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# THE ALIGNMENT OF ORGANISATIONAL CULTURE WITH STRATEGIC INTENT

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**2011-04-06**
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# THE ALIGNMENT OF ORGANISATIONAL CULTURE WITH STRATEGIC INTENT

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**A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration**

**Johannesburg**

**March 2005**

# ABSTRACT

A critical component in the implementation of strategy in South African business is the correct alignment of organisational culture with strategic intent. South Africa's unique history may have created organisational cultures that do not support the strategies necessary for remaining competitive in the complex and rapidly changing global environment. This research was aimed at determining the alignment of organisational culture with strategic intent in South African organisations.

Senior executives from 34 organisations completed a structured questionnaire. Descriptive statistics were utilised to determine each organisation's strategic intent and organisational culture. Inferential statistics were performed for evaluating the alignment of the culture with strategic intent.

The analysis of the sampled data indicated no statistically significant relationship between the measured organisational culture and the stated strategic intent. The findings highlighted the challenges associated with the measurement of strategic intent and the difficulty of applying international literature to the South African business environment. Evidence emerged that indicated a prevalence of differentiation generic strategies supported by organic cultures within the sampled organisations. A set of recommendations to improve the knowledge surrounding the alignment of organisational culture with strategic intent has been compiled.

# DECLARATION

I, Alan Ernest Dickson, declare that this research report is my own, unaided work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

_____

Alan Ernest Dickson

March, 2005

# ACKNOWLEDGEMENTS

I wish to express my sincere thanks and appreciation to:

- Mike Bendixen, my supervisor, for his time, encouragement and direction;
- All of the companies that agreed to participate in this research;
- Family, friends and colleagues for their support during the period of my studies;
- African Cables for their financial support for the academic studies; and
- Jackie, for your unfailing support, love and absolute understanding.

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# 1 INTRODUCTION

## 1.1 Background

Organisations continually strive to deliver sustainable financial success. It is widely recognised that to achieve this sustainable success, companies must consistently adjust their competitive advantage to meet the rapidly changing requirements of the dynamic environment in which they operate. The development of strategic direction, values, and the successful implementation of these is a fundamental requirement of all management teams.

A large body of academic literature covers the topic of strategy development. There is, however, an increasing concern that in spite of the effort taken up by the development of strategy, a significant number of strategies fail to achieve the objectives they were initially designed for (Brooke Dobni & Luffman, 2003; Sterling, 2003). These failures have initiated an interest in strategy implementation.

A variety of factors determine the successful implementation of strategy, one of the most dominant of these being organisational culture. The existing organisational culture and the influence it has on strategy implementation are rapidly becoming key focus areas of both academic and practical interest. It is recognised that the alignment of organisational culture with strategic intent is imperative if successful strategic implementation is to be achieved (Struwig & Smith, 2002; Reigle, 2001).

South Africa's unique confrontational history has led to organisational cultures that may not be ideally suited to the implementation of strategies necessary for remaining competitive in rapidly changing global and local environments. This researcher aims to assess organisational culture in South African organisations and how well it is aligned to the stated strategic intention of the company.

It is expected that the findings of the research will provide management with a key indicator of where to apply management effort and resources to improve the implementation of future organisational strategies.

## 1.2 Problem Statement

The researcher proposes to assess the alignment of organisational culture with strategic intent in South African companies.

## 1.3 Delimitations and Limitations

- This research is limited to companies operating within the boundaries of South Africa.

- It limits the information required for assessing the company's strategic intent to that collected from executive management or their designated representatives. The study will make no attempt to determine whether other members of the organisation were involved in the development of the strategy or whether the strategy has been appropriately communicated to them.

- The study aims merely to determine whether strategy and culture are aligned. The study will make no comment with respect to the appropriateness of the strategy chosen by the company.

- The research will determine organisational culture by assessing senior management's perceptions of this.

- The sample will be a targeted group. The researcher will draw no inference between this assessment, or attempt to generalise its applicability, to South African companies as a whole.

## 1.4 Assumptions

There are no assumptions that, if they do not hold, could influence the outcome of the research.

# 2 LITERATURE SURVEY

The “fit between the internal organisation of an enterprise and its strategy is central to strategic management” (White, 1986:217). The specific operational requirements of each strategic intent are supported by internal administrative expertise. It follows that an incorrect organisational culture within an enterprise can cause a sub-optimum performance level (Vancil, 1979; White, 1986; Struwig & Smith, 2002). The alignment of organisational culture with various strategic intents is examined in this Section.

## 2.1 Strategic Intent

### 2.1.1 Miles & Snow’s (1978) Strategic Typology

Miles & Snow (1978) were amongst the early pioneers to develop a methodology to describe the strategic intentions of organisations. These researchers determined that most organisations were involved in a continuous process of evaluating their purpose and “constantly modify and refine the mechanism by which they achieve their purpose” (Miles & Snow, 1978:3).

The research and findings developed by Miles & Snow (1978) were based upon three pivotal concepts:

- *Organisations act to create their environments* – Research has indicated that the decisions taken by organisation’s management define and create the operational environment (Child, 1972; Weick, 1977).

- *Management’s strategic choices shape the organisation’s structure and process* – contrary to previous observations, the research conducted by Mintzberg (1976) indicated that strategy was a pattern of decisions that impacted on the potential future of the company.

Miles & Snow (1978) determined that an “organisation’s strategy can best be inferred from its behaviour, though one can conceptually associate strategy with intent and structure with action” (Miles & Snow, 1978:7).

- *Structure and process constrain strategy* – significant research indicated that structure tended to follow strategy and the two components of the organisation must be correctly co-ordinated if they are to create organisational effectiveness (Chandler, 1962; Perrow, 1967; Drucker, 1974).

Miles & Snow (1978) argue that the “process of organisational adaptation is governed by the strategic choices of top management” (Miles & Snow, 1978:30). Within single industries their research proved that patterns of organisational behaviour could be summarised according to four archetypes. The four typologies developed by Miles & Snow (1978) are “defenders”, “prospectors”, “analysers” and “reactors”.

The typologies are defined by Miles & Snow (1978:29) as follows:

1. “Defenders are organisations that have narrow product-market domains. Top managers in this type of organisation are highly expert in their organisation’s limited area of operation but do not tend to search outside of their domains for new opportunities. As a result of this narrow focus, these organisations seldom need to make major adjustments to their technology, structure, or methods of operation. Instead, they devote their primary attention to improving the efficiency of their existing operations.

2. Prospectors are organisations, which almost continually search for market opportunities, and they regularly experiment with potential responses to emerging environmental trends. Thus, these organisations often are the creators of change and uncertainty to which their competitors must respond. However, because of their

strong concern for product and market innovation, these organisations are usually not completely efficient.

3. Analysers are organisations that operate in two types of product-market domains, one relatively stable, the other changing. In their stable areas, these organisations operate routinely and efficiently through the use of formalised structures and processes. In their more turbulent areas, top managers watch their competitors closely for new ideas, and then rapidly adopt those which appear to be the most promising.

4. Reactors are organisations in which the top managers frequently perceive change and uncertainty in their organisational environments but are unable to respond effectively. Because this type of organisation lacks a consistent strategy-structure relationship, it seldom makes adjustments of any sort until forced to do so by environmental pressures".

### 2.1.2 Porter's (1980) Generic Strategies

Porter conducted a seminal work completed on competitive strategies. He contested that for a company to maintain an above-average performance it must possess a sustainable competitive advantage (Porter, 1985). Kumar, Subramanian & Strandholm (2002:38) indicated that the underlying premise behind Porter's (1980) approach is "that the rules of the industry structure play a compelling role in determining the competitive rules of the game, as well as the strategies available to the organisations".

Although organisations have a myriad of strengths and weaknesses, there are essentially only two competitive advantages that exist – low cost or differentiation. The importance of any organisational strength or weakness is determined by the impact it has on the relative cost or differentiation. A company's ability to best harness a cost or differentiation advantage is determined by its ability to cope with the five forces (threat of entry, supplier

strength, buyer strength, substitute products and jockeying for position) better than any of their rivals (Porter, 1980).

The two classes of competitive advantage drive companies to pursue one of three generic strategies to achieve their above-average performance. Porter's (1985) three generic strategies are cost leadership, differentiation, and focus. Cost leadership and differentiation strategies attempt to gain competitive advantage in a wide variety of industry segments, while focus strategies target a narrow segment with either a cost or differentiation advantage. Each generic strategy requires different strengths and an organisation must, invariably, "make a choice amongst them, or it will become stuck in the middle" (Porter, 1985:17).

#### 2.1.2.1 Cost Leadership Strategy

The cost leadership strategy derives its success from a company's ability to ensure their products reach the market at a lower cost than that achieved by any of the competition (Porter, 1985). The strategy requires the organisation to achieve cost leadership by focusing on those activities that achieve and maintain a low cost position (White, 1986). The strategy implies that a competitive market price is accepted and the organisation can only attain prices that are close to the industry average (Porter, 1985).

The low cost strategy requires an enterprise to focus upon the internal operation of the organisation and improve the efficiency of both human resources and installed capital (White, 1986).

Cost reduction strategies pose lower risk and uncertainty challenges to organisations (Bower, 1970). The organisational requirements must ensure the implementation of these strategies by focusing upon frequent operational controls that are conducted within functional divisions (Porter 1980; White, 1986). Strong corporate involvement is present within organisations implementing cost leadership generic strategies. The divisional expectations associated with low cost generic strategies are well defined and inter-divisional interactions are uncomplicated (White, 1986).

Low cost generic strategies are best suited to benign business environments that exhibit stable pricing (Hambrick, 1983).

A company achieves an above average performance if it “can achieve and sustain overall cost leadership” (Porter, 1985:13) while maintaining proximity in terms of differentiation with its competitors.

#### 2.1.2.2 Differentiation Strategy

A differentiation strategy requires companies to provide a value proposition that exceeds customers’ expectations, along the dimensions that are valued by consumers, more completely than the industry (Porter, 1985). The dimensions that the organisation chooses to differentiate along must be different from those chosen by the competition.

The organisational requirements for supporting these generic strategies focus primarily upon the external business environment (White, 1986). Operational focus is directed to meeting the changing requirements of the consumer. This focus requires the organisation to optimally manage the inherent complexity associated within undefined customer requirements (Duncan, 1972).

Organisations pursuing a differentiation generic strategy manage the implementation of differentiation strategies by ensuring business unit autonomy and limiting corporate involvement to strategic input. The complexity of meeting customer expectations requires a strong co-ordination between divisions (White, 1986).

An organisation is successful in a differentiation strategy when the premium price that is achieved for a product, or service, exceeds the cost of introducing the differentiation.

#### 2.1.2.3 Focus Strategy

A focus strategy targets a narrow segment of the market and selects its strategy to exclude the competition (Porter, 1985). The organisation chooses either a cost or differentiation strategy within the sector to best deliver a superior value offering.

This strategy requires the segment to be structurally attractive, and an above-average performance is realised when either sustainable cost leadership or differentiation is achieved in the segment.

### 2.1.3 Treacy and Wiersema's Market Leadership

It is useful to characterise strategic intent in a single framework. A model that characterises the striving toward market leadership has been developed by Treacy & Wiersema (1993). These authors propose that a company must excel in one of three dimensions, while remaining abreast of industry standards in the other two.

The three value dimensions are:

- operational excellence;
- customer intimacy; and
- product leadership.

Companies that are successful in focusing their business strategy in one of these dimensions are likely to engender exceptional customer loyalty (Treacy & Wiersema, 1993).

#### 2.1.3.1 Operational Excellence

Treacy & Wiersema (1993:85) define the objectives of operational excellence as "leading the industry in price and convenience". A strong parallel can be drawn between this value discipline and Porter's (1980) cost leadership dimension. Companies pursuing operational excellence dedicate themselves to creating internal efficiency and protecting existing domains

(Pelham, 1997). The internal efficiencies tend to be focused upon the solution of company-specific challenges such as structural leanness, reducing cost curves, and increasing efficiency (Treacy & Wiersema, 1993).

#### 2.1.3.2 Customer Intimacy

Treacy & Wiersema (1993:87) indicate that companies that pursue a strategy of shaping "products and services to fit an increasingly fine definition of the customer" have adopted a customer intimacy strategy. This value discipline exhibits strong similarities to Porter's (1980) generic focus strategy. These companies focus upon the lifetime benefits of a single customer and are not swayed by the potential profitability of short-term transactions. These strategies focus upon the segmenting of the market to develop value propositions that create customer loyalty over the long term. It would be expected that these companies would be highly market orientated in their pursuit of scanning the external environment to best satisfy their customers.

#### 2.1.3.3 Product Leadership

The final strategic value dimension available to organisations is to target a continuous stream of state-of-the-art products (Treacy & Wiersema, 1993). The companies strive for product leadership as the basis for their sustainable competitive advantage. This classification has similarities to Porter's (1980) differentiation generic strategy.

Companies adopting the strategy of product leadership avoid bureaucracy at any cost (Treacy & Wiersema, 1993). These companies require highly creative and flexible management ability, innovative commercial skills, and an incessant ability to search for new ideas.

The modern company can no longer broaden its offering but should focus on exceeding industry norms in one of the three value disciplines. Successfully achieving a value discipline requires the alignment of the entire operating model – including culture, business process, management

systems and IT infrastructure – which becomes enormously challenging for the competition to imitate.

### 2.1.4 Strategy Development

Extensive research into strategy development has been conducted over the last 20 years. The literature indicates that strategies developed to provide products and services that are superior to those of the competition are key to sustained competitive advantage (Zeithaml, Parasuraman & Berry, 1985; Day & Wensley, 1988; Bitner, 1992). Other research indicates that the development of strategies that pursue market orientation creates a better organisational performance (Kohli & Jawarski, 1990; Narver & Slater, 1990; Day 1998, Pelham, 2000; Kumar *et al.*, 2002). Finally, research has indicated that strategies that are developed to embrace a "best practice" approach could be followed (Venkatraman & Prescott, 1990; Brooke Dobni & Luffman, 2003).

The selection of an appropriate strategy is dependent upon a myriad of organisational- and industry-specific factors. It is evident from the large body of published research that no template can be applied to an industry or organisation that is guaranteed to deliver a perfect strategy. However, the three methodologies highlighted by the researcher, (Miles & Snow, 1978; Porter, 1980; and Treacy & Wiersema, 1993) show the range covered by the broad topic of strategic intent.

