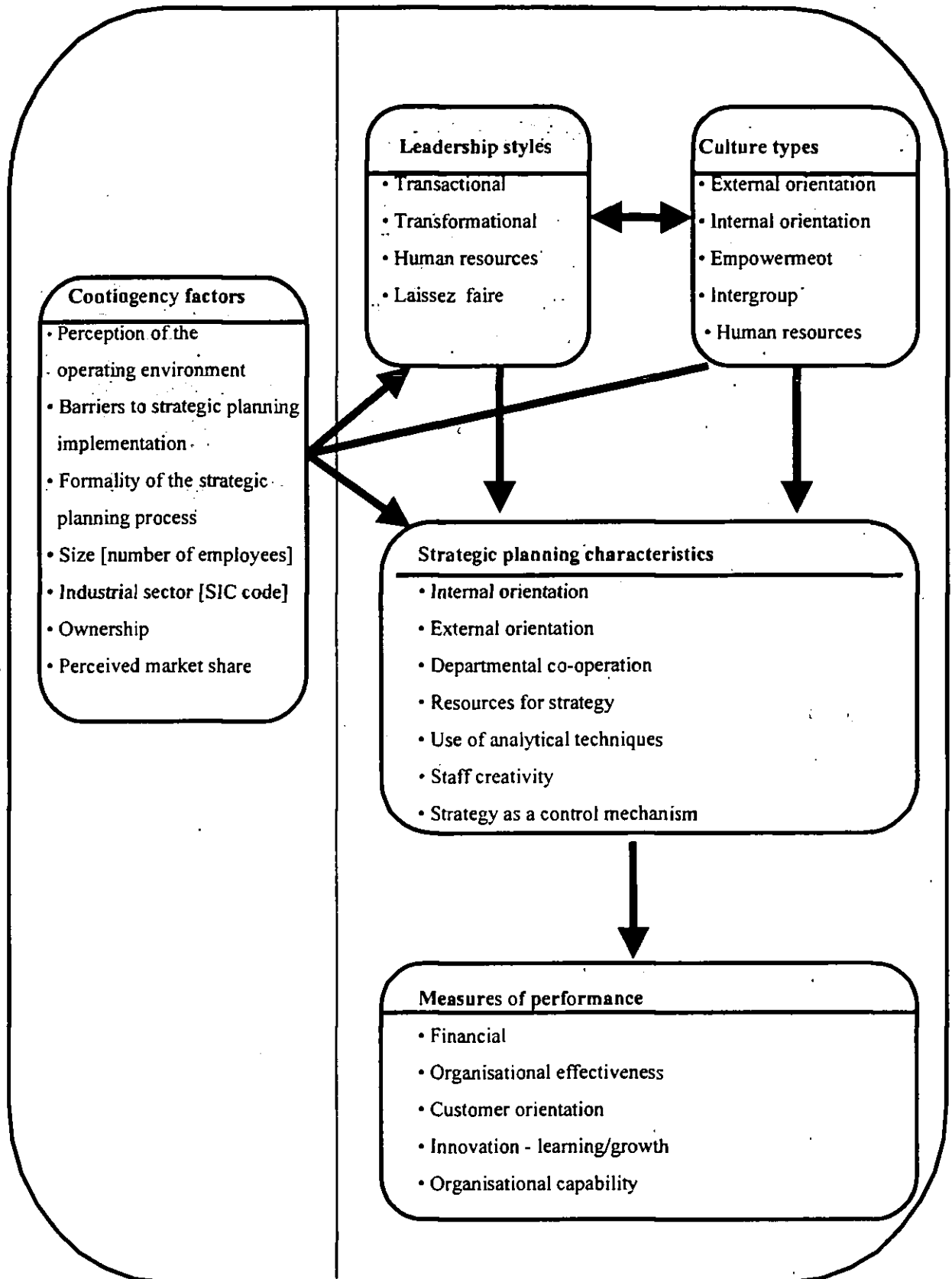
Chapter nine outlines the descriptive statistics resulting from the data analysis. The aim of this chapter is to statistically test the deductive model depicted in figure 10.1. More specifically, the author examines the following in this chapter:

- the association between contingency factors and the strategic planning process (section 10.1)
- the association between culture and leadership (section 10.2)
- the association between leadership and strategic planning in SMEs (section 10.3)
- the association between culture and strategic planning (section 10.4)
- the association between strategic planning and organisational performance (section 10.5).

The chapter continues by examining the emphasis placed on the attributes associated with both strategic planning and organisational performance by high success companies and low success companies (section 10.6). The chapter also tests for size differences between firms with fewer than twenty employees compared with firms with 100-249 employees (section 10.7).

Finally, a summary of the findings and conclusions is presented (section 10.8).

Figure 10.1 Deductive model



10.1 The influence of contingency factors on leadership, culture, strategic planning and organisational performance in SMEs

The literature indicates that a range of factors influence leadership, culture, strategic planning and organisational performance, many of which are outside the control of SMEs (section 3.4.1). The hypothesis in this section is:

H1(a) 'that firm size, financial turnover, industrial sector and perceived market share influence leadership, culture, strategic planning and organisational performance in SMEs'.

The descriptive statistics in chapter nine (sections 9.4, 9.5, 9.6 and 9.8) indicate that there appears to be no significant relationship between these contingency factors and the degree of emphasis placed on leadership, culture, strategic planning and performance measurement. While they may be influenced by other factors, it is not clear from this study what they are.

Clearly there are other contingency factors that could have been considered. For example, regional markets served, the characteristics of the managing directors and so on. Nevertheless, the emphasis afforded to the contingency factors outlined by the exploratory interviews forms the rationale for limiting statistical testing to the following:

- the extent to which the attributes of the characteristics of the strategic planning process (after data reduction) are emphasised by firms perceiving their operating environment as '*dynamic and changing*' or '*market threats focused*' (section 10.1.1)
- the emphasis on the potential barriers to the implementation of strategic planning by high or low performing firms (section 10.1.2)
- the extent that barriers to the implementation of the strategic planning process are experienced by firms with formal (written) strategic plans compared to firms with unwritten strategic plans (section 10.1.3)
- the emphasis on the various attributes of the characteristics of the strategic planning process by firms with formal strategic plans compared with firms with (unwritten) strategic plans (section 10.1.4).

It should be noted that the overall purpose of the research study is to establish the associations, if any, between culture, leadership and the strategic planning process and not the exclusive consideration of contingency factors.

10.1.1 The operating environment and the strategic planning process

Chapter nine indicates that the degree of emphasis by firms perceiving their operating environment as '*dynamic and changing*' appears to be broadly comparable to that of firms perceiving their operating environment as '*market threats focused*'. The degree of emphasis given to the perceived operating environment in the exploratory interviews led to the formulation of the following hypothesis prior to statistical testing:

H1(b) - 'that there is a significant difference between the emphasis on leadership, culture, strategic planning and organisational performance by firms that perceive their operating environment to be 'dynamic and changing' compared with firms that perceive their operating environment to be 'market threats focused'.

Statistical analysis using the Wilcoxon test is carried out on each attribute based on the size of the difference between the two pairs of variables. The analysis of the information presented in table 10.1 shows that there are a number of significant differences between firms that perceive their operating environment as dynamic and changing compared with firms that perceive their operating environment as market threats focused. Firms in a '*dynamic and changing*' environment place a greater emphasis on all the characteristics of strategic planning than firms perceiving their operating environment as '*market threats focused*'. It should be noted that only five attributes are statistically significant at $p < 0.005$ and a further nine attributes are statistically significant at $p < 0.05$. The results are outlined in table 10.1.

Table 10.1 Emphasis on the characteristics of the strategic planning process by firms perceiving their environment as dynamic and changing or market threats focused.

Strategic planning characteristics	Dynamic/changing Market threats		Z Statistic
	Mean (N=106)	Mean (N=88)	
<i>Internal Capability</i>			
General managerial ability	3.38	3.30	-0.86
Financial strengths/weaknesses	3.39	3.36	-0.19
Human resources strengths/weaknesses	3.42	3.41	-0.40
<i>Products and Performance</i>			
Past performance	3.78	3.73	-0.31
Current products strengths/weaknesses	4.22	3.94	-0.19
<i>External Orientation</i>			
General economic/business conditions	3.94	3.47	-2.86*
Technological trends	4.10	3.58	-2.74**
Competitive position and trends	4.06	3.67	-2.27**
<i>Departmental Co-operation</i>			
Understanding of all functions by employees	3.60	3.56	-0.32
Cross functional support	3.81	3.70	-0.71
Functional co-ordination	3.68	3.67	-0.33
Efforts to achieve functional agreement	3.66	3.62	-0.65
<i>Resources/employee involvement</i>			
Ad hoc working groups	2.52	2.40	-0.24**
Relevant/adequate information	3.61	3.59	-2.38**
Involvement of consultants	2.00	1.70	-2.36**
Other physical/financial resources	3.25	3.24	-0.29
<i>Management Time</i>			
Involvement of line managers	4.03	4.02	-1.50
Managing directors time	4.38	4.36	-0.21
<i>Use of Analytical techniques</i>			
Use of analytical techniques	2.95	2.40	-3.68*
Ability to use techniques	2.94	2.81	-3.22*
Willing to seek outside assistance	2.78	2.56	-0.91
<i>Staff Creativity</i>			
Coping with surprises/crises	3.61	3.35	-1.98**
Adapting to unanticipated changes	3.78	3.63	-0.99
Identify new opportunities	4.15	3.88	-1.96**
Identifying key problem areas	3.66	3.50	-1.56
Generating new ideas	3.87	3.61	-1.48
Generating/evaluating strategy alternatives	3.71	3.27	-3.09*
Anticipating barriers to strategy imp.	3.51	3.18	-1.86
<i>Strategy a Control Mechanism</i>			
Value as a control mechanism	3.43	2.98	-2.61**
A monitoring control technique	3.27	2.91	-1.92
A mechanism for revising strategy	3.35	2.93	-3.39*
Ability to communicate management thinking down the line	3.62	3.47	-0.85
Communicate staff thinking up the line	3.49	3.20	-1.76
A mechanism for integrating functions	3.08	2.91	-0.83
A mechanism for managerial motivation	3.39	3.06	-2.11**

* $p < 0.005$ ** $p < 0.05$

A statistical analysis of the mean scores indicates that none of the attributes of the *internal capability, products and performance, departmental co-operation and management time characteristics* are statistically significant. A possible explanation for this may lie in the perception of these characteristics by both environment types as core characteristics which form a foundation for the use of the remaining characteristics.

The principal differences between the two types of firms are in the following characteristics and their attributes:

(a) the external orientation attributes of *general economic and business conditions* ($z = -2.86$ and $p < 0.005$), followed by *technological trends* ($z = -2.74$, $p < 0.05$) and *competitive position and trends* ($z = -2.27$, $p < 0.05$) are statistically significant. This finding was expected as firms in a perceived dynamic and changing environment tend to place a greater emphasis on looking outwards by scanning the environment and establishing the necessary actions to ensure a 'fit' with the emerging environment.

(b) the resources for strategy attributes of *involvement of ad hoc working groups*. ($z = -0.24$, $p < 0.05$), followed by the availability of *relevant and adequate information from available sources* ($z = -2.38$, $p < 0.05$), and *the involvement of consultants* ($z = -2.36$, $p < 0.05$) are statistically significant. None of these findings are surprising as firms perceiving their environment as *dynamic and changing* often need ad hoc groups to consider emerging opportunities/weaknesses. It could be argued that in a dynamic and changing environment the availability of relevant and adequate information is vital to enable changes to be made in the strategic planning process. Often, firms in a dynamic environment may need to engage consultants to provide the expertise that they lack in the preparation of a strategic plan covering emerging problems or potential opportunities.

(c) the use of structured/analytical approach attributes of *the use of analytical techniques* ($z = -3.68$, $p < 0.005$), and *the ability to use techniques* ($z = -3.22$, $p < 0.005$) are statistically significant. Both attributes are emphasised to a greater degree by firms perceiving their environment as dynamic. This can be explained by the need to utilise a range of mechanisms to adjust the strategic planning process to meet the changes in the

emerging external environment. Interestingly, the remaining attribute of this characteristic, *willingness to seek outside assistance*, does not differ to a degree that is statistically significant. A possible explanation is that most firms have the ability to use a limited number of analytical techniques.

(d) the staff creativity attributes of *ability to cope with surprises, crises, and threats* ($z=-1.98, p<0.05$), *the ability to identify new opportunities* ($z=-1.96, p<0.05$), and finally, the *capacity to generate and evaluate a number of strategic alternatives* ($z= -3.09, p<0.05$) are statistically significant. The emphasis on these attributes by firms perceiving their environment as dynamic can be explained by the requirement to deal with constant and varied change in a dynamic environment.

(e) the control mechanism attributes of *value as a control mechanism* ($z=-2.61, p< 0.05$), *a mechanism for revising current strategy* ($z=-.339, p<0.005$) and *a mechanism for managerial motivation* ($z=-2.11, p<0.05$) are statistically significant. *Control and managerial motivation* can be argued to be necessary elements in a *dynamic* environment to enable firms to compete effectively. A mechanism for revising current strategy has the strongest significance ($p<0.005$) which arguably reflects the importance of having an up to date strategic plan at all times.

10.1.1.1 The perception of the operating environment and strategic planning - concluding remarks

The analysis of the perception of operating environment indicates that firms perceiving their environment to be '*dynamic and changing*' place a higher emphasis on the attributes of a majority of the strategic planning characteristics than firms that perceive their operating environment as '*market threats focused*'. However, the differences in only a small number of attributes are statistically significant. In conclusion, these results suggest that the operating environment influences a number of important attributes used to describe strategic planning but it is not a significant variable. It is therefore logical to conclude that the strategic planning process is influenced more significantly by other factors than the operating environment. Accordingly, the guiding hypothesis is rejected.

10.1.2 Potential barriers to the implementation of strategic planning

Following the effective formulation of a strategic plan, the next most important factor arising from the exploratory interviews is the impact of the potential external and internal barriers on the deployment of the strategic plan. There is no accepted definition of a barrier to implementation or growth - Barber *et al* (1989), Cambridge (1992). Indeed, Piatier (1984 p. 146), suggests that a survey 'can do no more than provide an idea, and possibly an improvised measurement of the perception of the barrier by the person questioned'. Accordingly, this section of the study does not seek to establish a comprehensive range of barriers but rather identify some general barriers derived from the literature that relate to the constraint or hindrance of the implementation of strategic planning. The pilot study confirms eight main barriers which could be categorised as internal or external barriers as shown in table 10.2.

Table 10.2 Barriers to the implementation of strategic planning

Barriers	Attributes
internal	<i>communication was inadequate, implementation took longer than anticipated, a shortfall in employee capabilities, overall goals of strategy not well enough understood by staff, co-ordination of implementation not effective enough.</i>
external	<i>crises distracted attention from implementation, unanticipated problems arose, external factors impacted on implementation.</i>

To enable the impact of these barriers to be ascertained the following hypothesis is formulated:

H1(c) - 'That strategic planning implementation problems are experienced to the same extent by high performing and low performing firms'.

Firms with a perceived increased market share are classified as high performing firms and firms with a perceived decreased market share are classified as low performing firms. In addition, question 25 (the achievement of the company's initial goals and objectives and the financial results expected) is used to confirm the classification of firms as high or low performing. The mean scores were computed. The frequencies indicate the number and percentage of firms that perceived each problem as either 'major' or 'substantial' (mean score 4 or more). A Wilcoxon test is used to ascertain the difference in the extent to which implementation problems are experienced by high and low performing firms. The analysis is shown in table 10.3.

Table 10.3 Extent to which strategic planning implementation problems were experienced by high and low performing firms

Implementation barriers	High Performing firms (N=108)		Low Performing Firms (N=35)		Z Statistic
	Mean	Frequency	Mean	Frequency	
Communication was inadequate	2.18	7 (7%)	2.34	6 (17%)	-1.47
Crises distracted attention from implementation	2.35	18 (17%)	2.51	7 (20%)	-2.26*
Implementation took longer than anticipated	3.31	45 (42%)	3.37	17 (49%)	-0.31
Employees capabilities- not enough	2.40	19 (18%)	2.66	9 (26%)	-1.12
Overall goals of strategy not well enough understood by staff	2.11	7 (7%)	2.26	3 (9%)	-1.43
Co-ordination of implementation not effective enough	2.59	20 (18%)	2.69	18 (52%)	-1.69
Unanticipated problems arose	2.81	19 (18%)	2.86	8 (23%)	-0.54
External factors impacted in implementation	2.74	25 (23%)	2.94	13 (37%)	-0.71

* $p < .05$

The results indicate that all the implementation barriers are experienced to a greater extent by low performing firms than by high performing firms. However, the differences are statistically insignificant with the exception of the barrier *crises distracted attention from implementation* which is statistically significant ($z = -2.26$ at $p < 0.05$). These findings can be interpreted as indicating that in successful firms it is easier to focus on the implementation of the strategy planning process, whereas in low performing firms there is a greater degree of uncertainty and a lower degree of confidence. This is confirmed by the significance of the barrier *crises distracted attention from implementation*, which

implies that the operations of low performing firms are disrupted to a far greater extent than the operations of high performing firms. Overall, the analysis indicates that similar barriers to strategy implementation exist in high and low performing firms. This finding is not surprising as both categories operate, either directly or indirectly, in the same market environment. However, it indicates that the barriers to implementation are not as significant as perceived by the exploratory interview discussions. These findings are consistent with the work of *Kargar and Blumenthal (1994)*, which indicates that high success firms experience implementation problems to a broadly similar extent to that of low success firms. It could be argued that the concerns of SMEs in relation to implementation barriers may in effect, be more properly assigned to the strategic planning process itself, or be assigned to the contingency factors. Accordingly, the hypothesis that the extent to which strategy implementation problems are experienced is the same in high performing forms as low performing firms is accepted.

10.1.3 The impact of formal planning on the elimination of potential barriers

The previous section outlines that implementation barriers with the exception of '*crises distracted attention from implementation*', do not differ significantly between high performing firms and low performing firms and that this may result from the preparation for such barriers in the strategic planning process. It is, therefore, necessary to ascertain if firms deploying a formal planning process experience the same barriers to the same extent as firms that use an informal planning process. Accordingly, the hypothesis in this section is:

H1(d) 'That the barriers to the implementation of the strategic planning process are the same in firms deploying formal strategic planning and firms deploying non formal processes'.

Responses are divided into two categories: firms deploying a formal strategic planning process (a written strategic plan is used as a surrogate measure for formality), and those that do not have a written strategic plan. A wilcoxon test is used to ascertain the difference in the extent to which implementation problems are experienced by both categories of firms. The results of the analysis are outlined in table 10.4.

Table 10.4 The extent to which strategy implementation problems were experienced by firms with formal and non formal strategic plans

Implementation barriers	Formal	Non Formal	
	Mean (N=113)	Mean (N=81)	Z Statistic
Crises distracted attention from implementation	2.44	2.61	-1.39
Implementation took longer than anticipated	3.43	3.22	-0.74
Employees capabilities were not enough	2.54	2.43	-0.09
Communication was inadequate	2.25	2.26	-0.26
Overall goals of strategy were not well enough understood by staff	2.19	2.10	-0.88
External factors impacted on implementation	3.06	2.61	-2.95*
Co-ordination of implementation not effective enough	2.64	2.69	-0.69
Unanticipated problems arose	2.89	2.93	-0.68

* $p < 0.01$

The results indicate that all eight barriers/problems to the implementation of strategic planning are experienced by both firm types. Only one barrier/problem is statistically significant *external factors impacted on implementation* ($z = -2.95$ at $p < 0.005$).

Overall, it is possible to conclude that formal and non-formal planning firms experience similar implementation problems. These findings are consistent with the findings of *Kargar and Blumenthal* (1994), who found that firms with formal strategic planning processes experience implementation problems to a broadly similar extent as firms with an informal strategic planning process. An analysis of the findings indicates that the problem of *implementation taking longer than expected* has the highest mean scores in both formal and non-formal planning firms. However, it must be noted that a higher significance rating given to the implementation problems by formal strategic planning firms implies that all the barriers/problems are better prepared for in firms with formal planning than in firms without formal planning. This indicates that formal planning is more likely to enable firms to meet any potential barriers and problems with greater confidence. This finding can be argued to result from the tendency by formal strategic planning firms to be more outward looking or external environment orientated. It is suggested that many of the implementation barriers may be already anticipated in the formulation of the strategic plan. However, the results do not provide any information on the degree of emphasis on the strategic planning characteristics by formal or non formal planning firms. The next section examines this aspect.

A further analysis is carried out to ascertain if a similar perceived emphasis on the characteristics of strategic planning exists in firms with formal and non-formal strategic planning processes. The hypothesis in this section is:

H1(e) 'that there is a significant difference between the emphasis given to the characteristics of strategic planning by firms deploying formal strategic planning compared to firms deploying non-formal strategic planning'

A Wilcoxon test is used to ascertain the difference in the extent to which implementation problems are experienced by formal planning and non formal planning firms as shown in table 10.5.

Table 10.5 Extent of emphasis on the characteristics of strategic planning by firms with formal and non formal strategies

	Formal	Non Formal	
Strategic planning characteristics	(N=113) Mean	(N=81) Mean	Z Score
<i>Internal Capability</i>			
General managerial ability	3.47	3.16	-1.70
Financial strengths/weaknesses	3.44	3.33	-1.03
Human resources strengths/weaknesses	3.52	3.31	-1.44
<i>Products and Performance</i>			
Past performance	3.77	3.73	-0.09
Current products strengths/weaknesses	4.14	4.03	-0.08
<i>External Orientation</i>			
General economic/business conditions	3.84	3.57	-1.15
Technological trends	4.02	3.64	-1.68
Competitive position and trends	4.10	3.61	-2.43**
<i>Departmental Co-operation</i>			
Understanding of all functions by employees	3.70	3.42	-1.02
Cross functional support	3.80	3.72	-0.46
Functional co-ordination	3.69	3.68	-0.67
Efforts to achieve functional agreement	3.65	3.64	-0.40
<i>Resources/employee</i>			
Ad hoc working groups	2.77	2.28	-1.95
Relevant/adequate information	3.76	3.41	-2.53*
Involvement of consultants	2.15	1.75	-1.49
Other physical/financial resources	3.43	3.04	-1.90
<i>Management Time</i>			
Involvement of line managers	4.12	3.84	-1.64
Managing directors time	4.39	4.25	-1.08
<i>Use of Analytical techniques</i>			
Use of analytical techniques	3.00	2.09	-4.36*
Ability to use techniques	3.00	2.27	-3.47*
Willing to seek outside assistance	2.94	2.32	-3.42*
<i>Staff Creativity</i>			
Coping with surprises/crises	3.52	3.48	-0.10
Adapting to unanticipated changes	3.79	3.66	-0.92
Identify new opportunities	4.05	4.02	-0.92
Identifying key problem areas	3.70	3.44	-1.76
Generating new ideas	3.88	3.67	-2.04**
Generating/evaluating strategy alternatives	3.55	3.46	-0.09
Anticipating barriers to implementation	3.43	3.25	-0.78
<i>Strategy a Control Mechanism</i>			
Value as a control mechanism	3.37	3.01	-1.76
A monitoring control technique	3.31	2.82	-2.74**
Mechanism for revising strategy	3.45	2.89	-2.99*
Ability to communicate management thinking down the line	3.64	3.43	-0.84
Communicate staff thinking up the line	3.42	3.27	-0.38
A mechanism for integrating functions	3.07	2.91	-0.65
A mechanism for managerial motivation	3.35	3.10	-0.80

* $p < 0.005$ ** $p < 0.05$

The analysis indicates that the emphasis on all the characteristics of strategic planning and their attributes by firms deploying formal planning is higher than the degree of emphasis given by firms relying on an informal strategic planning process. The differences in emphasis in the majority of attributes are not statistically significant, with the exception of a number of characteristics which are outlined as follows:

(a) the external orientation attribute *competitive position and trends* is statistically significant ($z=-2.43, p<.005$). It could be argued that formal strategic planning ensures that the competitive position and trends are stressed to a greater degree than in informal planning firms.

(b) the resources for strategy attribute *availability of relevant and adequate information* ($z=-2.53, p<0.005$) is statistically significant. The availability of relevant information is central to the strategic planning process. Therefore, the greater emphasis by formal planning process firms compared to informal planning firms is no surprise.

(c) All the attributes of the *use of analytical techniques* characteristic are emphasised to a higher degree by formal planning firms than informal planning firms. The difference of emphasis is statistically significant in respect of each attribute. This finding can be explained by the tendency of firms with a written strategic plan to depend more on analytical assessment than on 'instinct' or 'gut feeling' as outlined in section 3.2.

(d) the staff creativity attribute *generating new ideas* is statistically significant ($z=-2.04, p<0.05$). It could be argued that formal planning process firms are more aware of the need for staff creativity in order to achieve greater competitive advantage.

(e) the control mechanism attributes: *strategy as a monitoring mechanism* ($z=2.74, p<0.05$), and as a *mechanism for revising strategy* ($z=-2.9, p<0.005$) are statistically significant. This indicates the greater degree of emphasis given by formal planning firms in the review of activities and in the monitoring processes used.

In conclusion, while all the attributes are given higher emphasis by formal planning firms than in non formal planning firms, only a limited number of attributes in five characteristics are statistically significant. Accordingly, the hypothesis that there is a significant difference between the emphasis given to the characteristics of strategic planning by formal and non formal strategic planning firms is rejected.

10.2 Leadership and culture

The literature review in chapters four and five suggests that there are close associations between culture and leadership. To establish the associations, if any, between leadership and culture, the following hypothesis is formulated:

H2 - 'that elements of the dimensions of leadership styles are associated with elements of the dimensions of culture in SMEs'.

Canonical correlation analysis indicates that only the first canonical pairing is significant at .000 (see table 10.6). As the remaining canonical correlation analyses are in excess of a significance level of 0.01, they are omitted from further analysis.

Table 10.6 Results of the canonical correlations - culture and leadership

	Canonical Correlation	Chi-Sq	df	Significance
1.	.844	148.923	55.00	.000
2.	.548	53.467	40.00	.075
3.	.397	26.111	27.00	.512

Table 10.7 summarises the results of the canonical correlation analysis

Table 10.7 Relationship between the canonical functions - culture and leadership

Variable	L*	L2**	%***	Canonical Cross Loading
Criterion Set (Leadership Styles)				
<i>Transactional Style</i>				
Transactional -rewards	-0.509	0.259	12.21	-0.401
Maintenance of standards	-0.320	0.107	4.81	-0.252
Performance focused	-0.280	0.078	3.68	-0.221
Own interests	-0.245	0.060	2.83	-0.193
<i>Transformational Style</i>				
Competence	-0.708	0.501	23.62	-0.557
Creativity	-0.502	0.252	11.88	-0.395
Vision	-0.131	0.017	0.80	-0.103
Mistakes focused	-0.354	0.125	5.89	-0.279
<i>Human Resources Style</i>				
Employee focused	-0.749	0.561	26.45	-0.591
Competing for the future	-0.369	0.136	6.41	-0.249
<i>Laissez faire Style</i>				
Reactive	-0.174	0.030	1.42	-0.137
Passive	-0.004	0.000	0.00	-0.003
Total		2.121	100.00	
Predictor Set (Culture)				
Empowerment	-0.819	0.462	13.63	-0.645
External Orientation	-0.869	0.711	20.98	-0.684
Human Resources	-0.819	0.904	26.67	-0.645
Intergroup orientation	-0.836	0.493	14.55	-0.659
Improvement orientation	-0.784	0.615	18.03	-0.618
Total		3.410	100.00	

* Canonical loading - correlation of the canonical variate with each variable in their respective sets

** Measure of variance of observed variables with the canonical (unobserved) variate

*** Proportion of explained variance accounted for by each variable in both the criterion and predictor sets

The associated variables of significance (with canonical cross loading in excess of ± 0.300) are outlined in bold type. The results of the canonical correlation analysis indicate that there are associations between *reward*, *competence*, *creativity* and *employee focused* leadership styles and all five cultural types. The results indicate that the four main leadership styles (comprising twelve new variables) account for over 74% of the variance of the association with the characteristics of culture as follows: *employee focused style* accounts for 26% of the variance, *creativity style* 12%, *competence style* 24% and *reward style* 12%. *Wilderom and van den Berg (1997)* found that a balanced

transformational/human resources style is likely to be associated to a greater extent with culture than either the transactional or laissez faire leadership styles. In this study, the components of a 'balanced transformational style' comprising transformational, creativity and employee focused styles account for over 62% of the variance. This finding is consistent with the increasing emphasis given to transformational and human resources styles in the literature and reflects the decline in the reward style of leadership (section 4.3). Furthermore, this arguably reflects the characteristics of SMEs where the contributions of individual employees are more explicit and a lack of hierarchy means that a closer interaction is possible between managers and employees.

10.2.1 Leadership and culture - concluding remarks

Overall, the analysis shows varying degrees of association between the dimensions of leadership and culture. All the culture types are associated with the dimensions of leadership in varying degrees. For example, the human resources culture type accounts for 27% of the variance in the association with the four leadership styles highlighted in the criterion set; whereas empowerment culture type accounts for 15% of the variance. There is however, no association detected between any culture type and the reactive or passive leadership styles. Accordingly, the guiding hypothesis is accepted.

10.3 Leadership and the strategic planning process

The literature suggests that leadership can have a varying impact on the strategic planning process (see Chapter 4). The literature further suggests that leadership styles such as transformational and human resources are more likely to be associated with some of the characteristics of strategic planning than transactional and laissez faire leadership style - *Wilderom and van den Berg (1997)*. It is therefore expected, that in line with the literature findings, transactional and laissez faire leadership styles will be associated to a lesser extent with the characteristics of strategic planning than transformational or human resources leadership styles. Accordingly, the main hypothesis in this section is:

H3 - 'that elements of the dimensions of leadership styles are associated with the characteristics of the strategic planning process in SMEs'.

To examine the degree of association, canonical correlation is deemed to be the most appropriate technique - see section 7.8.6 for an explanation. Only the first canonical correlation at .668 is significant at a level of .000 as shown in table 10.8.

Table 10.8 Results of canonical correlations- leadership and the strategic planning process

	Canonical Correlatioo	Chi-Sq	DF	Significance
1	.668	207.901	108.00	.000
2	.449	103.493	88.00	.124
3	.340	63.616	70.00	.691

The results of the first canonical correlation are shown in table 10.9

Table 10.9 Relationship between the canonical functions - leadership and strategic planning

Variable	L*	L2**	%***	Canonical Cross Loading
Criterion Set (Leadership)				
<i>Transactional Style</i>				
Transactional -rewards	-.493	0.243	10.65	-.329
Maintenance of standards	-.360	0.130	5.70	-.240
Performance focused	-.212	0.045	1.97	-.142
Own interests	-.113	0.013	0.57	-.075
<i>Transformational Style</i>				
Competence	-.514	0.264	11.57	-.343
Creativity	-.645	0.416	18.24	-.431
Vision	-.134	0.018	0.79	-.089
Mistakes focused	-.371	0.138	6.05	-.248
<i>Human Resources Style</i>				
Employee focused	-.840	0.706	30.95	-.561
Organisation based	-.375	0.141	6.18	-.250
<i>Laissez faire Style</i>				
Reactive	-.397	0.158	6.93	-.265
Passive	-.095	0.009	0.40	-.064
Total		2.281	100.00	
Predictor Set (Strategic Planning)				
<i>Internal Orientation</i>				
Internal Capability	-.524	0.275	11.64	-.350
Products and Performance	-.340	0.116	4.91	-.227
<i>External Orientation</i>	-.602	0.362	15.33	-.402
<i>Departmental Co-operation</i>	-.583	0.340	14.39	-.389
<i>Resources for Strategy</i>				
Resources for strategy	-.241	0.058	2.46	-.161
Management time	-.340	0.116	4.91	-.227
<i>Use of analytical techniques</i>	-.175	0.031	1.31	-.117
<i>Staff Creativity</i>	-.922	0.850	35.99	-.616
<i>Control Mechanism</i>	-.463	0.214	9.06	-.309
Total		2.352	100.00	

* Canonical loading - correlation of the canonical variate with each variable in their respective sets

** Measure of variance of observed variables with the canonical (unobserved) variate

*** Proportion of explained variance accounted for by each variable in both the criterion and predictor sets

The associated variables of significance (with canonical cross loading in excess of ± 0.300) are outlined in bold type. The results of the canonical correlation analysis indicate that the *reward*, *competence*, *creativity* and *employee focused* leadership styles are associated with *staff creativity*, *external orientation*, *departmental co-operation*, *internal capability* and *strategy as a control mechanism*.

The results indicate that the four main leadership factors outlined account for over 70% of the variance of the association with the characteristics of strategic planning as follows: *employee focused style* 31% of the variance, *creativity style* 18%, *competence style* 11.5%, while *transactional- rewards style* accounts for over 10%. This finding is consistent with the work of *Wilderom and van den Berg* (1997) which indicates that a balanced transformational/human resources style is more likely to impact to a greater extent on strategic planning than either the transactional or laissez faire leadership styles. In this study, the components of a 'balanced transformational style' comprising both transformational and human resources styles account for over 60% of the variance. This finding is consistent with the increasing emphasis given to transformational and human resources styles in the literature and reflects the decline in the reward style of leadership (section 4.3).

The characteristics of the strategic planning process associated with the dimensions of leadership are: *staff creativity* 36% of the variance, *external orientation* 15%, *departmental co-operation* 14.39%, *internal capability* 11.64%, followed by *strategy as a control mechanism* accounts for only 9%. It is noteworthy that the characteristics of the strategic planning process account for over 84% of the variance on the characteristics of strategic planning explained by the various leadership styles. The results, however, do not indicate any association between leadership styles and the *resources for strategy*, *management time*, *products and performance* or the *use of analytical techniques* characteristics. The lack of association with the *use of analytical techniques* is not surprising as the literature indicates that this characteristic is perceived as being the least important to SMEs - *Kargar and Parnell* (1996). It could be argued that the *use of analytical techniques* is not indicative of any of the main leadership styles outlined in section 4.3. It is also possible to argue that any lack of association between leadership styles and *products and performance* is not a cause for concern as product strengths and

weaknesses may be implicitly covered in other attributes. In any event, SME leadership cannot influence past performance, but only use it to draw limited conclusions. The lack of association between leadership styles and the *resources for strategy and management time* characteristics is more difficult to explain. One explanation is that the attributes of both of these characteristics are included or implied in the remaining characteristics and consequently there is no need to state each attribute separately. Overall, the analysis shows varying degrees of association between the dimensions of leadership and the characteristics of strategic planning process. Transformational and human resources leadership styles are associated with the following five characteristics of strategic planning: *staff creativity, external orientation, department co-operation, internal orientation* and *strategy as a control mechanism*. Transactional-rewards leadership style is associated with the strategic planning characteristics to a lesser extent whereas both *reactive and passive* leadership style show no significant association with any of the strategic planning characteristics.

10.3.1 The associations between leadership and the strategic planning process - concluding remarks

The analysis shows that certain elements of leadership are associated with a number of the characteristics of strategic planning. However, there is a marked difference in the ranking of the importance of some of the leadership styles. In line with previous studies, elements of human resources and transformational styles of leadership are associated with strategic planning to a greater extent than the elements of the transactional leadership style, whereas laissez faire leadership style is not significantly associated with any of the characteristics of strategic planning. Accordingly, the guiding hypothesis is supported.

10.4 Culture and strategic planning processes

The literature review in chapter 5 suggests that culture is likely to be associated with the strategic planning process in SMEs. The objectives of this section are to establish the associations, if any, between the dimensions of culture and the characteristics of the strategic planning process in manufacturing SMEs.

The main hypothesis in this section of the study is:

H4 - 'that elements of the dimensions of culture are associated with the characteristics of strategic planning in SMEs'.

The results of the canonical correlation analysis show that the first canonical pairing has a correlation of .673 which is significant at .000. (see table 10.3) All of the remaining canonical correlations are in excess of a significance level of <0.01 and are omitted from the analysis.

Table 10.10 Results of canonical correlations- culture and the strategic planning process

	Canonical Correlation	Chi-Sq	df	Significance
1	.673	153.543	45.00	.000
2	.314	42.062	32.00	.110
3	.297	22.931	21.00	.348

Table 10.11 summarises the results of the canonical correlation analysis.

Table 10.11 Relationships between the canonical correlations - culture and strategic planning

Variables	L*	L2**	%***	Canonical Cross loading
Criterion Set (Culture)				
<i>Empowerment</i>	-0.680	0.462	13.63	-0.458
<i>External Orientation</i>	-0.843	0.711	20.98	-0.568
<i>Human Resources</i>	-0.951	0.904	26.67	-0.640
<i>Intergroup orientation</i>	-0.702	0.493	14.55	-0.473
<i>Improvement orientation</i>	-0.905	0.819	24.17	-0.609
Total		3.389	100.00	
Predictor Set (Strategic Planning)				
<i>Internal Orientation</i>				
Internal Capability	-0.548	0.300	10.22	-0.369
Products and Performance	-0.504	0.254	8.65	-0.298
<i>External Orientation</i>	-0.623	0.388	13.23	-0.419
<i>Dept. Co-operation</i>	-0.687	0.472	16.08	-0.463
<i>Resources for Strategy</i>				
Resources for strategy	-0.337	0.114	3.88	-0.227
Management time	-0.391	0.153	5.21	-0.263
<i>Use of analytical techniques</i>	-0.272	0.074	2.52	-0.183
<i>Staff Creativity</i>	-0.896	0.803	27.36	-0.604
<i>Control Mechanism</i>	-0.614	0.377	12.85	-0.413
Total		2.935	100.00	

* Canonical loading - correlation of the canonical variate with each variable in their respective sets

** Measure of variance of observed variables with the canonical (unobserved) variate

*** Proportion of explained variance accounted for by each variable in both the criterion and predictor sets

The associated variables of significance (with canonical cross loading in excess of ± 0.300) are outlined in bold type. The results of the canonical correlation analysis indicate that all the dimensions of culture are associated with all the characteristics of strategic planning, with the exception of the *use of analytical techniques, resources for strategy, management time* and *past performance*.

The results indicate that all attributes of culture are associated with the characteristics of strategic planning in the following order: *human resources* style accounts for 26.6% of the variance, *improvement orientation* 24%, followed by *external orientation* which accounts for nearly 21%. The remaining associations, although weaker, are still significant and indicate that *intergroup orientation* accounts for 14.55% of the variance, while *empowerment orientation* accounts for 13.63%. Overall the five dimensions of culture account for 100% of the variance indicating that the dimensions cover the concept

of culture in SMEs adequately. In addition, the results are consistent with the findings of *Wilderom and van den Berg (1997)*.

The results also indicate that the characteristics of strategic planning are influenced by culture in the following order of association: *staff creativity* accounts for 27.6% of the variance, *departmental co-operation* 16.08%, *external orientation* 13.23%, followed by *strategy as a control mechanism* which accounts for 12.85% and *internal orientation* which accounts for 10.22%. The five characteristics outlined account for over 88% of the variance which implies that the characteristics derived cover the concept of strategic planning in manufacturing SMEs adequately. No significant associations are derived between culture and the *resources for strategy*, *management time*, *past performance* or the *use of analytical techniques* characteristics. The failure to achieve an association between culture and the *use of analytical techniques* is consistent with the literature (section 3.4.2).

The lack of an association between the dimensions of culture and the characteristic *resources for strategy* is more difficult to explain. A possible explanation is that the contents of this characteristic are already covered and are implicit in, the other characteristics. Arguably, the *resources for strategy* characteristic can be considered as the means by which the strategic planning process is deployed rather than as a characteristic of strategic planning. It is equally possible to argue that there is little point in formulating a strategic plan if the intention and resources necessary for deployment are lacking.

10.4.1 Culture and strategic planning - concluding remarks

The results of the canonical correlation analysis indicate that all the dimensions of culture are associated with five characteristics of strategic planning. A previous study conducted by *Wilderom and van den Berg (1997)* indicates that culture is associated with organisational performance. The strongest associations are based on the *human resources* and *improvement orientation dimensions* followed by *external orientation* dimensions of culture. Possible explanations for the importance of both *human resources orientation* and *internal orientation* characteristics relate to the increasing emphasis on ensuring that

all employees are working together to achieve common stated aims in an attempt to meet external demands and needs. The findings indicate that while *internal orientation* and *human resources* dimensions have the strongest associations, the weakest association is between *empowerment* and the characteristics of strategic planning. A possible explanation for this may be that SMEs are still concerned with internal activities which they can control. In conclusion, the results presented in table 10.11 indicate that culture is associated with five characteristics of the strategic planning process. Accordingly, the guiding hypothesis is accepted.

10.5 The association between the characteristics of strategic planning and the dimensions of organisational performance

The association between the characteristics of strategic planning and the performance measures is examined in section 3.3. These studies indicate an inconclusive outcome. Nevertheless, there is enough evidence to suggest a degree of association. Accordingly, the hypothesis in this section of the study is:

H5 - 'that the characteristics of strategic planning are associated with the elements of organisational performance in SMEs'.

Canonical correlation analysis is used to indicate the degree of correlation among the individual variables in the first set, the correlations among the variables in the second set and the correlations between the variables in the two sets. Table 10.12 shows that the first canonical correlation only is significant at a level of 0.00.

Table 10.12 Results of canonical correlations - strategic planning and performance

	Canonical Correlation	chi-square	df	Significance
1	0.642	190.066	72	.000
2	0.298	26.354	15	.034
3	0.335	34.554	28	.183

Table 10.13 summarises the results of the canonical correlation analysis and outlines the canonical loadings and cross loadings:

Table 10.13 Relationships between canonical functions - strategic planning characteristics and performance dimensions

Variables	L*	L2**	%***	Canonical Cross Loading
	(1)	(2)	(3)	(4)
Criterion Set (Performance Measures)				
<i>Overall Financial performance</i>	-0.239	0.057	3.38	-0.153
<i>Customer Orientation</i>	-0.446	0.199	11.80	-0.286
<i>Organisational Effectiveness</i>				
Organisational Effectiveness	-0.377	0.142	8.42	-0.242
Short term needs	-0.310	0.096	5.69	-0.199
<i>Learning/growth</i>	-0.763	0.582	34.50	-0.490
<i>Organisational Capability</i>				
Meeting customer demands	-0.541	0.293	17.37	-0.347
Provision of quality goods on time	-0.560	0.314	18.61	-0.359
After sales service	-0.066	0.004	0.23	-0.043
Total		1.687	100.00	
Predictor Set (Strategic Planning)				
<i>Internal Orientation</i>				
Internal Capability	-0.492	0.242	8.23	-0.316
Products and Performance	-0.346	0.120	4.08	-0.222
<i>External Orientation</i>	-0.582	0.307	10.44	-0.372
<i>Dept. Co-operation</i>	-0.619	0.383	13.02	-0.397
<i>Resources for Strategy</i>				
Resources for strategy	-0.501	0.251	8.53	-0.321
Management time	-0.475	0.226	7.68	-0.305
<i>Use of analytical techniques</i>	-0.557	0.310	10.54	-0.358
<i>Staff Creativity</i>	-0.846	0.716	24.35	-0.543
<i>Control Mechanism</i>	-0.621	0.386	13.13	-0.398
Total		2.941	100.00	

* Canonical loading - correlation of the canonical variate with each variable in their respective sets

** Measure of variance of observed variables with the canonical (unobserved) variate

*** Proportion of explained variance accounted for by each variable in both the criterion and predictor sets

The associated variables of significance (with canonical cross loading in excess of ± 0.300) are displayed in bold type. The results indicate that all the characteristics of strategic planning, with the exception of *products and performance* are associated to varying degrees with the following dimensions of organisational performance: *learning/growth* 34.5%, *the provision of quality goods on time* 18.6% and *meeting customers demands* 17.37%. Taken together, the three dimensions of organisational performance account for over 70% of the variance. The association between the characteristics of strategic planning and organisational performance are consistent with the findings of *Kargar and Parnell (1996)* and confirm that the characteristics of strategic

planning are associated with some performance measures. The importance attached to the use of analytical techniques in this study is unexpected given the strong views and findings of the secondary literature- *Ramanajam and Venkatraman (1987)*, *Hayes and Abernathy (1980)* and *Kargar and Parnell (1996)*. In direct contrast to the findings in this study, *Kargar and Parnell (1996)* suggest that analytical techniques are not associated with organisational performance. A possible explanation for the greater emphasis on this characteristic in this study may relate to the type of firms and the sectors that they belong to. It could be argued that small banks operating in one region do not use analytical techniques to a significant extent, whereas electronic and engineering manufacturing firms use analytical techniques to a greater extent due to their broader range of activities and openness to external competition. It is interesting to contrast this finding with the failure to identify any association between the dimensions of leadership or culture with the *use of analytical techniques* and the *resources for strategy* characteristics (see sections 10.1 and 10.2). A possible explanation is that both of the attributes outlined are largely quantitative in nature and are not usually subjected to culture or leadership influences.

The characteristics of strategic planning are associated with the following dimensions of organisational performance: *learning and growth*, *meeting customer demands* and *the provision of quality goods on time*. The characteristics of strategic planning associated with performance include *staff creativity* which accounts for 24.35% of the variance. This finding is not unexpected as innovation requires a considerable degree of creativity. *Strategy as a control mechanism* accounts for over 13% of the variance which implies that SMEs need a control mechanism in order to achieve their objectives. The third highest association is in respect of *functional co-ordination*, which accounts for 13% of the variance. This implies that all the resources of the SME are needed to meet the requirements of *innovation to meet the customer demands* and *the provision of quality goods on time*. The next highest associated characteristic is the *use of analytical techniques* which accounts for over 10.5% of the variance. The remaining characteristics (*resources for strategy*, *products and performance* and *the use of management time*) each account for less than 10% of the variance. It could be argued that elements of these characteristics are included or overlap with elements of the remaining strategic planning

process characteristics. As regards the association between the characteristics of strategic planning and some performance measures, the ranking of the degree of importance attributed to each characteristic differs from that suggested by the literature. The ranking of the factors associated with performance measures is indicated by the canonical loading as shown in table 10.14:

Table 10.14 Ranking of strategic planning characteristics with the dimensions of performance

Characteristic	Canonical loading	% of variance
Staff creativity	-.846	24.35
Strategy as a control mechanism	-.621	13.13
Departmental co-ordination	-.619	13.02
Use of analytical techniques	-.557	10.54
External orientation	-.582	10.44
Resources for strategy	-.501	8.53
Products and performance	-.492	8.23
Management time	-.475	7.68

It is not surprising to note that *staff creativity* has the strongest association with the measures of performance. This finding is consistent with the literature review in chapter three. It is also consistent with the resource based view of strategic planning.

The characteristic *external orientation* is given a lower importance than expected. This is surprising given the perception of the operating environment as either '*dynamic and changing*' or '*market threats focused*'. This may be explained in part by the proportion of SMEs that supply parts or components to larger firms (section 9.1.5). Arguably it indicates a tendency for SMEs to look inwards rather than to the external environment.

It is, however, a surprise that the *resources for strategy* characteristic accounts for only 8.53% of the variance of association between strategic planning and performance measures. It could be argued that this characteristic which includes planning and co-ordination and the involvement of senior managers, could be a major constraining influence on the effectiveness of the formulation and deployment of strategic planning.

10.5.1 Strategic planning and its association with organisational performance - concluding remarks

The results of this study indicate that elements of the strategic planning process are associated with elements of organisational performance in SMEs. *Learning/growth* is the most important dimension in the multivariate index of performance and explains 34.5% of the variance of the association between strategic planning and performance measures. This finding is in keeping with the contention in the literature that innovation is associated with organisational performance - *Acs and Audretsch (1991)*, *Storey (1994)*. It is also consistent with the work of *Lorange (1979)* and *Karger and Parnall (1996)* who contend that systems' capability should be seen as the 'primary reference point' for the evaluation of effective organisational performance.

The next most important attribute is the *provision of quality goods on time* which accounts for 18.61% of the variance, followed by *meeting customer demands* which accounts for 17.37%. The results also indicate a number of unexpected findings in relation to the emphasis on performance measures. For example, the lack of association with financial performance measures may be explained by the inclusion of a generic question seeking information on the impact of strategic planning on the overall financial performance. The finding in respect of financial performance is not consistent with the analysis presented in section 9.8.2, which indicates that 45.4% of firms with 1-9 employees perceive that the use of strategic plan leads to the fulfilment of their expected financial results, while 77.5% of firms with 200-249 employees perceive that strategic planning leads to the fulfilment of their financial expectations (section 9.8.2). Accordingly, it is reasonable to expect an association between strategic planning and financial performance. The lack of association between the characteristics of strategic planning and customer orientation is easier to explain, as there is clearly an overlap between the attributes of organisational capability and customer orientation.

In conclusion, the results presented in table 10.13 indicate that strategic planning is associated with some measures of performance. Accordingly, the guiding hypothesis is supported.

10.6 Testing the deductive model

Previous sections indicate that there are positive associations between elements of:

- culture and elements of strategic planning,
- leadership and elements of strategic planning
- strategic planning and elements of performance measures

The deductive model contends that the various factors are associated with organisational performance. Accordingly, it could be argued that high performing firms (firms with a perceived increased market share) are more likely to place a greater emphasis on the elements with positive associations, than low performing firms (firms with a perceived decreased market share). The following hypothesis is therefore formulated:

H6 - 'that high performing firms place a greater emphasis on the elements with positive associations between culture and strategic planning, leadership and strategic planning, and between strategic planning and organisational performance, than low performing firms'.

This section consists of the following four parts:

- data preparation (section 10.6.1)
- elements of culture associated with the strategic planning process in high and low performing firms (section 10.6.2)
- elements of leadership associated with the strategic planning process in high and low performing firms (section 10.6.3)
- elements of the strategic planning process associated with elements of performance measures in high and low performing firms (section 10.6.4).

10.6.1 Data preparation - data grouping for model testing

The groupings for testing the model are based on a classification of firms into high and low performing (see section 10.1.2). A summary analysis is depicted in table 10.15.

Table 10.15 Degrees of success in the implementation of strategic planning by high performing and low performing firms as defined by their market share

Firm type	Achieved *			
	Number of firms	Initial Goals/objectives	Financial Results Expected	Deployment Resources Allocated
High performing	108	75.0%	50.1%	63.9%
Low performing	35	48.5%	34.3%	45.7%
All firms**	194	67.0%	53.0%	56.0%

* Firms indicating that their goals were either fulfilled or entirely fulfilled

** includes firms whose share of the market remained static

Table 10.15 shows that high performing firms have higher perceived initial goals and objectives and financial results, than low performing firms. One hundred and eight firms were classified as 'high performing' whereas only thirty five firms were classified as 'low performing'.

10.6.2 The degree of emphasis given to the attributes of culture by high and low performing firms

An analysis of the emphasis given to the attributes of culture by high and low performing firms is outlined in table 10.16. The analysis shows the overall mean scores, and the frequencies indicating the number and percentage of firms that emphasised the attributes of culture 'to a great extent' or 'to a very great extent' (mean score 4 or more).

Table 10.16 The emphasis on the attributes of culture associated with strategic planning in SMEs - high and low performing firms

Culture Dimensions	High Performing Mean (N=108)		Low Performing Mean (N=35)	
	Mean	Percentage	Mean	Percentage
<i>Empowerment</i>				
Room for non-managerial employees to Make their own decisions	3.46	39(36%)	3.05	15 (48%)
Assignment of interesting tasks	3.52	38(35%)	3.09	11(36%)
Employees exert influence on important decisions regarding work	3.13	32(30%)	2.77	8 (26%)
The opportunity for employees to bring forward ideas before decisions are made	3.68	53(49%)	3.22	19 (61%)
Freedom for employees to depart from the rules	2.40	15 (14%)	2.38	16(52%)
<i>External Orientation</i>				
Working to improve the local market position	3.79	79 (73%)	3.26	15 (48%)
Quick reaction to developments in the market	3.68	64 (59%)	3.20	15 (48%)
Investigation of the needs and wishes of customers	3.70	71 (66%)	3.42	21 (68%)*
Thorough training of employees in systematically gathering data on what customers want to see improved	3.07	37 (34%)	2.61	11 (36%)*
<i>Human Resources</i>				
Managers taking performance evaluation seriously	3.56	59 (45%)	3.45	16 (52%)*
Careful selection of new employees	4.13	85(79%)	3.81	26 (74%)
Recognition of good performance by employees	3.76	70 (55%)	3.22	18 (62%)*
Stimulation of creativity in employees	3.15	32 (30%)	2.64	22 (71%)*
Thorough training of employees	3.40	57 (52%)	3.09	15 (48%)
<i>Intergroup Orientation</i>				
Exchange of information	3.72	74 (69%)	3.71	21 (69%)
Useful co-operation in departments	3.67	74 (61%)	3.28	15 (45%)
Timely resolution of conflicts	3.68	60 (55%)	3.19	12 (39%)
Useful meetings between heads	3.80	74 (69%)	3.45	15 (45%)
<i>Internal/Improvement Orientation</i>				
Talking about mistakes	3.63	61 (57%)	3.55	17 (55%)
Initiatives to improve way to work	3.62	54 (50%)	3.16	14 (45%)
Efforts for exceptional performance of the firm	3.49	58 (54%)	3.09	11 (36%)
Implementation of change	3.55	58 (54%)	3.19	13 (42%)

* attribute has a higher percentage response but a lower mean score than high performing firms

Table 10.16 indicates that the emphasis by high performing firms on the dimensions of culture and their attributes is greater than that given by low performing firms to the same attributes. The mean scores are higher for all attributes in the high performing firms.

A wilcoxon test shows that the majority of attributes in all the culture styles are statistically significant ($p < .05$). In conclusion, the guiding hypothesis that high performing firms place a higher emphasis on the dimensions and attributes of culture than low performing firms is accepted.

10.6.3 The extent of emphasis given to the attributes of leadership style by high and low performing firms

An analysis of the emphasis given to the attributes of leadership style by high performing and low performing firms is outlined in table 10.17.

Table 10.17 The emphasis on attributes of leadership associated with strategic planning in SMEs - high and low performing firms

Leadership	High Performing Mean (N=108)		Low Performing Mean N=35	
	Mean	Count (%)	Mean	Count (%)
<i>Transformational</i>				
Instil perfect trust	3.88	75 (70%)	3.32	17 (55%)
Gives employees the feeling that management can overcome any obstacle	3.45	53 (49%)	3.06	12 (40%)
Shows an extraordinary ability in everything they undertake	3.17	29 (27%)	2.72	7 (23%)
Makes a powerful impression	3.61	56 (52%)	3.13	9 (29%)
<i>Creativity</i>				
Encourage new ideas from employees	3.62	66 (61%)	3.52	17 (55%)
Intrnduces new projects and challenges	3.81	78 (62%)	3.39	14 (41%)
Stimulates employees to support their opinions with good arguments	3.65	50 (46%)	3.16	17(55%)*
<i>Tronsactional</i>				
Offers the prospects of rewards for good work	3.52	59 (58%)	3.45	16 (52%)
Agrees with the employees on the rewards that they can look forward to if they do what has to be done	3.06	37 (34%)	2.61	18 (58%)*
Tell employees criteria for performance related benefits	3.23	51 (48%)	2.87	13 (42%)
<i>Employee Focused</i>				
Has an ear for matters that are important to employees	3.90	64 (59%)	3.33	25 (81%)*
Gives advice to employees when they need it	3.87	73 (68%)	3.42	23 (74%)*
Creates a feeling of working together on major assignments/missions	3.80	66 (61%)	3.32	16 (52%)*
Shows employees how to look at problems from new angles	3.32	43 (40%)	3.23	13 (42%)*

* attribute has a higher percentage response and a lower mean score than high performing firms

Table 10.17 indicates that the emphasis by high performing firms on the dimensions of leadership and their attributes is greater than the emphasis given by low performing firms on the same attributes. The analysis indicates the mean scores and the number and percentage of firms that emphasised the attributes of leadership 'to a great extent' or 'to a very greater extent' (mean score 4 or more). A wilcoxon test is used on the mean scores of both high and low performing firms. This indicates that the majority of the attributes in each dimension of leadership are statistically significant at $p < .05$ (outlined in bold type in table 10.17). The findings are consistent with the findings of section 9.4.

A significant difference between high and low performing firms is in relation to the emphasis placed upon the transactional leadership style attributes *agrees the rewards that staff can expect ... and tells employees criteria for performance related benefits*, which are emphasised to a far greater degree by high performing firms. This finding is consistent with section 9.4.1 (table 9.15) which indicates that these factors are emphasised to a greater extent by firms with a perceived increase in market share compared with firms indicating that they perceive their market share as decreasing.

However, the surprise inclusion of the transactional style attributes means that a combined balance of transformational and human resources leadership style must be moderated to include a 'rewards' element in manufacturing SMEs. In conclusion, the results confirm that high performing firms place a higher emphasis on the dimensions and attributes of leadership than low performing firms. Accordingly, the guiding hypothesis is supported.

10.6.4 The extent of emphasis given to the characteristics of strategic planning by high and low performing firms

The final part of the deductive model involves an analysis of the emphasis given to the attributes of the strategic planning characteristic by high and low performing firms. The analysis indicates the mean scores and the number and percentage of firms that emphasised the attributes of strategic planning strongly (mean score 4 or more). The analysis is depicted in table 10.18

Table 10.18 Emphasis on the characteristics of strategic planning associated with performance in SMEs by high and low performing firms

Strategic planning characteristics	High Performing Mean (N=108)		Low Performing Mean (N=35)	
	Mean	Count (%)	Mean	Count (%)
<i>Products and Performance</i>				
Past performance of the firm	3.87	76 (70%)	3.52	22 (71%)
Strengths and weaknesses in current products	4.16	92 (85%)	3.72	26 (84%)
<i>External Orientation</i>				
General economic and business conditions	4.07	66 (61%)	3.46	24 (78%)*
Technological trends and capabilities	3.95	82 (76%)	3.57	23 (74%)
Analysis of competitive position and trends	4.13	76 (70%)	3.59	27 (87%)
<i>Departmental Co-operation</i>				
Understanding of all functions by employees	3.57	59 (54%)	3.55	17 (55%)*
Cross functional support	3.77	69 (64%)	3.75	20 (65%)*
Functional co-ordination	3.79	67 (52%)	3.35	17 (55%)
Efforts to achieve functional agreement	3.71	64 (49%)	3.25	19 (61%)*
<i>Resources for strategy</i>				
Involvement of ad hoc working groups	2.66	30 (28%)	2.16	6 (19%)
Relevant and adequate information from available sources	3.63	71 (66%)	3.18	18 (58%)
Involvement of consultants	3.63	71 (66%)	1.81	3 (10%)
other physical/financial resources	3.58	57 (53%)	3.13	11 (36%)
<i>Management Time</i>				
Involvement of line managers	4.07	89 (82%)	3.45	25 (81%)
Time spent by the Managing Director	4.42	98 (91%)	3.82	28 (90%)
<i>Use of Analytical techniques</i>				
Use of analytical techniques	2.67	30 (28%)	2.65	6 (19%)
Ability to use techniques	2.89	36 (33%)	2.35	5 (16%)
Willing to seek outside assistance	2.68	33 (31%)	2.27	9 (29%)
<i>Staff Creativity</i>				
Ability to cope with surprises/crises/threats	3.57	63 (58%)	3.15	18 (58%)
Flexibility to adapt to unanticipated changes	3.78	78 (72%)	3.27	22 (71%)
Ability to identify new opportunities	4.14	89 (82%)	3.77	22 (71%)
Role in identifying key problem areas	3.69	66 (61%)	3.52	18 (58%)
Capacity to generate new ideas	3.87	79 (73%)	3.38	19 (61%)
Capacity to generate and evaluate a number of strategic alternatives	3.58	61 (56%)	3.36	15 (50%)
Anticipating and avoiding barriers to strategy implementation	3.61	53 (49%)	3.16	13 (42%)
<i>Strategy a Control Mechanism</i>				
Value as a control mechanism	3.24	46 (43%)	3.19	15 (48%)
Ability to communicate management thinking down the line	3.81	62 (58%)	3.34	24 (77%)
Communicate staff thinking up the line	3.57	55 (51%)	3.19	15 (48%)
A control technique for monitoring performance	3.59	42 (39%)	3.19	15 (48%)
A mechanism for revising current strategy	3.59	52 (48%)	3.19	11 (35%)
A mechanism for managerial motivation	3.36	45 (42%)	3.01	14 (45%)
A mechanism for integrating functions	3.62	38 (35%)	2.99	10 (32%)

Table 10.18 indicates that the emphasis by high performing firms on the characteristics of strategic planning and their attributes is greater than the emphasis given by low performing firms to the same attributes. The mean scores are higher for all attributes in high performing firms. A wilcoxon test is used on the mean scores of both firm types. The analysis indicates that the majority of attributes are statistically significant.

Both of the attributes of the characteristic *Products and Performance* are statistically significant. These attributes focus on the strengths and weakness of current products as well as the past performance of the firm. The characteristic derived by *Kargar and Parnell* (1996) contains a number of other attributes focusing on functional strengths and weaknesses such as marketing, human resources and general management ability. These attributes became part of the *capability* characteristic during the data reduction stage. The analysis indicates that *capability* is not associated with any of the performance measures. This finding is consistent with the work of *Ramanujam et al* (1986) which contends that the internal orientation of a firm relates to the efficiency of the operating systems and the reasons for past failures.

All the attributes of the *external orientation* characteristic are statistically significant. These attributes include the general economic and business conditions, technological trends and an analysis of the competitive position of the firm. The basis for these attributes is well documented in the literature on the external orientation of SMEs - *Covin and Slevin* (1989). The findings of this section are in direct contrast with the results of a study carried out by *Storey et al* (1987) which found that slow growth SMEs have little understanding of the external environment and their competitors. The analysis of the results in this study indicate that low performing firms place a significant degree of emphasis on all the attributes of the external environment - but to a lesser degree than high performing firms.

All the attributes of the *departmental co-operation* characteristic are statistically significant. These attributes focus on the understanding and effective use of a functional approach in SMEs. The use of a functional approach in large firms is well documented in

the literature (section 3.2.2) but little reference is made to a functional approach in SMEs. Accordingly, the finding in this section provides a new insight.

All the attributes of the *resources for strategy* characteristic are statistically significant. These attributes focus on the use of availability of information, the use of ad hoc working groups, the involvement of consultants and the provision of other physical and financial resources for strategy. The findings in this section are consistent with the literature (see section 3.2.2). During the data reduction stage, the original resources for strategy characteristic derived by *Kargar and Parnell* (1996) yielded a further separate factor - *Management Time*, which is also statistically significant. This is consistent with the literature on SMEs - *Bracker et al* (1988), *Thompson* (1993).

The analysis of the *use of analytical techniques* characteristic indicates that both the *ability to use techniques* and the *willingness to seek external assistance* are statistically significant. While it could be argued that the techniques used in most SMEs are not very complex, the more important finding relates to the willingness to seek external assistance which is emphasised to a greater degree by high performing firms. It could be argued that the emphasis on this characteristic by high performing SMEs reflects a more analytical and externally orientated approach.

All of the attributes of the characteristic *staff creativity* are statistically significant. This finding is consistent with the analysis of section 9.6.6, which indicates that firms with a perceived increased market share place a greater emphasis on these attributes compared with firms having a perceived decreased market share. The emphasis on the attributes of the characteristic *staff creativity* is consistent with the findings of *Smallbone et al* (1993) which stress their importance for the growth and success of SMEs.

Finally, all the attributes of the characteristic *strategy a control mechanism* are statistically significant. The author was able to find only one instance in the literature where this characteristic is considered in relation to small firms - the study carried out by *Kargar and Parnell* (1996) in the service sector. Accordingly, the consideration of this characteristic also provides a new insight in relation to manufacturing SMEs.

10.6.5 Testing the deductive model - concluding remarks

This study seeks to establish the associations, if any, between the various factors that are associated with organisational performance as depicted in the deductive model. Previous sections indicate that elements of leadership are associated with strategic planning, elements of culture are associated with elements of strategic planning, and finally that elements of strategic planning are associated with some performance measures.

This section tests the contention that high performing firms place a greater emphasis on the attributes that show strong associations between the factors. The results of the analysis presented in tables 10.16, 10.17 and 10.18 confirm this contention. Section 10.6 outlines that the analysis focuses on the elements of culture and leadership that are associated with strategic planning and the elements of strategic planning that are associated with performance. As performance represents the outcome of the strategic planning process, the analysis does not consider the emphasis placed by both types of firms on the various attributes of performance measurement. Accordingly, it can be argued that the elements of leadership (see section 10.3) and culture (see section 10.4) that are associated with strategic planning are confirmed. This section also confirms the elements of strategic planning that are associated with organisational performance (see section 10.5).

10.7 Testing for size differences

Chapter 2 suggests that the main criterion for the classification of a firm as an SME is the number of staff employed. This classification is based on firms employing up to 250 staff. The exploratory interviews contend that the emphasis of firms on culture, leadership and the strategic planning process varies according to size and that as firms grow they tend to emphasise and focus on these factors to a greater extent. This implies that SMEs are not a homogenous grouping.

The descriptive statistics in chapter nine suggest that size is not a factor in the culture, leadership or strategic planning process. However, given the strength of feeling of the exploratory group it was decided to statistically test the impact of firm size. As the differences between the various firm sizes in chapter nine appear to be small, it was

decided to statistically test the different emphases given by firms at the extremes of the size distribution (firms employing 1-19 employees and firms employing 100-249 employees) on the attributes of leadership and culture associated with strategic planning, and on the attributes of strategic planning that are associated with performance measures. The rationale for limiting the test to these categories was based on the premise that if any differences exist, they are more likely to be found by comparing the smallest size category with the largest size category. Accordingly, the following hypothesis is formulated:

H7 - 'that firms with fewer than twenty employees differ from firms with 100-249 employees on the degree of emphasis given to the attributes of leadership, culture and strategic planning'.

The following sections examine the emphasis given by these two firms sizes on:

- leadership (section 10.7.1)
- culture (section 10.7.2)
- the strategic planning process (section 10.7.3)

In each section, the statistically significant attributes are outlined in bold.

10.7.1 Leadership

Table 10.19 outlines the degree of emphasis on the dimensions and attributes of leadership by firms employing 1-19 and firms employing 100-249 employees. The analysis indicates the mean scores and the number and percentage of firms that emphasised the attributes of leadership 'to a great extent' or 'to a very greater extent' (mean score 4 or more). A wilcoxon test is used on both data sets which indicates that the attributes outlined in bold are statistically significant.

Table 10.19 The emphasis on attributes of leadership associated with strategic planning in SMEs employing fewer than 19 and between 100 -249 staff.