## 2.2 Organisational Culture

### 2.2.1 Definition of Organisational Culture

The culture of an organisation is defined by Schein (1990:111) as "a pattern of basic assumptions; invented, discovered and developed by a given group". Dennison (1996:264) describes culture as "the deep structure of organisations which is rooted in values, beliefs and assumptions held by organisational members". Sarros, Gray & Densten (2002:4) summarise

organisational culture as the “meanings inherent in the actions and procedures of organisational commerce and discourse”.

Trompenaars (1993) has determined that organisational culture has an intimate bearing on the manner in which organisations act. Trompenaars (1993) is supported by Schein (1992), who indicates that organisational culture comprises a set of assumptions and related values that are transferred to a group of individuals while this group is solving problems. These values are “considered to be appropriate to be emulated and used by new members to an organisation” (Thomas & Bendixen, 2000:510). Organisational culture and the role it plays in the operation of a company are inextricably linked. Morris (1992) supports this theory in his assertion that a key to a company’s ability to achieve sustainable success is an effective organisational culture.

### 2.2.2 Elements of Culture

On the basis of the numerous definitions of culture that exist, Reigle (2001) has developed five elements that are common to organisational cultures. These elements are set out in the paragraphs that follow.

- **Language** – the language used in a company communicates its culture through the use of myths, slogans, jargon, metaphors, ceremonies and celebrations and heroes and heroines (Westbrook, 1993; Deal, 1995)

- **Tangible artefacts and symbols** – these effects make underlying culture of an organisation tangible. Westbrook (1993) indicates that the artefacts and symbols provide substantial verification of the existence of culture.

- **Patterns of behaviour, rites and rituals, behavioural norms** – Schein (1992) defines these behavioural activities as the implicit standards and values that evolve in groups.

- **Espoused values** – these values are those that are consistently strived for by the company.

- **Beliefs and underlying assumptions** – the decisions, policies and procedures enacted by management reveal the underlying assumptions of an organisation (Reigle, 2001).

### 2.2.3 Organisational Culture Model

Burns & Stalker (1961) utilise the terms organic and mechanistic to define organisational structure. The characteristics for mechanistic and organic organisational structures are tabulated below:

| Organic Characteristics | Mechanistic Characteristics |
|---|---|
| • Little emphasis on the chain of command | • Close adherence to the chain of command |
| • Divisional type division of work | • Functional division of work |
| • Continually adjusted job definitions | • Specialised tasks |
| • Lateral communication | • Vertical communications |
| • Employee commitment to the organisation's tasks | • Top-down decision making |

**Table 2.1**: Characteristics of Mechanistic and Organic Cultures

Reigle (2001) further defines the elements for each culture:

| Culture Element | Organic Culture | Mechanistic Culture |
|---|---|---|
| Language | • Heroes, storytellers<br>• Positive myths and legends | • Acronyms and jargon<br>• Negative metaphors |
| Artefacts & symbols | • Symbols represent integration and support<br>• "Open door" policy | • Symbols reinforce segregation<br>• Small cubicles for non- |

| | | |
|---|---|---|
| | | managers |
| Patterns of behaviour | • Celebrate work accomplishments<br>• Look for better ways to the job better | • Celebrate retirements<br>• Long work hours expected |
| Espoused values | • Praise for good performance<br>• Flexible working hours | • Quality of work stressed<br>• Due dates stressed |
| Beliefs and underlying assumptions | • McGregor's Theory Y<br>• Employees want to work<br>• Employees need little direction | • McGregor's Theory X<br>• Employees must be coerced to work<br>• Employees need detailed direction |

**Table 2.2**: Elements of Mechanistic and Organic Cultures

## 2.3 Strategy Implementation

The development of strategy is the commencement of an intricate process that culminates in the achievement of a desired set of organisational results. The implementation of any strategy forms a key aspect of the holistic process. Brooke Dobni & Luffman (2003:577) have concluded from both their research and practical experience that "the current key challenge for management lies in the implementation of strategy".

David (1993) and Johnson & Scholes (1999) argue that organisational culture must form an intrinsic component of the strategic management process. Schrivastava (1985) contests that although organisational culture is conceptually elusive, it has an important impact on corporate strategy. Brooke Dobni & Luffman (2003:577) believe that the key to "successful implementation resides in the ability to guide and manage employee behaviours on a collective basis. This ability to co-align key behaviours with the competitive context ultimately determines business performance." Morgan (1993) is more forceful in his assertion that changes taken without considering culture are extremely perilous.

The alignment of organisational culture to the strategic intent of the organisation is an integral component in the successful implementation of the strategy.

## 2.4 Strategic Intent and Organisational Culture

Miles & Snow (1978) have attempted to link their strategic typology to organisational strategies. They have determined that “defenders” and “prospectors” exhibit diametrically opposite organisational strategies. Pure “defenders” adopt strategies that focus upon the rigid application of functional responsibility, while “prospectors” are typified by diversified organisational responsibility that encourages flexible and dynamic operating decisions.

Miles & Snow (1978) note that “reactors” and “analysers” have less definitive organisational strategies than “defenders” and “prospectors”. “Reactors” tend to pursue diversification but are often unable to overcome their administrative constraints. Miles & Snow (1978) determine that “reactors” seldom make an aggressive attempt to align organisational strategy with business strategy. Organisations that exhibit the characteristics of “analysers” tend to be stable and focus upon core functional responsibilities. They are, however, better able than “reactors” to take advantage of targeted diversification where required.

Treacy & Wiersema (1993) have also determined the organisational requirements necessary to support their value disciplines. Their findings exhibit similarities to those of Miles & Snow (1978). Treacy & Wiersema (1993) state that organisations embracing the operational excellence value discipline are likely to focus extensively on the functional division of work for ensuring maximum efficiency (Treacy & Wiersema, 1993). Specialised tasks and strict adherence to procedural requirements are likely to underpin the company’s continual efforts to optimise each process. Organisations that pursue customer intimacy strategies spend significant resources on training

and educating their employees (Treacy & Wiersema, 1993) to ensure that their business processes stress flexibility and responsiveness.

Finally, Reigle (2001) identified that mechanistic cultures were best suited to stable operational environments, while organic cultures were more effective in changing and innovative environments.

# 3 PROPOSITION DEVELOPMENT

The review of literature has established that engendering superior economic performance requires strategy development to maximise the organisation's competitive advantage. Equally important is the co-alignment of an organisation's culture with it's strategic intent. The literature has revealed instruments exist that measure both the strategic intent and culture of organisations. It is proposed that organisations that have well-aligned corporate strategic intents and cultures will provide sustained financial results that exceed industry norms. The stated intention of assessing the alignment between organisational culture and strategy during strategy implementation will be explored through the use of the following propositions:

$P_1$ : Organisations that pursue a low cost-generic strategy will exhibit predominantly mechanistic cultures.

$P_2$ : Organisations that pursue a differentiation- or focus-generic strategy will exhibit predominantly organic cultures.

$P_3$ : Organisations that follow a "defender" or "analyser" strategic intent will exhibit predominantly mechanistic cultures

$P_4$ : Organisations that signify a "prospector" strategic intent will exhibit predominantly organic cultures

# 4 METHODOLOGY

In this study determining the alignment of organisational culture with strategic intent required the application of descriptive and inferential statistics to data collected from 34 respondents. The process by which data was collected and the subsequent data analysis is covered in this section.

## 4.1 Conceptual Model

To determine a statistically significant relationship between organisational culture and strategic intent required a methodical application of descriptive and inferential statistics.

Figure 4.1 indicates the conceptual process that is described in this chapter. It links the research propositions to the descriptive and inferential statistics necessary to support or contradict them.

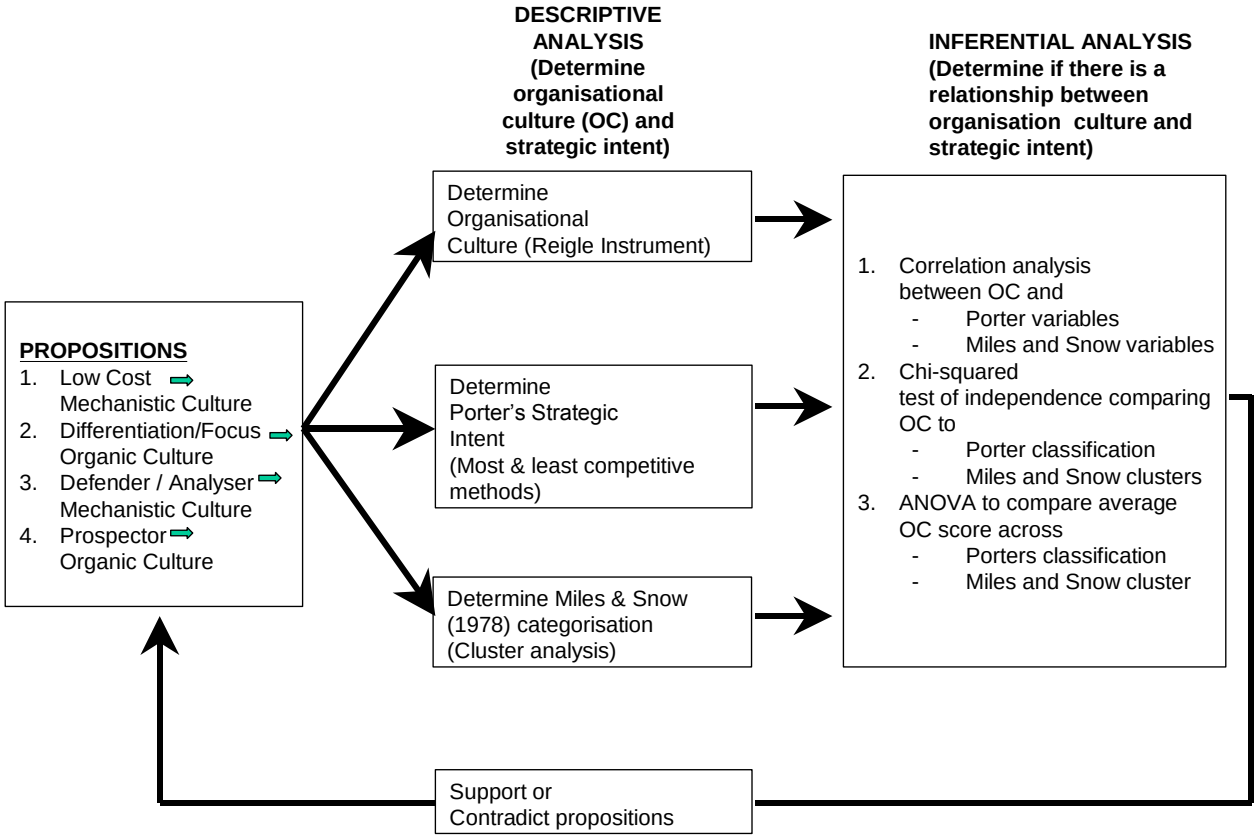



**Figure 4.1:** Conceptual Model of Research Methodology

## 4.2 Assessing Strategic Intent

The following sections describe the instruments that were used to measure strategic intent.

### 4.2.1 Miles & Snow's Strategic Typology

The broad descriptions of organisation types developed by Miles & Snow (1978) have been operationalised by Vorhies & Morgan (2003). Vorhies & Morgan (2003:105) developed the "self-typing descriptor approach" for use in their instrument. This approach permits managers to choose the strategic intent description that best characterises their organisation. The instrument

developed by Vorhies & Morgan (2003) exclusively determined the business strategy and omitted the more general structural and system components referred to in Miles & Snow's (1978) typology.

The method had been extensively utilised to determine strategic intent (McDaniel & Kolari, 1987; Zahra & Pierce, 1990; Matsuno & Mentzer, 2000) and had also delivered valid results as proved by Shortell & Zajac (1990) and James & Hatten (1995).

### 4.2.2 Porter's Generic Strategy

Dess & Davis (1984) developed a multimethod multivariate instrument that provided empirical support for the measurement of the strategic intent of organisations within the Porter (1980) framework. The research built on the findings of Bourgeois (1980) and Hambrick (1980) to the effect that questionnaire data can be utilised to identify the "intended strategies" (Dess & Davis, 1984:483) in industrial sectors.

The Dess & Davis (1984) instrument has more recently been used by Vorhies & Harker (2000) to measure business strategy. The original instrument utilised a 21-item scale to measure the extent to which organisations developed low cost, differentiation, or focus- based strategies.

Dess & Davis (1984) categorised competitive methods that best supported each of Porter's (1980) generic strategies. The competitive methods were developed on the basis of a three-phase research process. The three phases were:

i) a field study in which top management teams were polled to determine the relative importance of competitive methods suitable to pursue Porter's (1980) generic strategies;

ii) a panel of academic experts who "developed normative recommendations regarding the appropriate content of

each of Porter's (1980) three generic strategies" (Dess & Davis, 1984: 474); and

iii) the responses of CEOs that were used to categorise firms into strategic intent clusters.

The criteria developed from the research were classified into two categories, namely:

1. Competitive methods most important in the pursuit of the organisation's strategic intent; and

2. Competitive methods least important in the pursuit of the organisation's strategic intent.

The competitive methods for each of the three Porter's (1980) generic strategies are tabulated below:

| LOW COST | DIFFERENTIATION | FOCUS |
|---|---|---|
| **Most Important** | | |
| Operating efficiency | New product development | Customer service |
| Competitive pricing | Brand identification | Brand identification |
| Procurement of raw materials | Innovation in marketing techniques and methods | Serving special geographical areas |
| Innovation in the manufacturing process | Advertising | Capability to manufacture speciality products |
| **Least Important** | | |
| Customer service | Competitive Pricing | Maintain high inventory levels |
| Innovation in marketing techniques and methods | Broad range of products | Broad range of products |
| Capability to manufacture speciality products | Procurement of raw materials | Procurement of raw materials |
| Products in high price market sectors | Minimising use of outside financing | Minimising use of outside financing |

**Table 4.1:** Competitive Methods Supporting Porter's Strategy

### 4.2.3 Treacy and Wiersema's Strategic Intent Model

This research provided a powerful academic framework for strategic intent. The literature had not, however, developed an operationalised instrument that represented the framework in a valid and reliable manner. It has been decided that the Treacy & Wiersema (1993) instrument, while academically sound, would not be utilised to measure strategic intent in this research.

## 4.3 Assessing Organisational Culture

Sarros *et al.* (2002) describe the Organisational Culture Profile (OCP) instrument. The tool was developed by O'Reilly, Chatman & Caldwell, (1992) and assesses organisational culture by aggregating the value orientations of individuals in an organisation. Sarros *et al*. (2002) utilised a methodology in which only senior executives were used to determine the culture within an organisation. This methodology was consistent with the findings presented by Katz & Kahn (1978) indicating that only the top echelons of leaders were in a position to significantly influence culture and change. The OCP utilised a questionnaire to measure organisational culture along eight factors (innovation, attention to detail, outcome orientation, aggressiveness, supportiveness, emphasis on rewards, team orientation and decisiveness).