Leadership dimensions	Firms (1-19 staff)		Firms (100-249 staff)	
	Mean	(N=46)	Mean	(N=45)
<i>Transformational</i>				
Instil perfect trust	3.87	36 (78%)	3.49	23 (51%)*
Gives employees the feeling that management can overcome any obstacle	3.67	29 (63%)	3.27	14 (31%)*
Shows an extraordinary ability in everything they undertake	3.24	16 (35%)	2.96	8 (18%)
Makes a powerful impression	3.46	21 (46%)	3.56	23 (51%)
<i>Creativity</i>				
Encourage new ideas from employees	3.42	34 (74%)	3.94	23 (51%)*
Introduces new projects and challenges	3.61	24 (52%)	3.67	29 (64%)
Stimulates employees to support their opinions with good arguments	3.27	24 (52%)	3.48	17 (38%)
<i>Transactional</i>				
Offers the prospects of rewards for good work	3.39	23 (50%)	3.53	21 (47%)
Agrees with the employees on the rewards that they can look forward to if they do what has to be done	3.04	18 (39%)	3.07	14 (31%)
Tell employees criteria for performance related benefits	2.59	12 (26%)	3.25	22 (49%)*
<i>Employee Focused</i>				
Has an ear for matters that are important to employees	3.78	32 (70%)	3.60	26 (58%)
Gives advice to employees when they need it	3.96	35 (76%)	3.80	30 (67%)
Creates a feeling of working together on major assignments/missions	3.91	35 (76%)	3.67	24 (53%)
Shows employees how to look at problems from new angles	3.57	26 (57%)	3.04	12 (27%)*

The results of this analysis presented in table 10.19 indicate that the differences in the five attributes outlined in bold type are statistically significant at $p < .05$. The transformational attributes of *instils perfect trust* and *gives employees the feeling that management can overcome any obstacle* are given higher emphasis by firms employing 1-19 employees. This could be argued to result from a strong personal hands-on approach by the managing directors in smaller firms. Furthermore, it is arguably easier to build personal relationships and trust in organisations where the number of employees is small. Creativity is emphasised to a higher degree in medium sized firms in the attribute *encourage new ideas from employees*. This could be argued to reflect a greater concentration of resources on a more proactive approach compared with smaller firms

where fire fighting tends to be more common. Furthermore, this could be due to wider spans of control exercised by managers in smaller companies. In medium sized companies, the number of employees is a potential restriction on the managers' span of control and understanding. This increases the necessity for managers to rely more on their employees for new ideas.

The transactional attribute *tells employees criteria for performance related* is arguably the essence of a transactional leadership approach. This attribute is emphasised to a greater degree by medium sized firms which implies that their relationships with their employees is more formalised compared to smaller firms where management-employee relations could be argued to be on a more personal basis. This finding is consistent with the employee focused attribute *shows employees how to look at problems from new angles* which shows a greater degree of emphasis by smaller firms. The greater emphasis given by medium sized firms to a transactional leadership style compared to small firms is not unsurprising as arguably the former have more complex systems and procedures in place.

In conclusion, the results presented in table 10.19 suggest that size influences a small number of important attributes used to describe different leadership styles. However, considering these results in conjunction with the descriptive statistics presented in section 9.4 suggests that size exerts some influence on leadership styles but it is not a significant variable. Therefore, it is logical to conclude that leadership style is influenced more significantly by other variables rather than size.

10.7.2 Culture

Table 10.20 outlines the degree of emphasis on the dimensions and attributes of culture by firms employing 1-19 and firms employing 100-249 employees. A wilcoxon test is used on both data sets which indicates that the attributes outlined in bold are statistically significant.

Table 10.20 The emphasis on the attributes of culture associated with strategic planning in SMEs employing fewer than 19 and between 100-249 staff.

Culture Dimensions	Firms (1-19 staff)		Firms (100-249 staff)	
	Mean	(N=46)	Mean	(N=45)
<i>Empowerment</i>				
Room for non- managerial employees to make their own decisions	3.61	29(63%)	3.02	12 (27%)*
Assignment of interesting tasks to employees	3.59	22(48%)	3.09	17 (38%)
Employees exert influence on important decisions regarding work	3.35	18(39%)	3.11	15 (33%)
The opportunity for employees to bring forward ideas before decisions are made	3.67	29(63%)	3.47	24 (53%)
Freedom for employees to depart from the rules	2.87	06 (13%)	2.28	04 (9%)
<i>External Orientation</i>				
Working to improve the local market position	3.63	28 (61%)	3.67	30 (65%)
Quick reaction to developments in the market	3.50	22 (48%)	3.56	25 (56%)
Investigation of the needs and wishes of customers	3.62	35 (76%)	3.83	29 (65%)
Thorough training of employees in systematically gathering data on what customers want to see improved	2.96	14 (31%)	3.58	15 (33%)
<i>Human Resources</i>				
Managers taking performance evaluation seriously	3.19	23 (50%)	3.80	26 (58%)
Careful selection of new employees	3.96	34(74%)	4.04	36 (80%)
Recognition of good performance by employees	3.51	33 (72%)	3.74	24 (53%)
Stimulation of creativity in employees	3.13	13 (28%)	3.24	15 (33%)
Thorough training of employees	3.29	23 (50%)	3.35	20 (44%)
<i>Intergroup Orientation</i>				
Exchange of information	3.60	39 (85%)	3.98	28 (62%)*
Useful co-operation in departments	3.72	31 (67%)	3.60	28 (62%)
Timely resolution of conflicts	3.80	31 (67%)	3.49	23 (51%)
Useful meetings between heads	3.57	27 (59%)	4.04	36 (80%)*
<i>Internal/Improvement Orientation</i>				
Talking about mistakes	3.53	29 (63%)	3.72	22 (59%)
Initiatives to improve way to work	3.41	18 (38%)	3.64	27 (60%)
Efforts for exceptional performance of the firm	3.27	29 (63%)	3.53	17 (38%)*
Implementation of change	3.39	22 (48%)	3.40	20 (44%)

The results presented in table 10.20 indicate that the differences between the emphasis of both firm sizes on the attributes of culture are statistically significant for a number of important attributes (outlined in bold). The analysis indicates the mean scores and the number and percentage of firms that emphasised the attributes of culture 'to a great extent' or 'to a very greater extent' (mean score 4 or more). It indicates that three of the attributes of the *empowerment* culture style are statistically significant. For example, the attribute *room for non-managerial employees to make their own decisions* is emphasised to a greater extent by firms employing less than twenty employees. It could be argued that this is not surprising as smaller firms have less formalised decision making structures and procedures.

The attributes *assignment of interesting tasks to employees* and *freedom for employees to depart from the rules* are also emphasised to a greater extent by firms employing less than twenty employees. This in essence, reflects the lack of bureaucratic structures and procedures in smaller organisations. This is a point found frequently in the literature - see for example, section 2.5.1.

The results indicate that the external orientation culture style is emphasised to a greater degree in firms with 100-249 employees than in firms employing fewer than twenty staff. However, only one attribute *thorough training of employees in systematically gathering data on what customers want to see improved* is statistically significant. It could be argued that this finding is not surprising as firms employing 100-249 employees often have greater resources and tend to give more formal attention to meeting customer needs. This is also consistent with the attribute *encourage new ideas from employees* discussed in section 10.7.1.

The human resources culture style is also emphasised to a greater extent by firms employing 100-249 employees. However, only one attribute *managers taking performance evaluation seriously* is statistically significant. It could be argued that this can be explained by the capacity of larger firms to devote greater resources to human resources management. Furthermore, this reflects the need for more formal procedures in medium size firms due to their wider span of operations.

The *intergroup* dimension shows a greater emphasis by firms with 100-249 staff than in firms with fewer than twenty employees. This is not surprising as the wider span of

operation forces medium sized organisations to explicitly divide tasks and create explicit functions to deal with these responsibilities. Therefore, larger firms have more opportunities for intergroup activities. However, only two attributes are statistically significant - *exchange of information* and the *useful meetings between heads of departments*. This finding reflects the need for medium sized companies to have more formal procedures for the exchange of information due to their wider span of control.

Table 10.20 indicates that firms with 100-249 employees place a greater emphasis on all the attributes of the internal/improvements orientation culture style. However, only one attribute *efforts for exceptional performance of the firm* is statistically significant. This could be argued to result from the greater tendency for firms with 100-249 employees to compete directly with other firms in the market place rather than supply one or more larger firms. It also reflects the need for medium sized companies to have more formal procedures for a co-ordinated effort to achieve exceptional performance due to their wider span of control.

In conclusion, the results presented in table 10.20 suggest that size influences a small number of important attributes used to describe different culture styles. However, considering these results in conjunction with the descriptive statistics presented in section 9.5 suggest that size exerts some influence on culture styles but it is not a significant variable. Therefore, it is logical to conclude that culture is influenced more significantly by other variables rather than size.

10.7.3 Strategic planning

Table 10.21 outlines the degree of emphasis on the characteristics and attributes of strategic planning by firms employing 1-19 and firms with 100-249 employees. The analysis indicates the mean scores and the number and percentage of firms that emphasised the attributes of strategic planning strongly (mean score 4 or more). A wilcoxon test on both data sets indicates that the attributes outlined in bold are statistically significant.

Table 10.21 Emphasis on the characteristics of strategic planning associated with performance in SMEs employing fewer than 19 and 100 -249 staff.

Strategic Planning characteristics	Firms (1-19 staff)		Firms (100-249 staff)	
	Mean (N=46)		Mean (N=45)	
<i>Products and Performance</i>				
Past performance	3.48	24 (52%)	4.04	37(82%)
Strengths and weaknesses in current products	4.02	38 (83%)	4.24	40(89%)
<i>External Orientation</i>				
General economic and business conditions	3.63	32 (70%)	3.80	28 (62%)
Technological trends and capabilities	3.78	33 (70%)	3.98	34 (76%)
Analysis of competitive position and trends	3.70	29 (63%)	4.11	36 (80%)
<i>Departmental Co-operation</i>				
Understanding of all functions by employees	3.61	28 (61%)	3.69	26 (58%)
Cross functional support	3.65	28 (61%)	4.07	34(76%)
Functional co-ordination	3.72	29 (63%)	3.80	28 (62%)
Efforts to achieve functional agreement	3.65	29 (63%)	3.66	24 (53%)
<i>Resources for strategy</i>				
Involvement of ad hoc working groups	1.96	4 (9%)	2.93	17 (38%)
Relevant information from available sources	3.53	28 (61%)	3.65	29 (64%)
Involvement of consultants	2.09	8 (17%)	2.13	7 (16%)
other physical/financial resources	3.07	16 (35%)	3.56	29 (64%)
<i>Management Time</i>				
Involvement of line managers	3.57	29 (63%)	4.20	39 (87%)
Time spent by the Managing Director	4.22	41 (89%)	4.18	37 (82%)
<i>Use of Analytical techniques</i>				
Use of analytical techniques	2.30	7 (15%)	3.02	15 (33%)
Ability to use techniques	2.46	10 (22%)	2.93	15 (33%)
Willing to seek outside assistance	2.65	15 (33%)	2.93	14 (31%)
<i>Staff Creativity</i>				
Ability to cope with surprises/crises/threats	3.26	21 (46%)	3.62	25(55%)
Flexibility to adapt to unanticipated changes	3.67	32 (68%)	3.84	32 (71%)
Ability to identify new opportunities	4.00	35 (76%)	4.11	35 (78%)
Role in identifying key problem areas	3.48	23 (50%)	3.71	31 (69%)
Capacity to generate new ideas	3.85	35 (76%)	3.87	32 (73%)
Capacity to generate/evaluate strategic alternatives	3.51	28 (61%)	3.63	25 (55%)
Anticipating and avoiding barriers to strategy implementation	3.42	25 (54%)	3.44	21 (47%)
<i>Strategy a Control Mechanism</i>				
Value as a control mechanism	3.24	21 (46%)	3.31	21 (47%)
Ability to communicate management thinking down the line	3.46	27 (59%)	3.67	27 (60%)
Communicate staff thinking up the line	3.17	20 (44%)	3.53	26(58%)
A control technique for monitoring performance	2.85	17 (37%)	3.53	25(56%)
A mechanism for revising current strategy	3.02	19 (41%)	3.47	24 53%)
A mechanism for managerial motivation	3.17	19 (41%)	3.20	17 (38%)
A mechanism for integrating functions	2.89	15 (46%)	3.00	15 (33%)

The results presented in table 10.21 indicate that the differences between the emphasis of both firm sizes on the characteristics of the strategic planning process are statistically significant for a number of important attributes.

Products and performance are emphasised to a greater extent by firms with 100-249 employees. This finding could be argued to result from the presence of more established procedures and systems in medium size firms. The higher emphasis by medium sized firms on *departmental co-operation* is expected as firms with 100-249 employees tend to have departmental demarcation compared with firms employing fewer than twenty staff. A similar argument could be given for the greater emphasis on the *involvement of ad hoc working groups* by firms with 100-249 staff. The greater emphasis on *other physical/financial resources* could be explained by the presence in larger firms of greater resources that are available for strategic planning.

The greater emphasis by firms employing 100-249 people on the *involvement of line managers* can be attributed to the hierarchical structure of medium size firms. It is no surprise that medium size firms (100-249 employees) emphasise *the use of and the ability to use analytical techniques* to a greater extent than firms with fewer than twenty employees. It could be argued that the operations of medium size firms warrant the use of analytical techniques. The *use of strategy as a control mechanism* receives a greater emphasis in medium sized firms, which arguably reflects the added emphasis on the characteristics outlined earlier, as well as the greater need for a control mechanism in firms employing over 100 employees.

In conclusion, the results presented in table 10.21 suggest that size influences a small number of important attributes used to describe the different characteristics of the strategic planning process. However, considering these results in conjunction with the descriptive statistics presented in section 9.6 suggests that size exerts some influence on the strategic planning characteristics but it is not a significant variable. Therefore, it is logical to conclude that the strategic planning process is influenced more significantly by other variables rather than size.

10.7.4 The Miles and Snow typology

An additional statistical analysis is carried out to ascertain the extent to which SMEs follow the generic strategies proposed by *Miles and Snow* (1984). The following hypothesis is formulated:

H8 'that SMEs follow the generic strategic orientation proposed by Miles and Snow (1984)'.

An analysis of product type according to perceived strategic orientation is depicted in table 10.22.

Table 10.22 Emphasis on product type, research and development investment and export orientation based on the Miles and Snow typology

Variable	Mean scores			
	Prospector	Defender	Analysers	Reactor
Customised products	43.8	31.8	60.6	72.0
Mature products	39.9	45.8	37.3	23.0
Standard products	46.0	52.8	38.9	23.0
R & D investment	6.4	3.8	4.5	4.4
Export orientation	25.3	17.0	20.7	16.6

The analysis of table 10.22 presents some unexpected findings. For example, while it is expected that 'prospector' type firms will have a higher emphasis on customised products, the results indicate that 'reactor' type firms emphasise this product type to a much higher degree. The greater emphasis by 'reactor' firms on customised products is reinforced by their lower emphasis on mature and standard products. However, it should be noted that there are only five cases (2.6%) where the managing directors perceive their firms to be 'reactor' type firms. In addition, 'analysers type' firms appear to emphasise customised products to a much higher degree than 'prospector' type firms. However, the sample contains only ten firms (5.2%) that perceive themselves as 'analysers' type firms. Consequently, these results must be treated with a degree of caution. Nevertheless, if both 'analysers' and 'reactors' are removed from the analysis, the remaining 92% of firms have strategic orientations that are consistent with the *Miles and Snow* typology. For example, prospector firms emphasise customised products, research and development and an external orientation to a greater extent than 'defender' firms. On the other hand,

'defender' firms emphasise mature and standard products to a greater extent than 'prospector' firms. Accordingly, it is possible to conclude that the main strategic orientations derived by the *Miles and Snow* typology partially apply to this sample for the reasons outlined.

In order to test the association between the strategic orientation and performance, firms are classified into high performing firms and low performing firms as shown in table 10.15. The breakdown according to strategic orientation of both types of firm is depicted in table 10.23.

Table 10.23 - Strategic orientations of high and low performing firms

Strategic Orientation	High Performing	Low Performing
Prospector	60.9%	30.0%
Defender	30.7%	67.1%
Analysar	5.6%	2.9%
Reactor	2.8%	
Total	100.0%	100.0%

An analysis of table 10.23 indicates that the majority of high success firms are 'prospector' type firms, whereas the majority of low success firms are 'defender' type firms. These findings imply that 'prospector' firms are likely to concentrate to a greater extent on customised goods compared with standard or mature products. In addition, the highest proportion of high success firms are 'prospector' type firms. This could be argued to imply that to achieve success, SMEs need to consider meeting their customers specific needs rather than concentrate on standard or mature products. This finding is consistent with the greater emphasis on the perceived performance attributes of *offering consistent quality and the delivery of goods on time*. On the other hand, SMEs concentrating on standard or mature products are more likely to be 'defender' type firms and also more likely to feature in the low success firms classification. An analysis of the association between organisational capability and the *Miles and Snow* typology is provided in section 9.3.

A further analysis compares high performing firms with low performing firms in relation to organisational capability. This analysis is shown in table 10.24.

Table 10.24 Organisational capability - high and low performing firms

Attribute Capability to:	High Performing	Low Performing
	Mean Scores	
Advertise/promote products	3.267	3.258
Provide after sales service	3.857	3.806
Deliver a broad product line	3.400	3.323
Make rapid design changes	3.743	3.742
Distribute products broadly	3.514	3.484
Provide high performance goods	4.057	4.000
Compete on price	3.971	4.000
Deliver products quickly	3.789	3.728
Offer consistent quality	4.543	4.504
Respond to swings in volume	3.514	3.581
Deliver products on time	4.710	4.684

Table 10.24 indicates that high performing firms place a greater emphasis on the attributes of organisational capability compared to low performing firms. However, none of the attributes are statistically significant. This indicates that in this sample, there appears to be no significant relationship between organisational capability and the degree of SME success.

10.8 Concluding remarks

The managing directors of SMEs face many hurdles in the quest for success or the achievement of their objectives. This chapter begins by statistically testing the associations between a range of contingency factors (firm size, financial turnover, sector, perceived market share and the perceived operating environment) and leadership, culture and the strategic planning process. However, considering these results in conjunction with the descriptive statistics presented in section 9.1 suggests that the contingency factors exert some influence on a small number of important elements of leadership, culture and strategic planning, but they are not significant variables. For example, the analysis indicates that firms that perceive their operating environment as 'dynamic and changing' place a higher emphasis on all the attributes of the strategic planning characteristics compared with firms that perceive their operating environment as 'market threats' focused. However, the differences in emphasis are statistically significant for only a small number of the attributes in the *external orientation, resources for strategy,*

use of analytical techniques, staff creativity and strategy as a control mechanism characteristics. These findings are not surprising as it could be argued that they are necessary to enable firms to compete effectively in a dynamic and changing environment. The first section considers the impact of the potential barriers to the implementation of strategic planning. The analysis indicates that each of the eight barriers are perceived to a greater problem by low performing firms compared with high performing firms, however, none of the differences are statistically significant. This finding indicates that the barriers to the implementation of strategic planning are broadly similar in high and low performing firms. It should be noted that each of the barriers are seen as 'minor' or 'moderate' problems with the exception of the barriers *implementation took longer than anticipated* which is perceived as a 'moderate' to 'substantial' problem. The chapter also considers the formality of strategic planning as an influence on the reduction or elimination of the barriers to implementation. The analysis indicates that there are no significant differences between the barriers to implementation in formal or informal planning firms.

The chapter also examines the differences in emphasis given by high and low performing firms to the attributes of strategic planning. The analysis indicates that firms with formal strategic plans place a greater emphasis on all the attributes compared with firms with informal strategic plans. However, only a few of the differences in emphasis are statistically significant. Accordingly it is possible to conclude, that in general, formal planning firms and informal planning firms emphasise the attributes of strategic planning to the same extent.

In order to contribute to a better understanding of the factors necessary for performance satisfaction, culture, leadership and strategic planning are analysed based on the dimensions tested and validated by *Wilderom and van den Berg (1997)* and *Kargar and Parnell (1996)*. The chapter indicates that some elements of leadership styles are associated with some elements of the strategic planning process. It also indicates that some elements of culture are associated with some elements of the strategic planning process.

Leadership and culture are also analysed to identify any associations. The analysis indicates that all the dimensions of culture are associated with the following leadership styles: *rewards style, competence, creativity and employee focused*.

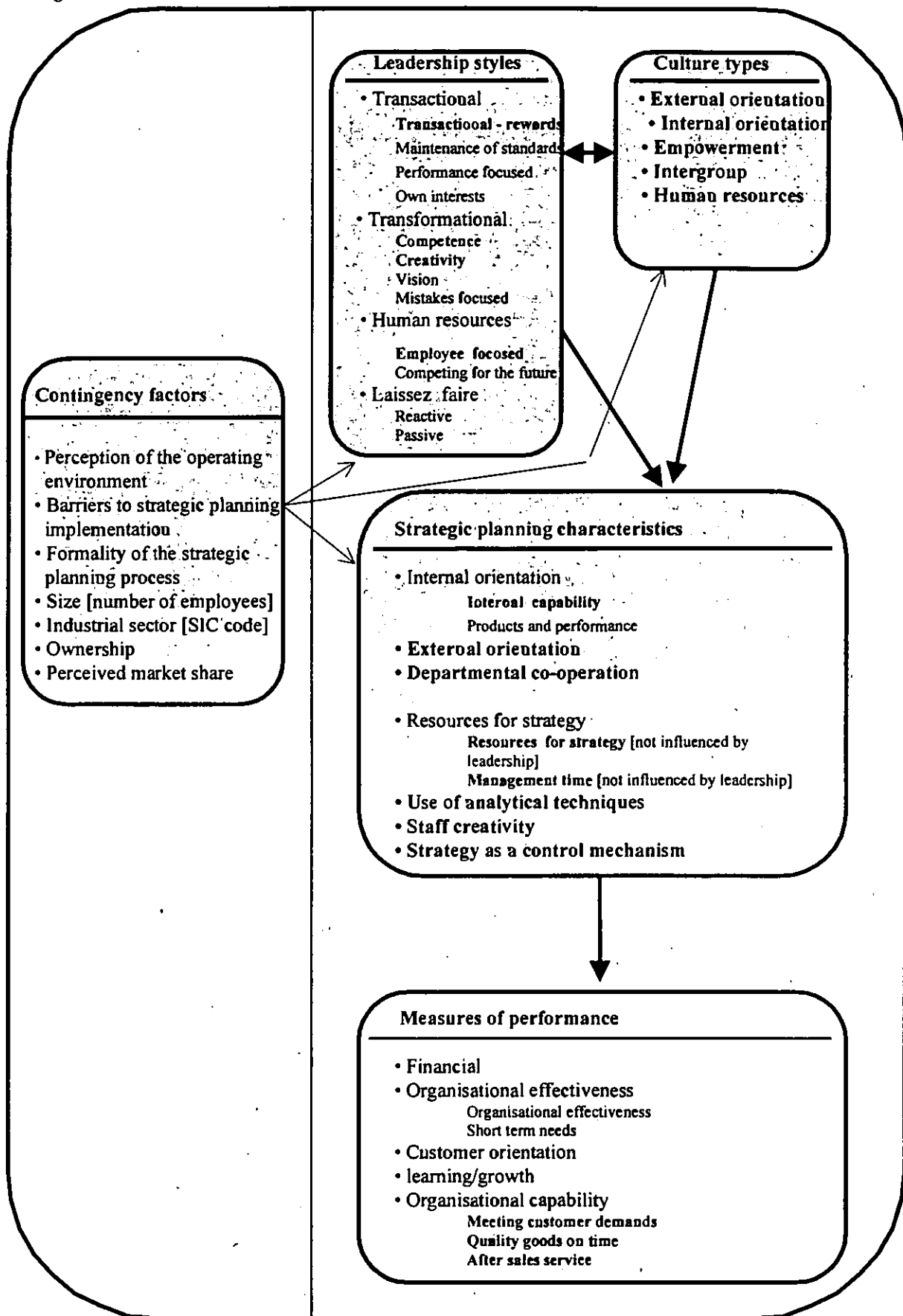
The examination of the associations between leadership and strategic planning indicates that the same leadership styles are also associated with the characteristics of strategic planning. This finding appears to suggest that culture and strategy are closely related as they both focus on assessing the external and internal environments and ensuring that the internal capabilities are appropriate for the business to be effective.

The chapter continues by examining the associations between the characteristics of strategic planning and performance measures. The analysis indicates that some elements of the strategic planning process are associated with the following performance measures:

- learning and growth
- meeting customer needs
- the provision of quality goods on time

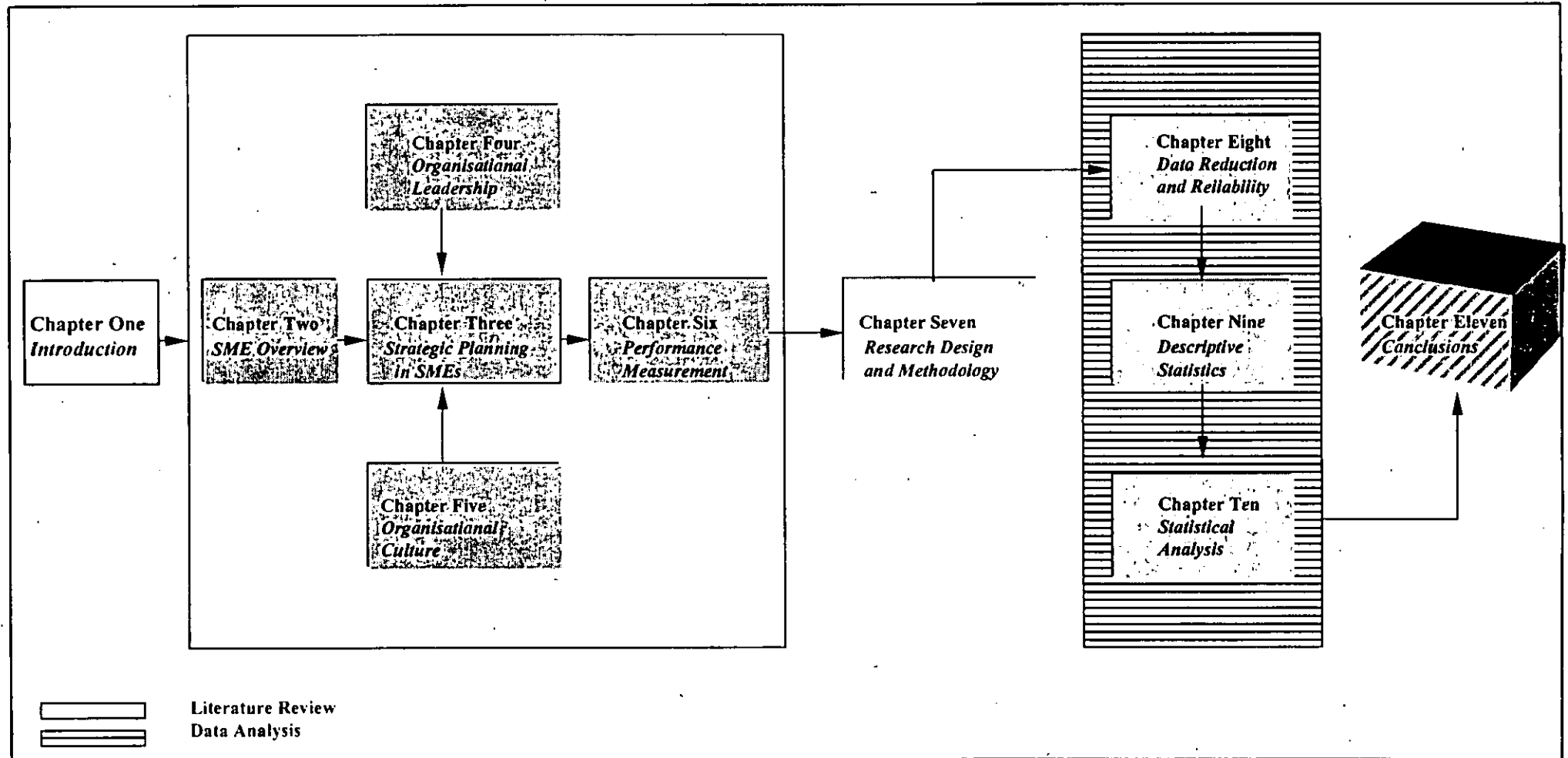
The establishment of the associations between leadership and strategic planning, culture and strategic planning and between strategic planning and performance measures achieves the main aims of this study. The associations established are depicted in bold type in figure 10.2.

Figure 10.2 Deductive model - established associations*



* Associations are depicted with hold arrows

**The Relationship between Culture, Leadership, Strategic Planning and Performance in Small and Medium Sized Enterprises
- Chapter Outline**



CHAPTER ELEVEN: SUMMARY AND CONCLUSIONS

11.0 Introduction

The aim of this chapter is to draw together the results of the analysis presented in previous chapters. The chapter examines the main findings and the contribution that this study makes to the body of knowledge on the strategic planning process, organisational culture, leadership styles and performance measures in manufacturing SMEs. The chapter:

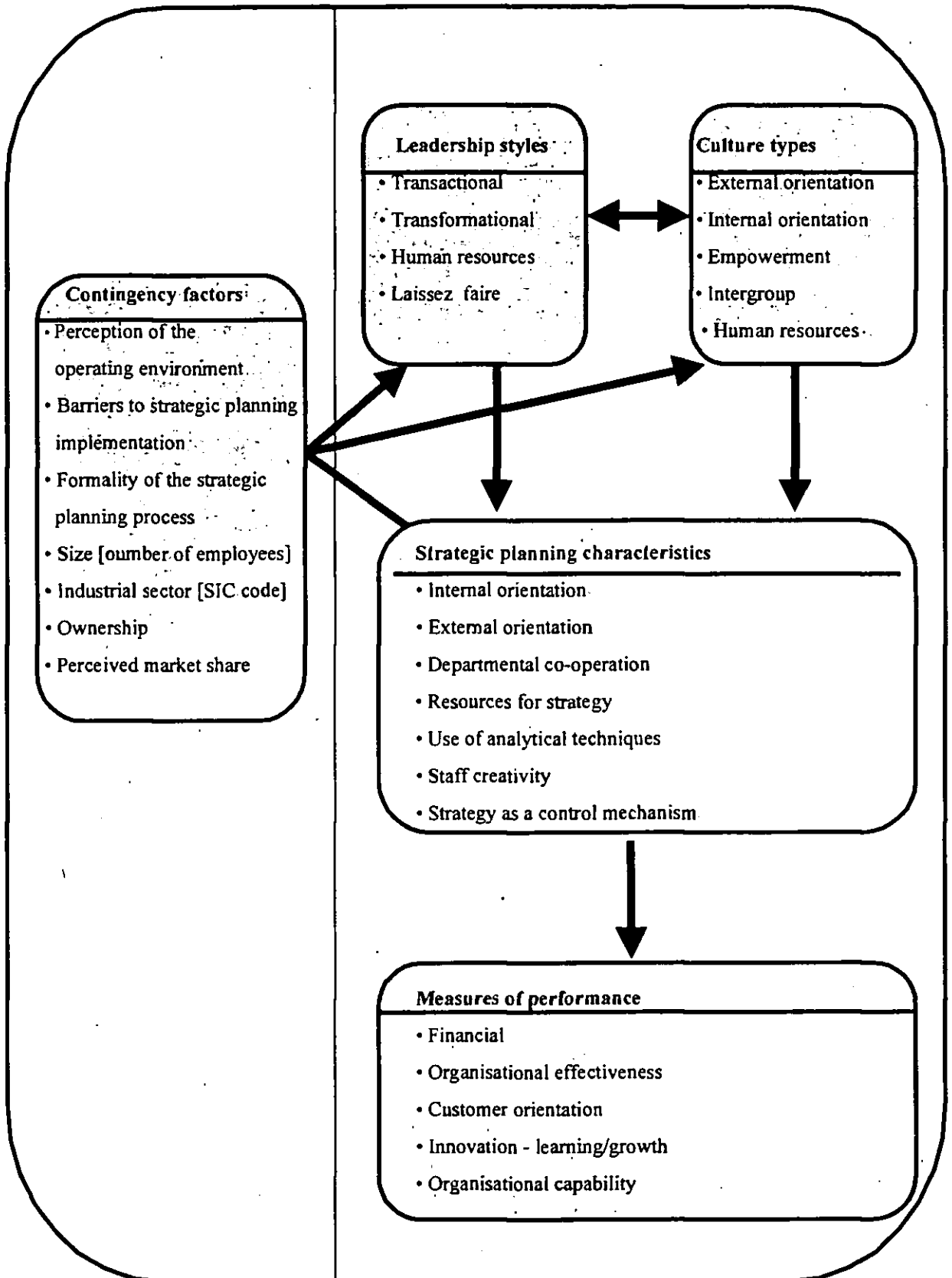
- outlines the inductive model (section 11.1)
- revisits the literature review (section 11.2)
- reflects on the methodology (section 11.3)
- describes the key aspects of the data reduction (section 11.4)
- evaluates the main associations arising from the statistical analysis including the testing of the deductive model (section 11.5)
- considers the contribution to the present knowledge of strategic planning, leadership, culture and performance in SMEs (section 11.6)
- outlines the limitations of the study (section 11.7)
- discusses the practical applications of the research (section 11.8)
- suggests directions for future research (section 11.9)

11.1 The deductive model

The deductive model presented in figure 11.1 was developed through the analysis of the relevant literature and semi structured interviews with seven managing directors of established engineering and electronics SMEs. The model (figure 11.1) depicts the relationships between potentially important factors capable of influencing the competitive ability of SMEs. It suggests that strategic planning is associated with organisational performance and is influenced by a number of factors such as organisational culture, leadership and contingency factors (formality of planning, barriers to deployment of the

strategic plan). The aim of the research was to test this inductive model through systematic examination of a series of key objectives.

Figure 11.1 Deductive model - factors influencing the competitiveness of SMEs



11.2 The literature

The review of the literature revealed four substantially separate issues in relation to the performance of SMEs which can be described as:

- concern regarding the continued use of efficiency related measures
- the need for a strategic planning approach
- the relationships between culture, leadership and strategic planning
- the growing importance of performance management

Each of these issues are revisited below.

Concern regarding the continued use of efficiency related measures arose from the contention by *De Meyer & Ferdows* (1990) that SMEs have been subjected to a vast array of such measures. They implied that governmental agencies, business advisers and SME representative groups seem content to continue to emphasise efficiency related measures. Yet, in reality *Clark* (1997) suggests that few efficiency measures are used in small firms and in any event, with labour costs now accounting for only 5-15% of production costs, the scope for further efficiency improvements is limited. It is, therefore no surprise that such measures are attracting growing criticism suggesting that they lack focus and are often deployed without regard for the overall objectives of the firm - *Spitzer & Evans* (1997), *Redman et al.* (1995). A more serious concern is expressed by *Prahalad & Hamel* (1995) that efficiency related measures overshadow strategic direction in SMEs.

The need for a strategic planning approach to improve SME competitiveness in an increasingly dynamic operating environment was advanced by *Kargar and Parnell* (1996), *Naffziger and Mueller* (1999). The literature indicates that strategic planning is rare in SMEs and that many small firms are more concerned with short term performance than long term planning - *McKiernan & Morris* (1994), *Deakins & Freel* (1998). The literature indicates that strategic planning is an approach already adopted by large firms. However, the potential for the transfer of best practice to SMEs needs careful

consideration due to the significant differences between small and large firms - *Jennings and Beaver* (1995), *Wilkes and Dale* (1998). The implication of this is that the benefits of strategic planning need to be considered from an SME viewpoint. The review of the literature suggests that there is little consensus on the association between strategic planning and performance in SMEs. Whilst the number of studies on SMEs is growing, the findings indicate a mixed picture on the impact of strategy on the financial performance (see section 3.3.4). Arguably, these findings lead to some confusion in SMEs. However, the findings of studies using a mixture of both financial and non-financial performance measures appear to confirm an association between strategic planning and performance (see section 3.3.3).

The relationships between culture, leadership and strategic planning are an important consideration for SMEs. The literature indicates that strategic planning is influenced by leadership - *Kotter and Heskett* (1992), *Hart and Quinn* (1993) and *Wilderom and van den Berg* (1997), and organisational culture - *Hofstede* (1980), *Deal and Kennedy* (1982), *Smircich* (1983), *Lewis et al* (1997). However, the majority of studies examine both leadership and culture in large firms, leaving a dearth of data in relation to SMEs.

The growing importance of performance management is emerging as a priority area for companies seeking success and growth - *Creelman* (1996). However, there is little agreement on the dimensions of a performance measurement system - *Moon and Fitzgerald* (1996). References to performance measurement include phrases such as: 'if you can not measure it then you can not manage it' *Schroeder* (1989 p.669). This implies that greater attention is likely to be focused on dimensions that are measured at the expense of those that are not - *Globerson et al* (1991), *Eccles* (1991). It is no surprise that the literature criticises the use of financial measures when they are used as the sole measure of organisational performance. However, whilst it acknowledges a trend from financial measures to a more balanced system of performance measurement, there is no consensus on the number or types of performance measurements appropriate to SMEs (see section 6.2.2). However, studies using a broad matrix of performance measures appear to indicate that a positive link exists between the characteristics of the strategic

planning process and enhanced performance in SMEs - *Baker et al* (1993) and *Joyce, Seaman and Woods* (1996). This study therefore used a broader mix of performance measures.

Various studies have examined many of these four issues from different viewpoints. However, it should be noted that so far no attempt has been made to investigate all the concepts in an integrated model in regard to SMEs. Arguably the literature fails to provide a degree of clarity on the concepts outlined. The only conclusion that can be drawn is that the development of an integrated model is a complex and difficult research task.

11.3 Methodology

A phenomenological approach was chosen in this study as it is capable of considering many complex dimensions in the same study - *Burrell and Morgan* (1979), *Daft and Wiginton* (1979). Both inductive and deductive modes of research were used (section 7.2). Exploratory research methods were employed in the development of the *inductive* model based on the views of managing directors of SMEs in the engineering and electronics sectors. Inductive research refers to the process by which the theory is generated, whereas deductive research is the process by which the theory is tested. The exploratory research suggested that the main issues facing manufacturing SMEs in the engineering and electronics sectors relate to organisational leadership, culture, strategic planning and organisational performance. The literature review supported this finding. A postal survey was used as the most reliable and effective means of data gathering in order to test the *deductive* model (see section 7.3.3).

Opinion research is a common approach used in the majority of studies investigating the impact of strategic planning on organisational performance and on the association between culture and leadership on strategic planning (see chapters 3, 4, and 5). The literature accepts that the use of opinions or perceptions is a valid approach (see section 7.2.1). Indeed, aspects of the study such as culture and leadership could only be considered using opinion research. The author was fortunate in obtaining permission to use existing tested and validated constructs in relation to strategic planning, organisational culture and leadership. The remainder of the questionnaire was based on

the published research of others. The questionnaire response rate was satisfactory (see section 9.1.1). The data reduction stage indicated strong factor structures. Canonical correlation analysis was the most appropriate analytical technique to derive clear associations between the main concepts (see section 7.4.6). This technique is particularly useful in the development of a model linking all the main factors. Overall, it can be argued that the methodology developed in this study represents an advance in an area where there is a dearth of research.

11.4 Keys aspects of the descriptive data

The analysis indicates that small firms tend to rely on standard products to a greater extent than medium sized firms (see section 9.1.5). This finding is consistent with the analysis that less than a third of firms employing fewer than 20 employees rely on customised goods for the majority (over 50%) of their sales. This could be argued to be a missed opportunity by many SMEs as they fail to maximise their inherent advantage by moving away from standardised products. This calls into question the small organisations' contribution to innovation. On the other hand, it is not unusual for small firms to produce parts and components for larger firms, thus constraining their scope for innovation. Yet, the study shows that the most frequent type of written strategic plan introduced over the previous three years relates to the introduction of new products by 21% of firms (see section 9.2). The literature suggests that a greater emphasis is needed on innovation and on a more strategic outlook (see sections 2.3.7 and 3.4.2). The study shows that 58% of firms have a written strategic plan. Arguably, this could be considered high in the light of the comments by *McKiernan and Morris* (1994). The analysis considers the association between the following contingency factors and the main concepts in the deductive model: organisation culture, leadership, strategic planning and organisational performance. These include:

- size (number of employees)
- the operating environment (dynamic or market focused)
- status (independent or subsidiary)
- standard industrial classification (electronics or engineering)
- perceived market share (increased, decreased or static)

The analysis indicates that none of these contingency factors impact on the product type (mature, standard or customised), the proportion of total sales exported or the propensity to invest in research and development (see section 9.1). The analysis also indicates that none of the contingency factors impact on culture, leadership, strategic planning or organisational performance in this sample (see sections 9.4, 9.5, 9.6 and 9.8). Arguably, there may be other factors that influence these concepts. However, it is not clear from this study what they are. The analysis indicates that the type of strategy tends to result in minor differences dependant on organisation size (see section 9.2). For example, small firms (with 1-19 employees), emphasise the introduction of new products but tend to introduce new products to old markets rather than seek new markets. In addition, small firms focus on serving other firms more effectively and efficiently. This finding is not surprising as small firms frequently produce parts and components for larger firms.

The remainder of the descriptive statistics examines the main concepts in the deductive model: strategic planning, organisational culture, leadership and performance measurement. The descriptive statistics confirm that SMEs place a significant emphasis on the transactional, transformational and human resources leadership styles derived by *Wilderom and van den Berg* (1997). Lesser emphasis is placed by SMEs in all size groupings, on the laissez faire leadership style: This is not surprising as it is a style where leaders tend to abdicate responsibility and allow their subordinates to do whatever they chose. The descriptive statistics also confirm that SMEs place a significant emphasis on all the organisational culture styles derived *Wilderom and van den Berg* (1997). The chapter shows that the seven main characteristics of strategic planning derived by *Kargar and Parnell* (1996) are emphasised in all SME size groupings to a significant degree with the exception of the characteristic *analytical techniques*. The analysis of performance measurement indicates that all attributes are emphasised to a significant extent by the SMEs in each size category. The highest degree of emphasis is on financial performance, customer satisfaction and customer retention.

11.5 Testing the deductive model

The primary aim of the study was to test the deductive model presented in section 1.1. This model depicts the main influences on the strategic planning process and its subsequent association with organisational performance. The deductive model was tested in the following manner. First, the impact of the contingency factors on the main concepts was considered (section 11.5.1). Second, the associations between culture, leadership, strategic planning and performance were established (section 11.5.2). Third, in order to ascertain the impact of the associated attributes on overall performance, the emphasis placed by high performing firms was compared with the emphasis placed on the same attributes by low performing firms (section 11.5.3). Fourth, the model was tested in relation to size (number of employees) in order to ascertain the homogeneity of the SME categorisation (section 11.5.4). Fifth, the applicability of the *Miles and Snow* generic strategies typology was examined (section 11.5.5). Each of these aspects are briefly examined in this section.

11.5.1 Contingency factors

The first hypothesis relates to the associations between contingency factors (the perceived operating environment, the barriers to strategic planning implementation and the degree of formality of the strategic plan) and leadership, culture, strategic planning and performance in SMEs. The descriptive analysis has already indicated that there is no association between contingency factors (firm size, financial turnover, sector and perceived market share) and leadership, culture, strategic planning and performance. (see sections 9.4 - 9.6) The hypothesis and a summary of the outcome of the analysis are presented in table 11.1.

Table 11.1 Hypothesis one - contingency factors

Hypothesis	Finding
Hypothesis 1(a) <i>'That firm size, financial turnover, industrial sector and perceived market share influence leadership, culture, strategic planning and organisational performance in SMEs'. [for detailed discussion see section 9.4, 9.5, 9.6 and 9.8]</i>	<i>Rejected</i>
Hypothesis 1(b) <i>'That there is a significant difference between the emphasis on leadership, culture, strategic planning and organisational performance by firms that perceive their operating environment to be 'dynamic and changing' compared with firms that perceive their operating environment to be 'market threats focused'. [for detailed discussion see section 10.1.1]</i>	<i>Rejected</i>
Hypothesis 1(c) <i>'That strategic planning implementation problems are experienced to the same extent by high performing and low performing firms'. [for detailed discussion see section 10.1.2]</i>	<i>Supported</i>
Hypothesis 1(d) <i>'That the barriers to the implementation of the strategic planning process are the same in firms deploying formal strategic planning and firms relying on formal processes'. [for detailed discussion see section 10.1.3]</i>	<i>Supported</i>
Hypothesis 1(e) <i>'That there is a significant difference between the emphasis given to the characteristics of strategic planning by firms deploying formal strategic planning compared to firms deploying non-formal strategic planning'. [for detailed discussion see section 10.1.3]</i>	<i>Rejected</i>

The key findings indicate that the barriers to the implementation of strategic planning are experienced to a slightly greater degree by low performing firms compared with high performing firms and that firms with a formal strategy have a greater degree of success in overcoming such barriers than firms without a formal strategic planning process. This is based on the analysis that formal planning firms emphasise the characteristics of strategic planning to a greater extent than non formal planning firms. However, the differences are not statistically significant. Considering these results in conjunction with the descriptive statistics presented in section 9.1, suggests that the contingency factors exert some influence on a small number of important elements of leadership, culture and strategic planning, but they are not significant variables.

11.5.2 Associations between culture, leadership, strategic planning and performance

The second hypothesis relates to the associations between organisational leadership and culture. The hypothesis and a summary of the outcome of the analysis are presented in table 11.2.

Table 11.2 Hypothesis two - culture and leadership

<i>Hypothesis</i>	<i>Finding</i>
<i>Hypothesis 2</i> <i>'That elements of the dimensions of leadership styles are associated with elements of the dimensions of organisational culture in SMEs'</i> <i>[for detailed discussion see section 10.2]</i>	<i>Supported</i>

The results indicate that *reward, competence, creativity and employee focused* leadership styles are associated with all five cultural types (section 10.2). However, no association is detected between any culture type and the *reactive or passive* leadership styles. These findings are consistent with the increasing emphasis given to transformational and human resources styles in the literature and reflect the decline in the reward style of leadership (section 4.3).

The next three hypotheses relate to the associations between the main concepts in the deductive model: organisational leadership and culture with the strategic planning process and the associations between the strategic planning process and organisational performance. The hypotheses and a summary of the outcome of the analysis are presented in table 11.3.

Table 11.3 Hypotheses three, four and five - leadership, culture, strategic planning and organisational performance

Hypothesis	Finding
<p>Hypothesis 3 <i>'That elements of the dimensions of leadership styles are associated with the characteristics of strategic planning in SMEs'</i> <i>[for detailed discussion see section 10.3]</i></p>	<p>Supported</p>
<p>Hypothesis 4 <i>'That elements of the dimensions of organisational culture are associated with the characteristics of strategic planning in SMEs'</i> <i>[for detailed discussion see section 10.4]</i></p>	<p>Supported</p>
<p>Hypothesis 5 <i>'That the characteristics of strategic planning are associated with elements of organisational performance in SMEs'</i> <i>[for detailed discussion see section 10.5]</i></p>	<p>Supported</p>

The results indicate that there are associations between leadership and elements of strategic planning (section 10.3). The findings indicate that *employee focused, creativity and transformational leadership styles* are likely to impact to a greater extent on strategic planning than either *reward or laissez faire leadership styles*. This finding is consistent with the descriptive statistics (section 11.4). The results, however, do not indicate any association between leadership styles and the *resources for strategy, management time, products and performance or the use of analytical techniques* characteristics.

The results of this study are broadly similar to that of *Wilderom and van den Berg (1997)* which confirms the association between transformational and human resources leadership styles and strategic planning. However, they broaden the *Wilderom and van den Berg* definition of leadership from a single category - a balanced transformational style (transformational style and human relations orientated attributes) - by the inclusion of some transactional attributes (see table 10.2).

The dimensions of culture derived from the literature include *empowerment, intergroup orientation, internal orientation, external orientation and human resources orientation*. The data reduction stage confirms each of these culture types in this study. The results indicate that all the attributes of organisational culture are associated with the characteristics of strategic planning in the following order: *human resources,*

improvement orientation, external orientation, intergroup orientation and empowerment orientation. The analysis confirms that each culture style is associated with elements of the strategic planning process in SMEs. This finding provides empirical evidence to managers of SMEs, policy makers and small business advisers that there is an association between culture and strategic planning.

Finally, the analysis indicates that strategic planning is associated with the following dimensions of organisational performance: *innovation - learning/growth, meeting customer demands and the provision of quality goods on time.* The literature indicates broad agreement on the characteristics of strategic planning as *external orientation, internal orientation, cross functional working, resources for strategy staff creativity, the use of analytical techniques and strategy as control mechanism - Kargar & Parnell (1996).* The analysis of this study confirms the characteristics of strategic planning used in previous studies. Previous studies that examined the impact of strategic planning on performance pointed to *external orientation* as one of the more important characteristics of strategic planning. This study indicates that *external orientation* is ranked behind *staff creativity, strategy as a control mechanism, functional co-ordination and the use of analytical techniques* as regards the strength of association with performance measures. This finding implies that SMEs appear to be inward looking rather than externally orientated. This finding was confirmed by the high ranking of internally related characteristics.

The key measures of organisational performance in this study are the capability to *provide quality goods on time and to meet customers demands.* Innovation - creativity/learning was also a key measure of performance. No association was detected with performance measures such as *financial, organisational effectiveness or customer orientation.*

11.5.3 Comparing high and low performing firms

The deductive model contends that culture, leadership and strategic planning are associated with performance. To ascertain the validity of the model, it is contended that high performing firms (firms with a perceived increased market share) are more likely to place a greater emphasis on the elements with positive associations than low

performing firms (firms with a perceived decreased market share). This comparison is incorporated into the hypothesis to be tested. The hypothesis and a summary of the outcome of the analysis is presented in table 11.4.

Table 11.4 Hypothesis six - testing the deductive model

<i>Hypothesis</i>	<i>Finding</i>
<i>Hypothesis 6 that high performing firms place a greater emphasis on the elements with positive associations between culture and strategic planning, leadership and strategic planning, and between strategic planning and organisational performance, than low performing firms.</i>	<i>Supported</i>

The analysis indicates that 'high performing' companies place a stronger emphasis on the dimensions of organisational leadership, organisational culture and the characteristics of strategic planning that are perceived to be associated with organisational performance, than 'low performing' companies. This means that the main parts of the deductive model are confirmed. The modified model is presented in section 10.8 (figure 10.2).

The key differences between high success and low success firms include:

- a higher emphasis on the dimensions of organisational culture and their attributes by high performing firms (see section 10.6.2)
- a higher emphasis on some of the dimensions of leadership (see section 10.6.3)
- a higher emphasis on the majority of characteristics of strategic planning and their attributes by high performing firms (see section 10.6.4)

11.5.4 Testing for size

Chapter 2 suggests that the main criterion for the classification of a firm as an SME is the number of staff employed. This classification is based on firms employing up to 250 staff. The exploratory interviews contended that the emphasis of firms on organisational culture, leadership and the strategic planning process varies according to size and that as firms grow they tend to emphasise and focus on these factors to a greater extent. This

implied that the number of employees is one of the key determinants of SMEs behaviour.

In order to ascertain if any differences exist, firms with 1-9 employees were compared with firms employing 100-249 staff (see section 10.7). The hypothesis and a summary of the outcome of the analysis are presented in table 11.5.

Table 11.5 Hypothesis seven - testing for size

<i>Hypothesis</i>	<i>Finding</i>
<i>'That firms with fewer than twenty employees differ from firms with 100-249 employees on the degree of emphasis given to the attributes of leadership, culture and strategic planning.' [for detailed discussion see section 10.7]</i>	<i>Rejected</i>

The analysis indicates that the differences in emphasis between both sizes categories in the majority of the attributes are statistically insignificant. In general, small firms (employing fewer than 20) emphasise the attributes of leadership, culture and strategic planning to a similar degree as firms employing between 100 and 249. This implies that employee size is not a significant predictor of behaviour.

11.5.5 The applicability of generic strategies

The contention that firms follow generic strategies such as the *Miles and Snow* typology is tested in this study. The hypothesis and a summary of the outcome of the analysis are presented in table 11.6.

Table 11.6 Hypothesis eight - the applicability of generic strategies

<i>Hypothesis</i>	<i>Finding</i>
<i>'That SMEs follow the generic strategies proposed by Miles and Snow (1984)</i>	<i>Partially Supported</i>

The analysis indicates that the *Miles and Snow* typology is partially supported (see section 10.7.4). The majority of cases in this sample perceived themselves as 'prospector' or 'defender' type firms (92% of all respondents). The analysis indicates that 'prospector' firms emphasise customised products, research and development and an external

orientation to a greater extent than 'defender' firms. On the other hand, 'defender' firms emphasise mature and standard products to a greater extent than 'prospector' firms. This is in line with the contentions of *Miles and Snow*. The analysis also indicates that the majority of high success firms are 'prospector' type, whereas the majority of low success firms are 'defender' type firms. Arguably this suggests that successful SMEs have greater regard for their customers' specific needs. This finding is consistent with the greater emphasis on the perceived performance attributes of *offering consistent quality* and *the delivery of goods on time*. On the other hand, SMEs concentrating on standard or mature products are more likely to be 'defender' type firms and also more likely to feature in the low success firms' classification.

11.5.6 Organisational capability

A further analysis compares high performing firms with low performing firms in relation to organisational capability (see section 10.7.4). The findings indicate that high performing firms place a greater emphasis on the attributes of organisational capability compared to low performing firms. However, none of the attributes are statistically significant. This indicates that in this sample, there is no association between organisational capability and the degree of SME success.

11.5.7 Concluding remarks

The author contends that the main aim and objectives of the study were fully met. An examination of the literature on SMEs, strategic planning, organisational leadership, organisational culture and performance measurement identified areas where greater clarity is required. Arguably, all of these areas are under researched and require more empirical studies in relation to the association between culture leadership and strategic planning, and between strategic planning and performance. These issues are discussed in chapters one to six. In the author's view, this study makes a valuable contribution towards achieving clarity on the associations between culture, leadership, strategic planning and organisational performance in SMEs.

11.6 A Comparison of the model derived with existing models

The overall model presented in chapter one flows from the inductive research. As suggested in 1.0, no equivalent to this model was found in the literature. However, the constructs for testing this model were mainly located in the existing literature. Furthermore, as was discussed in sections 3.3.3, 4.2 and 5.2, examinations of bilateral relationships between elements of this model have been carried out by previous researchers. The published works located by the author were primarily concerned with examining the relationship between:

- a) strategic planning and performance
- b) leadership style and performance
- c) culture and performance

Furthermore, these studies were conducted mainly in large organisations. The picture that emerged from the exploratory interviews was somewhat different from the research reported thus far, in that, contingency factors, leadership style, culture, strategy and performance were presented as a set of interdependent phenomena. This led to the development of the integrated model depicting the relationship between these variables. The model was presented in section 1.2 and was subsequently modified in section 10.8. As far as the author could ascertain, this is the first model that attempts to link contingency factors, leadership style, culture, strategic planning and performance together. Furthermore, these concepts were tested within one sample of respondents.

In this section, the author compares the variables that were found to be significant in this study with the relevant previous studies - *Kargar and Parnell (1996)* and *Wilderom and van den Berg (1997)*. This study like the previous studies outlined, focuses on determining a series of relationships rather than establishing causality. Causality is extremely difficult to ascertain. This is largely because organisations are dynamic and their outputs and outcomes are influenced by a large number of factors. Furthermore, it is not possible to control for variables in order to ascertain causality. Similar arguments were put forward by *Lazerfeld (1955)* cited in *Ryan (1995 p. 131)*.

Table 11.7 outlines the characteristics of the strategic planning process derived by *Kargar & Parnell* (1996) and compares them with the characteristics derived in this study. It also outlines in **bold type** the characteristics that were found to be associated with organisational performance in this study and in the study conducted by *Kargar and Parnell* (1996).

Table 11.7 A Comparison of the characteristics of strategic planning associated with performance derived by *Kargar and Parnell* with the characteristics derived in this study

<i>Kargar and Parnell Study</i>	<i>This Study</i>
Internal Orientation	Internal Capability* Products and performance
External Orientation	External Orientation
Departmental Co-operation	Departmental Co-operation
Resources for Strategy	Resources for strategy Management time**
Use of analytical techniques	Use of analytical techniques
Staff Creativity	Staff Creativity
Strategy as a control mechanism	Strategy as a control mechanism

* does not include the *past performance* and *strengths and weaknesses in current products* attributes included in the original characteristic

** contains the attributes *involvement of line managers* and *managing directors time* which loaded onto a separate factor during the data reduction stage. These attributes were removed from the characteristic *resources for strategy*.

This study largely confirms the characteristics derived by *Kargar and Parnell*. However, there are a number of minor differences. For example, the internal orientation characteristic became two separate characteristics in this study - *internal capability* and *products and performance*. In addition, the *resources for strategy* characteristic became two separate characteristics - *resources for strategy* and *management time*. The overall analysis indicates that all the characteristics derived by *Kargar and Parnell* are associated with organisational performance, whereas in this study, no association is indicated between the new *products and performance* characteristic with organisational performance. A number of factors could account for these variances such as national culture, external influences and the sample distribution.

In a similar manner table 11.8 compares the dimensions of culture and leadership derived by *Wilderom and van den Berg* with the dimensions derived in this study. The table also

outlines the dimensions associated with organisational performance in respect of this study and the *Wilderom and van den Berg* study (outlined in bold type).

Table 11.8 A Comparison of the dimensions of culture and leadership associated with performance derived by *Wilderom and van den Berg* with the dimensions derived in this study

<i>Wilderom and van den Berg Study</i>	<i>This Study</i>
Culture	
External orientation	External orientation
Internal orientation	Internal orientation
Empowerment	Empowerment
Intergroup	Intergroup
Human Resources	Human Resources
Leadership	
Transactional	Transactional rewards
	maintenance of standards
	performance focused
	own interests
Transformational	Competence
	Creativity
	Vision
	Mistakes focused
Human Resources	Employee focused
	Competing for the future
Laissez faire	Reactive
	Passive

This study confirms the dimensions of culture used by *Wilderom and van den Berg*. The study also confirms the characteristics of leadership associated with performance derived by *Wilderom and van den Berg*. In addition, this study broadens the *Wilderom and van den Berg* findings by the addition of *transactional - rewards* leadership style which contains the attributes *rewards for work, agreed rewards for work and informs employees of the criteria for performance related benefits*.

This study also shows that the attributes *promote a clear vision and sets ambitious targets* (the derived *vision* dimension) are not associated with performance. Similarly, the attributes *learn from mistakes and keeps an eye on mistakes* (the derived *mistakes focused* dimension) are not associated with organisational performance. The *human resources* leadership style derived by *Wilderom and van den Berg* loaded onto two new dimensions - *employee focused* and *competing for the future*. The attributes of *competing for the future* (concern with organisation's personnel and with competing organisations, speaking optimistically about the future, and performance and employee welfare

orientated) were not associated with organisational performance in this study. A number of factors could account for these variances such as national culture, external influences and the sample distribution.

11.7 Contributions to the existing knowledge

It is contended that despite the interest shown by Managing Directors in the questionnaire, the impact of strategic planning in SMEs is far from clearly understood. It is evident that academic research has not provided clarification of the role that strategic planning could and should have in the quest for competitive advantage in SMEs. These arguments led to the identification of the need for substantive research to extend the current knowledge and understanding of strategic planning and to support and clarify its future role. The findings outline the association between leadership, culture and the strategic planning process and the association between strategic planning and organisational performance. This has been achieved in an integrated model. These findings fill a number of gaps in the existing knowledge. Moreover, it is argued that the timing of the study is of particular importance given the role of SMEs in the economy (see section 2.2).

More specifically, the results of the study:

- act as a conduit to improve the understanding of strategic planning, culture and leadership in SMEs based on the perception of practising Managing Directors. The exploratory interviews and the pilot study confirmed the characteristics of strategic planning and the dimensions of leadership and culture appropriate for use in this study (see section 7.3.3). The subsequent literature review established the basis for the inclusion of each of the characteristics and dimensions in the study (see sections 3.4.2, 3.4.3 in the case of strategic planning, 4.4. for leadership and 5.6 for culture). The analysis indicated that three dimensions of leadership and all the dimensions of culture were associated with strategic planning. Furthermore, the analysis indicated that all of the characteristics of strategic planning were associated with organisational performance measures (see section 10.5). This confirmation contributes an understanding of the associations between leadership, culture and strategic planning that can resolve many of the current misunderstandings on the

appropriateness of the concepts and their respective characteristics/dimensions in the overall performance of SMEs.

- provide a set of framework concepts or 'building blocks' each comprising definitional and operational attributes, which ensure that they are both understood and meaningful to practising SME Managing Directors - see section 10.8)
- identify the factors associated with the success of SMEs based on the analysis of the emphasis on the various factors by high and low performing firms (see section 10.6)
- indicate that SMEs in this sample appear to adhere to the 'prospectors' or 'defenders' (92% of all firms in this study) categories of the *Miles and Snow* typology (see section 10.7.4).

11.8 Limitations of the study

A number of limitations were noted during the study which relate to methodological issues and the means by which the concepts were measured. These issues are outlined below.

Survey Methods

The methodology focused on the use of a single respondent in the study. This approach is consistent with the majority of survey based studies on SMEs. In addition, the literature strongly supports the targeting of the Chief Executives or Managing Directors (see section 7.3.3). *Hambrick* (1981 p.271) states that:

'researchers who attempt to identify an organisation's 'actual' strategy by asking executives other than the chief executives may receive considerably less accurate information that might have been presumably assumed'.

Each managing director was contacted by telephone by the author. The responses received appeared to indicate that the managing directors completed the questionnaire themselves. Despite the precautions taken, there is no guarantee that those responding did not delegate the completion of the questionnaire to others. The author has no reason to

suspect that the completion of the questionnaire involved any staff other than the managing director.

The use of a lengthy questionnaire could be argued to be another limitation and a possible source of bias. The pilot study indicated that the questionnaire required nearly one hour to complete. This means that only the 'more committed' managing directors are likely to submit a response. It also means that many smaller firms may be precluded from responding due to time and resource constraints. Nevertheless response bias was not a problem and did not invalidate the results (see section 7.3.3).

This study relied on a highly structured questionnaire for gaining insights into Managing Directors' views on their perceptions of the emphasis given to the various concepts. The questionnaire used closed questions as the issues raised during the exploratory interviews and the literature review pointed to the advisability of adopting this approach. In addition, the use of closed questions was consistent with the outline of the information sought (see section 7.3.3) and highly suitable for use in a postal survey. Nevertheless the use of closed-ended questions could be considered to be a limitation of the study, in that the pattern of responses can only relate to the choices offered to respondents. *Ryan* (1995 p. 137) comments that the debate about the relative merits of open and closed ended questions has been 'well rehearsed in a number of standard texts'. He suggests that much depends on whether or not the range of alternative answers are known prior to the construction of the questionnaire. The use of open questions would have afforded respondents an opportunity to put forward their points of view in a more open fashion. In addition, a series of more in-depth interviews in an open and probing style could be used to ascertain the reasons for the responses given. However, it is important to point out that open-ended questions are often ignored by respondents and furthermore, the diversity of responses makes it difficult to analyse the responses to open-ended questions objectively.

Another potential draw-back relates to the use of Likert-type scales and the general tendency of respondents to gravitate towards the centre of the scale provided - *Ryan* (1995). *Ryan* (1995 p.153) refers to Likert-type scales as 'acquiescence sets' which may encourage 'a reply to a question where that reply is, to some extent, independent of the content of the statement'. While he acknowledges that the responses to a given statement may be influenced by content, chance, external stimuli, alternatives available and the

juxtaposition of items, he states that the acquiescence factor is 'probably one of the more difficult to quantify'. Ryan (1995) concludes that the weight of evidence suggests that where respondents are conversant with both the subject and wording of questionnaires, their responses tend to reflect the mean of the scale used. Nevertheless, Likert-type scales are used frequently in management research. An alternative approach to a rating scale is to rank the items. However, ranking has its own drawbacks such as the restriction on the number of variables that can be included to enable effective ranking to be carried out.

Surrogate Measures

The use of the strategic planning process as a surrogate measure of strategy could be argued to be another limitation (see section 3.2.4). However, the use of strategic content was discounted as it is virtually impossible to translate the contents of an organisation's strategy to a set of simple questionnaire constructs except at a simple and superficial level. To this end, the *Miles and Snow* typology was deployed. This study used a number of subjective measures of performance based on the personal opinions or beliefs of the respondent Managing Directors. While this approach is consistent with opinion research (see section 7.2.1), it does present a potential limitation. For example, the use of objective measures based on quantifiable data could be more meaningful and less prone to manipulation, distortion or interpretation. Objective measures have greater reliability (the extent to which consistent replies are received) and validity (the extent to which the attributes measure what they are intended to measure).

11.9 The practical use of the research

In section 1.1, it was argued that there is a lack of consensus in the literature as regards the associations between culture, leadership and strategic planning, and between strategic planning and organisational performance. It is contended that this lack of clarity is a factor in the low incidence of strategic planning in SMEs. Accordingly, these aspects were incorporated as the main aims of the study (see section 1.4).

The present study is based on an integrated approach to strategic planning and performance in SMEs and has indeed advanced knowledge towards a greater degree of

clarification. The literature review and the analysis carried out on this study have suggested three underpinning perspectives on organisational performance based on the associations between the main concepts in this study. First, the associations derived between leadership and strategic planning suggest that approaches which concentrate on a transformational/human resources leadership style combined with an element of transactional leadership are likely to have stronger associations with strategic planning process than other leadership styles. Second, while all culture styles are associated with strategic planning, the analysis indicates that *human resources* and *improvement orientation* culture styles are associated with the strategic planning process to a greater extent than other culture styles. Third, all the characteristics of strategic planning are associated with three performance measures to varying degrees. For example, *staff creativity* has the strongest association with the performance measure *learning and growth*, whereas *external orientation* is ranked the fifth strongest strategic planning characteristic associated with performance measures. This finding confirms the strong tendency of SMEs to have an internal or inward looking orientation (see section 3.4.2) and re-affirms the need for a more outward looking and strategic approach (see section 3.1).

The analysis also indicates that contingency factors such as firm size, financial turnover, industrial sector, operating environment and perceived market share do not influence the culture, leadership or strategic planning process of SMEs. This finding means that it is possible for SMEs to discount these factors and concentrate on 'other' contingency factors such as the entrepreneurial style of management or the personal characteristics of the Managing Directors.

The analysis also indicates that there is no difference in the degree of emphasis given to the characteristics of strategic planning by formal planning firms compared with non formal planning firms and that strategic implementation problems and barriers are experienced by all firms in the sample. This means that non formal planning firms need not feel that their approach suffers from any distinct disadvantages compared with the approach of formal planning firms.

The findings confirm that SMEs employing up to 249 employees are a homogenous grouping and that while size exerts some influence on the strategic planning characteristics and the dimensions of culture and leadership, it is not a significant variable. This finding, if repeated in other studies, has profound implications for policy makers and small business advisers and dispels the suggestions that there are significant differences between the various SME sizes using the number of employees.