Reigle (2001) developed an Organisational Culture Assessment (OCA) instrument that defined the five culture elements (language, artefacts and symbols, patterns of behaviour, espoused values and beliefs and underlying assumptions). The OCA score was determined by averaging the answers from all sample participants. The OCA characterises the organisational culture into one of four categories namely: **mechanistic, mechanistic-organic, organic-mechanistic or organic.**

While both of the instruments described in the preceding two paragraphs provided a valid representation of an organisation's culture, the OCA

instrument was more readily available to the researcher. In the interests of practicality the OCA has been utilised for the measurement of organisational culture in this research. Appendix B indicates the OCA instrument that was used by the researcher to determine organisational culture.

## 4.4 The Measurement of Strategic Intent and Organisational Culture

The measurement of the strategic intent and organisational culture was achieved through the development of a structured questionnaire. The various sections of the questionnaire are covered in detail in Sections 4.4.1 to 4.4.3. The questionnaire was sent to participants in conjunction with:

i) a covering letter from the researcher describing
   - the academic requirements of the MBA degree;
   - the research topic covered;
   - the reason for the research;
   - an explanation of the various components of the questionnaire; and

ii) a confidential demographic analysis used purely to characterise the sample.

The completed questionnaire was proofread by several University of the Witwatersrand MBA students to ensure it was logical and simple to complete. The introductory letter and the complete questionnaire are included in Appendix A and B respectively.

### 4.4.1 Miles & Snow's (1978) Typology

The operationalised Miles & Snow (1978) typologies, described by Vorhies & Morgan (2003), was the instrument utilised by this research to determine a measure of strategic intent. The instrument required the respondents to answer three questions on a seven point Likert scale.

The possible responses varied from:

- 1 – “Strongly Agree”; to
- 7 – “Strongly Disagree”

The instrument measured the degree to which the respondents identified their organisation’s strategic intent with one of the Miles & Snow (1978) typologies, namely:

- “Analysers”
- “Prospectors”
- “Defenders”

The questions form Section 7 of the structured questionnaire, which is displayed in Appendix B.

### 4.4.2 Porter’s (1980) Generic Strategic Intent

Dess & Davis’s (1984), 21-item instrument was utilised to determine a second construct of strategic intent. Each of the 21 competitive methods was related, either positively or negatively, to one of Porter’s (1980) three generic strategies, namely

- Low cost-generic strategy;
- Differentiation generic-strategy; and
- Focus generic-strategy

The respondents’ assessment of each competitive method was demarcated along a seven point Likert scale that had the following extremes:

- 1 – “Strongly Agree”; and
- 7 – “Strongly Disagree”

The relative importance of each competitive method determined the respondents’ perception of their organisation’s strategic intent along Porter’s (1980) three generic strategies.

The evaluation of Porter's (1980) generic strategic intent was captured in the structured questionnaire. This strategic intent component forms Section 6 of the structured questionnaire and is displayed in Appendix B.

### 4.4.3 Organisational Culture Measurement

The research instrument used to assess organisational culture was the OCA tool developed by Reigle (2001). The OCA is a 45-question survey comprising five sections. Each of the five sections is designed to assess an element of organisational culture (language, artefacts and symbols, patterns of behaviour, espoused values, or beliefs and underlying assumptions).

Each question of the questionnaire required the respondent to select one of four options on a Likert scale. The four options are:

- strongly agree;
- somewhat agree;
- somewhat disagree; and
- strongly disagree.

Each of the four options was further split into two potential responses, in this way allowing respondents one of eight possible answers for each question. Reigle (2001) developed a key that ranks each response according to its contribution to the five elements of culture. This key is included in Appendix C.

The OCA score for any organisation is calculated by averaging the responses for each question. The possible range of OCA scores are between 1,0 and 8,0. A score of 1,0 indicates a dominant mechanistic culture while the other extreme represents a dominant organic culture.

The 45-question OCA instrument comprises Sections 1- 5 of the structured questionnaire presented in Appendix B.

## 4.5 Collection of Data

### 4.5.1 Population

The population for this research was all companies that are actually pursuing strategic objectives and are large enough to exhibit unique organisational cultures. The population was limited to organisations with an annual turnover of more than R10m per annum and employee numbers of more than 25. All companies must operate within the boundaries of South Africa.

### 4.5.2 Sample

The sample for this research was drawn from the following industries:

- Manufacturing;
- Distribution;
- Parastatal; and
- Service.

The objective of the sample selection was to measure the alignment of organisational culture with strategic intent and limit the inherent bias of a targeted sample. The study targeted 100 companies. A sample size of 34 responses, from the structured questionnaire, consisted of those positive responses received from a cross section of South African business sectors.

The sample was selected on the basis of the following criteria:

- Willingness of organisations to participate in the survey;
- The executive management being readily accessible;
- The company's past or current involvement in a strategic implementation;
- Acceptance by the CEO that the results would be published, albeit under fictitious names, in the final research report.

In summary, a non-probability convenience sample (Leedy & Ormrod, 2001) was chosen. This implies that not all organisations that met the sample criteria had an equal chance of being selected for the sample.

The researcher acknowledges that a sample of this nature has the potential of introducing an inherent bias into the findings. This acknowledgement is reflected in the sample's inclusion of organisations from a variety of economic sectors and turnover categories, and with a range of employee numbers.

#### 4.5.3 Data Collection

##### 4.5.3.1 Strategic Intent Data Collection

The data set required for determining a company's strategic intent was gathered from the completed strategic intent questionnaire described in Section 4.4.1 and 4.4.2. The company's Chief Executive Officer or his or her designated representative completed the questionnaire. The CEOs were invited to participate in the course of a telephonic call made by the researcher. The contact contextualised the research and requested the involvement of the company. The personal contact was supplemented by a written request mirroring the verbal conversation and signed by the researcher. Those companies that consented to complete the questionnaire formed the sample for the research.

##### 4.5.3.2 Organisational Culture Data Collection

The assessment of the organisational culture was collected via the OCA described in Section 4.4.3. It was inappropriate to poll the entire organisation to determine culture. Sarros *et al.* (2002) indicated that an individual's perspective is an acceptable measurement of culture. To simplify the response and eliminate unnecessary explanations, the population for organisational culture was limited to the same individuals whose strategic intent perceptions were measured.

### 4.6 Analysis of Data

#### 4.6.1 Descriptive Statistical Analysis

Descriptive statistics were utilised to determine the organisation's stated strategic intent and culture. The details of the method for Miles & Snow's (1978) typology; Porter's (1980) generic strategy and Reigle's (2001) OCA are covered below.

#### 4.6.1.1 Porter's Strategic Intent Measurement

The organisation's strategic intent, as determined by the constructs of Porter's (1980) generic strategies, was analysed from Section 6 of the structured questionnaire.

Each respondent's perception of the strategic intent of his or her organisation was determined by:

i) Calculating the score of the most important competitive methods, Section 4.2.2 for each generic strategy; and

ii) Calculating the score of the least important competitive methods, Section 4.2.2 for each generic strategy.

The lowest score for the most important competitive methods indicated the dominant generic strategic intent of the organisation. When a tie emerged between two generic strategies, they were separated by the calculation of the highest score for the least important competitive methods.

Each organisation was characterised by one of Porter's (1980) three generic strategic intents:

- Low cost;
- Differentiation; or
- Focus.

#### 4.6.1.2 Miles & Snow's Strategic Intent

The small number of items required to determine the Miles & Snow (1978) typology complicated the strategic classification of the organisations. There

was no logical manner of separating responses that exhibited equal weighting for two or more of the questions.

A k-means cluster analysis was completed on the sample to separate respondents companies into the three Miles & Snow (1978) constructs of:

- "Analysers";
- "Defenders"; or
- "Prospectors".

The mean of each cluster was calculated and the lowest value determined the characterisation of that cluster.

#### 4.6.1.3 Organisational Culture

The OCA score was determined by averaging the answers from all survey participants for each organisation. The possible scores varied between 1,0 and 8,0 with those organisations that returned scores at the lower end of the scale representing mechanistic cultures and the higher scores representing organic cultures. The scores and the equivalent cultures are tabulated below:

| CULTURE TYPE | OCA SCORE |
|---|---|
| Mechanistic | OCA ≤ 4,75 |
| Mechanistic – Organic | 4,75 < OCA ≤ 5,25 |
| Organic – Mechanistic | 5,25 < OCA ≤ 5,75 |
| Organic | OCA > 5,75 |

**Table 4.2:** OCA Score and Equivalent Culture Type (Reigle, 2001)

### 4.6.2 Inferential Statistical Analysis

Figure 4.1 indicates the integrated approach necessary in the statistical analysis for supporting or contradicting the research propositions. This

Section covers the inferential analysis that was completed in order to arrive at conclusions regarding the four research propositions described in Section 3.

4.6.2.1 Correlation Analysis

The first analysis to determine the existence of a statistically significant relationship between OCA and strategic intent was completed through the conducting of a Pearson's correlation. This analysis evaluated the strength of association between the OCA, the dependant variable, and strategic intent, the independent variable. The correlation was completed for the 21 competitive methods of the Porter's (1980) construct as well as the three items of the Miles & Snow (1978) typology. The range of the calculated correlation co-efficient varies from –1, indicating a perfect negative correlation, to +1, a perfect positive correlation.

The co-efficient of correlation was studied to determine if any statistically significant linear correlation existed between the variables. Owing to the relatively small sample size a 10% significance level was chosen.

The Pearson's correlation technique was appropriate since the data in this sample is interval data. Although other techniques could also be used to complete a correlation analysis they tend to deliver more conservative results and the correlation co-efficients are unlikely to vary significantly from those of the Pearson analysis.

**4.6.2.2 Chi-squared Test of Independence**

The second analysis to determine the relationship between OCA and strategic intent was achieved through he completion of a Chi-squared Test of Independence. The level of the input data was nominal and hence non-parametric methods of statistical analysis were required.

The statistical technique utilised hypothesis testing to determine any relationship that was evident between the OCA and the strategic constructs.

The input data for this analysis was collected from the descriptive statistical methods described in Section 4.6.1.

The analysis was computed at a 0,1 significance level. It is noted that this test should be applied when the expected frequency level of each category exceeds five.

#### 4.6.2.3 ANOVA Testing

The final analysis determined whether the average OCA score statistically varied across the three components of Porter's (1980) and the Miles & Snow (1978) strategic intent constructs. This comparison of the mean for several populations is achieved through the completion of an ANOVA One-way test.

## 4.7 Validity and Reliability

High levels of validity and reliability are important in academic research. Reliability deals with the research procedure's accuracy and precision. Reliability can be defined as "the consistency with which a measuring instrument yields a certain result when the entity being measured hasn't changed" (Leedy & Ormrod, 2001:31). Validity indicates that a survey measures what it is intended to measure (Reigle, 2001). Two types of validity occur within the research, external and internal.

### 4.7.1 External Validity

It is acknowledged that the targeted sample may lead to biased results and that this will affect the external validity of this research. It will not be possible to generalise this research across organisations within the South African business environment.

### 4.7.2 Internal Validity

The face reliability of the instruments utilised is good. Both the Dess & Davis (1984) and the Reigle (2001) OCA instrument have been tested for internal

validity. The strategic intent instrument confirmed the internal validity (Vorhies & Harker, 2000). The Reigle (2000) OCA instrument was determined to exhibit a “high validity” (Reigle, 2000:6).

### 4.7.3 Reliability

The strategic intent instrument demonstrated “adequate reliability with values in excess of 0.70” (Vorhies & Harker, 2000:154). The organisational culture instrument has been proven to be “internally consistent” and each “section or element is internally consistent” (Reigle, 2001:5).

# 5 PRESENTATION OF RESULTS

This section of the research report presents the results of the data-collection phase of the research and the subsequent statistical analysis, described in Section 4. Detailed discussion regarding the results is completed in Section 6. The composition of the sample is first described here, whereafter the results of the statistical analysis are presented.

## 5.1 The Research Sample

Thirty-four CEOs, or their designated representatives, responded to the research request and completed the entire structured questionnaire. The demographic results from the various organisations are tabulated below:

| Size of Organisation | Number of Responses | Percentage |
|---|---|---|
| > 1000 | 11 | 32% |
| 501 – 1000 | 4 | 12% |
| 251 – 500 | 6 | 18% |
| 100 – 250 | 9 | 26% |
| < 100 | 4 | 12% |
| | **34** | **100%** |

**Table 5.1:** Size of Organisations Sampled

| Turnover of Organisation | Number of Responses | Percentage |
|---|---|---|
| < R50m | 4 | 12% |
| R50m – R100m | 2 | 6% |
| R100m – R500m | 12 | 35% |
| R500m – R1bn | 5 | 15% |
| >R1bn | 11 | 32% |
| | **34** | **100%** |

**Table 5.2:** Turnover of Organisations Sampled

| Sector of Economy | Number of Responses | Percentage |
|---|---|---|
| Manufacturing | 19 | 56% |
| Distribution | 2 | 6% |
| Service | 2 | 6% |
| Parastatal | 11 | 32% |
| | **34** | **100%** |

**Table 5.3:** Economic Sectors Represented by the Sample

The sample, although targeted, covered a broad base of South African industries. The sample represented organisations across economic sectors, and with a variety of turnovers and employee numbers.

## 5.2 Strategic Intent and Organisational Culture Characterisation

The inferential statistical analysis that evaluated the research propositions, required the following results:

i) The strategic intent of the organisation as determined by Porter's generic classification (Dess & Davis, 1984);

ii) The strategic intent of the organisation as determined by the operationalised Miles & Snow (1978) typology (Vorhies & Morgan, 2003); and

iii) The organisational culture characterisation as determined by Reigle (2001).

### 5.2.1 Porter's Strategic Intent Characterisation

Section 6 of the structured questionnaire describes the 21 competitive methods, developed by Dess & Davis (1984) and utilised by the researcher, to characterise the respondent's organisations into one of Porter's three generic strategic intents. Appendix D tabulates the source date captured from the 34 respondent organisations. The methodology described in

Section 4.6.1 resulted in each respondent being classified into one of Porter's (1980) generic strategies.

| Respondant | Primary Criteria | | | Secondary Criteria | | | Porter's Generic |
|---|---|---|---|---|---|---|---|
| Number | Differentiation | Low Cost | Focus | Differentiation | Low Cost | Focus | Strategy Classification |
| 1 | 1.75 | **1.00** | 2.40 | 3.00 | 2.40 | 2.00 | **Low Cost** |
| 2 | 3.75 | 3.50 | 3.50 | 3.75 | **3.80** | 2.50 | **Low Cost** |
| 3 | **3.00** | 4.25 | 3.65 | 4.50 | 3.60 | 3.00 | **Differentiation** |
| 4 | **1.50** | 2.50 | 3.70 | 5.00 | 3.60 | 3.50 | **Differentiation** |
| 5 | 4.25 | 4.25 | 3.45 | 3.25 | **3.80** | 2.50 | **Low Cost** |
| 6 | **2.00** | 5.50 | 4.50 | 5.75 | 4.40 | 5.00 | **Differentiation** |
| 7 | 2.00 | 3.00 | 2.00 | **4.25** | 1.80 | 3.50 | **Differentiation** |
| 8 | 2.00 | 4.00 | 2.00 | **5.75** | 1.80 | 4.75 | **Differentiation** |
| 9 | **1.50** | 5.00 | 3.20 | 4.50 | 4.00 | 4.25 | **Differentiation** |
| 10 | **2.00** | 2.25 | 2.45 | 2.50 | 2.20 | 1.25 | **Differentiation** |
| 11 | 4.25 | **2.50** | 3.10 | 3.00 | 3.60 | 1.75 | **Low Cost** |
| 12 | 4.00 | 3.00 | 3.00 | 3.25 | **3.60** | 3.50 | **Low Cost** |
| 13 | **1.50** | 2.00 | 1.60 | 1.25 | 2.20 | 1.75 | **Differentiation** |
| 14 | 1.75 | 2.50 | **1.30** | 2.50 | 1.00 | 1.00 | **Focus** |
| 15 | 3.50 | 1.75 | 1.75 | 1.50 | **2.40** | 1.50 | **Low Cost** |
| 16 | **2.00** | 5.00 | 3.20 | 5.50 | 3.00 | 4.50 | **Differentiation** |
| 17 | 2.50 | 2.33 | **2.07** | 1.67 | 2.80 | 3.33 | **Focus** |
| 18 | 3.25 | 3.25 | **2.85** | 2.33 | 3.80 | 2.33 | **Focus** |
| 19 | **1.50** | 2.00 | 2.60 | 3.25 | 3.60 | 2.25 | **Differentiation** |
| 20 | 4.75 | 5.00 | **4.20** | 4.25 | 4.20 | 4.00 | **Focus** |
| 21 | 3.75 | 5.00 | **3.60** | 5.25 | 4.60 | 3.75 | **Focus** |
| 22 | 4.25 | **3.25** | 3.65 | 3.25 | 3.60 | 2.75 | **Low Cost** |
| 23 | 4.25 | **2.25** | 3.45 | 3.00 | 4.00 | 3.00 | **Low Cost** |
| 24 | 3.75 | 2.75 | **1.95** | 2.75 | 3.20 | 1.50 | **Focus** |
| 25 | **2.00** | 3.00 | 3.40 | 3.25 | 3.80 | 2.00 | **Differentiation** |
| 26 | 5.50 | 4.50 | **3.90** | 5.33 | 4.40 | 4.67 | **Focus** |
| 27 | **2.25** | 2.75 | 3.35 | 4.50 | 4.20 | 4.50 | **Differentiation** |
| 28 | **2.00** | 4.00 | 4.00 | 4.50 | 3.60 | 3.00 | **Differentiation** |
| 29 | 3.50 | 3.75 | **3.35** | 4.75 | 4.20 | 4.50 | **Focus** |
| 30 | **3.50** | 5.75 | 3.95 | 6.75 | 4.40 | 5.25 | **Differentiation** |
| 31 | 5.00 | 4.00 | **3.40** | 4.00 | 2.60 | 2.75 | **Focus** |
| 32 | 5.00 | **3.25** | 3.45 | 4.25 | 4.00 | 3.25 | **Low Cost** |
| 33 | **3.50** | 3.75 | 4.55 | 4.00 | 5.00 | 3.00 | **Differentiation** |
| 34 | **2.25** | 5.50 | 4.10 | 6.25 | 3.80 | 5.25 | **Differentiation** |

**Table 5.4:** Porter's Generic Strategic Intent Classification

The results can be summarised as follows:

| Porter's Generic Strategic Intent | Number of Responses | Percentage |
|---|---|---|
| Low Cost | 9 | 26,5% |
| Differentiation | 16 | 47% |
| Focus | 9 | 26,5% |
| | **34** | **100%** |

**Table 5.5:** Summarised Results According to Porter's Classification

### 5.2.2 Miles & Snow's (1978) Strategic Intent Typology

Section 7 of the structured questionnaire was utilised for determining the Miles & Snow (1978) Strategic Intent Typology. Appendix E tabulates the source data from the 34 respondent organisations.

The output of the three-cluster solution applied to the data is tabulated below:

| **Cluster Means Variables** | **Cluster 1** | **Cluster 2** | **Cluster 3** |
|---|---|---|---|
| "Prospectors" | 1,636 | 6,091 | 3,750 |
| "Analysers" | 5,091 | 4,273 | 1,750 |
| "Defenders" | 6,182 | 2,182 | 3,250 |
| **Count** | **11** | **11** | **12** |

**Table 5.6:** K-Means Cluster Analysis of Miles & Snow's (1978) Typology

The lowest score in each cluster indicated the dominant typology. The results indicate that:

- **Cluster 1** implies a dominant "**Prospector"** strategic intent;
- **Cluster 2** implies a dominant "**Defender"** strategic intent; and
- **Cluster 3** implies a dominant "**Analyser"** strategic intent.

A summary of the respondent organisations and their respective Miles & Snow type is tabulated below:

| Respondant Number | Miles & Snow Cluster Number | Miles & Snow Strategic Classification |
|---|---|---|
| 1 | 1 | Prospector |
| 2 | 3 | Analyser |
| 3 | 1 | Prospector |
| 4 | 3 | Analyser |
| 5 | 2 | Defender |
| 6 | 1 | Prospector |
| 7 | 1 | Prospector |
| 8 | 3 | Analyser |
| 9 | 1 | Prospector |
| 10 | 1 | Prospector |
| 11 | 2 | Defender |
| 12 | 2 | Defender |
| 13 | 1 | Prospector |
| 14 | 1 | Prospector |
| 15 | 3 | Analyser |
| 16 | 1 | Prospector |
| 17 | 3 | Analyser |
| 18 | 2 | Defender |
| 19 | 3 | Analyser |
| 20 | 2 | Defender |
| 21 | 2 | Defender |
| 22 | 2 | Defender |
| 23 | 2 | Defender |
| 24 | 3 | Analyser |
| 25 | 2 | Defender |
| 26 | 2 | Defender |
| 27 | 3 | Analyser |
| 28 | 3 | Analyser |
| 29 | 3 | Analyser |
| 30 | 2 | Defender |
| 31 | 3 | Analyser |
| 32 | 3 | Analyser |
| 33 | 1 | Prospector |
| 34 | 1 | Prospector |

**Table 5.7:** Miles & Snow's (1978) Strategic Intent Classification

The results are further summarised below to indicate the strategic intent spread across the sample.

| Typology | Number of Respondents | Percentage |
|---|---|---|
| "Defender" | 12 | 36% |
| "Analyser" | 11 | 32% |
| "Prospector" | 11 | 32% |
| | **34** | **100%** |

**Table 5.8:** Summarised Miles & Snow's (1978) Cluster Classification

### 5.2.3 Organisational Culture Classification

Sections 1 to 5 of the structured questionnaire were utilised to develop a single output that determines the organisational culture of each organisation. The output from the use of the instrument as described by Reigle (2001) is tabulated and summarised below:

| Respondent Number | OCA Score | Reigle Organisational Culture Chatacterisation |
|---|---|---|
| 1 | 7.03 | Organic |
| 2 | 5.53 | Organic - Mechanistic |
| 3 | 5.78 | Organic - Mechanistic |
| 4 | 4.90 | Mechanistic - Organic |
| 5 | 5.38 | Organic - Mechanistic |
| 6 | 5.48 | Organic - Mechanistic |
| 7 | 5.30 | Organic - Mechanistic |
| 8 | 4.75 | Mechanistic - Organic |
| 9 | 3.95 | Mechanistic |
| 10 | 5.43 | Organic - Mechanistic |
| 11 | 6.43 | Organic |
| 12 | 5.45 | Organic - Mechanistic |
| 13 | 5.28 | Organic - Mechanistic |
| 14 | 6.33 | Organic |
| 15 | 5.18 | Mechanistic - Organic |
| 16 | 6.50 | Organic |
| 17 | 5.13 | Mechanistic - Organic |
| 18 | 5.38 | Organic - Mechanistic |
| 19 | 6.75 | Organic |
| 20 | 4.63 | Mechanistic |
| 21 | 6.40 | Organic |
| 22 | 5.38 | Organic - Mechanistic |
| 23 | 5.90 | Organic |
| 24 | 5.53 | Organic - Mechanistic |
| 25 | 5.40 | Organic - Mechanistic |
| 26 | 6.08 | Organic |
| 27 | 4.44 | Mechanistic |
| 28 | 6.30 | Organic |
| 29 | 5.98 | Organic |
| 30 | 5.73 | Organic - Mechanistic |
| 31 | 6.05 | Organic |
| 32 | 5.08 | Mechanistic - Organic |
| 33 | 5.58 | Organic - Mechanistic |
| 34 | 6.48 | Organic |

**Table 5.9:** OCA Classification of the Sample

| Organisational Culture | Number of Respondents | Percentage |
|---|---|---|
| Organic | 12 | 35% |
| Organic - Mechanistic | 14 | 41% |
| Mechanistic - Organic | 5 | 15% |
| Mechanistic | 3 | 9% |
| | **34** | **100%** |

**Table 5.10:** Summarised OCA Classification

## 5.3 Proposition Results

Each of the four research propositions was evaluated by means of the same inferential statistics analysis. The research propositions were:

$P_1$: Organisations that pursue a low cost-generic strategy will exhibit predominantly mechanistic cultures.

$P_2$: Organisations that pursue a differentiation- or focus-generic strategy will exhibit a predominantly organic culture.

$P_3$: Organisations that pursue a “defender” or “analyser” strategic intent will exhibit a predominantly mechanistic culture.

$P_4$: Organisations that pursue a “prospector” strategic intent will exhibit a predominantly organic culture

### 5.3.1 Correlation Analysis

Correlation analysis was carried out between the OCA score calculated in Section 5.2.3 and:

i) The 21 competitive methods of Porter’s (1980) generic strategy criteria; and

ii) The three Miles & Snow (1978) variables.

The analysis was completed in NCSS and the matrix containing the correlation co-efficients, calculated at a 10% level, is set out in Appendix F.

#### 5.3.1.1 Porter's (1980) Generic Criteria

Only competitive method six – "Experienced/trained personnel" - indicated a significant correlation (r= -0,44; p = 0,018).

#### 5.3.1.2 Miles & Snow (1978) Variables

The correlation co-efficients indicated no statistically significant result.

### 5.3.2 Chi-squared Test of Independence

The Chi-squared test of independence was employed to evaluate relationships between:

i) Porter's (1980) strategic intent classification and the organisational culture classification, and

ii) Miles & Snow's (1978) strategic typology and the organisational culture classification.

#### 5.3.2.1 Input Data

The results set out Section 5.2 were further segmented to achieve the required matrix to input into the statistics software, NCSS. The input data for the two analyses is tabulated below:

| | Organic | Organic-Mechanistic | Mechanistic–Organic | Mechanistic |
|---|---|---|---|---|
| Differentiation | 5 | 7 | 1 | 3 |
| Focus | 5 | 3 | 1 | 1 |
| Low Cost | 3 | 3 | 2 | 0 |
| | **13** | **13** | **4** | **4** |

**Table 5.11:** Porter's Classification vs. Culture Type

| | Organic | Organic-Mechanistic | Mechanistic–Organic | Mechanistic |
|---|---|---|---|---|
| "Prospector" | 5 | 5 | 0 | 1 |
| "Analyser" | 4 | 6 | 0 | 1 |
| "Defender" | 4 | 2 | 4 | 2 |
| | **13** | **13** | **4** | **4** |

**Table 5.12:** Miles & Snow's Typology vs. Culture Type

The null and alternate hypotheses were set as follows:

$H_0$ = There is no relationship between Porter's/Miles & Snow's classification and the type of organisational culture.

$H_1$ = There is a relationship between Porter's/Miles & Snow's classification and the type of organisational culture.

The analysis was completed with the use of six degrees of freedom, which resulted in an $H_{critical}$ value of 10,645 (at a 0,1 level).

5.3.2.2 Chi-squared Test of Independence Result

The NCSS analysis, contained in Appendix G, resulted in the critical information tabulated below:

| | $H_{critical}$ | $H_{actual}$ | Decision | Probability Level (p) |
|---|---|---|---|---|
| Porter's (1980) Generic Strategic Intent | 10,645 | 4,136 | Accept the null hypothesis | 0,658 |
| Miles & Snow (1978) Strategic Typology | 10,645 | 10,323 | Accept the null hypothesis | 0,112 |

**Table 5.13:** Chi-squared Test of Independence Results

## 5.4 Analysis of Variance (ANOVA) Results

A Kruskal-Wallis One-Way ANOVA test was carried out to determine if the median of the OCA varied across:

i) Porter's (1980) three generic strategies; and

ii) Miles & Snow's (1978) three typologies.

The hypotheses statements for this analysis were as follows:

$H_0$ = the medians of the OCA are the same across all three of Porter's / Miles & Snow's strategic intents.

$H_1$ = the medians of the OCA are not the same across all three of Porter's / Miles & Snow's strategic intents.

This hypothesis was tested at a 0,1 level of significance. Appendix H shows the NCSS output for these analyses.

### 5.4.1 Porter's (1980) Hypothesis Decision

The actual Chi-squared value and the probability were determined. The values are: -

$H_{actual}$ = 0,345

p = 0,841

The null hypothesis is hence accepted. The low probability value indicates a strong acceptance of the null hypothesis.

### 5.4.2 Porter's (1980) Graphical Output

The box plot of the ANOVA test is shown in Figure 5.1, and highlights the range, medians and inter-quartile values associated with the analysis.