This study also broadly confirmed the relevance of the *Miles and Snow* typology in characterising SMEs market position. The analysis indicated that the majority of SMEs adhere to the 'prospector' and 'defender' categories. Therefore, marketing positioning provides a broad mechanism for classifying SMEs and is a useful tool for policy makers and business advisers in the formulation and targeting of initiatives to SMEs. The clarifications outlined have contributed to the aim of the study in a number of ways. First, the importance of the various concepts or 'building blocks' of the study are established. Second, their importance is tested by examining the hypothesis that *high performing firms place a greater emphasis on the elements with positive associations between culture and strategic planning, leadership and strategic planning and between strategic planning and organisational performance, than low performing firms*. A number of reasons have been put forward to explain these associations (see sections 10.3, 10.4 and 10.5). While this may be regarded as an indicative result based on a number of associations rather than a definitive result, it does re-enforce the rationale for further research in this area. As outlined in section 11.6, the author was unable to find any comparative studies in the literature that could be used as benchmark studies. Accordingly, there is an element of uniqueness to the results achieved. The results of this study are consistent with, and confirm the results of the partial approaches of other writers (see section 11.6).

These findings can be used as a basic diagnostic tool to identify the attributes emphasised to strong extent by high performing firms. Accordingly, it is the researcher's opinion that the findings have some important implications for SME managers, policy makers, business advisers and academics. Based on the analysis of the data, it is suggested that the deductive model provides an ideal foundation for SMEs to review the critical aspects of their operations and to identify the concepts necessary for gaining competitive advantage. In particular, it is suggested by the author that a deeper understanding of operational

issues faced by SMEs and the factors that influence their behaviour and results, could potentially lead to an improvement in:

- the development and implementation of policies directed at SMEs;
- the effectiveness of interventions flowing from support policies;
- the support infrastructure;
- the nature and the range of advice;
- training and education for SME owners, managers, and employees

In conclusion, the model helps the various stakeholders understand more about the concepts and the associations. It provides a checklist for managing directors of SMEs as well as small business advisors of the dimensions and their attributes that are associated with performance. Further development of the model will enable firms to identify the necessary aspects to emphasise in order to achieve enhanced competitive advantage.

11.10 Directions for future research

The directions for future research can be grouped in three main categories: industrial sector aspects, further in-depth qualitative and quantitative work, and the development of a diagnostic framework for the deployment of the model. Firstly, the sample was restricted to two different sector types: *mature products and stable technology*, *products with short life cycles and changing technology* respectively. Clearly the analysis applies primarily to these sectors. In addition, the study did not attempt to examine the differences at the more detailed sub-sectoral level. In other words, it assumed that SIC 37 and 38 were internally homogeneous. This assumption should be tested in future studies.

The main dilemma in testing any model is in the breadth of the domain used. Clearly, tests can only signify whether or not the model applies in certain situations. Increased testing of any model in different circumstances increases its reliability. In this study choosing a wider range of sectors would have only added to the confusion because the results would be difficult to interpret. The validity of the model presented in chapter one can not be ascertained by one study. Indeed, to ascertain its robustness, it is imperative that this study is replicated in other sectors and sub-sectors. The more the model is tested, the greater the level of confidence that can be placed on it.

Secondly, future research should consider a more in-depth approach. It would have been beneficial to augment the quantitative data with qualitative in depth case studies or an ethnographic approach. In contrast to the quantitative approach used in this study, ethnography focuses on induction and is unstructured. *Gill and Johnson (1991)* state an ethnographic approach is '*perhaps the most likely of all strategies to identify and include all the relevant variables in any subsequent theoretical analysis*'. Their rationale for this contention is that researchers have the opportunity to reflect on the data gathered and identify the relevant variables. It was not possible to engage in further qualitative data collection within the time and resource constraints of this study. However, the model was further verified and its usefulness ascertained through a series of workshops and personal discussions with managing directors of SMEs. Although not a part of the data presented, this process was undertaken as part of a follow up study. The outcome was presented at a conference on the needs of small firms and was favourably received by owner managers of small and medium sized enterprises. It was also discussed with several owner managers active in the North London Manufacturers Action Group, which confirmed its usefulness.

As the study deals with behavioural concepts enacted in a political environment, it is suggested that further research considers the use of ethnography or at least qualitative approaches to enable the richness of the data available to be captured. Such an approach would need to incorporate the perceptions of more than respondents from each SME than was possible in this study. The rationale for broadening the number of respondents from each is based on the possibility that perception and practice may differ in reality. Managing Directors of SMEs may place the same weight on various variables of culture and leadership but behave differently in practice. Therefore, it is important to conduct further studies using multiple respondents from the same firm. This would enable the researcher to identify gaps between perception and practice.

The study relied on rating the responses using Likert-type scales. This approach is used widely in management research. The drawback of this approach is that respondents tend to gravitate towards the centre point. To overcome this difficulty, it is useful to repeat the study using both rating and ranking scales. Ranking will force respondents to make a choice between competing variables. The combination of rating and ranking approaches may produce more reliable results.

The implication of the discussion following chapter eight on data reduction is that further research could use a more concise survey instrument based on the factors derived. Additional qualitative and quantitative research stages could be used to further refine the survey instrument to minimise the omission of vital information such as the sector from which the response was received and the status of the respondent firms.

Moreover, it is important to widen the variables deployed and include attributes designed to ascertain the entrepreneurial influence on the factors outlined above, as well as previous experience, education, personal values, and risk taking capabilities of the managing directors.

This study focuses on the managerial processes used in the formulation and deployment of the strategic planning process. While it incorporates a number of characteristics of the respondent firms such as size, product type, age, and turnover, it does not focus on entrepreneurial styles of management or the personal characteristics of the Managing Directors. *Hatten* (1997 p.352) describes the six main styles of entrepreneurial management as

- classic (not delegating),
- co-ordinator (sub contracting tasks),
- craftsman (doing everything oneself),
- entrepreneur and employee team style (authority delegated to key employees while retaining overall control),
- small partnership (sharing strategic decisions with other partners)
- big team venture (requiring substantial resources to enable rapid growth).

Arguably the individual entrepreneurial management style could potentially influence the culture, leadership and strategic planning processes of an SME. Other factors such as the educational and social background of the Managing Director could also be potential influences. However, as with any study, it is impossible to include all potential variables and it is therefore necessary to draw the line somewhere. The variables deployed in this

study are closely aligned to the stipulated aim and adding additional variables would have made it virtually impossible for respondents to complete the questionnaire. In any event, the questionnaire was long enough without the addition of other variables.

Thirdly, while the model outlines a number of associations between the main concepts, further studies are needed to develop the model's potential. For example, further testing should be carried out to confirm the model's relevance to practice and in particular its effective operationalisation. This might entail the development of a diagnostic framework to assist SMEs to identify the aspects necessary for improved performance using a checklist principle. Such a checklist would be of immense value to SMEs managers as a self-monitoring instrument.

REFERENCES

- Acs, Z.J, and Audretsch, D.B., (1988) 'Innovation in large and small firms', *American Economic Review*, Vol.78, No.4, pp. 678-691.
- Acs, Z., and Preston, L., (1997), 'Small and Medium-sized Enterprises, technology, and globalisation: introduction to a special issue on small and medium-sized enterprises in the global economy', *Small Business Economics*, Vol. 9, No.1, pp. 1-6.
- Ackelsberg, R., and Arlow, P., (1985), 'Small business do plan and it pays off', *Long Range Planning*, Vol.18, No.5, pp. 61-67.
- Ackoff, R.L., (1999), 'Transformational leadership', *Strategy and Leadership*. Vol.27, No.1, pp.20-26.
- Adair, J., (1982), *Action-Centred Leadership*, Aldershot:Gower
- Akkermans, H.A., and Van Aken, J.E. (1992), 'Process-related problems in operations strategy', *International Studies of Management & Organization* Winter, 1992, Vol.22, No.4, pp.6-21.
- Alexander, L.D., (1985), 'Successfully implementing strategic decisions', *Long Range Planning*, Vol.18, No.3, pp.91-97.
- Aldrich, H.E., (1979), *Organizations and Environments*, Englewood Cliffs, N.J:Prentice Hall.
- Amidon, D.M., (1996), 'Knowledge Management gains Momentum in Industry', *Research-Technology Management*, Vol. 39, No. 3, pp. 5-8.
- Ancona, D., and Caldwell, D., (1987), 'Management issues facing new product teams in high technology companies', in Lewin, D., Lipsky, D., and Sokel, D., (eds.) *Advances in Industrial and Labour Relations*, Vol.4, pp.191-221, Greenwich CT: JAI Press.
- Anderson, J.C., Cleveland, G.,and Schroeder, R.G., (1989), 'Operations strategy: a literature review', *Journal of Operations Management*, Vol.8, No.2, pp. 133-159.
- Anderson, R.L., and Dunkelberg, J.S., (1993), *Managing small businesses*, NY:West Publishing.
- Andrews, K.R., (1971), *The Concept of Corporate Strategy*, Homewood, Ill:Dow-Jones Irwin
- Ansoff, H. I., (1969), *Corporate Strategy*, Harmondsworth: Penguin.
- Ansoff, H.I., (1979), *Strategic Management*, London: MacMillan.

Ansoff, H.I., Avner, J., Brandenburg, R.G., Portner, F.E., & Radosevich, R., (1970) 'Does planning pay? The effect of planning on success of acquisition in American firms', *Long Range Planning*, Vol.3, No.2, pp.2-7.

Applegate, L.M. (1995), *Managing in an Information Age: Organizational Challenges and Opportunities*, Harvard Business School Paper No. 9-196-002.

Aram, J.D., and Cowan, S.S., (1990), 'Strategic planning for increased profit in small business', *Long Range Planning*, Vol.23, No.6, pp. 63-70.

Armstrong, J.S., (1982), 'The value of formal planning for strategic decisions', *Strategic Management Journal*, Vol.3, No.3, pp.197-211.

Atchison, T.J. (1991), 'The employment relationship: untied or retied?', *Academy of Management Executive*, Vol. 5, No. 4, pp. 52-62.

Atkins, M.H., and Lowe, J.F., (1997), 'Sizing up the small firm; UK and Australian experience', *International Small Business Journal*, Vol.15, No.3, pp. 42-55.

Atkinson, P.E., (1990), 'Creating cultural change', *Management Services*, Vol.34, No.7, pp.6-10.

Atkinson A.A., Waterhouse, J.H., and Wells, R.B., (1997), 'A stakeholder approach to strategic performance measurement', *Sloan Management Review*, Spring, Vol. 38, No.3, pp. 25-37.

Bain and Co., (1994), 'Management tools must be managed' in *Industry Week*, September 5 1994.

Baker, W.H., Addams, H.L., and Davis, B., (1993), 'Business planning in successful small firms', *Long Range Planning*, Vol.26, No.6, pp.82-88.

Bank of England (1997), *Quarterly Report on Small Business Statistics*, January, London.

Barclay's Bank (1998), *Small Business Bulletin*, Issue 1, Small Business Banking, London.

Barker, R.C., (1995), 'Financial performance measurement : not a total solution', *Management Decision*, Vol. 33, No.2, pp.31-39.

Barkham, R., Gudgin, G., Hart, M., and Hanvey, E., (1996), *The Determinants of Small Firm Growth: an Inter-Regional Study in the UK 1986-1990*, London: Jessica Kingsley.

Barney, J.B.,(1986), 'Strategic factor markets: expectations, luck and business strategy', *Management Science*, Vol.32, No.10, pp. 1231-1241.

Barney, J.B.,(1991), 'Firm resources and sustained competitive advantage', *Journal of Management*, Vol.17, No.1, pp. 99-120.

Barratt, E. S., (1990), 'Human resource management : organisational culture', *Management Update*, Vol.2, No.1, pp. 21-32.

Barrow, C., Brown, R., and Clarke, L., (1995), *The Business Growth Handbook*, London: Kogan Page.

Bartlett, C.A., and Ghoshal, S., (1989), *Managing Across Borders: The Transnational Solution*, Boston, MA: Harvard Business School Press.

Bartlett, C.A., and Ghoshal, S., (1995), 'Changing the role of top management : beyond systems to people'; *Harvard Business Review*, May-June, Vol. 73, No.3, pp. 132-142.

Bass, B.M., (1981), *Stogdill's Handbook of Leadership: A Survey of Theory and Research*. New York: Free Press.

Bass, B.M., (1985), *Leadership and Performance beyond Expectations*, New York:Free Press

Bass, B.M., (1990), 'From transactional to transformational leadership: learning to share the vision', *Organizational Dynamics*, Winter, Vol. 18, No.3, pp.19-31.

Bass, B.M., and Avolio, B.J., (1989), *Manual for the multifactor leadership questionnaire*, Palo Alto, CA: Consulting Psychologists Press.

Beer, M., Eisenstat, R., and Spector, B., (1990). 'Why change programs don't produce change', *Harvard Business Review*, Vol. 68, No.6, pp. 158-166.

Begley, T.M., and Boyd, D.P., (1986). 'Executive and corporate correlates of financial performance in smaller firms', *Journal of Small Business Management*, Vol. 24, No.2, pp. 8-15.

Bell, H., (1987), *Doing Your Research Project: A Guide to First-Time Researchers in Education and Social Science*, Milton Keynes: Open University Press.

Bennett, R.J., (1998), 'Business associations and their potential contribution to the competitiveness of SMEs', *Entrepreneurship and Regional Development*, Vol. 10, pp. 243-260.

Bennis, W.G., (1966) 'The coming death of bureaucracy' *Think*, Nov-Dec, Vol. 30, No.5.

Bennis, W., and Nanus, B., (1985), *Leaders: The Strategies for Taking Charge*, New York:Harper and Row.

Berkeley Thomas, A., (1988), 'Does leadership make a difference to organisational performance?' *Administrative Science Quarterly*, Vol. 33, pp. 388-400.

Beyer, J. M. (1981), 'Ideologies, values, and decision-making in organizations' in *Handbook of Organizational Design*, Vol. 2, Paul C. Nystrom and William H. Starbuck (eds.), pp. 166-202. New York: Oxford University Press.

Birch, D., (1979), *The Job Generation Process*, MIT Program on Neighbourhood and Regional Change, Cambridge, MA: MIT Press.

Birley, S., and Whitehead, P., (1990), 'Growth and performance contrasts between 'types' of small firms', *Strategic Management Journal*, Vol.11, No.7, pp.535-557.

Blake, R.R., and Mouton, J.S., (1969), *Building a Dynamic Organization through Grid Organization Development*, Houston:Gull.

Bohrnstedt, G.W., (1983), 'Measurement' in *Handbook of Survey Research*, Rossi, P.H., Wright, J.D., and Anderson, A.B., (eds), New York: Academic Press.

Bolton, J.E., (1971), *Small Firms: Report of the Commission of Inquiry on Small Firms*, London; HMSO, Cmnd 4811.

Boraston, I, Gill, J., Shipton, J., and Jennings, P., (1996), 'Facilitating entrepreneurship in deprived communities', *Small Business and Enterprise Development*, Vol.3, No.3, pp. 136-147.

Boswell, J., (1973), *The Rise and Decline of Small Firms*, Allen and Unwin: London

Bourgeois L.J., (1996), *Strategic Management: From Concept to Implementation*. Fort Worth, TX:The Dryden Press

Bourgeois, L. J, and Jemison, D.B., (1982), 'Analyzing corporate culture in its strategic context'. *Organizational Behavior Teaching Journal*, Vol.7, No.3, pp. 37-41.

Bourque, L., and Fielder, E., (1995), *How to conduct self-administered and mail surveys*. Thousand Oaks, CA:Sage

Bracker, J., Keats, B., and Pearson, J., (1988), 'Planning and financial performance among small firms in a growth industry', *Strategic Management Journal*, Vol. 9, No.6, pp.591-603.

Bracker, J.S., and Pearson, J.N., (1986), 'Planning and financial performance of small, mature firms' *Strategic Management Journal*, Vol.7, No.6, pp.503-522.

Bridge, S., O'Neill, K., and Crome, S., (1998), *Understanding Enterprise, Entrepreneurship and Small Business*, London:MacMillan Press.

Brignall, S., and Ballantine, J., (1997), *Interactions and trade offs in multi dimensional performance management*, Warwick Business School Research Bureau No.247.

- Brooksbank, R., (1991), 'Defining the small business : a new classification of company size', *Entrepreneurship and Regional Development*, Vol.3, pp.17-34.
- Brown, A., (1992), Organisational culture: the key to effective leadership and organizational development, *Leadership and Organisation Development Journal*, Vol.13, No.2, pp.3-7.
- Brown, A. D., (1995), *Organisational Culture*, London: Pitman.
- Brown, D.M., and Laverick, S., (1994), 'Measuring corporate performance', *Long Range Planning*, Vol.27, No.4, pp. 89-98.
- Bryman, A. (1988), *Doing Research in Organisations*, London: Routledge.
- Bryman, A., (1989), *Research Methods and Organisational Studies*, London: Unwin Hyman.
- Bryman, A., and Cramer, D., (1994), *Quantitative Data Analysis for Social Scientists*, London: Routledge.
- Buckley, J.W., Buckley, M.H., and Chiang, H-F., (1976), *Research Methodology and Business Decisions*, National Association of Accountants & The Society of Industrial Accountants of Canada.
- Burgelman, R., (1984), 'Managing the internal corporate venturing process', *Sloan Management Review*, Vol. 26, No.2, pp. 33-48.
- Burgelman, R.A., and Risenbloom, R.S., (1989), 'Technology strategy: an evolutionary process perspective', *Research and Technological Innovation, Management and Policy*, Vol. 4, pp. 1-23; Greenwich, Conn: JAI Press.
- Burnes, B., (1996), *Managing Change : A Strategic Approach to Organizational Dynamics*, London: Pitman Publishing.
- Burns, J.M., (1978), *Leadership*, New York: Harper and Row.
- Burns, T., and Stalker, G.M., (1961), *The Management of Innovation*, London : Tavistock.
- Burrell, G., and Morgan, G., (1979), *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life*, London: Heinemann Educational
- Burt, D., (1978), 'Planning and performance in Australian retailing', *Long Range Planning*, Vol.11, pp.62-68.
- Butler, R., (1991), *Designing Organisations : A Decision-Making Perspective*, London : Routledge

Butler, A., Letza, S.R., and Neale, B., (1997), 'Linking the balanced scorecard to strategy', *Long Range Planning*, Vol.30, No.2, pp. 242-253.

Buzzell, R.D., and Gale, B.T., (1987), *The PIMS Principles: Linking Strategy to Performance*, New York: The Free Press.

Camillus, J.C. (1975), 'Evaluating the benefits of formal planning', *Long Range Planning*, Vol.8, No.3, pp.33-40.

Camillus, J.C., and Venkatraman, N., (1984) 'Dimensions of strategic choice', *Planning Review*, Vol.12, No.1, pp. 26-31.

Campbell J.P., (1977), 'The cutting edge of leadership: an overview,' in Hunt, J.G., and Larson, L.L., (eds.), *Leadership : The Cutting Edge*, Carbondale, IL : Southern Illinois University Press.

Campbell, A., and Alexander, M., (1997), 'What's wrong with strategy', *Harvard Business Review*, November-December, Vol. 75, No.6, pp. 42-51.

Carlson, F.P. (1990), 'The long and short of strategic planning', *The Journal of Business Strategy*, May/June, Vol. 11, No.3, pp. 15-19.

Carroll, P.J. (1982), 'The link between performance and strategy', *Journal of Business Strategy*, Vol.2, No.4, pp.3-20.

Central Statistics Office (1979), *Standard Industrial Classification: Revised 1980*. London:HMSO

Chaharbaghi, K., and Willis, R., (1998), 'Strategy: the missing link between continuous revolution and constant evolution', *International Journal of Operations and Production Management*, Vol.18, No.9/10, 1998, pp.1017-1027.

Champy, J.A., (1995), *Reengineering Management: The Mandate for New Leadership*. London:Harpur Business.

Chan, K.C., (1993), 'World class manufacturing', *Industrial Management and Data Systems*, Vol.93, No.2, pp.5-12.

Chandler A.D., (1962), *Strategy and Structure: Chapters in the history of the American Industrial Enterprise*, Cambridge, MA:MIT Press.

Chaston, I., and Mangles, T., (1997), 'Core capabilities as predictors of growth potential in small manufacturing firms', *Journal of Small Business Management*, Vol.35, No.1, pp.47-58.

Chatman, J.A., and Jehn, K.A., (1994), 'Assessing the relationships between industry characteristics and organizational culture: how different can yours be?', *Academy of Management Journal*, Vol. 37, No.3, pp. 522-553.

- Churchill, J., (1991), *Marketing Research: Methodological Foundation*, 5th ed., London: Dryden Press.
- Churchill, N.C., and Lewis, V.L., (1983), 'The five stages of small business growth', *Harvard Business Review*, May-June, Vol.61, No.3, pp. 30-51.
- Cialdini, R.B., (1988), *Influence*, (2nd edition) IL: Scott, Foresman.
- Clark, D.N., (1997), 'Strategic management tool usage: a comparative study', *Strategic Change*, Vol.6, pp. 417-427.
- Clarke, L., (1994), *The Essence of Change*, Hemel Hempstead: Prentice Hall.
- Collis, D.J., (1991), 'A resource-based analysis of global competition', *Strategic Management Journal*, Vol.12, Special Issue, Summer, pp. 49-68.
- Collins, O., and Moore, D. (1970), *The Organization Makers*, NY: Appleton-Century-Crofts.
- Colwell, J. (1990), 'Qualitative market research: a conceptual analysis and review of practitioner criteria', *Journal of the Market Research Society*, Vol. 32, pp. 13-37.
- Conant J.S., Mokwa, M.P. and Varadarajan, P.R. (1990), 'Strategic types, distinctive marketing competencies and organizational performance: a multiple measures-based study', *Strategic Management Journal*, Vol. 11, pp. 365-383.
- Conger, J.A., (1991), 'Inspiring others: the language of leadership', *Academy of Management Executive*, Vol. 5, pp. 31-45.
- Converse, J.M., and Presser, S., (1986), *Survey Questions: handcrafting the standardised questionnaire*, New Delhi: Sage Publications.
- Cooper, D.R., and Emory, C.W., (1995), *Business Research Methods* (5th Edition), Irwin/McGraw-Hill.
- Coopers and Lybrand, (1994), *Made in the UK: The Middle Market Survey*, London: Coopers and Lybrand.
- Coopers and Lybrand (1997), *How to Innovate with Trust and Passion*, London: Coopers and Lybrand.
- Cotton, J.L., Vollrath, D.A., Lengnick-Hall, M.L. and Froggatt, K.L., (1990), 'Fact : the form of participation does matter - a rebuttal to Leana, Locke and Schweiger', *Academy of Management Review*, Vol.15, No.1, pp. 147-153.
- Courtney, H., Kirkland, J., and Viguerie, P., (1997), 'Strategy under uncertainty', *Harvard Business Review*, Vol. 75, No.6, pp. 67-79.

Covin, J.G., (1991), 'Entrepreneurship versus conservative firms: a comparison of strategies and performance', *Journal of Management Studies*, Vol. 28, No. 5, pp.439-462.

Covin, J.G., and Slevin, D.P., (1989), 'Strategic management of small firms in hostile and benign environments', *Strategic Management Journal*, Vol.10, No.1, pp. 75-87.

Crabtree, B.F., Yanoshik, M.K., Miller, W.L., and O'Connor, P.J., (1993), 'Selecting individual or group interviews', in Morgan, D.L. (Ed.), *Successful focus groups: advancing the state of the art*. Newbury Park, NJ:Sage Publications, pp. 137-149.

Creelman, J., (1996), 'Why money's only part of the score', *Financial Director*, April, pp. 39-41.

Cronbach, I.J. (1951), 'Coefficient alpha and the internal structure of tests', *Psychometrika*, Vol. 16, No.3, pp. 297-334.

Cross, K.L., and Lynch, R.L., (1992), 'For Good Measure', *CMA Magazine*, April, pp.20-23.

Curtis, D.A., (1983), *Strategic Planning for Small Business: Improving Corporate Performance and Personal Reward*, Mass:Lexington.

D'Aveni, R., (1994), *Hypercompetition: Managing the Dynamics of Strategic Manoeuvring*, New York: Free Press.

Daft, R.L., (1983), 'Symbols in organisations: a dual context framework for analysis' in Pondy, L.R., Frost, P.J., Morgan, G., and Dandridge, T.C., *Organisational Symbolism*, pp. 199-206, London: JAI Press.

Daft, R., and Lewin, A., (1993), 'Where are the theories for the 'new' organisational forms? an editorial essay', *Organisation Science*, Vol.4, No.4, pp. i-vi.

Daft, R.L., and Weick K.E., (1984), 'Toward a model of organizations as interpretation systems', *Academy of Management Review*, Vol. 9, No.2, pp.284-295.

Daft, R.L., and Wiginton, (1979), 'Language and organisation', *Academy of Management Review*, Vol. 4, No.2, pp. 179-191.

Daly, M., (1990), 'The 1980's - a decade of growth in enterprise: data on VAT registrations and deregistrations', *Employment Gazette*, November, Vol. 98, No.11, pp. 553-565.

Daly, M., and McCann, A. (1992), 'How many small firms?', *Employment Gazette*, February, Vol.100, No.2, pp. 47-51.

Dalton, D., Daily, C., Ellstrand A, and Johnson J., (1998), 'Meta-analytic reviews of board composition, leadership structure and financial position', *Strategic Management Journal*, Vol.19, No.3, pp. 269-290.

Damanpour, F., (1992), 'Organizational size and innovation', *Organizational Studies*, Vol.13, No. 3 1992, pp.375-402.

Dandridge, T., Mitroff, I., and Joyce, W., (1980), 'Organizational symbolism: a topic to expand organizational analysis', *Academy of Management Review*, Vol. 5, pp. 77-82.

Davig, W.; (1986) 'Business strategies in smaller manufacturing firms', *Journal of Small Business Management*, Vol. 24, No. 1, pp. 38-46.

Davis, D., and Cosenza, R.M., (1988), *Business Research for Decision Making*, Boston:PWS-Kent Publishing.

Davis, J.G., and Devinney, T., (1997), *The Essence of Strategy*, London: Allen and Unwin.

Davis, S., and Botkin, J., (1994), 'The coming of knowledge-based business', *Harvard Business Review*, September-October, Vol. 72, No.5, pp.165-170.

Davis, J.H., Schoorman, F.D., and Donaldson, L., (1997), 'Towards a stewardship theory of management', *Academy of Management Review*, Vol.22, No.1, pp.20-47.

Day, D.V., and Lord, R.G., (1988), 'Executive leadership and organisational performance: suggestions for a new theory and methodology', *Journal of Management*, Vol. 14, No.3, pp. 453-464.

Deakins, D., and Freel, M., (1998), 'Entrepreneurial learning and the growth process in SMEs', *The Learning Organisation*, Vol. 5, No.3, pp. 144-155.

Deal, T.E., and Kennedy, A.A., (1982), *Corporate Cultures: The Rites and Rituals of Corporate Life*, Reading, MA: Addison-Wesley.

Dean, J.W., and Sharfman, M.P., (1996), 'Does Decision process matter? A study of strategic decision making effectiveness', *Academy of Management Journal*, Vol. 39. no 2, pp.368-397.

De Geus, A., (1988), 'Planning as learning', *Harvard Business Review*, Vol.66, No.2. pp. 70-74.

De Geus, A. (1997), 'The Living company', *Harvard Business Review* Vol. 75, No.2, March-April, pp.51- 59.

De Meyer, A., and Ferdows, K., (1990), 'Influence of manufacturing improvement programmes on performance', *International Journal of Operations and Production Management*, Vol.10, No.2, pp. 120-131.

Deloitte and Touche, (1992), 'Building global competitiveness: imperatives for the 21st century', *Research Report*, London:Deloitte and Touche.

Denison, D.R., (1984), 'Bringing corporate culture to the bottom line', *Organisational Dynamics*, Vol. 13, No. 2, pp. 5-22.

Denison, D.R., (1990), *Corporate Culture and Organisational effectiveness*, New York: Wiley.

Denison, D.R., and Mishra, A.K., (1995), 'Towards a theory of organizational culture and effectiveness', *Organizational Science*, Vol.6, No.2, pp. 204-223.

Department of Employment, (1991), Enterprise in Action Initiative: *Small Firms in Britain* London: HMSO 25038.

Department of Employment (1992), *Small Firms in Britain 1992*, London: HMSO.

Deschamps, J-P, (1996), Managing the marketing/r&d interface, *Prism* Vol.11, Cambridge, MA: Arthur D Little, pp.113-128.

Dess G.G. and Davis, P.S., (1984), 'Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance', *Academy of Management Journal*, Vol.27, No.3, pp.467-488.

Dess, G., and Robinson, R., (1984), 'Measuring organizational performance in the absence of objectives measures: the case of the privately held firm and conglomerate business unit', *Strategic Management Journal*, Vol.5, No.3. pp. 265-273.

De Vaus, D.A., (1996), *Surveys in Social Research*. 4th Edition, London : UCL Press Ltd.

Dewhurst, J., and Burns, P., (1993). *Small Business Management*, London: Macmillan Press.

De Wit, B., and Meyer, R., (1994), *Strategy: Process, Content, Context*, NY: West Publishing.

Dillman, D.A., (1978), *Mail and Telephone Surveys: the Total Design Method*, New York: Wiley-Interscience.

Donaldson, G., and Lorsch. J., (1983), *Decision Making at the Top: The Shaping of Strategic Direction*, New York:Basic Books Inc.

Doyle, P., (1994), 'Setting business objectives and measuring performance', *European Management Journal*, Vol.12, No.2, pp.123-132.

Drihlon, G., and Estime, M.F. (1993), 'Technology watch and the small firm', in *OECD Observer*, No 182, June/July, pp. 31-34.

- Drucker, P.F., (1961), *The Practice of Management*, London: Mercury.
- Drucker, P.F., (1963) 'Managing for business effectiveness', *Harvard Business Review*, Vol. 41, No.3 pp. 53-60.
- Drucker, P.F., (1969), *The Age of Discontinuity: Guidelines to our Changing Society*. NY: Transactions Publishers.
- Drucker, P.F., (1985), *Innovation and Entrepreneurship*, London: Heinemann.
- Drucker, P.F., (1989), cited in Hamel, G., and Prahalad, C.K., 'Strategic intent', *Harvard Business Review*, Vol. 67, No.3, pp.63-76.
- DTI (1996), *Small Firms in Britain Report*, London: Department of Trade and Industry.
- Dunbar, R.L., Dutton, J.M., and Torbert, W.R., (1982), 'Crossing mother: ideological constraints on organizational improvements', *Journal of Management Studies*, Vol.19, No.1, pp.91-108.
- Duncan, R., (1972), 'Characteristics of organizational environments and perceived environmental uncertainty', *Administrative Science Quarterly*, Vol.17, No.2, pp.313-327.
- Dunne, P., and Hughes, A., (1994), 'Age, size growth and survival : UK companies in the 1980's', *The Journal of Industrial Economics*, Vol.42, No.2, pp.115-141.
- Easterby-Smith, M., (1990). 'Creating a learning organisation', *Personnel Review*, Vol.19, No.5, pp.24-28.
- Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991). *Management Research: An Introduction*, London: Sage Publications Ltd, 2nd edition.
- Eccles, R.G., (1991), 'The performance measurement manifesto', *Harvard Business Review*, January/February, Vol.69, No.1 pp.131-137.
- Egan, G., (1994), 'Cultivate your culture', *Management Today*, April 1994, pp. 38-42.
- Eisenhardt, K., (1989), 'Making fast strategic decisions in high-velocity environments', *Academy of Management Journal*, Vol.32, No.3, pp.543-576.
- Emory, C., and Cooper, D., (1991), *Business Research Methods* (4th Ed.), IL: Irwin.
- Evans, D.S., (1987), 'Tests of some alternative theories of firm growth', *Journal of Political Economy*, Vol.95, pp.657-675.
- European Observatory for SMEs (1985), *Third Annual Report*, EIM Small Business and Research Consultancy, The Netherlands.
- European Commission (1996), *Official Journal*, L107, 30.04.96

- Fahey, L. and King, W.R., (1977), 'Environmental scanning for corporate planning', *Business Horizons*, Vol.20, No.4, pp. 61-71.
- Fiedler, F.E., (1967), *A Theory of Leadership Effectiveness*, NY: McGraw-Hill.
- Fiegenbaum, A., Hart, S and Schendel, D., (1996), 'Strategic reference point theory', *Strategic Management Journal*, Vol. 17, No. 3, pp. 219-235.
- Finlay, P., (2000), *Strategic Management : An Introduction to Business and Corporate Strategy*, London: Prentice Hall.
- Fisher, B.M., and Edwards, J.E., (1988), 'Consideration and initiating structure and their relationships with leader effectiveness: a meta analysis', *Proceedings of the Academy of Management*, pp.201-205.
- Fitzgerald, L., Johnston, R., Brignall, S., Silvestro, R., and Voss, C., (1991), *Performance Measurement in Service Business*, London:CIMA.
- Flapper, S.D.P., Fortuin, L, and Stoop, P.P.M., (1996), 'Towards consistent performance measurement systems', *International Journal of Operations and Production Management*, Vol.16, No.7, pp.27-37.
- Fleishman, E.A., and Harris, E.F., (1962), 'Patterns of leadership behaviour related to employee grievance and turnover', *Personnel Psychology*, Vol.15, pp.46-56.
- Folz, D., (1996), *Survey Research for Public Administration*, Thousand Oaks, CA:Sage.
- Fombrun, C. J., (1992), *Turning Points:Creating Strategic Change in Corporations*. New York: McGraw-Hill.
- Fornell, C., and Wernerfelt, B., (1987), 'Defensive marketing strategy by customer complaint management: a theoretical analysis'. *Journal of Marketing Research*, Vol. 24, No.4, pp. 337-346.
- Foster, M.J. (1993), 'Scenario planning for small businesses', *Long Range Planning*, Vol.26, No.1, pp. 123-129.
- Frederickson, J.W., (1984), 'The comprehensiveness of strategic decision processes: extension, observations, future directions', *Academy of Management Journal*, September 1984, Vol.27, No.3, pp. 445-466.
- Frederickson, J.R., and Mitchell, T.R., (1984), 'Strategic decision processes: comprehensiveness and performance in an industry with an unstable environment', *Academy of Management Journal*, Vol. 27, No. 2, pp. 399-423.
- French, W.L., and Bell, C.H., (1990), *Organization Development:Behavioural Science Interventions for Organization Improvement* (4thEd.), NJ: Prentice - Hall.

- Fry, T.D., (1992), 'Manufacturing performance and cost accounting', *Production and Inventory Management Journal*, Vol. 33, No.3, pp:30-35.
- Gallagher, C., Daly, M., and Thomason, J., (1990), 'The growth of UK companies 1985-87 and their contribution to job creation', *Employment Gazette*, Vol.98, No.2, February, pp. 92-97.
- Gallear, D.N., (1999), *Deploying a theory of total quality management – using the delphi technique*, Unpublished Ph.D. thesis, Middlesex University Business School.
- Ghobadian, A., (1993), 'Integrating operations strategy and quality improvement - the way ahead', *Middlesex University Inaugural Lectures 5*.
- Ghobadian, A., and Gallear, D., (1997), 'TQM and organisation size', *International Journal of Operations and Production Management*, Vol. 17, No.2, pp.121-163.
- Ghoshal S., and Bartlett, C., (1990), 'The multinational corporation as an interorganizational network', *Academy of Management Review* Vol. 15, No. 4, pp. 603-625.
- Gibb, A.A., and Davies, L., (1990), 'In pursuit of a framework for the Development of growth models of the small business', *International Small Business Journal*, Vol.9. No.1. pp.15-31.
- Gibb, A., and Scott, M., (1986), 'Understanding small firms growth' in *Small Firms Growth and Development*, (ed). Scott, M., Aldershot: Gower.
- Gill, J. and Johnson, P. (1991), *Research Methods for Managers*, London:Paul Chapman Publishing.
- Gilmore, F., (1971), 'Formulating strategy in smaller companies', *Harvard Business Review*, May-June. Vol. 49, No.3, pp. 71-81.
- Gilmore F.F., and Brandenburg. R.G., (1962) 'Anatomy of corporate planning', *Harvard Business Review*, Vol. 40, No.6. pp.61-69.
- Glancey, -K., (1998), 'Determinants of growth and profitability in small entrepreneurial firms', *International Journal of Entrepreneurial Behaviour and Research*, Vol.4. No.1. pp.18-27.
- Glaser, B., and Strauss, A.L., (1967), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, NY:Aldine Publishing Co.,
- Globerson A., Globerson, S., and Frampton, J., (1991), *You Can't Manager What You Don't Measure*, NY:Avebury.
- Gluck, F., Kaufman, S., and Walleck, A.S., (1982), 'The four phases of strategic management', *Journal of Business Strategy*, Vol.2, No.3, pp. 9-21.

- Glueck, W.F., (1980), *Business Policy and Strategic Management*, NY:McGraw-Hill.
- Godiwalla, Y.M., Meinhart W.A., and Warde W.A., (1981), 'General management and corporate strategy', *Managerial Planning*, Vol. 30, No.2, pp.17-29.
- Goodman, M., (1995), *Creative Management*, Hemel Hempstead: Prentice Hall.
- Goold, M., (1991), 'Strategic control in the decentralized firm', *Sloan Management Review*, Winter, Vol.32, No.2, pp.69-81.
- Goold, M., and Quinn, J., (1993), *Strategic Control: Milestones for Long-term Performance*, London: Pitman Publishing.
- Gorb, P., Dowell, P., and Wilson, P., (eds), (c1981) *Small Business Perspectives*, London:Armstrong.
- Gordon, G.G., (1990), 'The relationship of corporate culture to industry sector and corporate performance', in Kilmann, R.H., Saxton, M.J., and Serpa, R., *Gaining Control of the Corporate Culture*, San Francisco: Jossey-Bass, pp. 103-125.
- Gordon,G.G., and DiTomaso, N., (1992), 'Predicting corporate performance from organizational culture', *Journal of Management Studies*, Vol. 29,No. 6, pp. 783-798.
- Govindrajan, V., (1986), 'Impact of participation in the budgetary process on managerial attitudes and performance: universalistic and contingency perspectives', *Decision Sciences*, Vol. 17, pp.496-516.
- Grant, R.M., (1991), 'The resource based theory of competitive advantage: implications for strategy formulation', *California Management Review*, Vol.33, No.3, pp.114-135.
- Grant, R.M., (1997), *Contemporary Strategy Analysis: Concepts, Techniques, Applications*, Oxford: Blackwell Business Books.
- Grant, J.H., and King W.R., (1982), *The Logic of Strategic Planning*, Boston: Little, Brown and Co.
- Gray, C., (1996) 'The enterprise culture and growth business', Paper presented at the 19th National Small Firms Policy and Research Conference, Birmingham, pp. 1109-1120.
- Greenan, N., and Guellic, D., (1995), *Technological Innovation and Employment Reallocation*, OECD Working Paper, 1995.
- Greenley, G., (1986), 'Does strategic planning improve company performance?', *Long Range Planning*, Vol.19, No.2, pp.101-109.
- Gregory, K.L.,(1983), 'Native-view paradigms: multiple cultures and culture conflicts in organizations', *Administrative Science Quarterly*, Vol.28, pp. 358-376.

- Grinyer, P.H., and Norburn, D., (1975), 'Planning for existing markets: perceptions of executives and financial performance', *Journal of the Royal Statistical Society*, 138(1), pp. 70-97.
- Grinyer, P.H., and Spender, J.C., (1979), *Turnaround - Management Recipes for Strategic Success*, NY: Associated Business Press.
- Gross, R.D., (1987), *Psychology : The Science of Mind and Behaviour* London:Edward Arnold.
- Guth, W., and MacMillan, I., (1986), 'Strategy implementation versus middle management self-interest', *Strategic Management Journal*, Vol. 7, No.4, pp. 313-327.
- Gummesson, E., (1991), *Qualitative Networks in management research*, London: Sage Publications.
- Hales, C.P., (1986), 'What do managers do? - a critical review of the evidence', *Journal of Management Studies*, Vol.22, No.1, pp. 88-115.
- Hall, B., (1987), 'The relationship between firm size and growth', *Journal of Industrial Economics*, Vol. 35, pp. 583-606.
- Hambrick, D.C., (1981), 'Environment, strategy and power within top management teams', *Administrative Science Quarterly*, Vol. 26, pp.253-276.
- Hambrick, D.C., (1983), 'Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types', *Academy of Management Journal*, Vol.26, No.1, pp. 5-26.
- Hambrick, D. C., Geletkanycz, M.A., and Frederickson, J.W., (1993), 'Top executive commitment to the status quo: some tests of its determinants', *Strategic Management Journal*, Vol.14, No. 6, pp. 401-418.
- Hambrick, D.C., and Mason, P.A., (1984), 'Upper echelons: the organisation as a Reflection of its top managers', *Academy of Management Review*, Vol. 9, No.1, pp.193-206.
- Hamel G., and Prahalad, C.K., (1993), 'Strategy as stretch and leverage', *Harvard Business Review*, March - April, Vol.71, No.2, pp. 75-84.
- Hamel, G., and Prahalad, C.K., (1994), *Competing for the Future*, MA: Harvard Business School Press.
- Hammer, M., (1990), 'Reengineering Work: don't automate, obliterate', *Harvard Business Review*, Vol.68, No.4, pp. 104-112.

- Hampden-Turner, C. (1990), *Creating Corporate Culture: From Discord to Harmony*, Addison-Wesley, Reading, MA.
- Hannan, M. and Freeman, J., (1984), 'Structural inertia and organizational change', *American Sociological Review*, Vol. 49, pp. 149-164.
- Hand, H., Sineath, W.P., and Howle, W.E., (1987), 'Small business concepts and their relationship to performance: A Field Study of Retail Petrol Stations', *Journal of Small Business Management* Vol. 25, No.2, pp. 55-63.
- Handy, C., (1986), *Understanding Organisations*, Harmondsworth:Penguin.
- Handy, C., (1990), *The Age of Unreason*, Boston: Harvard Business School Press.
- Handy, C., (1993), *Understanding Organizations*, Fourth Edition, London:Penguin.
- Handy, C., (1994), *The Empty Raincoat: Making Sense of the Future*. London:Hutchinson.
- Harris, L.C., and Ogbonna, E., (1999), Developing a market oriented culture: a critical evaluation, *Journal of Management Studies*, Vol.36, No.2, pp.177-200.
- Hart, S., and Banbury, C., (1994), 'How strategy-making processes can make a difference', *Strategic Management Journal*, Vol. 15, No.4, pp. 251-269.
- Hart, S.L., and Quinn, R.E., (1993), 'Roles executives play: CEO's, behavioural complexity, and firm performance', *Human Relations*, Vol.46, No.5, pp. 543-574.
- Hassard, J., (1991), *Sociology and Organisation Theory: Positivism, Paradigms and Postmodernity*, Cambridge: Cambridge University Press.
- Hassard, J., and Sharifi, S.. (1989), 'Corporate culture and strategic change', *Journal of General Management*, Vol.15, No.2. pp. 4-19.
- Hater, J.J., and Bass, B.M., (1988), 'Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership', *Journal of Applied Psychology*, Vol.73, No.4, pp. 695-704.
- Hatten, K.J., and Hatten, M.L.(1987), 'Strategic groups, asymmetrical mobility barriers and contestability', *Strategic Management Journal*, Vol.8, No.4, pp. 329-342.
- Hatten, T.J., (1998), *Small Business: Entrepreneurship and Beyond*, NJ: Prentice Hall.
- Hax, A.C., and Majluf, N.S., (1984), *Strategic Management - an Integrative perspective*, NJ: Prentice Hall.
- Hayes, R.H., and Abernathy, W.J., (1980), 'Managing our way to economic decline', *Harvard Business Review*, Vol. 58, No. 4, pp. 67-77.

- Hayes, R., and Garvin, J., (1982), 'Managing as if tomorrow mattered', *Harvard Business Review*, Vol.60, No.3, pp.70-79.
- Hayes, R.H., and Jaikumar, R., (1988), 'Manufacturing crisis: new technologies, obsolete organizations', *Harvard Business Review*, September -October, Vol. 66, No.5, pp. 77-85.
- Hayes R.H., and Pisano G., (1996), 'Manufacturing strategy: at the intersection of two paradigm shifts', *Production and Operations Management*, Spring 1996, Vol. 5, No 1, pp. 25-41.
- Hayes, R.H., and Upton, D.M.,(1998), 'Operations-based strategy', *California Management Review* Summer 1998, Vol. 40, No. 4, pp.8-25.
- Hayes, R.H. and Wheelwright, S.C., (1984), *Restoring Our Competing Edge: Competing through Manufacturing*, NY: John Wiley & Sons.
- Heap, J.P., (1992), *Productivity Management: A Fresh Approach*, London: Cassell.
- Hegarty, W.H., and Hoffman, R.C., (1987), 'Who influences strategic decisions?', *Long Range Planning*, Vol.20, No.2, pp. 76-85.
- Heller, R., (1997), *In Search of European Excellence*, London: HarperCollins Business Books.
- Henderson, B.D., (1989), 'The origin of strategy', *Harvard Business Review*, Nov-Dec, Vol. 67, No.6, pp.139-143.
- Hepworth, P., (1998), 'Weighing it up- a literature review for the balanced scorecard', *Journal of Management Development*, Vol.17, No.7-8, pp. 559-563.
- Hersey, P., and Blanchard, K.H., (1988). *Management of Organizational Behaviour*, (5th Edition), NJ:Prentice-Hall.
- Hickson, D.J., Butler, R.J., Cray, D., Mallory, G.R., and Wilson D.C., (1986). *Top Decisions: Strategic Decision Making in Organizations*. San Francisco, CA:Jossey Bass.
- Hinterhuber, H.H., and Krauthammer, E., (1998), 'The leadership wheel: the tasks entrepreneurs and senior executives cannot delegate', *Strategic Change*, Vol.7, pp. 149-162.
- Hinterhuber, H.H., and Popp, W., (1992), 'Are you a strategist or just a manager?', *Harvard Business Review*, January/February Vol. 70, No.1, pp.105-113
- Hirschorn, L., and Gilmore, T., (1992), 'The new boundaries of the 'boundaryless' corporation', *Harvard Business Review*, May/June, Vol. 70, No.3, pp.104-115.

- Hitt, M.A., Ireland, R.A., and Palia, K.A., (1982), 'Industrial firms' grand strategy and functional importance : moderating effects of technology and uncertainty', *Academy of Management Journal*, Vol.25, No. 2, pp. 265-298.
- Hitt, M.A., Ireland, R.A., and Stadter, G.A., (1982), 'Functional importance and company performance : moderating effects of grand strategy and industry type', *Strategic Management Journal*, Vol.3, No.4, pp.315-330.
- Hodgkinson, S. (1990), 'A note on postal surveys in management research', *Graduate Management Research*, Vol. 5 No. 3, pp. 37-40.
- Hofer, C.W., and Schendel, D., (1978), *Strategy formulation: Analytical concepts*. St Paul, MN: West Publishing.
- Hoffecker, J., and Goldenberg, C., (1994), 'Using the balanced scorecard to develop companywide performance measures', *Journal of Cost Management*, Vol.8, Fall, pp. 5-18.
- Hofstede, G., (1980), *Cultures' Consequences: International Differences in Work Related Values*. Beverly Hills, CA : Sage Publications.
- Hofstede, G., (1984), *Cultures consequences: International Differences in work-related values*. Beverly Hills: Sage Publications.
- Hofstede, G., (1991), *Cultures and Organizations: Software of the Mind*. New York:McGraw-Hill.
- Hofstede, G., (1994), 'The business of international business is Culture', *International Business Review*, Vol.3, No.1, pp.1-14.
- Hofstede, G., Neuijen, B., Ohayv, D.D., and Sanders, G., (1990), 'Measuring organizational cultures: a qualitative and quantitative study across twenty cases', *Administrative Science Quarterly*, Vol.35, No.2, pp.286-316.
- Hoinville, G., and Jowell, R., (1978), *Survey Research Practice*, London: Heinemann Education.
- Howard, K., and Sharpe, J.A., (1983), *The Management of a student research project*. Aldershot: Gower.
- Huber, G.P., and Power, D.J. (1985), 'Retrospective reports of strategic-level managers: guidelines for increasing their accuracy', *Strategic Management Journal*, Vol.6, No.2, pp.171-180.
- Iacoboucci, D., Grayson, K., and Ostram, A., (1994), 'Customer satisfaction fables', *Sloan Management Review*, Summer, Vol.35, No.2, pp. 93-96.

Inkpen, A., and Choudhury N., (1995), 'The seeking of strategy where it is not: towards a theory of strategy absence', *Strategic Management Journal*, Vol.16, No.4, pp.313-323.

Jacquemin A., and Pench, L.R., (1996), *Europe Competing in the Global Economy: Report of the Competitiveness Advisory Group*, Edward Elgar Publishing.

Jauch, L.R., and Glueck, W.F., (1988), *Business Policy and Strategic Management*, 5th Edition, New York: McGraw-Hill.

Jauch, L.R., and Osborn, R.N., (1981), 'Towards an integrated theory of strategy', *Academy of Management Review*, Vol. 6, No.3, pp.491-498.

Jennings, P.L., and Beaver, G., (1995), 'The Managerial dimension of small business failure', *Journal of Strategic Change*, Vol.4, No.4, pp. 185-200.

Jennings, P.L. and Beaver, G., (1997), 'The performance and competitive advantage of small firms: a management perspective', *International Journal of Small Business*, Vol. 15, No. 2, pp.63-75.

Johannesson, J-A, Olsen, B., and Olaisen, J., (1997), 'Organizing for innovation', *Long Range Planning*, Vol. 30, No.1, pp. 96-105.

Johnson, R.J., (1983), *Philosophy and Human Geography: An Introduction to Contemporary Approaches*, London: Edward Arnold

Johnson, H.T., and Kaplan, R.S., (1987), *Relevance lost: The Rise and Fall of Management Accounting*, Boston, MA: Harvard Business Press.

Johnson, G. and Scholes, K., (1997), *Exploring Corporate Strategy : Text and Cases*, Cambridge:Prentice Hall.

Jones, A.P., and James, L.R., (1979). 'Psychological climate: dimensions and relationships of individual and aggregated work environment perceptions', *Organizational Behavior and Human Performance*, Vol. 23, pp. 201-250.

Joyce, P., Seaman, C., and Woods, A., (1996), in Blackburn, R., and Jennings, P., (eds). *Small Firms : Contributions to Economic Regeneration*, London: The Institute for Small Business Affairs.

Kanter, R.M., (1983), *The Change Masters*, New York:Simon and Schuster.

Kanter, R.M.,(1990). 'Thinking across boundaries', *Harvard Business Review*, November-December. Vol. 68, No.4, p.4.

Kaplan, R.S., and Norton, D.P., (1992), 'The balanced scorecard - measures that drive performance', *Harvard Business Review*, Vol. 70, No. 1, pp. 71-79.

- Kaplan, R.S., and Norton, D.P., (1993), 'Putting the balanced scorecard to work', *Harvard Business Review*, September-October, Vol. 71, No.5, pp.134-147.
- Kaplan R.S., and Norton, D.P., (1996), *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press.
- Kargar, J., (1996), 'Strategic planning system characteristics and planning effectiveness in small mature firms', *The Mid-Atlantic Journal of Business*, Vol. 32, No. 1, pp.19-34.
- Kargar, J., and Blumenthal, R.A., (1994), 'Successful implementation of strategic decisions in small community banks', *Journal of Small Business Management*, Vol.32, No.2, pp.10-23.
- Kargar, D.W., and Malik, Z.A., (1975), 'Long range planning and organizational performance', *Long Range Planning*, Vol. 8, pp. 60-64.
- Kargar, J., and Parnell, J.A.,(1996), 'Strategic planning emphasis and planning satisfaction in small firms: an empirical investigation', *Journal of Business Strategies* Vol. 13, No 1, pp.42-64.
- Karmel, B., (1978), 'Leadership : a challenge to traditional research methods and assumptions', *Academy of Management Review*, Vol. 3, pp. 475-482
- Katz, D., and Kahn, R.L., (1978), *The Social Psychology of Organisations*, 2nd ed. New York : John Wiley.
- Katzner, D.W. (1995), 'Participatory decision making in the firm', *Journal of Economic Behavior and Organization*, Vol. 26, No.2, pp. 221-36.
- Kay, J., (1993), *Foundations of Corporate Success: How Business Strategies add Value*. Oxford: Oxford University Press.
- Kazanjan, R.K., (1988), 'Relation of dominant problems to stages of growth in technology-based new ventures', *Academy of Management Journal*, Vol.31, No.2, pp.257-279.
- Keegan, W.J., (1974), 'Multinational scanning: a study of information sources utilized by headquarters executives in multinational companies', *Administrative Science Quarterly*, Vol.19, pp.411-421.
- Keller, R.T.; (1992), 'Transformational leadership and the performance of research and development project groups', *Journal of Management*, Vol.18. No.3, pp. 489-501.
- Kennedy, P.M., (1989), *The Rise and Fall of the Great Powers*, London: Fontana.
- Kets de Vries, M., (1980), *Organisational Paradoxes*, New York: Tavistock.
- Keuning, D. (1998), *Management: A Contemporary Approach*, London: Pitman.

- Kiefer, C., (1994), 'Executive team leadership', in Senges P.M., *The Fifth Discipline*. London :Nicholas Brearley Publishing.
- Kim, W.C., and Mauborgne, R., (1997), 'Opportunity beckons', *Financial Times*, August 18 1997.
- Kim, J.O., and Mueller, C.W., (1978), *Factor Analysis: Statistical Methods and Practical Issues*, Beverly Hills, Cal:Sage.
- Kimberley, J.R., (1976), 'Organization size and structuralist perspective: a review, critique and proposal', *Administrative Science Quarterly*, Vol.21, No.4, pp. 571-597.
- King, W.R. (1983), 'Evaluating strategic planning systems', *Strategic Management Journal*, Vol. 4, No.3, pp. 263-277.
- King, W.R., and Cleland, D.I. (1979), *Strategic Planning and Management Handbook*, New York:Van Nostrand Reinhold Co.
- Kinnear, T. and Taylor, J.R. (1996), *Marketing Research: An Applied Approach*, London:McGraw-Hill.
- Kline, P., (1994), *An Easy Guide to Factor Analysis*, London:Routledge.
- Koch, R., and Godden, I., (1996), *Managing Without Management*, London: Nicholas Brearley.
- Kotler, P., (1994), *Marketing management : analysis, planning implementation and control*. 8th Ed. London: Prentice Hall.
- Kotler, P., (1989), 'From Mass marketing to mass customization, *Planning Review*', Vol.17, No.5, pp.10-15.
- Kotter, J. P. (1982), 'What effective general managers really do', *Harvard Business Review*, Nov/Dec, Vol. 60, No. 6, pp. 156-167.
- Kotter, J. P., (1988), *The Leadership Factor*, New York: Free Press.
- Kotter, J. P., (1990), *A Force for Change: How Leadership Differs from Management*, New York:Free Press.
- Kotter, J., and Heskett, J., (1992), *Corporate Culture and Performance*, New York: Free Press.
- Kouzes, J., and Posner, B., (1987), *The Leadership Challenge: How to Get Extraordinary Things Done in Organisations*, San Francisco:Jossey-Bass.
- Kouzes, J., and Posner, B., (1997), *Leadership Practices Inventory: Lpi-ic Participant's Workbook and Self Assessment*, NY: Pfeiffer and Co.

- Krueger, R. (1994), *Focus groups: a practical guide for applied research*, (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Kudla, R.J. (1980), 'The effects of strategic planning on common stock returns', *Academy of Management Journal*, Vol. 23, pp.5-20.
- Lamming, R., (1993), *Beyond Partnership: Strategies for Innovation and Lean Supply*, London: Prentice Hall.
- Langerak, F., Nijssen, E., Frambach, R., and Gupta, A., (1999), 'Exploratory results on the importance of R&D knowledge domains in business with different strategies', *R & D Management*, July, Vol.29 No.3, pp. 209-218.
- Larsen, P., Tonge, R, and Ito, M., (1998), 'The strategic planning process in growing companies', *Journal of General Management*, Vol.24, No.1, pp. 53-67.
- Lawrence, P.R., and Lorsch, J.W.,(1967), *Organisation and the Environment: Managing Differentiation and Integration*, Cambridge, MA: Harvard University Press.
- Lazenby, R., (1996), *A multi-paradigm approach to studying meaning in organisational symbols*, Unpublished thesis, Cranfield University.
- Lee, C., (1991), 'Followership: the essence of leadership', *Training*, Vol.28, pp.27-35.
- Lees, J. and Lees, D. (1987), 'Realities of small business information system implementation', *Journal of Systems Management*, Vol. 38, pp. 6-14.
- Leonard, D. and Straus, S. (1997), 'Putting your company's whole brain to work', *Harvard Business Review*, July-August, Vol. 75, No.4, pp.111-121.
- Lewis, D.S., French. E.. and Steane. P., (1997). 'A culture of conflict'. *Leadership and Organizational Development Journal*, Vol.18, No.6-7, pp.257-265.
- Likert, R., (1961), *New patterns in management*. New York: McGraw-Hill.
- Lim, B., (1997), 'Transformational leadership in the UK management culture', *Leadership and Organizational Development Journal*, Vol. 18, No.6-7, pp. 283-290.
- Lim, B., (1998). 'Examining the organizational culture and organizational performance link', *Leadership and Organizational Development Journal*, Vol. 16, No.5, pp. 16-21.
- Lindell, M., and Karagozoglu, N., (1997), 'Global strategies of US and Scandinavian R&D intensive small and medium sized companies', *European Management Journal*, Vol. 15, No.1, pp. 92-101.

- Lindsay W.M., and Rue, L.W. (1980), 'Impact of the organization environment on the long range planning process: a contingency view', *Academy of Management Journal*, Vol. 23, No.3, pp.385-404.
- Liswood, L.A., (1989), 'A new system for rating service quality', *Journal of Business Strategy*, July -August, Vol. 10, No. 4, pp.42-45.
- Litwin, M., (1995), *How to measure survey reliability and validity*, Thousand Oaks, CA:Sage.
- Liu, J., and Roth, U.D., (1995), 'Global performance measurement model: a proposed model for developing an effective performance measurement system', Paper presented at the *International Management Accounting Conference*, Kuala Lumpur, 1995.
- Lorange, P. (1980), *Corporate Planning: An Executive Viewpoint* NJ:Prentice Hall.
- Lorange, P., and Vancil, R.F., (1977), *Strategic Planning Systems*, Englewood Cliffs, N.J: Prentice Hall:
- Lybaert, N., (1988), 'The information use in an SME: its importance and some elements of influence', *Small Business Economics*, Vol.10, No.2, pp.171-191.
- Lyles, M.A., Baird, I.S., Orris, J.B., and Kuratko,F.F.,(1993), 'Formalised planning in small business: increasing strategic choices', *Journal of Small Business Management*, Vol.31, No.2, pp.38-50.
- Lynch, R.L., and Cross, K.F., (1991), *Measure Up! Yardstick for Continuous Improvement*, Cambridge, MA: Basil Blackwell.
- Manly, B., (1994), *Multivariate Statistical Methods: A Primer* (2nd edition), London: Chapman and Hall.
- Marcoulides, G.A., and Heck, R.H., (1993), 'Organisational culture and performance : proposing and testing a model', *Organisation Science*, Vol.4, pp. 209-225.
- Maira, A.N., (1996), 'Managing transformational change', Arthur D Little *Prism* Vol.11 pp. 17-33.
- Matejka, K., and Dunsing, R.J., (1995), *A Manager's Guide to the Millennium: Today's Strategies for Tomorrow's Success*, American Management Association.
- May, T., (1997), *Social Research: Issues, Methods and Processes*, 2nd edition, Open University Press.
- Mayer, R.J., and Moore, J., (1983), 'Applying manufacturing strategy concepts to practice', *Operations Management Review*, Fall 1983, pp.45-50.

- Meek, V.L., (1988), 'Organizational culture: origins and weaknesses', *Organization Studies*, Vol. 9, No.4, pp.453-473.
- Merton, R., (1967), *Social Theory and Social Structure*, New York: The Free Press.
- Meyer M.W., and Zucker, L., (1989), *Permanently Failing Organizations*. CA: Sage.
- McDaniel, S.W. and Kolari, J.W. (1987), 'Marketing strategy implications of the Miles and Snow typology', *Journal of Marketing*, Vol. 51, pp. 19-20.
- McDonald, M. (1996), 'Strategic marketing planning: theory, practice and research agendas', *Journal of Marketing Management*, Vol. 12, No.1-3, pp. 5-28.
- McGregor, D., (1987), *The Human Side of Enterprise*, Harmondsworth :Penguin.
- McKiernan, P. and Morris, C., (1994), 'Strategic planning and financial performance in UK SMEs: does formality matter?', *British Journal of Management*, Vol. 5, Special Issue, S31-S41.
- McLagan, P. and Nel, C. (1995), *The Age of Participation: New Governance for the Workplace and the World*, San Francisco: Berret-Koehler.
- Miles, R., (1989), 'Adapting to technology and competition: a new industrial relations system for the 21st Century', *California Management Review*, Winter, Vol. 34, No.2, pp. 9-28.
- Miles R.E., and Snow, C.C. (1978), *Organizational Strategy, Structure and Process*, New York:McGraw-Hill.
- Miles, R.E., and Snow, C.C., (1984), 'Fit, failure and the hall of fame', *California Management Review*, Vol. 26, No.3, pp. 10-26.
- Miles, R., and Snow, C., (1994), *Fit, Failure and the Hall of Fame: How Organizations Succeed or Fail*, New York: Free Press.
- Miller, D., and Friesen, P.H., (1982), 'Innovation in conservative and entrepreneurial firms: two models of strategic momentum', *Strategic Management Journal*, Vol. 3, No.1, pp. 1-25.
- Mills, D.Q., (1991), *Rebirth of the Corporation*, New York:Wiley.
- Mills, D.Q., and Friesen, B., (1992), 'The learning organization', *European Management Journal*, Vol.10, No.2, pp. 146-156.
- Mintzberg, H., (1973), *The Nature of Managerial Work*, NY: Harper and Row.
- Mintzberg, H., (1979), *The Structuring of Organizations*, Englewood Cliffs, NJ: Prentice-Hall.

Mintzberg, H., (1983), *Power in and around Organizations*, Englewood Cliffs, NJ: Prentice Hall.

Mintzberg, H., (1987), 'Crafting strategy', *Harvard Business Review*, Vol.65, No.4, pp. 66-75.

Mintzberg, H., (1990), 'The design school: reconsidering the basic premises of strategic management', *Strategic Management Journal*, Vol.11, No.3, pp.171-195.

Mintzberg, H. (1989), *Mintzberg on Management: Inside Our Strange World of Organizations*, New York:Free Press.

Mintzberg, H., (1992), 'Five p's for strategy', in Mintzberg H., and Quinn, J.B., *The Strategy Process: Concepts and Contexts*, NJ:Prentice Hall, pp.12-19.

Mintzberg, H. (1993), 'The pitfalls of strategic planning', *California Management Review*, Vol. 36, No. 1, pp. 32-47.

Mintzberg, H., (1994), 'The rise and fall of strategic planning', *Harvard Business Review*, Vol.72, No.1, pp. 107-114.

Mintzberg, H., Raisinghani, O., and Theoret A., (1976), 'The structure of 'unstructured' decision processes', *Administrative Science Quarterly*, Vol. 21, No. 2, pp. 246-275.

Moon, P., and Fitzgerald, L., (1996), 'Delivering the goods at TNT: the role of the performance measurement system', *Management Accounting Research*. Vol.7, pp. 431-457.

Morden, A.R., (1996), *Principles of Management*, London:McGraw-Hill.

Morgan, G. (1986), *Images of Organization*, Sage. Beverly Hills, CA:Sage.

Morgan, G., (1989), *Creative Organization Theory. A Resource Handbook*. London: Sage.

Morgan, G., and Smircich, L., (1980), 'The case for qualitative research', *Academy of Management Review*, Vol.5, pp. 491-500.

Moser, C.A., and Kalton, G., (1986), *Survey Methods in Social Investigation* (2nd Ed) Aldershot: Gower.

Motowidlo, S., (1992), 'Leadership and leadership processes', in M.D. Dunnette (ed.), *Handbook of Industrial/Organisational Psychology* (2nd ed.) Palo Alto, CA : Consulting Psychologists Press.

Mullins, L.J., (1996), *Management and Organisational Behaviour*, London :Pitman.

Murphy, P.R., Daley, J.M., and Dalenberg, D.R., (1991), 'Exploring the effects of postcard prenotification on industrial firms' response to mail surveys', *Journal of the Market Research Society*, Vol. 33, No.4, October, pp.335-342.

Murphy, K.R., and Davidshofer, C.O., (1994), *Psychological Testing*, 3rd Edition, NJ: Prentice-Hall.

Naffziger, D.W., and Mueller, C.B., (1999), Strategic planning in small businesses: process and content realities, in the *Proceedings of the 14th Annual USASBE Conference*, San Diego, CA.,

Neely, A., (1999), 'The performance measurement revolution: why now and what next? (Special Issue: The Future of Operations Management)', *International Journal of Operations & Production Management* Vol.19, No.2, pp. 205-207.

Neely, A., Mills, J., Platts, K., Gregory, M., and Richards, H., (1994), 'Realising strategy through measurement', *International Journal of Operations and Production Management*, Vol. 14 No. 3, pp. 143-55.

Neely, A., Gregory, M, and Platts, K., (1995), 'Performance measurement systems design: a literature review and research agenda', *International Journal of Operations and Production Management* Vol.15, No. 4, pp.80-116.

Nicholson, N., Rees, A., and Brooks-Rooney, A., (1990), 'Strategy, innovation and performance', *Journal of Management Studies*, Vol.27, No.5, pp. 511-536.

Nie, N.H., Hull, C.H., Jenkins. K., Steinbrenner, K., and Bent, D.L., (1975), *Statistical Package for the Social Sciences*, NY: McGraw-Hill

Norusis, M.J., (1990), *SPSS Introductory Statistics Student Guide*, Chicago.IL:SPSS Inc.

Nulty, P., (1994), 'The national business hall of fame', *Fortune*, Vol. 29, No. 7, pp.118-124.

Nunnally, J., (1978), *Psychometric Theory*, New York:McGraw-Hill.

Ohmae, K., (1983), *The Mind of the Strategist*, Harmondsworth:Penguin

Ohmae, K., (1989), 'Planting for a global harvest', *Harvard Business Review*, Vol.67, No.4, July-August, pp. 137-138.

O'Regan, N., Ghobadian, A., and Liu, J., (1998a), 'The need to re think strategy in SMEs', in McCarthy I.P., and Ridgway (eds), *Proceedings of the First International SMESME Conference: Stimulating Manufacturing Excellence in Small and Medium Sized Enterprises*, Sheffield.