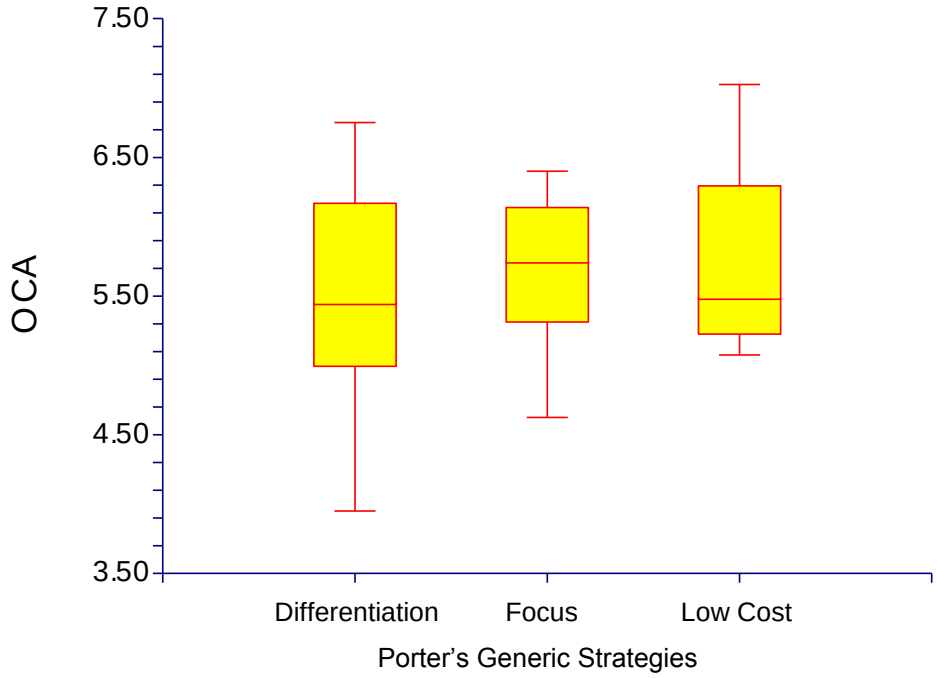



**Figure 5.1:** ANOVA Box Plot for OCA vs. Porter

### 5.4.3 Miles & Snow's (1978) Hypothesis Decision

The actual chi-squared value and the associated probability were determined as follows:

$H_{actual}$ = 1,532

p = 0,465

These values are not statistically significant and the null hypothesis was accepted. There is no statistically significant difference between the medians of the OCA across the three Miles & Snow (1978) typologies.

### 5.4.4 Miles & Snow's (1978) Graphical Output

The graphical representation of the OCAs and the Miles & Snow typologies is illustrated in Figure 5.2.

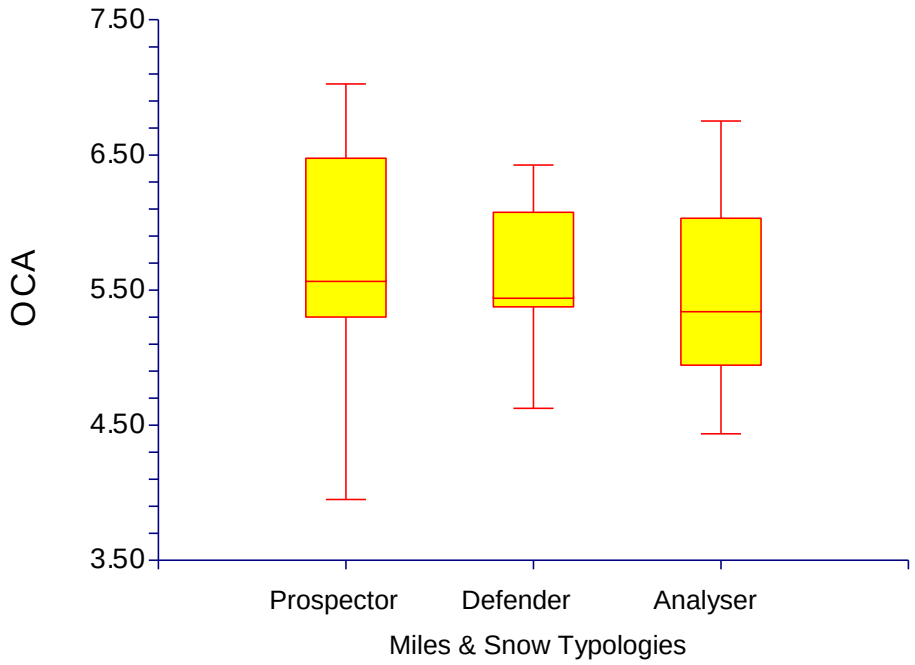



**Figure 5.2:** Box Plot representing OCA and the Miles & Snow's (1978) Typology

## 5.5 Further Analysis of Results

As the sample was relatively small, the data had to be analysed further. The organisational culture categories were reduced from four to two. This reduction number created a more generalised data set. The following definitions, used in the remainder of the research report, applied:

| | ORGANISATIONAL CULTURE | OCA |
|---|---|---|
| Organic’ | Organic and Organic-Mechanistic | ≤ 5,25 |
| Mechanistic’ | Mechanistic–Organic and Mechanistic | > 5,25 |

**Table 5.14:** Reduced Organisational Culture Definition

The strategic intent responses given by the respondent organisations and frequencies associated with the new reduced organisational culture definitions are tabulated below:

| | RESPONSE | |
|---|---|---|
| | **Organic’** | **Mechanistic’** |
| Low Cost | 7 | 2 |
| Differentiation | 12 | 4 |
| Focus | 7 | 2 |
| | **26** | **8** |

| | FREQUENCY | |
|---|---|---|
| | **Organic’** | **Mechanistic’** |
| Low Cost | 78% | 22% |
| Differentiation | 75% | 25% |
| Focus | 78% | 22% |
| | **76%** | **24%** |

**Table 5.15:** Porter’s (1980) Strategy vs Reduced Organisational Culture

| | RESPONSE | |
|---|---|---|
| | **Organic’** | **Mechanistic’** |
| Analyser | 10 | 1 |
| Prospector | 10 | 1 |
| Defender | 6 | 6 |
| | **26** | **8** |

| | FREQUENCY | |
|---|---|---|
| | **Organic’** | **Mechanistic’** |
| Analyser | 91% | 95 |
| Prospector | 91% | 95 |
| Defender | 50% | 50% |
| | **76%** | **24%** |

**Table 5.16:** Miles & Snow’s (1978) Strategic Typology vs Organisational Culture

The research propositions set out in Section Three suggest that multiple strategic intents are supported by the same organisational cultures. The combination of the strategic intents, in line with these propositions, further consolidates the data analysis as shown in Table 5.17 and 5.18 and in Figures 5.3 and 5.4.

| | ORGANIC' | | MECHANISTIC' | |
|---|---|---|---|---|
| | **Responses** | **Percentage** | **Responses** | **Percentage** |
| Low Cost | 7 | 78% | 2 | 22% |
| Differentiation and Focus | 19 | 76% | 6 | 24% |

**Table 5.17:** Consolidated Porter's (1980) Strategy vs Organisational Culture

| | ORGANIC' | | MECHANISTIC' | |
|---|---|---|---|---|
| | **Responses** | **Percentage** | **Responses** | **Percentage** |
| Defender and Analyser | 16 | 70% | 7 | 30% |
| Prospector | 10 | 91% | 1 | 9% |

**Table 5.18:** Consolidated Miles & Snow's (1978) Typology vs Organisational Culture

A graphical representation of these results is shown below:

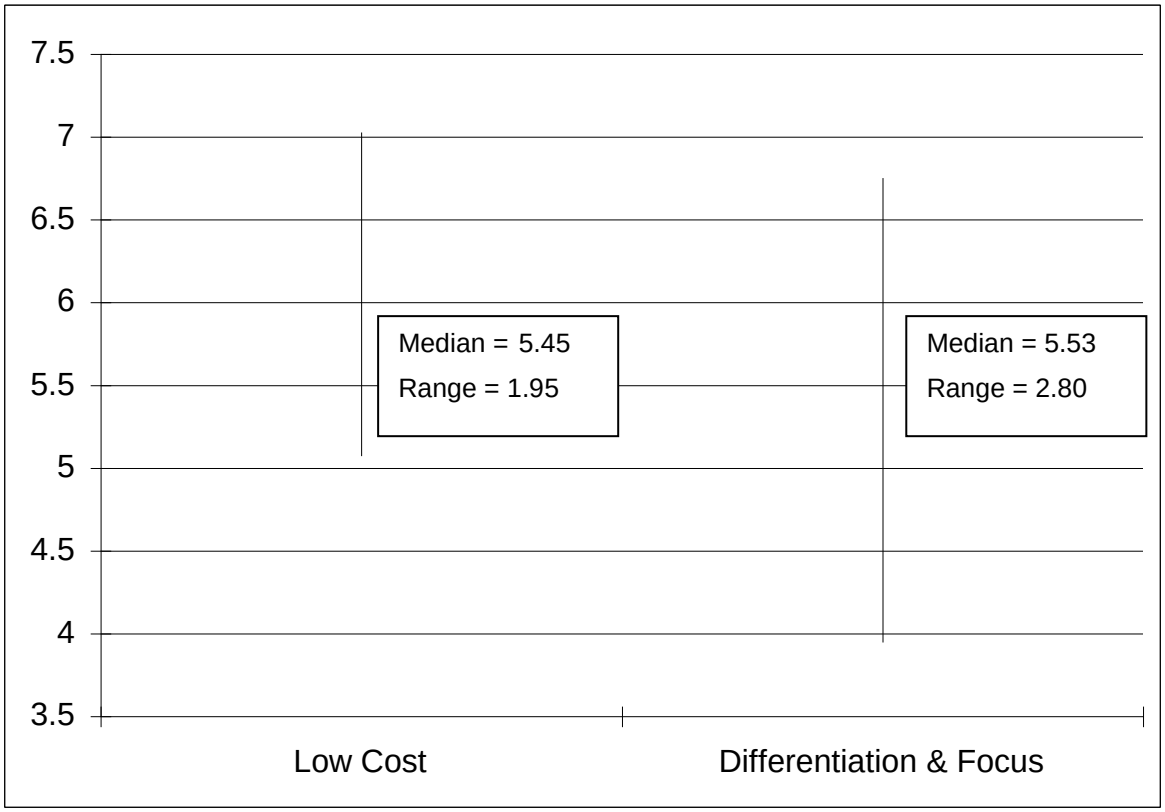



**Figure 5.3:** Consolidated Porter's (1980) Plot

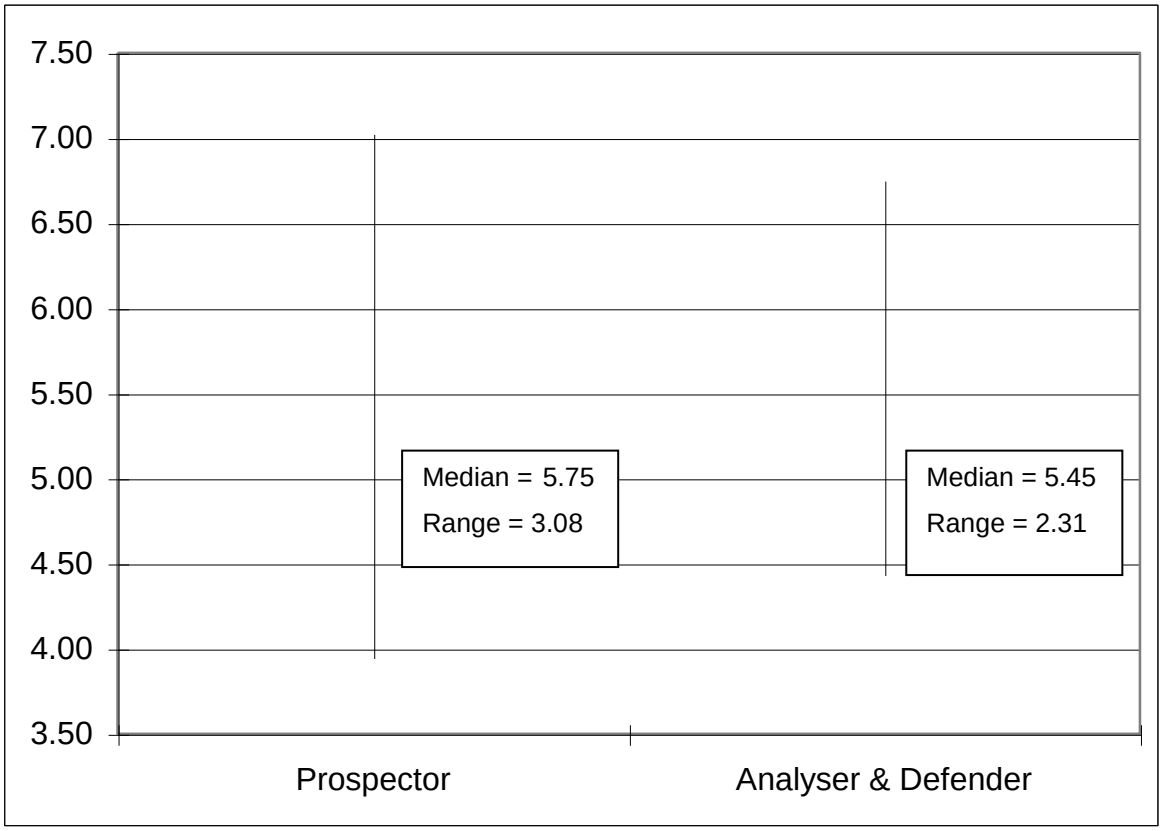



**Figure 5.4:** Consolidated Miles & Snow's (1978) Plot

It is noted that the omission of the minimum value in the "prospector" data range resulted in the range being reduced to 1,75.

# 6 INTERPRETATION OF RESULTS

## 6.1 Sample

The sample favoured medium to large organisations that operated within the manufacturing sector of the South African economy. More than 80% of the respondents managed organisations that have turnovers exceeding R100m/annum and employees numbering more than 100.

The bias inherent in utilising a targeted sample could have been increased by the high number of respondents from the manufacturing sector. The turnover and employee criteria are, however, well distributed across the categories.

## 6.2 Research Propositions

Research propositions, as stated in Section three, are as follows:

$P_1$: Organisations that pursue a low cost-generic strategy will exhibit predominantly mechanistic cultures.

$P_2$: Organisations that pursue a differentiation- or focus-generic strategy will exhibit a predominantly organic culture.

$P_3$: Organisations that pursue a “defender” or “analyser” strategic intent will exhibit a predominantly mechanistic culture.