- O'Regan, N., Ghobadian, A., and Liu, J., (1998b), 'Enhancing competitive advantage in SMEs', in the *Proceedings of 28th European Small Business Seminar*, Vienna.
- Otley, D., (1987), *Accounting Control and Organisational Behaviour*, London: Heinemann
- Ott, J., (1989), *The Organizational Culture Perspective*, Pacific Grove, CA: Brooks/Cole
- Owen, F., and Jones, R., (1990), *Statistics* (3rd ed.), London: Pitman Publishing
- Parks, B., Olson, P.D., and Bokor, D.W., (1991), 'Don't mistake business plans for planning', *Journal of Small Business Strategy*, Vol.2, No.1, pp. 15-24.
- Pascale, R.T., (1984), 'Perspectives on strategy: The real story behind Honda's success', *California Management Review*, Spring, Vol. 26, No.3, pp. 47-72.
- Pearce, J.A., Freeman, E.B., and Robinson R.B., (1987), 'The tenuous link between formal strategic planning and financial performance', *Academy of Management Review*, Vol. 12, No.4, pp. 658-675.
- Peters, T., (1989), *Thriving on Chaos*, London: Pan.
- Peters, T. (1990), 'Get innovative or get dead', *California Management Review*, Vol.33, No.1, pp.9-26.
- Peters, T., (1997), *The Circle of Innovation*, London: Hodder and Stoughton.
- Peters, T.J., and Austin, N., (1985), *A Passion for Excellence: The Leadership Difference*, New York: Random House.
- Peters, T. J., and Waterman R.H. (1982), *In Search of Excellence*, New York: Harper and Row.
- Pettigrew, A. M., (1979), 'On studying organizational cultures'. *Administrative Science Quarterly* Vol.24, pp. 570-581.
- Pettigrew, A., and Whipp, R., (1991), *Managing Change for Competitive Success*, Oxford: Blackwell Publishers.
- Pfeffer, J., and Salancik, G.R., (1978), *The External Control of Organizations : A Resource Dependency Perspective*, New York: Harpur and Row.
- Pickle, H.B., and Abrahamson R.L., (1976), *Small Business Management*, New York: Wiley and Sons.
- Pisano, G.P., and Wheelwright, S.C., (1995), 'The new logic of high tech R &D', *Harvard Business Review*, Sept-Oct. Vol. 73, No.5, pp.93-105.

- Porter, M.E., (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, New York: Free Press.
- Porter, M.E., (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, New York : Free Press.
- Porter, M. E., (1987) 'From competitive advantage to corporate strategy', *Harvard Business Review*, May-June, Vol. 65, No.3, pp. 43-59.
- Porter, M. (1990), *The Competitive Advantage of Nations*, London: MacMillan.
- Porter, M. E. (1991). 'Towards a dynamic theory of strategy', *Strategic Management Journal*, Vol. 12, Special Issue, Winter, pp.95-117.
- Porter, M.E., (1994) 'Towards a dynamic theory of strategy' in Rumelt, R.P., Schendel, D.E., and Teece, D.J., *Fundamental Issues in Strategy: A Research Agenda*, Harvard Business School Press, pp. 423-462.
- Porter, M.E., (1996), 'What is strategy', *Harvard Business Review*, Vol.74, No.6, Nov/Dec, pp.61-78.
- Porter, M.E., and Spence, A.M., (1982) 'The capacity expansion process in a growing oligopoly : the case of corn wet milling' in J.J. McCall(ed), *Economics of Information and Uncertainty*(Chicago: University of Chicago Press) pp. 259-309.
- Powell, T.C., (1992), 'Strategic planning as competitive advantage', *Strategic Management Journal*, Vol.13. No. 7, pp.551-558.
- Power, C.,(1991), 'Value marketing: quality, service and fair price are the keys to selling in the 1990's', *Business Week*, 11 November, pp. 132-140.
- Prahalad C.K., and Hamel, G, (1995), 'Thinking differently', *Business Quarterly*, Summer, Vol.59, No 4, pp. 22-32.
- Price Waterhouse, (1995). *Better Change - Best Practices for Transforming your Organization*, Irwin Publishing, pp. 180-190.
- Proctor T.,(1997), 'Establishing a strategic direction', *Management Decision*, Vol.35, No.2, pp.143-154.
- Quinn, J.B., (1978), 'Strategic change:logical incrementalism', *Sloan Management Review*, Vol. 20, No.1, pp.7-21.
- Quinn, J.B., (1980), *Strategies for Change: Logical Incrementalism*, Homewood, IL: Irwin.
- Quinn, J.B., (1985), 'Managing innovation: controlled chaos', *Harvard Business Review*, Vol.63, No.3, pp. 73-84.

- Quinn, J.B., (1992), *Intelligent Enterprise- A Knowledge and Services based Paradigm for Industry*, New York:Free Press.
- Radford, K.J., (1980), *Strategic Planning : An Analytical Approach*, NY: Reston Publishing Co.,
- Ramanujam, V., and Venkatraman, N., (1987), 'Planning and performance: a new look at an old question', *Business Horizons*, Vol. 30, May-June, pp.19-25.
- Ramanujam, V., Venkatraman, N., and Camillus, J., (1986), 'Multi-objective assessment of effectiveness of strategic planning: a discriminant analysis approach', *Academy of Management Journal*, Vol.29, No.2, pp. 347-372
- Rapoport, R.N., (1970), 'Three dilemma of action research', *Human Relations*, Vol.23, pp.499-513.
- Rauch, C.F., and Behling, O., (1984), 'Functionalism: basis for an alternate approach to the study of leadership', in Hunt, J.G., Hosking, D.M., Schriesheim, C.A., and Stewart, R., (eds), *Leaders and Managers; International Perspectives on Managerial Behaviour and Leadership*, NY:Permagon Press.
- Redman, T., Snape, E., and Wilkinson, A., (1995), 'Is quality management working in the UK?', *Journal of General Management*, Vol. 20, No. 3, pp. 44-59.
- Reed, M., and Hughes, M., (1993), *Rethinking Organisation: New Directions in Organisational Theory and Analysis*. London: Sage.
- Reicheld, F.F., (1996), 'Learning from customer defections', *Harvard Business Review*, March-April, Vol. 74, No.2, pp. 56-69.
- Reicheld, F.F., and Sasser, W.E., Jr.. (1990). 'Zero defections: quality comes to services', *Harvard Business Review*, Vol. 68, No.5, September-October. pp. 105-111.
- Reid, L.J., and Andereck, K.L., (1989), 'Statistical uses in tourism research', *Journal of Travel Research*, Vol. 28, No.4, pp.45-49.
- Reinharth, L., Shapiro, H.J., and Kallman, E.A., (1981), *The Practice of Planning: Strategic, Administrative and Operational*. New York: Van Nostrand Reinhold.
- Renaissance Solutions Ltd., (1996), *Translating Strategy into Action: Survey findings on the effectiveness of business strategy management and implementation in the UK*, London:Renaissance.
- Rhyne, L.C., (1986), 'The Relationship of strategic planning to financial performance', *Strategic Management Journal*, Vol. 7, No.5, pp. 423-436.

Richards, D., and Engle, S., (1986), 'After the vision, suggestions to corporate visionaries and vision champions', in Adams, J.D., (ed.), *Transforming Leadership*, Alexandria, VA : Miles River Press.

Robinson, R., (1979), 'Forecasting and small business : a study of the strategic planning process', *Journal of Small Business Management*, Vol.17, No.3, pp. 19-27.

Robinson, R.B., (1982), 'The importance of 'outsiders' in small firm strategic planning', *Academy of Management Journal*, Vol. 25, No.1, pp. 80-93:

Robinson, R., (1983), 'Measures of small firm effectiveness', *Journal of Small Business Management*, Vol.21, No.2, pp. 22-30.

Robinson, R.B. and Pearce, J.A., (1983), 'The impact of formalised strategic planning on financial performance in small organizations', *Strategic Management Journal*, Vol.4, No.3, pp.197-207.

Robbins, S., (1992), *Essentials of Organizational Behaviour*, 3rd edition, London: Prentice-Hall.

Robson, C., (1993), *Real World Research*, Oxford: Blackwell.

Rollins, T. (1993), 'Two studies define link between corporate culture and business performance', *Employment Relations Today*, Vol. 20 No. 2, pp. 141-57.

Roper, S., (1997), 'Strategic initiatives and small business performance: an exploratory analysis of Irish companies', *Entrepreneurship and Regional Development*, Vol. 9, pp. 353-364.

Rothwell, R., and Dodgson, M., (1991), 'External linkages and innovation in small and medium-sized enterprises', *R & D Management*, Vol.21, No. 2, April 1991, pp.125-136.

Russell, J.C., (1997), 'Driving change through performance measurement', *Strategy and Leadership*, Vol.25, No.2, pp. 40-41.

Ryan, C., (1995), *Researching Tourist Satisfaction*, London: Routledge.

Ryh-Song Yeh, and Lawrence, J.J., (1995), 'Individualism and confucian dynamism: a note on Hofstede's cultural root to economic growth', *Journal of International Business Studies*, Vol.26, No.4, pp. 655-670.

Sakakibara, S., Flynn, B., Schroeder, R.G., (1993), 'A framework and measurement instrument for just-in-time manufacturing', *Production and Operations Management*, Vol.2, No.3, pp. 177-194.

Sampler, J.L., (1998), 'Redefining industry structure for the information age', *Strategic Management Journal*, Vol.19, No. 4, pp.343-355.

Sapp, R.W., and Seiler, R.E., (1981), 'The relationship between long range planning and financial performance of U.S. commercial banks', *Managerial Planning*, Vol.30, No.2, pp. 32-36.

Saunders, M., Lewis, P., and Thornhill, A., (1997), *Research Methods for Business Students*, London: Pitman Publishing.

Schein, E.H., (1985), *Organizational Culture and Leadership: A Dynamic View*. San Francisco Jossey-Boss.

Schein, E.H. (1987), *Process Consultation Volume 11: Lessons for Managers and Consultants*, Reading, MA: Addison-Wesley Publishing Company.

Schein, E.H., (1992), *Organizational Culture and Leadership*, 2nd ed. San Francisco, CA: Jossey Bass.

Schein E.H., (1996), 'Culture : the missing concept in organisational studies', *Administrative Science Quarterly*, Vol. 41, pp. 229-240.

Schneider, S.C., (1989), 'Strategy formulation: the impact of national culture', *Organisation Studies*. Vol.10, No.2, pp. 149-68.

Schneider, B., Brief, A.P. and Guzzo, R.A. (1996), 'Creating a climate and culture for sustainable organisational change', *Organisational Dynamics*, Vol. 24, No.4, pp. 7-19.

Schreyer, P., (1996), *SMEs and employment creation*, OECD Paris.

Schroeder, R.G., (1989), *Operations Management:: Decision Making in the Operations Function*, London:McGraw Hill.

Schwartz, P., (1991), *The Art of the Long View: Planning for the Future in an Uncertain World*, New York: Doubleday.

Schwartz, H., and Davis, S., (1981), 'Matching corporate culture and business strategy', *Organizational Dynamics*, Vol.9 (Summer), pp. 30-48.

Schwenk, C.R., (1984), 'Cognitive simplification processes in strategic decision-making', *Strategic Management Journal*, Vol. 5, No.2, pp.111-128.

Schwenk, C.R., and Shrader, C.B.,(1993), 'The effects of formal strategic planning on financial performance in small firms : a meta analysis', *Entrepreneurship in Theory and Practice* Vol.17, No.3, pp.53-64.

Scott, M.C., (2000), *Re inspiring the Corporation*; Chichester: John Wiley & Sons Ltd

Seddon, V., (1991), 'The management of performance' in the *Management Services Handbook (2nd ed)*, edited by Bentley, T.J., London : Pitman Publishing.

- Segev, E., (1989), 'A systematic comparative analysis and synthesis of two business-level strategic typologies', *Strategic Management Journal*, Vol.10, No.5, pp.487-505.
- Senge, P., (1990), *The Fifth Discipline: The Art and Practice of the Learning Organisation*, New York:Doubleday.
- Sexton, D.L., and Van Auken P., (1985), 'A longitudinal study of small business strategic planning', *Journal of Small Business Management*, Vol. 23, No.1, pp. 7-15.
- Sexton, D.L., and Bowman-Upton, N., (1991), *Entrepreneurship: Creativity and Growth*, New York: MacMillan Publishing Company.
- Shank, J.K., Niblock, E.G., and Sandalls W.T., (1973), 'Balance 'creativity' and 'practicality' in formal planning', *Harvard Business Review*, Vol.51, No.1, pp. 87-95.
- Shrader, C.B., Taylor, L., and Dalton D.R., (1984), 'Strategic planning and organizational performance : a critical appraisal', *Journal of Management* 1984, Vol.10, No.2, pp. 149-171.
- Shrivastava, P., (1985), 'Integrating strategy formulation with organizational culture', *Journal of Business Strategy*, Vol.5, No.3, pp.103-111.
- Shrivastava, P., and Grant J.H., (1985), 'Empirically derived models of strategic decision making processes', *Strategic Management Journal*, Vol. 6, No. 2, pp. 97-113.
- Shortell, M.S., and Zajac, E.J., (1990) 'Perceptual and archival measures of Miles and Snow's strategic types : a comprehensive assessment of reliability and validity', *Academy of Management Journal*, Vol.33, No.4, pp. 817-832.
- Sieger, J. (1992), 'Manage your numbers to match your strategy', *Management Review*, Vol. 81, No. 1, pp. 46-48.
- Simons, R., (1995), 'Control in an age of empowerment', *Harvard Business Review*, Vol. 73, No.2, pp.80-88.
- Sims, D., Fineman, S., and Gabriel, Y., (1993), *Organising and Organisations*, London: Sage Publications.
- Skinner, W., (1969), 'Manufacturing-missing link in corporate strategy', *Harvard Business Review*, Vol.47, No.3, pp. 136-145.
- Skinner W., (1996), 'Three yards and a cloud of dust: industrial management at century end', *Production and Operations Management Society*, Vol. 5, No 1, Spring, pp.15-24.
- Slater, S.F. and Narver, J.C. (1993), 'Product-market strategy and performance: an analysis of the Miles and Snow typology', *European Journal of Marketing*, Vol. 27, No.10, pp.33-51.

- Smallbone, D., (1991), 'Success and failure in new business start-ups', *International Small Business Journal*, Vol.8, No.2, pp.34-47.
- Smallbone, D., North, D., and Leigh, R., (1993), 'The growth and survival of mature manufacturing SMEs in the 1980s: An Urban and Rural Comparison', in J. Curran and D.J. Storey (eds), *Small Firms in Urban and Rural Locations*, London: Routledge.
- Smallbone, D., North, D., and Leigh, R., (1993), 'The use of external assistance by mature SMEs in the UK: some policy implications', *Entrepreneurship and Regional Development*, Vol.5, pp. 279-295.
- Smircich, L., (1983) 'Concepts of culture and organizational analysis', *Administrative Science Quarterly*, Vol.28, pp. 339-358.
- Snow, C.C. and Hambrick, D.C., (1980), 'Measuring organizational strategies : some theoretical and methodological problems', *Academy of Management Review*, Vol.5, No.4, pp.527-538.
- Snow, C.C. and Hebriniak, L.G. (1980), 'Strategy, distinctive competence, and organizational performance', *Administrative Science Quarterly*, Vol. 25, No.2, pp. 317-336.
- Spitzer, Q., and Evans, R., (1997), *Heads You Win : How the Best Companies Think*, New York: Simon and Schuster.
- Spreitzer, G.M., (1995), 'Psychological empowerment in the workplace: dimensions: measurement, and validation', *Academy of Management Journal*, Vol. 38, No. 5. pp. 1442-1465.
- Stacey, R.D. (1996), *Complexity and Creativity in Organizations*, CA:Berrett-Koehler.
- Stacey, R., (1993), *Strategic Management and Organizational Dynamics*, London: Pitman.
- Stanworth, M.J.K., and Curran, J. (1976), 'Growth and the small firm: an alternative view', *Journal of Management Studies*, Vol. 13, No.2, pp.95-110.
- Starbuck, W.H., (1982), 'Congealing oil: inventing ideologies to justify acting ideologies out', *Journal of Management Studies*, Vol.19, No. 1, pp.3-27.
- Steiner, G.A., (1979), *Strategic Planning : What every manager must know*, New York:Free Press.
- Stevenson, H.H., (1976), 'Defining corporate strengths and weaknesses', *Sloan Management Review*, Vol.17, No.3, pp.51-68.
- Stewart, T.A., (1997), *Intellectual Capital*, London: Nicholas Brealey Publishing.

- Stodgill, R.M., (1974), *Handbook of Leadership: a survey of the literature*, New York:Free Press
- Storey, D., (1985), *Small Firms in Regional Economic Development*, Cambridge : Cambridge University Press.
- Storey D., (1994), *Understanding the Small Business Sector*, London : Routledge.
- Storey, D.J., Keasey, K., Watson, R., and Wynarczyk, P., (1987), *The Performance of Small firms: Profits, Jobs and Failures*, London: Croom Helm.
- Storey, D., and Westhead, P., (1996), 'Management training and small firm performance : why is the link so weak?', *International Small Business Journal*, Vol.14, No.4, pp.13-24.
- Tabachnick, B.G., and Fidell, L.S., (1996), *Using Multivariate Statistics* (3rd Ed.), NY: HarperCollins College Publishers.
- Thomas, P.S., (1980), 'Environmental scanning: the state of the art', *Long Range Planning*, Vol.13, No.1, pp. 20-8.
- Thomas, A.S., Litschert R.J., and Ramaswamy, K., (1991), 'The performance impact of strategy-manager coalignment: an empirical examination', *Strategic Management Journal*, Vol. 12, No.7, pp.509-522.
- Thompson, J.L. (1993), *Strategic Management - Awareness, and Change*, 2nd ed., London: Chapman and Hall.
- Thompson, J.L., (1996). 'Strategic effectiveness and success: the learning challenge'. *Management Decision*, Vol. 34, No.7, pp.14-23.
- Tichy, N., and Charan, R., (1989). 'Speed, simplicity and self confidence : an interview with Jack Welch', *Harvard Business Review*, Vol. 67, No.5, September-October, pp.112-120.
- Tichy, N.M., and Devanna, M.A., (1986). '*The Transformational Leader*', New York: John Wiley and Sons.
- Tichy N.M, and Ulrich, D.O., (1984), 'The leadership challenge - a call for the transformational leader', *Sloan Management Review*, Fall, Vol.27, No.1, pp. 59-68.
- Trompenaars, F., and Hampden-Turner, C.M., (1997), *Riding the Waves of Culture*, London:Nicholas Brealey.
- Turner, D., (1998), *Liberating Leadership*, London : The Industrial Society.
- Turney, P., and Anderson B., (1989), 'Accounting for continuous improvement', *Sloan Management Review*, Vol.30, No.2, pp. 37-48.

Tushman, M., and Nadler, D., (1986), 'Organising for innovation', *California Management Review*, Spring, Vol. 27, No.3, pp. 74-92.

Tushman M.L., and O'Reilly, C.A., (1997), *Winning Through Innovation*, Boston MA:Harvard Business School Press.

Tushman, M.L., O'Reilly, C., and Nadler, D.A., (1989), *The Management of Organizations: Strategies, Tactics and Analyses*, New York:HarperCollins.

Vaill, P.B., (1991), *Managing as a Performing Art: New ideas for a world of change*, San Francisco CA: Jossey Bass.

Van Maanen, J., and Barley, S., (1984), 'Occupational communities:culture and control in organizations', in B. Straw and L. Cummings (eds), *Research in Organisational Behaviour*, Vol.6, Greenwich, CT, JAI Press, pp. 287-365.

Van Maanen, J., and Schein, E.H., (1979), 'Towards a theory of organizational socialization', in Staw, B., (ed.), *Research in Organizational Behavior*, Vol.1, San Francisco JAI Press pp. 209-264.

Vargas, G.A.; Rivera, J., and Cardenas L., (1997), 'The transferability of 'soft' business practices among different socio-economic environments: A multi-country/multi-cultural empirical assessment'. Paper presented at the *1997 Annual Conference of the British Academy of Management*, London Business School .

Veal, A., (1992), *Research Methods for Leisure and Tourism*, London: Longman

Veliyath, R., and Shortell, S.M., (1993). 'Strategic orientation, strategic planning systems, characteristics and performance'. *Journal of Management Studies*, Vol. 30, pp. 359-381.

Venkatraman, N., and Camillus, J.C., (1984), 'Exploring the concept of 'fit' in strategic management', *Academy of Management Review*, Vol.9, No.3, pp. 513-525.

Venkatraman, N. and Ramanujam, V., (1986), 'Measurement of business performance in strategy research: a comparison of approaches', *Academy of Management Review*, Vol.11, No.4, pp. 801-814.

Von Zugbach, R., (1995), *The Winning Manager*, London: Souvenir Press.

Wagner, J.A., and Gooding, R. Z., (1987), 'Shared influence and organisational behaviour : A meta-analysis of situational variables expected to moderate participation-outcome relationships', *Academy of Management Journal*, Vol. 30, No. 3, pp.524-541.

Wall, S.J., and Wall, S.R., (1995), 'The evolution (not the death) of strategy', *Organisational Dynamics*, Autumn 1995 Vol.24, Issue 2.

Watson, C.M.,(1983), 'Leadership, management and the seven keys', *Business Horizons*, March-April, pp.8-13.

Watson, K., Hogarth-Scott, S., and Wilson, N., (1998), 'Small business start-ups: success factors and support implications', *International Journal of Entrepreneurial Behaviour and Research*, Vol.4, Issue 3, pp. 217-238.

Webber, A., (1988), 'In this issue', *Harvard Business Review*, Vol.66, No.1, Jan-Feb, pp.4-5.

Wehrich, H., and Koontz, H., (1993), *Management: Global Perspectives*, 10th Edition, NY: McGraw-Hill.

Weiss, N.A., and Hassett, M.J., (1993), *Introductory Statistics, 3rd Ed.*, Reading,Mass: Addison-Wesley Publishing Company.

Welsh, J., and White, J., (1981), 'A small Business is not a little business' *Harvard Business Review*, Vol. 59, No.4, pp. 18-32.

Wernerfelt, B., (1984), 'A resource based view of the firm', *Strategic Management Journal*, Vol. 5, No.2, pp. 171-180.

Westley, F., and Mintzberg, H., (1989), 'Visionary leadership and strategic management', *Strategic Management Journal*, Summer Special Issue, Vol. 10, pp.17-32.

Whipp, R., Rosenfeld, R., and Pettigrew, A., (1989), 'Managing strategic change in a mature business', *Long Range Planning*, Vol. 22, No. 6, pp.92-99.

Wilderom, C., and van den Berg, P., (1997), *A Test of the Leadership-Culture-Performance Model within a Large Dutch Financial Organisation*, Working Paper 103952 Tilburg University.

Wilkes, N., and Dale, B.G., (1998), 'Attitudes to self-assessment and quality awards: a study of small and medium-sized companies', *Total Quality Management*, Vol.9, No.8, pp.731.

Wilson, D.C., and Rosenfeld, R.H., (1990), *Managing Organisations, Text, Readings and Cases*, Maidenhead: McGraw-Hill.

Winch, G., Millar, C., and Clifton, N., (1997), 'Culture and organisations: the case of Transmanche -Link', *British Journal of Management*, Vol.8, pp. 237-249.

Wisner, J.D., and Fawcett, S.E., (1991), 'Linking firm strategy to operating decisions through performance measurement', *Production and Inventory Management Journal*, Vol. 32, No.3, pp. 5-11.

Womack, J., and Jones, D., (1994), 'From lean production to the lean enterprise', *Harvard Business Review*, March-April; Vol. 72, No.4, pp.93-103.

- Womack, J.P., and Jones, D.T., (1996), *Lean Thinking*, New York:Simon and Schuster.
- Womack, J.P., Jones, D.T., and Roos, D., (1990), *The Machine that Changed the World*, New York:Rawson MacMillan.
- Wood, D.R., and LaForge, R.L. (1979), 'The impact of comprehensive planning on financial performance', *Academy of Management Journal*, Vol. 22, No.3, pp.516-526.
- Wooldridge, B., and Floyd, S., (1990), 'The strategy process, middle management involvement and organizational performance', *Strategic Management Journal*, Vol.11, No. 3, pp. 231-241.
- Wortman, M.S., (1986) 'A unified framework, research typologies, and research prospectuses for the interface between entrepreneurship and small business', In Sexton, D.L., and Smilor, R.E., (eds.), *The Art and Science of Entrepreneurship*, MA Cambridge: Ballinger, pp. 273-331.
- Wright, J.N. (1996), 'Creating a quality culture', *Journal of General Management*, Vol. 21 No. 3, pp. 19-29.
- Wright, P., Kroll, M.J., and Parnell, J., (1996), *Strategic Management : Concepts and Cases*, 3rd ed., Englewood Cliffs, NJ: Prentice Hall Inc.,
- Wyer, P., and Smallbone, D., (1999), 'Export activity in small firms: the need for a learning approach', in the *Proceedings of The British Academy of Management Annual Conference*, Vol.2, pp. 1500-1501.
- Yammarino, F.J., and Bass, B.M., 'Transformational leadership and multiple levels of analyses', *Human Relations*, Vol.43, No. 10, pp. 975-996.
- Yin, R.K., (1994) *Case Study Research : Design and Methods*, (2nd Edition). London:Sage Publications.
- Yukl, G.A., (1989), *Leadership in Organisations* (2nd edition), New York: Academic Press.
- Yukl, G.A., (1994), *Leadership in Organisations* (3rd edition), New York : Prentice Hall.
- Yukl, G.A., (1997), *Leadership in Organisations*, New York : Prentice Hall.
- Zaleznik, A., (1977), 'Managers and leaders: Are they different?', *Harvard Business Review*, May-Jun, Vol. 55, No.3, pp.67-78.
- Zikmund, W.G., (1994), *Business Research Methods* (5th ed.), Chicago: Dryden Press.

Appendix 7.1 Letter to SMEs regarding the focus group participation

Ms. X. YYYYY
Managing Director,
XYZ Company
The Bank
London

23rd October 1997

TRANSFORMING CORPORATE PERFORMANCE BY EFFECTIVELY DEPLOYING STRATEGY

Dear Managing Director,

Small and Medium sized firms have adopted numerous management initiatives as they seek to address increased competition. However many of these initiatives have failed to help firms to retain their competitive edge or to attract new customers. Meanwhile leading companies have made strategy their main priority as a means of enhancing their performance further, which has resulted in many Small and Medium Sized firms facing an increasing competitive battle.

With so much at stake, Middlesex University Business School has initiated a study to develop a framework to guide SMEs in strategy preparation based on a review of how successful SMEs formulate and effectively deploy strategies. The study will identify the elements of strategy and establish the dimensions that influence to the greatest extent the organisation's effectiveness based on a range of performance measures. It will also develop a mechanism to focus on short term results and at the same time take on board the factors that will enable firms to survive and grow.

The study will provide a practical framework for SMEs to:-

- determine the impact of strategy on performance
- develop strategy
- understand the critical elements of strategy
- link strategy to performance
- ensure that performance measures develop with and influence the strategic process face the challenges of the future and retain competitive advantage in the face of increased competition from large companies and imports.

Your involvement is essential

The Business School has already carried out significant work on the study, and would value an input from you and a small group of fellow Managing Directors to review and qualify from a practical viewpoint the attributes of both strategy and performance in your business.(approximately 1 hour). This forms part of the pilot phase of the project to be completed by December 1997. A full scale study will be completed in 1998.

At each stage of the study, a report of the findings to date will be sent to you.

In addition, participation in the study will provide you with access to the leading practitioners and academics to explore the latest developments in strategy and performance measures

If you would like to take part in the study, I would be grateful if you would complete and return the form below to:-

**Centre for Interdisciplinary Strategic Management Research
Middlesex University Business School.
The Burroughs, Hendon
London NW4 4BT**

Alternatively, you can contact Nicholas O'Regan, Centre for Interdisciplinary Management Research on 0181 362 6166 or Fax 0181 362 5822:

I look forward to your participation.

Yours sincerely,

**Prof. A Ghobadian,
Director of Research**

To: Nicholas O'Regan
Centre for Interdisciplinary Strategic Management Research
Middlesex University Business School.
The Burroughs, Hendon
London NW4 4BT

Study on the Impact of Strategy on Performance

I would/would [please delete as applicable] not like to take part in the focus group discussions on the impact of strategy on performance.

Preliminary arrangements have been made to present the study. The most suitable date for me is :-

Friday November 7th 1997 _____
Monday November 10th 1997 _____
Thursday November 14th 1997 _____

Name _____

Firm _____

Telephone Number _____

If above dates are not convenient for you and you wish to participate in the study, please contact Nicholas O'Regan on Tel; 0181 362 6166 or fax 0181 362 5822

Appendix 7.2 Framework for Exploratory Interviews/Discussions with SME Managing Directors

PURPOSE : a) To ascertain the what the managing directors of SMEs consider to be the main elements of a strategy and to identify the most effective ways of measuring performance.

b) To obtain further commitment towards the study.

Introduction

1. Briefly outline the origin of your business

Some firms have as their mission, to 'be the best in x sector in the country' - what would you say are the principle objectives and underlying values in your business?

How do you foresee the effects of changes in your industry sector, in respect of competition, new competitors, and so on affecting the way you do business.

Is your firm experiencing change? In what way?

2. Strategy (*The literature suggests the following dimensions : External orientation, internal analysis, functional integration, analytical techniques, resources for strategy, new thinking and strategy as a control mechanism*)

a) How do you identify the driving forces in your company's environment

Aspects to look for:- define where one wants to go and what objectives are to be achieved. The right questions must be asked to ensure that the right answers leading to the strategy are formulated. What are the root causes that lead to either a threat or opportunity e.g. economic, technological, demographic, or competitive.

To identify the drivers carry out brain storming session with the company's senior managers to examine factors that might be drivers, and derive hypotheses, which you can then examine diagrammically or map them -this is like developing a model or theory. Mapping requires assumptions to be out in the open and therefore more likely to be agreed as consensus is reached.

b) How do you formulate a strategy to address/redress the driving forces

How did your strategy come about? Was each element thought out?

Aspects to look for:- brainstorm the ideas and rank the driving forces in order of importance. Each force will need to be considered in turn and options generated on how it will be addressed/redressed. The options will emerge and are likely to include alternatives that have never been considered before - this is so as the issues must be made totally clear.

Create a strategy matrix - list the driving forces at the top in order of priority, and down the side list the main functional groups. This provides an overview for addressing each driving force - this gives hypotheses for what the strategy might be.

map the functional strategies - this enables managers to consider actions at a conceptual level rather than operational see p.153 *Christensen 1997*

c) How important were the following:-

- (i) managers involvement and commitment to the strategy and its implementation.?
- (ii) issues such as external or functional difficulties? .

- (iii) the external environment?
- (iv) the internal environment?
- (v) functional integration?
- (vi) staffing and other resources dedicated to the strategy?

3. Deployment of Strategy

- (i) Does your firm have tactics for implementation of the strategy?
- (ii) Are the tactics worked out before the strategy is formulated ?
- (iii) Are resources allocated strictly in line with the strategic objectives?.
- (iv) Are there any problems in implementing or deploying your firms strategy?

Aspects to look for:- Define a plan that shows specifically how resources such as staff time and money will be used to implement the strategy - this avoids the forces of culture, biases, conflicts and short termism from influencing the deployment. This plan will need to be checked periodically to ensure that it is on track.

4. Factors Influencing strategy formulation and deployment

What is the impact of organisations culture on the implementation/deployment of strategy?
Are any 'barriers' erected and what action is taken to get over them?

5. Leadership

What do you consider to be the impact of leadership on strategy deployment?
What is your leadership style and why?
How do you consider leadership relates to management?

6. Performance

- (i) How is performance measured?
- (ii) Financial measures v. non financial?
- (iii) What time scale is used?

6. Closing

- (i) do you think your strategy is successful? And why?
- (ii) what are the key elements to your success?
- (iii) Could other firms follow the same strategy?
- (iv) What about your personal role in the above?
- (v) What about the future?

Appendix 7.3 Covering letter and analysis form to SME Managing Directors regarding participation in the pilot survey

A.N. Other Esq.,
Managing Director,
Other Manufacturing Ltd.,
The Industrial Estate
London

16th January 1998

**Corporate Strategy and Performance Measurement
A Research Survey**

Dear Mr. Other,

Thank you for agreeing to review the Research Questionnaire for our forthcoming study into the impact of strategy on corporate performance. Your assistance will help us to ensure that we are asking the right questions when the questionnaire is distributed to a major sample of UK companies.

The Study is part of the continuing programme of research conducted by Middlesex University Business School on the competitiveness of Small and Medium sized businesses. The survey is divided into 8 broad themes to facilitate completion. The aim of section 1 is to collect some background data on your company. Sections 2 examines the operating environment. Section 3 is intended to find out the management style and Section 4, 5 and 6 ascertain your perceptions of your company's culture and its strategic orientation.

Section 7 is designed to find out from you any areas that posed particular problems in implementation, and to ascertain the degree of success in meeting the objectives set. This section is followed by Section 8 which seeks to find out your perceptions of performance measures and the success of the strategy in meeting its aims. We have taken on board your suggestions and strengthened the leadership section

We would be grateful if you would take the time to complete and return the questionnaire in the stamp addressed envelope provided. In recognition of your support and co-operation, we shall be pleased to forward you a summary of the findings.

Thank you in advance for your co-operation.

Yours sincerely,

Professor A. Ghobadian
Director of the Institute of Research

Middlesex University Business School
The Impact of Strategy on Corporate Performance

Testing The Research Questionnaire

Introduction

Thank you for agreeing to help us examine the impact of strategy on corporate performance by testing our research questionnaire. Your assistance will help us to ensure that we are asking the right questions when the questionnaire is distributed to a major sample of UK companies.