$P_4$: Organisations that pursue a “prospector” strategic intent will exhibit a predominantly organic culture

### 6.2.1 Correlation Analysis

The correlation analysis indicated no linear correlation between the organisational culture and the strategic intent of any organisation. This result

was equally valid for the strategic intents described by both the Porters (1980) generic strategy and the Miles & Snow (1978) strategic typologies.

### 6.2.2 Results of the Chi-squared Test of Independence

The chi-squared test of independence determined if there was a statistically significant difference between the observed and expected relationship between the strategic intent and organisational culture.

There was no statistically significant difference along the Porter's (1980) generic strategic intent and the null hypothesis was accepted. The p-value (0,66) for the Porter's (1980) strategy indicated acceptance of the null hypothesis at a 10% significance level.

Similarly, the null hypothesis was accepted in the case of the Miles & Snow (1978) typology.

### 6.2.3 ANOVA Results

The ANOVA analysis indicated that there was no statistically significant difference between the medians of the organisational culture across any of the strategic intents.

This result indicates that the organisational cultures of the sample, irrespective of whether Porter's (1980) or Miles & Snow's (1978) strategic intent was followed, were not statistically different.

### 6.2.4 Summary of the Proposition Results

It was concluded that none of the research propositions, $P_1$ to $P_4$, were supported by the current research.

## 6.3 Research Findings and Theory

The findings of this research contradict both theory and common practice (Miles & Snow, 1978; Pelham, 1997; Porter, 1980; Reigle 2001; Treacy & Wiersema, 1993; White, 1986). The literature identifies specific organisational cultures that are best suited to the support of Porters (1980) generic strategy and Miles & Snow's (1978) strategic typology.

The current research found no support for the alignment of specific organisational cultures with the stated strategic intents. The remainder of this Section interprets the remaining statistical data and evaluates the contradiction of the theory.

## 6.4 Porter's (1980) Strategy

The reduction of the organisational culture sets from four to two resulted in more generalised data. This more generalised data set enables generic interpretation to be completed. The interpretation of this data is analysed in this Section.

### 6.4.1 Differentiation and Focus Generic Strategy Results

A dominant portion, 47%, of the sample described their strategic intent as being typical of a differentiation-generic strategy. These organisations are characterised by attempts to provide value that exceeds the expectations of the customer (Porter, 1980). This value is often achieved by providing a stream of state of the art products and services (Treacy & Wiersema, 1993).

This finding is supported by Davies (2001) and Joffe, Kaplan, Kaplinsky & Lewis (1995). The research of these authors indicated that the South African manufacturing sector is unusually diversified and typified by a limited degree of specialisation. They found that South African organisations tend to produce a larger product range than do similar firms in other countries (Joffe *et al*., 1995).

The finding that 47% of the sample fell into the differentiation-generic strategy was not surprising as South Africa's unique and isolated history was dominated by an import-replacement industrial strategy. The country's economic growth required a diverse manufacturing base to meet the complex industrial needs. The dominant differentiation-generic strategic intent indicates that this legacy has been maintained within the sampled South Africa organisations.

The organisational culture associated with the sampled organisations that tended towards differentiation-generic strategies indicated a large range ($3{,}95 \leq OCA \leq 6{,}75$).

Organisations exhibited cultures in all of Reigle's (2001), categories:

- Organic - 31%
- Organic–Mechanistic - 44%
- Mechanistic–Organic - 6%
- Mechanistic - 19%

The spread of the organisational cultures is not supported by the literature reviewed, which indicated that organisations pursuing a differentiation-generic strategy avoid bureaucracy and require highly creative and flexible commercial and management skills (Treacy & Wiersema, 1993).

Notwithstanding the large range of the organisational cultures identified in Figure 5.1 the consolidated data set out in Table 5.15 indicates that 75% of the respondent organisations that identified a differentiation-generic strategy also rated their cultures to be organic'. Whilst this finding is not statistically significant it does indicate some evidence supporting the link between differentiation-generic strategies and organic' cultures.

The same observation can be made in the consideration of the data shown in Table 5.16. The sample group that identified differentiation- and focus-generic strategies exhibited a 76% prevalence of organic' cultures.

The sampled group indicate a high prevalence of differentiation- and focus-generic strategies being supported by organic' cultures.

### 6.4.2 Low Cost-Generic Strategy

The respondent organisations that rated themselves as falling into the low cost-generic strategy did not record any mechanistic cultures. The sample had a small range (1,95) of organisational cultures, as indicated in Figure 5.1. The low cost-generic strategy exhibited a higher organic' culture frequency (Table 5.3) than the differentiation- and focus-generic strategies.

These findings are different from those presented by Porter (1980), White (1986) and Treacy & Wiersema (1993). International research indicated that these organisations are typified by actions focused on the reduction of cost through internal efficiencies. Research proposition one receives no support from this research.

There is, however, no statistically significant evidence within the sample to indicate that an organic' culture is also suitable for the pursuit of low cost-generic strategies.

### 6.4.3 Organisational Culture

35% of the sampled respondent organisations determined their dominant organisational culture as being organic, and 41% described the dominant culture as being organic-mechanistic (41%).

The culture required to support a changing and innovative environment is organic (Reigle, 2001). Furthermore, the co-operative culture required within an organisation, as it transforms from a protected to a self-regulated organisation better suited to face the threat of globalisation, demands an organic culture (Bendixen, 2003). Saros *et al*. (2002) identify the strong transformational role leadership plays in changing an organisation's culture.

The strong evidence of organic' cultures within the sample indicated a good awareness among the respondent senior executives of the need to lead the cultural transformation of their organisation. There is evidence to suggest that the sampled leaders ascribe to the philosophy that maintaining a competitive advantage in a changing environment requires a dominant organic culture. It would appear that this requirement is recognised irrespective of the strategic direction being implemented.

## 6.5 Miles & Snow's (1978) Typology and Organisational Culture

The sample also exhibited a predominance of organic and organic-mechanistic cultures (Table 5.16) in terms of the Miles & Snow (1978) typology.

The frequebcy of organisational cultures across the sample was:

- Organic - 38%
- Organic–Mechanistic - 38%
- Mechanistic–Organic - 12%
- Mechanistic - 12%

The high incidence of organic' cultures, greater than 75% across both strategic intent models, is worth noting. It is also important to note that the CEOs in the sample identified strongly with the virtues of organic and organic-mechanistic cultures.

The distribution of Miles & Snow (1978) typologies was spread evenly within the sampled organisations. Table 5.8 indicates that a response rate of 36%, 32% and 32% was assigned to the typologies of "prospector", analyser" and "defender" respectively. The Miles & Snow (1978) typology does not indicate a dominant strategic intent within the sample and evidence exists that all of Miles & Snow's (1978) strategic intents find suitable application within the South African sample.

### 6.5.1 "Prospector" Strategy Results

The organisational culture within the "prospector" construct exhibits a wide range of 3,08 (Figure 5.4). This indicates that all four organisational cultures are represented in this type of strategic intent. There is, however, only a single response that creates the large range. The removal of this response reduces the range to 1,75. This is the smallest range of organisational cultures associated with any Porter's (1980) or Miles & Snow (1978) strategic intent.

The frequency of responses shown in Table 5.2 and Table 5.4 indicated that 91% of the organisations that implemented a "prospector" strategic intent also practised an organic' culture.

The organisational culture that supports "prospector" strategies must promote the ability to experiment and adjust to emerging environmental changes (Miles & Snow, 1978). This requirement embraces the characteristics of organic cultures. The respondents organisations identified a high prevalence of organic' cultures which support "prospector" strategic intent.

This finding provides support for research proposition four. While this support is not statistically significant it is important to note the high frequency of organic' cultures associated with the "prospector" strategic intent.

### 6.5.2 "Analyser" and "Defender" Results

The consolidated response frequency of the "analyser" and "defender" strategies, displayed in Table 5.4 and Figure 5.2, indicates a wide range of organisational cultures. In isolation, however, the frequency of organisations that pursue "analyser" strategies and exhibit organic' cultures is 91%.

"Analysers" are organisations that operate in two product-market domains, one relatively stable and the other changing (Miles & Snow, 1978). The organisations are required to possess the culture and skills necessary to:

(i) Operate routinely and efficiently through the use of formalised structures and processes; and

(ii) Enable senior managers to watch for new ideas and then implement rapidly (Miles & Snow, 1978). This requirement could be considered as requiring dual cultures within an organisation.

The evidence provided by the fact that 91% of organic' cultures fell into the "analyser" category could indicate that a culture of analysing and implementing new ideas is dominant. Senior management has a significant role to play in the determination of organisational culture (Saros *et al*., 2002). There is evidence among the senior executives of the sample that the organic' culture necessary to manage in turbulent market domains is most important for South African organisations pursuing an "analyser" strategic intent.

There is no evidence supporting research proposition three which proposed that mechanistic cultures are dominant in the "analyser" strategic category.

The "defender" strategic construct is the only one that exhibits a response frequency of mechanistic and mechanistic-organic cultures. The consolidated data of Table 5.2 indicates an equal prevalence of organic' and mechanistic' cultures.

"Defenders" have narrow product-market domains that require management cultures that devote attention to existing operational efficiency. Internal skills are high but tend to be focus upon the organisation's limited area of operation. Research proposition three suggested that mechanistic cultures would dominate in such an environment.

The response frequency of the organisational cultures associated with the "defender" strategy is strongly contrasted to the remaining strategic constructs. The frequency of mechanistic cultures provides weak support for research proposition three.

## 6.6 Research Sample and Research Instruments

The impact of the research sample and the instruments utilised must be scrutinised to assess their impact on the research.

### 6.6.1 Research Sample

The research sample of 34 was small. This is particularly true since there are four organisational culture elements and three strategic intent components. The expected frequency of responses in each category is low and has adversely impacted the ability of the analysis to detect statistical trends.

The inherent bias in the sample towards the manufacturing sector of the South African economy is also a weakness. The biased sample may have limited the strategic intent and organisational culture diversity of the sample. The results are less applicable to the local business environment than could have been expected from a more representative sample.

### 6.6.2 Research Instruments

The strategic intent research models exhibited limitations. These limitations are specifically noted in the ability of the models to accurately determine the strategic intent of organisations.

Miller & Dess (1993) determined that Porters (1980) generic strategy model might not adequately represent business environments where generic strategy combinations could be both possible and profitable. Miller & Dess (1993) also found that no Porters (1980) generic strategy type is evenly spread across separate industries.

The ability of the Porter (1980) and Miles & Snow (1978) models to adequately represent South African business is supported by Douglas & Kee Rhee (1989) who indicated that most research into strategy types had been conducted on U.S. businesses where the findings were less generalisable to markets outside of the U.S. than they were to the U.S. businesses themselves.

The limitations in measuring organisational strategic intent complicate the evaluation of its alignment to organisational culture.

# 7 CONCLUSIONS AND RECOMMENDATIONS

The management of modern South African organisations is charged with the delivery of sustainable financial success. The global economy changes rapidly and organisations continually develop and implement their strategic focus to maintain their competitive advantage.

The topic of strategy development is well researched and familiar to both academic and business experts. There is, however, strong evidence that the implementation of strategy does not achieve the objectives set during its development. The responsibility of strategy implementation forms an integral role of the modern business executive.

There are several factors that contribute to the successful implementation of strategy. The impact of culture and the role it plays in successful strategy implementation is a topic of importance to senior executives. This research aimed to determine the alignment of strategic intent with organisational culture.

A targeted sample of CEOs, or their designated representatives, were requested to complete a structured questionnaire. Descriptive statistics were completed on the respondent's data that enabled the characterisation of organisational culture and strategic intent, along the constructs of Porter's (1980) generic strategy and Miles & Snow's (1978) typology. Inferential statistics were completed to determine the alignment between organisational culture and strategic intent.

## 7.1 Summary of Findings

### 7.1.1 Research Propositions

The research failed to provide statistically significant results that indicated an alignment of strategic intent with organisational culture. This finding was valid for both the Porter's (1980) generic strategies and the Miles & Snow (1978) typologies. None of the research propositions, which hypothesised

the relationship between particular strategic intents and organisational cultures, were supported.

### 7.1.2 Additional Findings

#### 7.1.2.1 Differentiation-Generic Strategy

The research provided insight into several aspects of organisational culture and strategic intent. The majority of the respondent's identified Porter's (1980) differentiation-generic strategy as being dominant in their organisations. This indicated that the provision of a wide range of products and services is seen as a strategic necessity within a large sector of the respondent's organisations.

The sample provided evidence that the adoption of a differentiation-generic strategy was supported by a combination of organic and organic-mechanistic (organic') cultures.

#### 7.1.2.2 Focus- and Low Cost-Generic Strategies

The sampled organisations that adopted a focus- or low cost-generic strategy identified a predominant culture of organic and organic-mechanistic (organic') cultures.

In the case of low cost-generic strategies this finding was not supported by the literature reviewed as part of the research. The proposition of a mechanistic culture did not find any support from the sampled analysis.

#### 7.1.2.3 "Prospector" and "Analyser" Typologies

The organisations that adopted a dominant "prospector" or "analyser" typology also identified a high incidence of organic' organisational cultures. The incidence of organic' cultures was higher for the "prospector" and "analyser" typologies, than any other strategic intent.

#### 7.1.2.4 "Defender" Typology

The sampled organisations that pursued a "defender" typology provided equal evidence of organic' and mechanistic' organisational cultures. This typology is the only strategic intent that provided any evidence that mechanistic' cultures were suitable for the pursuit of a strategy.

#### 7.1.2.5 Organisational Culture

Overall, 76% of the sampled CEOs perceived their organisations to exhibit organic and organic-mechanistic (organic') cultures. This finding applied irrespective of the strategic construct - Porters (1980) or Miles & Snow's (1978) - that was modelled. The prevalence of organic' cultures indicated that the sampled South African CEOs recognised the need to adopt a culture that supports strategic implementation in changing and innovative environments.

The results indicate that the sampled CEOs recognised that, irrespective of the strategy that was being implemented, it was necessary to promote organic' cultural elements if the best results were to be achieved.

#### 7.1.2.6 Sample Challenges

The small and targeted sample created an inherent bias that complicated the statistical analysis. The low expected frequency made statistical trends difficult to detect and the bias may have decreased the sample diversity.

#### 7.1.2.7 The Porter's (1980) and the Miles & Snow (1978) Strategic Models

It has been identified that certain limitations may exist within the Porter (1980) and Miles & Snow (1978) models. These models may not adequately determine strategic intent within the South African business environment. The reasons for the lack of fit could be:

- The age of the models;

- The unique political and social objectives that form an integral component of the South African business environment;
- The inability to accurately measure hybrid strategies; and
- The generalisability of the Porter (1980) and Miles & Snow (1978) models to adequately represent South African business.

7.1.2.8 Limitations of the Research

The research identified the sample size, sample bias and strategic intent instruments as limitations of the research. These components coupled to the lack of literature relevant to the South African business environment may have contributed to the lack of conclusive findings delivered by the research.

## 7.2 Recommendations to Management

7.2.1 Identification of Organisational Culture

Organisational culture forms a critical component of the successful implementation of strategy. It is imperative that senior management be aware of the organisational requirements of strategies that are to be implemented. It is recommended that a regular assessment of organisational culture be carried out. An instrument such as the OCA (Reigle, 2001) provides a simple, valid and reliable method of determining organisational culture.

It is important to assess cultural profiles of all the divisions, departments and teams that make up an organisation and compare these results to the organisation as a whole. The actual and required organisational cultures must be evaluated and critical deficiencies recognised.

It is recommended that the implementation of strategies take cognisance of any deficient elements of organisational culture. These elements must be adequately addressed as an integral component of strategy implementation.

It is further recommended that the deficiencies in the organisational culture form key inputs into the organisational recruitment and training processes. Such inputs will enable continuous improvement in the alignment of culture with strategy.

### 7.2.2 Strategic Intent Requirements

This research has identified potential shortcomings in the characterisation of strategic intent using the Porter's (1980) generic strategy and Miles & Snow (1978) strategic typology. These shortcomings limit the ability of the models to accurately determine the strategic intent of South African businesses. The challenge of determining the correct organisational culture to support a strategic intent should not be underestimated.

It is recommended that senior management expend effort in evaluating the most suitable strategy and organisational culture for their competitive environment.

### 7.2.3 Holistic Approach

Organisational culture is only one of several components that influence the success of strategic implementation within the business environment. It is recommended that executive management ensure that, in addition to the alignment of organisational culture and strategic intent, all other aspects of the business are suitably aligned. A model such as the Seven S model (Waterman, Peters & Phillips, 1980) provides a framework for ensuring all aspects of the organisational environment are addressed.

### 7.2.4 South African Situation

South Africa's unique business environment requires organisations to adequately deal with the challenges of political, social and emerging economy forces. The dearth of academic research indicates the lack of support available for South African executives to refer to. It is recommended

that management engage with academic institutions for an active understanding of the intricate relationships involved in strategic implementation that is specific to the South African environment.

## 7.3 Recommendations For Further Research

The completion of this research has led to several recommendations for further research. The recommendations are set out below:

- There are limitations described in this research and by Miller & Dess (1993) with regard to the measurement of strategic intent. The current methodologies have inherent weaknesses in their accuracy and generalisability. It is recommended that further research be completed to develop robust instruments to measure strategic intent. This is specifically recommended within the South African environment where a dearth of literature on organisational strategic intents exists.

- There exists significant research on organisational culture and its role in strategic implementation. Much of the research does not apply to the South African business environment. The complex history from which the country is emerging and the challenges of social and political reform are unique. It could be expected that international experience may not adequately address the unique organisational cultures experienced in South Africa and the role they play in strategic implementation.

  It is recommended that:

  - Research be carried out to develop models of the unique South African organisational cultures and to determine if they are adequately represented by international research; and that
  - Research be completed to identify the key factors required to align South African organisational cultures with the chosen organisational strategies.

The recommendations will increase the insight of South African managers to accelerate their organisational competitiveness.

## 7.4 Conclusion

South Africa's ability to increase competitiveness and accelerate growth in the global environment require organisations with the internal capacity to adapt to the rapidly changing global environment. It is important to develop organisations in which the organisational cultures and strategies are aligned to facilitate this rapid flexibility.

Organisations should increase their focus on the eradication of internal inconsistencies between organisational culture and strategic intent. The alignment of organisational culture with strategic intent should form an integral component of strategic development and implementation.

This research highlights the challenges associated with aligning organisational culture with strategic intent and highlights a number of recommendations that could assist in the future improvement of this vital component of organisational strategy.

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## APPENDIX A – LETTER OF INTRODUCTION

1 September 2004

TO :

I am a final year, part-time, student completing my MBA degree at Wits Business School. As you are probably aware the final academic requirement is the compilation of a research report of academic and business interest.

My research will analyse factors that impact a company's ability to consistently adjust their competitive advantages to meet the changing environment in which they operate. More specifically, the research will assess the organisational culture in South African organisations and determine its alignment to the company's stated strategic intent.

The attached questionnaire is broken into three components.

- **Component 1** comprises general demographic information and is not used in the statistical analysis. This information will not be reflected in the report and is used for reference purposes only.
- **Component 2** comprises Section 1 – 5 and will evaluate organisational culture. The questionnaire requires one of eight possible answers and you should choose the answer that most closely reflects your perception of the current situation within your organisation.
- **Component 3** comprises Section 6 and 7 and will evaluate the current strategic intent of the organisation. The questionnaire requires one of seven possible answers and the response should reflect the current strategic intent of your organisation.

I would be greatly appreciative if you could complete the attached questionnaire and return to the sender.

It would be a pleasure to share the final results of my research with you and should you wish this please indicate your contact details in Component 1 and I will forward

the results. Please contact me should you have any queries, requests or comments on the questionnaire or research.

Kind regards

**Alan Dickson (8807038/N)**

Cell : 083 631 4670
Fax : (016) 423 4602
E-mail : alan.dickson@africancables.com

## APPENDIX B – STRUCTURED QUESTIONNAIRE

### Organisational Culture and Strategic Intent Assessment

Please complete the following demographic information and the attached survey.

Be sure to mark one answer for **each** question to ensure the maximum use of your survey. Organisation or personal names will not be used in any published reports.

Thank you for your participation.

## Demographics

1. Your name (optional): _____

2. Organisation name: _____

3. Date: _____

4. How many employees does your organisation have?
(Mark with x)

| Less than 100 | 100- 250 | 250-500 | 500-1000 | >1000 |
|---|---|---|---|---|
| | | | | |

5. What is the turnover of your organisation?
(Mark with x)

| <R50m | R50m-R100m | R100m-R500m | R500m-R1 bn | >R1bn |
|---|---|---|---|---|
| | | | | |

6. Would you like to receive the final research report

| Yes | No |
|---|---|
| | |

If yes please complete electronic contact details:

_____

PLEASE INDICATE (WITH AN X) ONE BLOCK THAT BEST REPRESENTS THE SITUATION IN YOUR ORGANISATION:

Note: Management means direct supervisor up through upper management.

## Section 1

| | | Strongly Agree | | Somewhat Agree | | Somewhat Disagree | | Strongly Disagree | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Employees in your organisation tend to use derogatory terms for management. | | | | | | | | |
| 2 | Your organisation has positive myths such as going to extremes or breaking the rules to get the job done. | | | | | | | | |
| 3 | Use of jargon in your organisation often keeps outsiders from understanding your discussions. | | | | | | | | |
| 4 | Your organisation has heroes that set positive role models for employees to follow. | | | | | | | | |
| 5 | Managers in your organisation are suspected of using derogatory terms for employees. | | | | | | | | |
| 6 | New programs are warded off by negative comments that “it won’t work here”. | | | | | | | | |
| 7 | Functions within your organisation frequently use their own sets of acronyms which divide the organisation, making the need for their functions less likely to be challenged. | | | | | | | | |
| 8 | Managers in your organisation appear to exclude minority group members from participating in special projects which prevents them from learning the language needed to have upward mobility potential. | | | | | | | | |
| 9 | Stories about work performance in your organisation are generally positive. | | | | | | | | |

## Section 2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Managers in your organisation dress differently than employees. | | | | | | | | |
| 2 | Managers in your organisation have large, plush offices with better furniture than employees. | | | | | | | | |
| 3 | Managers in your organisation have assigned parking spaces near the door. | | | | | | | | |
| 4 | Pictures on the walls of your organisation are of executives and upper management instead of employees. | | | | | | | | |
| 5 | Managers in your organisation have company cars. | | | | | | | | |
| 6 | Managers in your organisation have better computers than technical professionals. | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 7 | Managers in your organisation have an open-door policy and are willing to talk to employees on an impromptu basis. | | | | | | | | |
| 8 | Managers in your organisation are in a separate location from employees | | | | | | | | |
| 9 | Employees in your organisation are expected to punch a time clock. | | | | | | | | |

## Section 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Employees in your organisation tend to criticize the organisation and the people in it. | | | | | | | | |
| 2 | Employees in your organisation listen to others and try to get their opinions. | | | | | | | | |
| 3 | Employees in your organisation actively look for ways to expand their knowledge in order to be able to do a better job. | | | | | | | | |
| 4 | Employees in your organisation show genuine concern for the problems that face the organisation and make suggestions about solving them. | | | | | | | | |

## Section 4

| | | Strongly Agree | | Somewhat Agree | | Somewhat Disagree | | Strongly Disagree | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | In your organisation, quantity of work instead of quality of work is stressed. | | | | | | | | |
| 2 | Managers in your organisation appear to value flexibility, such as allowing telecommuting, part-time work, or flexible work hours. | | | | | | | | |
| 3 | Managers in your organisation appear to value innovation – ideas and suggestions by employees are accepted and implemented. | | | | | | | | |
| 4 | Your organisation is quick to adapt to new technology applications in its area of speciality. | | | | | | | | |
| 5 | In your organisation, performance evaluations are fair, and generally the most competent people are promoted. | | | | | | | | |
| 6 | In your organisation, praise is offered for good performance. | | | | | | | | |
| 7 | In your organisation, there are opportunities for professional growth such as funding for college classes. | | | | | | | | |
| 8 | In your organisation, due dates are stressed over doing the work well. | | | | | | | | |
| 9 | In your organisation, good performance is effectively recognized. | | | | | | | | |

## Section 5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Managers make employees feel that they are the organisation's most important asset. | | | | | | | | |
| 2 | Employees are laid off and contractors hired to replace the employees. | | | | | | | | |
| 3 | Managers appear to assume that they are the thinkers and employees are the workers of the organisation. | | | | | | | | |
| 4 | Managers encourage teamwork and offer rewards for teams. | | | | | | | | |
| 5 | Managers empower employees to make decisions. | | | | | | | | |
| 6 | Managers tend to make decisions at high levels in the organisation without consulting employees for input. | | | | | | | | |
| 7 | Managers appear to assume that employees are responsible, capable and willing to work with little direction. | | | | | | | | |
| 8 | Policies and procedures are prepared in such great detail that it is assumed that the workers aren't very intelligent. | | | | | | | | |
| 9 | Managers organize people, equipment, and money so that employees can achieve their own goals in support of organisational objective. | | | | | | | | |

## Section 6

*Please indicate the extent to which the following competitive methods are most important for your organisation's strategy: (1 indicates "Strongly Agree" and & 7 indicates "Strongly Disagree")*

| | ITEM | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|
| **1** | New product development | | | | | | | |
| **2** | Competitive pricing | | | | | | | |
| **3** | Customer service | | | | | | | |
| **4** | Operating efficiency | | | | | | | |
| **5** | Product quality control | | | | | | | |
| **6** | Experienced/trained personnel | | | | | | | |
| **7** | Maintain high inventory levels | | | | | | | |
| **8** | Broad range of products | | | | | | | |
| **9** | Developing/refining existing products | | | | | | | |
| **10** | Brand identification | | | | | | | |
| **11** | Innovation in marketing techniques and methods | | | | | | | |
| **12** | Controls of channels of distribution | | | | | | | |
| **13** | Procurement of raw materials | | | | | | | |
| **14** | Minimising use of outside financing | | | | | | | |
| **15** | Serving special geographic areas | | | | | | | |
| **16** | Capability to manufacture speciality products | | | | | | | |
| **17** | Products in high priced market sectors | | | | | | | |
| **18** | Advertising | | | | | | | |
| **19** | Reputation within industry | | | | | | | |
| **20** | Forecasting market growth | | | | | | | |
| **21** | Innovation in the manufacturing process | | | | | | | |

## Section 7

*The following descriptions characterize equally effective strategies that organisation's can use to position themselves relative to their competition. Please select the description that you feel best characterizes your firm today. (1 indicates "Strongly Agree" and & 7 indicates "Strongly Disagree")*

| | ITEM | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|
| **1** | This business unit typically operates within a broad product-market domain that undergoes periodic redefinition. The business unit values being "first in" in new product and market areas even if not all these efforts prove to be highly profitable. This organisation responds rapidly to early signals concerning areas of opportunity, and these responses often lead to a new round of competitive actions. However, this business unit may not maintain market strength in all areas it enters. | | | | | | | |
| **2** | This business unit attempts to maintain a stable, limited line of products or services while moving quickly to follow a carefully elected set of the more promising new developments in the industry. This organisation is seldom "first in" with new products and services. However, by carefully monitoring the actions of major competitors in areas compatible with its stable product-market base, this business unit can frequently be "second in" with a more cost-efficient product or service. | | | | | | | |
| **3** | This business unit attempts to locate and maintain a secure niche in a relatively stable product or service area. The business unit tends to offer a more limited range of products or services than competitors, and it tries to protect its domain by offering higher quality, superior service, lower prices, and so forth. Often, this business unit is not at the forefront of developments in the industry. It tends to ignore industry changes that have no direct influence on current areas of operation and concentrates instead on doing the best job possible in a limited area. | | | | | | | |

# APPENDIX C – REIGLE (2001) KEY

| | Section 1 | Strongly Agree | | Somewhat Agree | | Somewhat Disagree | | Strongly Disagree | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Employees in your organization tend to use derogatory terms for management. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2 | Your organization has positive myths such as going to extremes or breaking the rules to get the job done. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 3 | Use of jargon in your organization often keeps outsiders from understanding your discussions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 4 | Your organization has heroes that set positive role models for employees to follow. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 5 | Managers in your organization are suspected of using derogatory terms for employees. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 6 | New programs are warded off by negative comments that "it won't work here." | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 7 | Functions within your organization frequently use their own sets of acronyms which divide the organization, making the need for their functions less likely to be challenged. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 8 | Managers in your organization appear to exclude minority group members from participating in special projects which prevents them from learning the language needed to have upward mobility potential. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | Stories about work performance in your organization are generally positive. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

**Section 2**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *1* | Managers in your organization dress differently than employees. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *2* | Managers in your organization have large, plush offices with better furniture than employees. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *3* | Managers in your organization have assigned parking spaces near the door. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *4* | Pictures on the walls of your organization are of executives and upper management instead of employees. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *5* | Managers in your organization have company cars. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *6* | Managers in your organization have better computers than technical professionals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *7* | Managers in your organization have an open-door policy and are willing to talk to employees on an impromptu basis. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| *8* | Managers in your organization are in a separate location from employees. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *9* | Employees in your organization are expected to punch a time clock. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