Instructions

Attached to this form you will find our strategy/corporate performance questionnaire. Could you please complete the questionnaire as fully as possible, and then let us know the answers to the following five questions;-

1. How long did it take you to complete the questionnaire?

2. Were any of the questions in any way ambiguous, or fail to make sense to you? Please indicate the section and the number of the question(s).

3. In your opinion, were any of the questions posed irrelevant? Please indicate the section and the number of each of the questions.

4. In your opinion, were there any obvious omissions from the questions posed? Please indicate the subjects you feel have been overlooked.

Appendix 7.4 Pilot Questionnaire Evaluation Analysis

Middlesex University Business School

The Impact of Strategy on Corporate Performance

Pilot Questionnaire Evaluation Analysis

Questionnaire Statistics

Total Pilot Questionnaires issued	20	
Number returned	16	80%
Non response	4	20%

In addition, a questionnaire was issued to an employers representative body, for general comments and was returned.

Section 1: Company Information

Part 1 *Date Company Established*

All of the respondents answered this part of the question. However the answers were given in three ways:-

- a) the year that the company was established e.g. 1967 -12 respondents
- b) the exact date e.g. 31st March 1972 - 2 respondents
- c) left the date blank - 2 respondents

In order to ensure that all respondents filled in the answer to this question, which may have importance in relation to all the principal components of the study, it was felt that the wording should be changed to '*Year company established*'.

Part 2 *Number of employees* - All of the respondents answered this part of the question.

Part 3 *Turnover* - All of the respondents answered this part of the question.

Part 4 *Export sales as a % of total sales* - 14 respondents answered this part of the question. 1 respondent indicated 'not applicable' while another left it blank. In the final questionnaire, this question will be unaltered as it is felt that all respondents read and understood it.

Part 5 *Market Share* - All of the respondents answered this part of the question.

Part 6 *Value of mature products as a % of total sales*

- a) Answered the question - 13 respondents
- b) indicated 'not applicable' - 2 respondents
- c) left the reply blank - 1 respondent

It is proposed that this question will remain

Part 7 Value of standard product sales as a % of total sales

- a) Answered the question - 11 respondents
- b) indicated 'not applicable' - 4 respondents
- c) left the reply blank - 1 respondent

It is proposed that this question will remain

Part 8 Value of Customised Product sales as % of total sales

- a) Answered the question - 15 respondents
- b) indicated 'not applicable' - 1 respondents

It is proposed that this question will remain

Part 9 Value of firms investment in RandD as a % of total sales?

- a) Answered the question - 15 respondents
- b) indicated 'not applicable' - 1 respondents

It is proposed that this question will remain

Section 2 : Operating Environment

All respondents answered this question. Two respondents made reference to the need to threats of larger companies - one in a written response and one over the telephone. As this is a valid addition, the following questions is added to Section 2 '*subject to threats of larger companies*'

Section 3 : Leadership/Management Style

All respondents answered all parts of this questions.

However, 3 respondents found the wording in parts f, g, k, l, q, r ambiguous, long winded, confusing and difficult to understand. This was confirmed in the response from the employers representative body. In addition, the changes were discussed with two respondents over the telephone. Accordingly, the wording of these sections was changed from :-

f. 'only takes action when problems threaten to become structural to'

'only takes action when problems become serious'

g. 'is alert to not attaining standards to'

'emphasises the maintenance of standards'

k. 'promulgates a clear vision on future options to'

'promotes a clear vision for the future'

l. 'does not trouble employees if they do not trouble management' to

'does not trouble employees if they do not cause difficulties for management'

Section 3 Leadership/Management Style (continued)

15 respondents answered this question, and one left the parts (l) and (n) blank. In qualitative discussions with the employers representative body, part (l) was referred to as difficult to understand and without meaning. Accordingly, the wording of part l was changed from 'is the image of ability in word and in deed' to '*fulfils promises with actions*' and part (n) was changed from 'is both human and results orientated' to '*is both employee welfare and performance orientated*'.

Section 4 Organisation Culture

All respondents answered this question. However in a conversation with one firm and the employers representative body, it was felt that the wording of part (o) was cumbersome. In an effort to ensure clarity, the wording has been changed from 'the direction that this firm is headed inspires employees to better achievement' to '*the firms future plans*'.

Section 5 - A Selected Strategy

All respondents answered all parts of this question. One respondent indicated a number of strategies that he could also have responded to. In order to avoid any doubt, the wording of the introduction to this questions will be changed from '..please indicate one ..' to '*please indicate the most important one*'.

Section 6 Strategic Orientation

Q. 15 Strategic Orientation - All respondents answered all parts of this question.

Q. 16 Organisational Capability -All respondents answered all parts of this question.

Q.17 Attention to product Delivery -All respondents answered all parts of this question.

Q.18 Attention to Market Place - All respondents answered all parts of this question. However, following a discussion with one respondent over the telephone, it was decided to add an extra part to this question to incorporate '*customer trends*'.

Q.19 All respondents answered all parts of this question. However, to ensure clarity the introduction to the question was amended to read '*cross departmental working*' rather than 'functional integration'.

Q.20 All respondents answered all parts of this question.

Q. 21 All respondents answered all parts of this question.

Q.22 All respondents answered all parts of this question.

Q.23 All respondents answered all parts of this question.

Q. 24 All respondents answered all parts of this question.

Q. 25 All respondents answered all parts of this question.

Q.26 All respondents answered all parts of this question.

Q.27 All respondents answered all parts of this question.

Q.28 All respondents answered all parts of this question.

Q.29 15 respondents answered all parts of the question, one left it blank while another indicated that it was 'not applicable'. In order to ensure clarity, the introduction to the question is amended to '*please circle one number for each part of the question, if applicable*'.

Further Information

Respondents were:-

15 male

1 Female

The Employers representative body respondent was female

Respondents ages were

30-40 years 1 respondent

40-50 years 4 respondent

50-60 years 11 respondents

Willingness to be interviewed further

Yes 5

No 9

No response 2

Appendix 7.5 Cover letter for final survey document

Mr. Joseph Bloggs,
Any Company plc,
The Industrial Estate
AnyTown
AT3 8GT

18th April 1998

Transforming Corporate Performance- A Research Survey

Dear Mr. Bloggs,

Small and medium sized manufacturing firms have adopted numerous management initiatives to address increased competition. Many of these initiatives have failed to help firms to retain their competitive edge or to attract new customers. Meanwhile, leading companies have made strategy their main priority as a means of enhancing their performance further, which has resulted in many Small and Medium Sized firms facing an increasing competitive battle.

With so much at stake for SMEs, Middlesex University Business School has initiated a major study to develop a framework to guide strategy preparation based on a review of how successful SMEs formulate and effectively deploy strategies. The study will identify the elements of strategy and how they are affected by the culture and leadership/management style of the company. It will then establish the dimensions that influence to the greatest extent the organisation's effectiveness based on a range of performance measures and develop a mechanism to focus on results and performance criteria.

As a company in the electronics/engineering sector the Business School is particularly interested in learning more about your company's activities in this area. To achieve this, we have designed a survey comprising the following elements:-

Section 1	background data on your company.
Section 2	perceptions of your company's' operating environment,
Sections 3 and 4	perceptions of your company's leadership/management style and organisation culture and its strategic and cultural orientation.
Sections 5 and 6	perceptions of your firm's strategic orientation together with the key dimensions of strategic action and their attributes.
Section 7	barriers to implementation and the success in meeting your objectives
Section 8	perceptions of performance of your company strategy.

We would be grateful if you would take the time to complete and return the questionnaire in the stamp addressed envelope provided. It should take no longer than 20 minutes to complete the survey. In recognition of your support and co-operation, we shall be pleased to forward you a summary of the findings to assist your company in its competitiveness.

Yours sincerely,

Professor A. Ghobadian
Director of Research



TRANSFORMING CORPORATE PERFORMANCE

CORPORATE STRATEGY AND PERFORMANCE MEASUREMENT

RESEARCH SURVEY

MIDDLESEX UNIVERSITY BUSINESS SCHOOL
Centre for Interdisciplinary Strategic Management Research

Tel: 0181- 362 6166
Fax: 0181- 362 5822
e-mail: N.O'Regan@mdx.ac.uk

All Replies will be treated in the strictest confidence

Thank you, in advance, for your co-operation and participation in this study. If you would like an executive summary of the results, please provide your name and address below. Otherwise please feel free to remain anonymous.

Name _____

Address _____

Please use the enclosed SAE to return your questionnaire to Nicholas O'Regan; Management Development Unit, Middlesex University Business School, The Burroughs, London NW4 4BT

For office use only

1-4

5-8

9

10

11

12

14

15

16

SECTION 1: COMPANY INFORMATION

1. Year company established _____

2. How many employees in your firm? 1 1-9 2 10-19 3 20-49
4 50-99 5 100-199 6 200-249

3. What is the total turnover of your company?
less than £500,000 1 between £2 million and £4 million 4
between £500,000 and £1 million 2 between £4 million and £6 million 5
between £1 million and £2 million 3 Over £6 million 6

4. Please indicate export sales as a percentage of total sales _____

5. Has your market share 1 Increased 2 Decreased 3 Remained Static

6. What is the value of mature products sold as a percentage of total sales? _____

7. What is the value of standard product sales as a percentage of total sales? _____

8. What is the value of customised product sales as a percentage of total sales? _____

9. What is your firm's investment in R&D as a percentage of total sales? _____

SECTION 2: OPERATING ENVIRONMENT

10. To what extent do you agree or disagree with each of the following statements as the describing the general environment in which your firm operates?

The environment in which my firm operated in the past three years was:
(Please circle one number for each part of this question)

	Strongly Agree					Strongly Disagree					
	5	4	3	2	1	5	4	3	2	1	
a) stable and posing little threat to my firms survival	5	4	3	2	1						<input type="checkbox"/> 17
b) dynamic	5	4	3	2	1						<input type="checkbox"/> 18
c) turbulent	5	4	3	2	1						<input type="checkbox"/> 19
d) subject to technological change in my firm's processes	5	4	3	2	1						<input type="checkbox"/> 20
e) subject to a threat of substitute products entering the market	5	4	3	2	1						<input type="checkbox"/> 21
f) subject to a threat of new firms entering the market from the United Kingdom	5	4	3	2	1						<input type="checkbox"/> 22
g) subject to a threat of new firms entering the market from overseas	5	4	3	2	1						<input type="checkbox"/> 23
h) undergoing technological change in the product	5	4	3	2	1						<input type="checkbox"/> 24
i) subject to a decreasing product life cycle	5	4	3	2	1						<input type="checkbox"/> 25
j) subject to a changing regulatory environment	5	4	3	2	1						<input type="checkbox"/> 26

SECTION 3: LEADERSHIP/MANAGEMENT STYLE

Questions 11 and 12 describe the way in which the management of your organisation may behave

11. In the left hand column (under IS/PRESENT), please fill in numbers that correspond with your answers to the question 'To what extent does the management of your organisation show this kind of behaviour?'

To a very small extent 1	To a small extent 2	Sometimes 3	To a great extent 4	To a very great extent 5
-----------------------------	------------------------	----------------	------------------------	-----------------------------

In the right hand column (under SHOULD/FUTURE) please fill in the answers to the question 'In your opinion, to what extent *should* the management of your organisation *show* this behaviour in the year 2000?'

IS/PRESENT

SHOULD/FUTURE

___	a. instil perfect trust	___	<input type="checkbox"/> <input type="checkbox"/>	27-28
___	b. only takes action when things go wrong	___	<input type="checkbox"/> <input type="checkbox"/>	29-30
___	c. encourages new ideas from employees	___	<input type="checkbox"/> <input type="checkbox"/>	31-32
___	d. introduces new projects and challenges	___	<input type="checkbox"/> <input type="checkbox"/>	33-34
___	e. pays attention to performance shortcomings that need correction	___	<input type="checkbox"/> <input type="checkbox"/>	35-36
___	f. only takes action when problems become serious	___	<input type="checkbox"/> <input type="checkbox"/>	37-38
___	g. emphasises the maintenance of standards	___	<input type="checkbox"/> <input type="checkbox"/>	39-40
___	h. has an ear for matters that are important to employees	___	<input type="checkbox"/> <input type="checkbox"/>	41-42
___	i. offers the prospect of rewards for good work	___	<input type="checkbox"/> <input type="checkbox"/>	43-44
___	j. gives advice to employees when they need it	___	<input type="checkbox"/> <input type="checkbox"/>	45-46
___	k. promotes a clear vision for the future	___	<input type="checkbox"/> <input type="checkbox"/>	47-48
___	l. does not trouble employees if they do not cause difficulty	___	<input type="checkbox"/> <input type="checkbox"/>	49-50
___	m. stimulates employees to support their opinions with good arguments	___	<input type="checkbox"/> <input type="checkbox"/>	51-52
___	n. adheres to the saying 'do not intervene unnecessarily'	___	<input type="checkbox"/> <input type="checkbox"/>	53-54
___	o. creates a feeling of working together on major assignments/missions	___	<input type="checkbox"/> <input type="checkbox"/>	55-56
___	p. shows employees how to look at problems from new angles	___	<input type="checkbox"/> <input type="checkbox"/>	57-58
___	q. tells employees criteria for Performance Related benefits	___	<input type="checkbox"/> <input type="checkbox"/>	59-60
___	r. does not attempt to improve matters as long as performance meets minimum demands	___	<input type="checkbox"/> <input type="checkbox"/>	61-62
___	s. agrees with the employees on the rewards that they can look forward to if they do what has to be done	___	<input type="checkbox"/> <input type="checkbox"/>	63-64
___	t. focuses attention on irregularities, exceptions, and deviations from what is expected of employees	___	<input type="checkbox"/> <input type="checkbox"/>	65-66
___	u. tries to involve as many employees as possible in progressive changes within the organisation	___	<input type="checkbox"/> <input type="checkbox"/>	67-68
___	v. makes employees aware of important common values & ideals	___	<input type="checkbox"/> <input type="checkbox"/>	69-70

SECTION 3: LEADERSHIP/MANAGEMENT STYLE (CONTINUED)

12. In the left hand column (under IS/PRESENT), please fill in numbers that correspond with your answers to the question 'To what extent does the management of your organisation show this kind of behaviour?'.
 In the right hand column (under SHOULD/FUTURE) please fill in the answers to the question 'In your opinion, to what extent *should* the management of your organisation *show* this behaviour in the year 2000?'.
 To a very small extent 1 To a small extent 2 Sometimes 3 To a great extent 4 To a very great extent 5

To a very small extent 1 To a small extent 2 Sometimes 3 To a great extent 4 To a very great extent 5

In the right hand column (under SHOULD/FUTURE) please fill in the answers to the question 'In your opinion, to what extent *should* the management of your organisation *show* this behaviour in the year 2000?'.
 IS/PRESENT SHOULD/FUTURE

IS/PRESENT		SHOULD/FUTURE	
_____	a. works actively for the benefit of both personnel and organisational goals	_____	<input type="checkbox"/> <input type="checkbox"/> 71-72
_____	b. gives employees the feeling that management can overcome any obstacle	_____	<input type="checkbox"/> <input type="checkbox"/> 73-74
_____	c. gives employees a sense of pride in working for this organisation	_____	<input type="checkbox"/> <input type="checkbox"/> 75-76
_____	d. shows an extraordinary ability in everything they undertake	_____	<input type="checkbox"/> <input type="checkbox"/> 77-78
_____	e. focuses attention on performing even better	_____	<input type="checkbox"/> <input type="checkbox"/> 79-80
_____	f. is of the opinion that employees should learn from their mistakes (if any)	_____	<input type="checkbox"/> <input type="checkbox"/> 81-82
_____	g. is strongly convinced of their own opinions and values	_____	<input type="checkbox"/> <input type="checkbox"/> 83-84
_____	h. is concerned with the organisation's personnel and with competing organisations	_____	<input type="checkbox"/> <input type="checkbox"/> 85-86
_____	i. Fulfils promises with action	_____	<input type="checkbox"/> <input type="checkbox"/> 87-88
_____	j. expects good performance from employees	_____	<input type="checkbox"/> <input type="checkbox"/> 89-90
_____	k. aims at reaching financial goals	_____	<input type="checkbox"/> <input type="checkbox"/> 91-92
_____	l. sets ambitious targets for the organisation	_____	<input type="checkbox"/> <input type="checkbox"/> 93-94
_____	m. speaks optimistically about the future	_____	<input type="checkbox"/> <input type="checkbox"/> 95-96
_____	n. is both performance and employee welfare orientated	_____	<input type="checkbox"/> <input type="checkbox"/> 97-98
_____	o. avoids making decisions	_____	<input type="checkbox"/> <input type="checkbox"/> 99-100
_____	p. keeps an eye on mistakes	_____	<input type="checkbox"/> <input type="checkbox"/> 101-102
_____	q. makes a powerful impression	_____	<input type="checkbox"/> <input type="checkbox"/> 103-104
_____	r. encourages co-operation	_____	<input type="checkbox"/> <input type="checkbox"/> 105-106
_____	s. pursues its own interests	_____	<input type="checkbox"/> <input type="checkbox"/> 107-108

SECTION 4: ORGANISATION CULTURE

13. In the left hand column (under IS/PRESENT), please fill in numbers that correspond with your answers to the question 'To what extent does the following occur within your firm?'

To a very small extent	To a small extent	Sometimes	To a great extent	To a very great extent
1	2	3	4	5

In the right hand column (under SHOULD/FUTURE) please fill in the answers to the question 'In your opinion, to what extent should.....occur within your firm in the year 2000?'

IS/PRESENT

SHOULD/FUTURE

- | | | | | |
|-------|--|-------|---|---------|
| _____ | a. exchange of information between departments | _____ | <input type="checkbox"/> <input type="checkbox"/> | 109-110 |
| _____ | b. room for non-managerial employees to make their own decisions | _____ | <input type="checkbox"/> <input type="checkbox"/> | 111-112 |
| _____ | c. active promotion of the organisation by its employees | _____ | <input type="checkbox"/> <input type="checkbox"/> | 113-114 |
| _____ | d. assignment of interesting tasks to employees | _____ | <input type="checkbox"/> <input type="checkbox"/> | 115-116 |
| _____ | e. useful cooperation between departments | _____ | <input type="checkbox"/> <input type="checkbox"/> | 117-118 |
| _____ | f. recognition of good performance by employees | _____ | <input type="checkbox"/> <input type="checkbox"/> | 119-120 |
| _____ | g. freedom for employees to depart from rules | _____ | <input type="checkbox"/> <input type="checkbox"/> | 121-122 |
| _____ | h. careful selection of new employees | _____ | <input type="checkbox"/> <input type="checkbox"/> | 123-124 |
| _____ | i. managers taking performance evaluation seriously | _____ | <input type="checkbox"/> <input type="checkbox"/> | 125-126 |
| _____ | j. timely resolution of conflicts between departments | _____ | <input type="checkbox"/> <input type="checkbox"/> | 127-128 |
| _____ | k. talking about mistakes in order to learn from them | _____ | <input type="checkbox"/> <input type="checkbox"/> | 129-130 |
| _____ | l. working to improve the local market position | _____ | <input type="checkbox"/> <input type="checkbox"/> | 131-132 |
| _____ | m. useful meetings between heads of departments | _____ | <input type="checkbox"/> <input type="checkbox"/> | 133-134 |
| _____ | n. employees exert influence on important decisions regarding work | _____ | <input type="checkbox"/> <input type="checkbox"/> | 135-136 |
| _____ | o. the firm's future plans | _____ | <input type="checkbox"/> <input type="checkbox"/> | 137-138 |
| _____ | p. the opportunity for employees to bring forward ideas before decisions are made | _____ | <input type="checkbox"/> <input type="checkbox"/> | 139-140 |
| _____ | q. initiatives taken by employees to improve the way in which the work is done | _____ | <input type="checkbox"/> <input type="checkbox"/> | 141-142 |
| _____ | r. efforts contributing to exceptional performance of the firm | _____ | <input type="checkbox"/> <input type="checkbox"/> | 143-144 |
| _____ | s. thorough training of employees in systematically gathering information in what customers want to see improved | _____ | <input type="checkbox"/> <input type="checkbox"/> | 145-146 |
| _____ | t. active canvassing of new customers | _____ | <input type="checkbox"/> <input type="checkbox"/> | 147-148 |
| _____ | u. this firm has an edge over local competitors | _____ | <input type="checkbox"/> <input type="checkbox"/> | 149-150 |
| _____ | v. stimulation of creativity in employees | _____ | <input type="checkbox"/> <input type="checkbox"/> | 151-152 |
| _____ | w. quick reaction to developments in the market | _____ | <input type="checkbox"/> <input type="checkbox"/> | 153-154 |
| _____ | x. thorough training of new employees | _____ | <input type="checkbox"/> <input type="checkbox"/> | 155-156 |
| _____ | y. investigation of the needs and wishes of customers | _____ | <input type="checkbox"/> <input type="checkbox"/> | 157-158 |
| _____ | z. quick implementation of sound proposals for change | _____ | <input type="checkbox"/> <input type="checkbox"/> | 159-160 |

SECTION 5 STRATEGY

14. A SELECTED STRATEGY FROM YOUR FIRM

A). From the following sample strategies please select the most important one that your firm has implemented within the past 3 years, that represents the typical planning process practised in your firm, and you are familiar with both its formulation and implementation.

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- a) introduced a new product or service 1
- b) expanded operations 2
- c) discontinued a product range 3
- d) established alliances/networks 4
- e) increased market share in existing markets by increased promotion 5
- f) introduced new products in old market 6
- g) introduced new products in new market 7
- h) offered on an industry wide basis unique products or services 8
- i) Diversification 9
- j) serving a particular larger group/firm, a segment of product line, or a geographic market more effectively or efficiently 10

Other (please specify) _____ 11

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YOUR REPLIES TO THE REMAINDER OF THE QUESTIONNAIRE SHOULD RELATE TO THE SELECTED STRATEGY ONLY.

B) Did your firm develop a written strategic plan for the strategy identified above?
Yes 1 No 2

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C) If yes, please tick any of the following items which were included in the strategic plan (tick all that apply):

- a) covered at least 3 years into the future 1
- b) the specification of objectives and goals 2
- c) other possible alternative strategies 3
- d) action plans for the major functional areas of the firm 4
- e) identified the future resources required 5
- f) procedures for anticipating or detecting errors in, or failures of the plan and for preventing or correcting them on a continuing basis 6
- g) some attempt to account for factors outside the immediate environment of the firm 7
- h) Other (please specify) _____ 8

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 165
 166
 167
 168

169

170
 171

SECTION 6 STRATEGIC ORIENTATION

15. Please read the following statements carefully and tick the one that you think matches your firm best

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- a) continually seeking opportunities and using flexibility to adapt and respond rapidly and creatively to the changing external environment 1
- b) competing on the basis of price, quality, delivery or service, and operating efficiency based on a strong emphasis on maintaining existing markets. 2
- c) focusing on efficient and increased production following a full analysis of directional strategy and how to compete 3
- d) reacting to the market place based on observing the experiences of others and a preference for the short term 4

16. ORGANISATIONAL CAPABILITY

Please indicate the importance of the following competitive capability factors for your firm
(Please circle one number for each part of this question)

	Degree of Importance					
	Much Importance			No Importance		
a) The capability to compete on price	5	4	3	2	1	<input type="checkbox"/> 173
b) The capability to make rapid design changes and/or introduce new products quickly	5	4	3	2	1	<input type="checkbox"/> 174
c) The capability to respond to swings in volume	5	4	3	2	1	<input type="checkbox"/> 175
d) The capability to offer consistent quality	5	4	3	2	1	<input type="checkbox"/> 176
e) The capability to provide high performance products	5	4	3	2	1	<input type="checkbox"/> 177
f) The capability to deliver products quickly	5	4	3	2	1	<input type="checkbox"/> 178
g) The capability to deliver products on time (as promised)	5	4	3	2	1	<input type="checkbox"/> 179
h) The capability to provide after sales service	5	4	3	2	1	<input type="checkbox"/> 180
i) The capability to advertise and promote the product	5	4	3	2	1	<input type="checkbox"/> 181
j) The capability to distribute the product broadly	5	4	3	2	1	<input type="checkbox"/> 182
k) The capability to deliver a broad product line	5	4	3	2	1	<input type="checkbox"/> 183

Questions 17 -23 seek to establish the emphasis placed on the dimensions of strategy selected above only

17. ATTENTION TO PRODUCT DELIVERY

To what extent did your firm's strategic decision making process for the selected strategy emphasise the analysis of the following internal factors? (Please circle one number for each part of this question)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) past performance of the firm	5	4	3	2	1	<input type="checkbox"/> 184
b) strengths and weaknesses in current products/services	5	4	3	2	1	<input type="checkbox"/> 185
c) strengths and weaknesses in marketing	5	4	3	2	1	<input type="checkbox"/> 186
d) strengths and weaknesses in general managerial ability	5	4	3	2	1	<input type="checkbox"/> 187
e) strengths and weaknesses in human resources	5	4	3	2	1	<input type="checkbox"/> 188
f) financial strengths and weaknesses	5	4	3	2	1	<input type="checkbox"/> 189
g) diagnostic assessment of past failures or performance shortfalls	5	4	3	2	1	<input type="checkbox"/> 190
h) Other (please specify) _____	5	4	3	2	1	<input type="checkbox"/> 191

18. ATTENTION TO MARKET PLACE/CUSTOMER REQUIREMENTS
To what extent did your firm's strategic decision making process for the selected strategy take into account the following external factors?
(Please circle one number for each part of the question)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) General economic and business conditions (opportunities)	5	4	3	2	1	<input type="checkbox"/> 192
b) regulatory and Government issues	5	4	3	2	1	<input type="checkbox"/> 193
c) analysis of current competitive position and trends (competition)	5	4	3	2	1	<input type="checkbox"/> 194
d) technological trends and capabilities	5	4	3	2	1	<input type="checkbox"/> 195
e) customer trends	5	4	3	2	1	<input type="checkbox"/> 196
e) Other (please specify) _____	5	4	3	2	1	<input type="checkbox"/> 197

19. DEPARTMENTAL CO-OPERATION
To what extent did your firm emphasise cross departmental working?
(Please circle one number for each part of the question)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) understanding of all functions by employees	5	4	3	2	1	<input type="checkbox"/> 198
b) cross functional support	5	4	3	2	1	<input type="checkbox"/> 199
c) functional co-ordination	5	4	3	2	1	<input type="checkbox"/> 200
d) efforts to achieve functional agreement	5	4	3	2	1	<input type="checkbox"/> 201

20. EMPLOYEE INVOLVEMENT
To what extent did your firm use the following resources in the strategic decision making process of the chosen strategy?
(Please circle one number for each part of the question)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) Time spent by the Managing Director	5	4	3	2	1	<input type="checkbox"/> 202
b) Involvement of line managers	5	4	3	2	1	<input type="checkbox"/> 203
c) Involvement of consultants	5	4	3	2	1	<input type="checkbox"/> 204
d) Relevant and adequate information from the available sources	5	4	3	2	1	<input type="checkbox"/> 205
e) Other physical and financial resources	5	4	3	2	1	<input type="checkbox"/> 206
f) Involvement of ad hoc working groups	5	4	3	2	1	<input type="checkbox"/> 207

21. USE OF STRUCTURED/ANALYTICAL APPROACH

To what extent did your managers place emphasis on the use of analytical techniques and methodologies in dealing with strategic decision making and to what extent did they emphasise the ability to use such techniques?

(Please circle one number for each part of the question)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) Use of analytical techniques	5	4	3	2	1	<input type="checkbox"/> 208
b) Ability to use techniques	5	4	3	2	1	<input type="checkbox"/> 209
c) Willingness to seek outside assistance	5	4	3	2	1	<input type="checkbox"/> 210

22. STAFF CREATIVITY

To what extent did your firm's strategic decision making process for the selected strategy emphasise the following concerns as its primary goals?

(Please circle one number for each part of the question)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) Ability to cope with surprises/crises/threats	5	4	3	2	1	<input type="checkbox"/> 211
b) Flexibility to adapt to unanticipated changes	5	4	3	2	1	<input type="checkbox"/> 212
c) Ability to identify new opportunities	5	4	3	2	1	<input type="checkbox"/> 213
d) Role in identifying key problem areas	5	4	3	2	1	<input type="checkbox"/> 214
e) Capacity to generate new ideas	5	4	3	2	1	<input type="checkbox"/> 215
f) Capacity to generate and evaluate a number of strategic alternatives	5	4	3	2	1	<input type="checkbox"/> 216
g) Anticipating and avoiding barriers to strategy implementation	5	4	3	2	1	<input type="checkbox"/> 217

23. STRATEGY - A CONTROL MECHANISM

To what extent did your firm's strategic decision making process for the selected strategy emphasise the following concerns as its primary goals?

(Please circle one number for each part of the strategy)

	Degree of Emphasis					
	Strong Emphasis			No Emphasis		
a) Value as a control mechanism	5	4	3	2	1	<input type="checkbox"/> 218
b) Ability to communicate management thinking down the line	5	4	3	2	1	<input type="checkbox"/> 219
c) Communicate staff thinking up the line	5	4	3	2	1	<input type="checkbox"/> 220
d) A control technique for monitoring performance	5	4	3	2	1	<input type="checkbox"/> 221
e) A mechanism for revising current strategy	5	4	3	2	1	<input type="checkbox"/> 222
f) A mechanism for managerial motivation	5	4	3	2	1	<input type="checkbox"/> 223
g) A mechanism for integrating functions	5	4	3	2	1	<input type="checkbox"/> 224

SECTION 7: IMPLEMENTATION

24. POTENTIAL STRATEGY IMPLEMENTATION PROBLEMS
 To what extent did any of the following implementation problems occur as your firm tried to put the strategy into effect?
 (Please circle one number for each part of the question)

	Extent of Problem					
	Major	Substantial	Moderate	Minor	None	
a) Implementation took longer than anticipated	5	4	3	2	1	<input type="checkbox"/> 225
b) Unanticipated problems arose	5	4	3	2	1	<input type="checkbox"/> 226
c) Co-ordination of implementation was not effective enough	5	4	3	2	1	<input type="checkbox"/> 227
d) Crises distracted attention from implementation	5	4	3	2	1	<input type="checkbox"/> 228
e) Employees' capabilities were not enough	5	4	3	2	1	<input type="checkbox"/> 229
f) External factors impacted on implementation	5	4	3	2	1	<input type="checkbox"/> 230
g) Overall goals of strategy were not well enough understood by staff	5	4	3	2	1	<input type="checkbox"/> 231
h) Communication was inadequate	5	4	3	2	1	<input type="checkbox"/> 232

25. STRATEGY IMPLEMENTATION SUCCESS
 To what extent did the actual deployment of strategy achieve any of the following:
 (Please circle one number for each part of the question)

	Degree of Fulfilment					
	Entirely Unfulfilled					
	5	4	3	2	1	
a) Initial goals and objectives of the strategy	5	4	3	2	1	<input type="checkbox"/> 233
b) Financial results expected	5	4	3	2	1	<input type="checkbox"/> 234
c) Deployed within the resources allocated	5	4	3	2	1	<input type="checkbox"/> 235

SECTION 8: PERFORMANCE MEASUREMENT

This section is designed to ascertain the specific steps that have been taken to define the dimensions of performance.

26. FINANCIAL
 In your opinion, to what extent has the implementation of the selected strategic decision impacted on the overall financial performance of your firm?

Very Negative Impact	No Impact at all			Very positive Impact	
1	2	3	4	5	
					<input type="checkbox"/> 236

27. CUSTOMER ORIENTATION
 To what extent did the implementation of the selected strategy impact on the following:
 (Please circle one number for each part of the question)?

	Degree of Fulfilment					
	Entirely Fulfilled			Entirely Unfulfilled		
a) Customer satisfaction	5	4	3	2	1	<input type="checkbox"/> 237
b) Customer retention	5	4	3	2	1	<input type="checkbox"/> 238
c) Market share	5	4	3	2	1	<input type="checkbox"/> 239

28. ORGANISATIONAL EFFECTIVENESS
 To what extent did your firm achieve the following objectives of strategy?
 (Please circle one number for each part of the question)

	Degree of Fulfilment					
	Entirely Fulfilled			Entirely Unfulfilled		
a) Predicting future trends	5	4	3	2	1	<input type="checkbox"/> 240
b) Evaluating alternatives based on more relevant information	5	4	3	2	1	<input type="checkbox"/> 241
c) Avoiding problem areas	5	4	3	2	1	<input type="checkbox"/> 242
d) Improving short term performance	5	4	3	2	1	<input type="checkbox"/> 243
e) Improving Long term performance	5	4	3	2	1	<input type="checkbox"/> 244

29. LEARNING AND GROWTH
 To what extent do you agree that the implementation of the selected strategy has impacted on the following:
 (Please circle one number for each part of the question)?

	Degree of Fulfilment					
	Entirely Fulfilled			Entirely Unfulfilled		
a) manufacturing learning	5	4	3	2	1	<input type="checkbox"/> 245
b) introduction of new products	5	4	3	2	1	<input type="checkbox"/> 246

FURTHER INFORMATION

1. Are you.....? Male 1 Female 2 247

2. What is your age? Under 24 1 25-29 2 30-39 3 40-49 4 50-59 5 Over 59 6 248

To enable us to gain a more in-depth understanding we are keen to conduct a series of interviews with respondents. Please indicate whether or not you are willing to participate in a more in-depth interview

Yes, I am willing to be interviewed further Yes 1 No 2 249

Thank you for your time and co-operation