**Section 3**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *1* | Employees in your organization tend to criticize the organization and the people in it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2 | Employees in your organization listen to others and try to get their opinions. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 3 | Employees in your organization actively look for ways to expand their knowledge in order to be able to do a better job. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 4 | Employees in your organization show genuine concern for the problems that face the organization and make suggestions about solving them. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 5 | Employees in your organization look upon their jobs as being merely eight hours and the major reward as the month-end paycheck. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *6* | Your organization celebrates work accomplishments. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| *7* | Your management watches the time clock, enforcing strict work hour adherence. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *8* | Employees in your organization are expected to work 50-60 hours per week. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| *9* | Employees make a mad rush for the exit door at quitting time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

| | Section 4 | Strongly Agree | | Somewhat Agree | | Somewhat Disagree | | Strongly Disagree | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | In your organization, quantity of work instead of quality of work is stressed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2 | Managers in your organization appear to value flexibility, such as allowing telecommuting, part-time work, or flexible work hours. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 3 | Managers in your organization appear to value innovation - ideas and suggestions by employees are accepted and implemented. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 4 | Your organization is quick to adapt to new technology applications in its area of specialty. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 5 | In your organization, performance evaluations are fair, and generally the most competent people are promoted. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 6 | In your organization, praise is offered for good performance. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | In your organization, there are opportunities for professional growth such as funding for college classes. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 | In your organization, due dates are stressed over doing the work well. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | In your organization, good performance is effectively recognized. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

**Section 5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Managers make employees feel that they are the organization's most important asset. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 2 | Employees are laid off and contractors hired to replace the employees. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 3 | Managers appear to assume that they are the thinkers and employees are the workers of the organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 4 | Managers encourage teamwork and offer rewards for teams. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 5 | Managers empower employees to make decisions. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 6 | Managers tend to make decisions at high levels in the organization without consulting employees for input. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 7 | Managers appear to assume that employees are responsible, capable, and willing to work with little direction. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 | Policies and procedures are prepared in such great detail that it is assumed that the workers aren't very intelligent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | Managers organize people, equipment, and money so that employees can achieve their own goals in support of organizational objectives. | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

# APPENDIX D – SOURCE DATA FOR PORTER'S (1980) GENERIC STRATEGY

## Response Summary

| | Porters Strategy | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Respondant No** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** |
| 1 | 1 | 2 | 1 | 2 | 2 | 1 | | 3 | 1 | 1 | 1 | 1 | | | 7 | 1 | 1 | 4 | 1 | 7 | |
| 2 | 3 | 3 | 4 | 1 | 1 | 2 | 7 | 6 | 3 | 3 | 3 | 3 | 1 | 1 | 4 | 4 | 5 | 6 | 2 | 4 | 2 |
| 3 | 3 | 1 | 1 | 3 | 1 | 1 | 7 | 4 | 2 | 4 | 3 | 7 | 5 | 2 | 7 | 2 | 5 | 2 | 1 | 4 | 4 |
| 4 | 1 | 3 | 1 | 1 | 1 | 1 | 7 | 5 | 1 | 1 | 1 | 1 | 1 | 7 | 7 | 5 | 2 | 3 | 1 | 4 | 1 |
| 5 | 7 | 2 | 2 | 1 | 5 | 3 | 6 | 4 | 7 | 2 | 4 | 3 | 2 | 1 | 2 | 7 | 4 | 4 | 2 | 1 | 7 |
| 6 | 1 | 1 | 1 | 1 | 4 | 4 | 7 | 4 | 5 | 2 | 2 | 2 | 7 | 5 | 7 | 7 | 5 | 3 | 3 | 3 | 7 |
| 7 | 1 | 3 | 1 | 3 | 1 | 2 | 5 | 3 | 2 | 2 | 1 | 2 | 4 | 5 | 1 | 1 | 3 | 4 | 1 | 3 | 2 |
| 8 | 4 | 2 | 1 | 1 | 1 | 2 | 6 | 6 | 4 | 1 | 1 | 4 | 4 | 7 | 1 | 2 | 3 | 2 | 1 | 2 | 5 |
| 9 | 1 | 5 | 2 | 3 | 5 | 6 | 7 | 4 | 2 | 1 | 3 | 5 | 4 | 3 | 1 | 4 | 7 | 1 | 2 | 4 | 7 |
| 10 | 2 | 1 | 1 | 1 | 1 | 1 | 6 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 2 | 1 | 4 | 1 | 1 | 1 |
| 11 | 3 | 2 | 1 | 1 | 1 | 1 | 6 | 4 | 3 | 3 | 5 | 2 | 1 | 1 | 7 | 1 | 3 | 6 | 1 | 3 | 2 |
| 12 | 6 | 2 | 2 | 2 | 3 | 3 | 2 | 6 | 2 | 2 | 4 | 2 | 2 | 3 | 3 | 5 | 4 | 4 | 2 | 4 | 6 |
| 13 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 4 | 2 | 2 | 2 | 4 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 1 | 1 |
| 15 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 3 | 2 | 1 | 1 | 3 | 3 | 5 | 1 | 4 | 3 |
| 16 | 1 | 3 | 2 | 4 | 2 | 1 | 5 | 4 | 2 | 1 | 2 | 6 | 7 | 6 | 4 | 3 | 3 | 4 | 1 | 5 | 6 |
| 17 | 4 | 2 | 2 | 1 | 4 | 6 | 1 | 3 | 4 | 1 | 3 | 2 | | 1 | 1 | 4 | 4 | 2 | 1 | 1 | 4 |
| 18 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 1 | 1 | 2 | 4 | 2 | 3 | | 2 | 5 | 6 | 5 | 1 | 6 | 5 |
| 19 | 1 | 5 | 1 | 1 | 1 | 1 | 5 | 2 | 1 | 1 | 2 | 1 | 1 | 5 | 3 | 2 | 6 | 2 | 1 | 1 | 1 |
| 20 | 4 | 3 | 5 | | 5 | 4 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 5 | 3 | 6 | 4 | 6 | 3 | 4 | 6 |
| 21 | 3 | 5 | 1 | 5 | 1 | 1 | 7 | 4 | 3 | 1 | 4 | 7 | 7 | 3 | 4 | 3 | 7 | 7 | 1 | 5 | |
| 22 | 3 | 2 | 2 | 1 | 2 | 3 | 5 | 3 | 3 | 4 | 4 | 2 | 2 | 3 | 5 | 4 | 3 | 6 | 1 | 3 | 4 |
| 23 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 4 | 5 | 4 | 4 | 2 | 6 | 4 | 4 | 7 | 1 | 4 | 2 |
| 24 | 3 | 1 | 2 | 1 | 1 | 1 | 6 | 3 | 1 | 1 | 5 | 1 | 1 | 1 | 3 | 2 | 5 | 6 | 1 | 2 | 2 |
| 25 | 1 | 5 | 2 | 1 | 1 | 2 | 7 | 2 | 4 | 2 | 3 | 3 | 1 | 3 | 3 | 4 | 4 | 2 | 2 | 1 | 2 |
| 26 | 3 | 3 | 1 | 1 | 1 | 1 | 3 | 6 | 6 | 6 | 6 | 6 | 7 | | 5 | 1 | 7 | 7 | 1 | 4 | 7 |
| 27 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 2 | 2 | 3 | 6 | 6 | 3 | 7 | 7 | 3 | 2 | 2 | 2 |
| 28 | 1 | 3 | 1 | 2 | 1 | 1 | 7 | 4 | 4 | 2 | 1 | 3 | 5 | 2 | 5 | 6 | 3 | 4 | 1 | 1 | 3 |
| 29 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 2 | 3 | 1 | 6 | 3 | 5 | 7 | 6 | 4 | 3 | 5 | 2 | 3 | 3 |
| 30 | 6 | 3 | 2 | 2 | 2 | 1 | 7 | 6 | 5 | 2 | 3 | 6 | 7 | 7 | 7 | 2 | 7 | 3 | 1 | 6 | 7 |
| 31 | 1 | 3 | 1 | 1 | 1 | 2 | 7 | 4 | 2 | 7 | 6 | 6 | 3 | 2 | 1 | 2 | 1 | 6 | 2 | 4 | 5 |
| 32 | 4 | 1 | 1 | 3 | 2 | 2 | 6 | 6 | 3 | 4 | 6 | 6 | 3 | 2 | 6 | 3 | 4 | 6 | 1 | 3 | 3 |
| 33 | 2 | 3 | 1 | 4 | 3 | 2 | 6 | 4 | 2 | 4 | 4 | 6 | 3 | 3 | 6 | 6 | 6 | 4 | 2 | 4 | 5 |
| 34 | 4 | 1 | 1 | 1 | 3 | 3 | 7 | 4 | 4 | 2 | 2 | 3 | 7 | 7 | 7 | 5 | 4 | 1 | 4 | 4 | 7 |

## APPENDIX E – SOURCE DATA FOR MILES & SNOW'S (1978) STRATEGIC TYPOLOGY

| | Snow and Miles | | |
|---|---|---|---|
| **Respondant No** | **1** | **2** | **3** |
| 1 | 1 | 7 | 7 |
| 2 | 3 | 3 | 4 |
| 3 | 2 | 4 | 4 |
| 4 | 5 | 1 | 7 |
| 5 | 6 | 4 | 2 |
| 6 | 2 | 6 | 6 |
| 7 | 1 | 4 | 7 |
| 8 | 4 | 2 | 3 |
| 9 | 2 | 4 | 7 |
| 10 | 1 | 5 | 7 |
| 11 | 6 | 4 | 2 |
| 12 | 6 | 4 | 2 |
| 13 | 2 | 4 | 7 |
| 14 | 1 | 7 | 7 |
| 15 | 1 | 2 | 1 |
| 16 | 2 | 5 | 5 |
| 17 | 6 | 2 | 6 |
| 18 | 3 | 4 | 2 |
| 19 | 6 | 1 | 4 |
| 20 | 4 | 5 | 3 |
| 21 | 5 | 4 | 3 |
| 22 | 3 | 4 | 3 |
| 23 | 7 | 4 | 1 |
| 24 | 4 | 2 | 3 |
| 25 | 7 | 3 | 1 |
| 26 | 7 | 7 | 3 |
| 27 | 3 | 1 | 2 |
| 28 | 1 | 2 | 3 |
| 29 | 5 | 2 | 3 |
| 30 | 2 | 4 | 2 |
| 31 | 2 | 1 | 1 |
| 32 | 5 | 2 | 2 |
| 33 | 2 | 5 | 6 |
| 34 | 2 | 5 | 5 |

# APPENDIX F – CORRELATION ANALYSIS DATA

**Correlation Report**

**Pearson Correlations Section (Row-Wise Deletion)**

| | OCA | P1 | P2 | P3 | P4 | P5 |
|---|---|---|---|---|---|---|
| OCA | 1.000000 | -0.088400 | -0.058843 | -0.090470 | -0.007504 | -0.243399 |
| | 0.000000 | 0.654643 | 0.766139 | 0.647069 | 0.969769 | 0.211995 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P1 | -0.088400 | 1.000000 | -0.257709 | 0.292231 | -0.059144 | 0.325596 |
| | 0.654643 | 0.000000 | 0.185506 | 0.131298 | 0.764974 | 0.090881 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P2 | -0.058843 | -0.257709 | 1.000000 | 0.296847 | 0.207939 | 0.070873 |
| | 0.766139 | 0.185506 | 0.000000 | 0.125038 | 0.288323 | 0.720062 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P3 | -0.090470 | 0.292231 | 0.296847 | 1.000000 | 0.045089 | 0.204265 |
| | 0.647069 | 0.131298 | 0.125038 | 0.000000 | 0.819780 | 0.297118 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P4 | -0.007504 | -0.059144 | 0.207939 | 0.045089 | 1.000000 | 0.284677 |
| | 0.969769 | 0.764974 | 0.288323 | 0.819780 | 0.000000 | 0.142031 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P5 | -0.243399 | 0.325596 | 0.070873 | 0.204265 | 0.284677 | 1.000000 |
| | 0.211995 | 0.090881 | 0.720062 | 0.297118 | 0.142031 | 0.000000 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P6 | -0.441168 | 0.018861 | 0.132470 | 0.227185 | 0.138715 | 0.794525 |
| | 0.018773 | 0.924108 | 0.501599 | 0.244984 | 0.481457 | 0.000000 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P7 | 0.170682 | -0.017055 | 0.296987 | 0.159520 | 0.107889 | 0.101871 |
| | 0.385184 | 0.931357 | 0.124851 | 0.417465 | 0.584745 | 0.605980 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P8 | -0.226948 | 0.513637 | 0.059032 | 0.268098 | 0.181325 | 0.137865 |
| | 0.245490 | 0.005180 | 0.765407 | 0.167781 | 0.355786 | 0.484174 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P9 | -0.072392 | 0.471226 | -0.054856 | 0.151570 | -0.163490 | 0.413452 |
| | 0.714307 | 0.011368 | 0.781591 | 0.441341 | 0.405816 | 0.028746 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P10 | 0.127639 | 0.041117 | -0.076714 | -0.075040 | 0.057096 | -0.125411 |
| | 0.517461 | 0.835434 | 0.698020 | 0.704312 | 0.772898 | 0.524858 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P11 | 0.065399 | 0.272490 | -0.132700 | 0.199343 | 0.123850 | 0.167868 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 0.740921 | 0.160660 | 0.500848 | 0.309159 | 0.530072 | 0.393182 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P12 | -0.055353 | 0.148336 | 0.115406 | 0.029195 | 0.617057 | 0.162642 |
| | 0.779661 | 0.451259 | 0.558690 | 0.882758 | 0.000470 | 0.408287 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P13 | 0.058586 | 0.032830 | -0.095696 | -0.136114 | 0.399731 | 0.295327 |
| | 0.767131 | 0.868279 | 0.628099 | 0.489794 | 0.035074 | 0.127074 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P14 | -0.035011 | -0.000997 | 0.245052 | -0.086721 | 0.197953 | 0.111487 |
| | 0.859614 | 0.995983 | 0.208810 | 0.660813 | 0.312616 | 0.572208 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P15 | 0.291241 | 0.098690 | -0.238687 | -0.076715 | 0.141556 | 0.031588 |
| | 0.132671 | 0.617335 | 0.221252 | 0.698015 | 0.472435 | 0.873222 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P16 | -0.247643 | 0.132040 | 0.046837 | 0.118630 | 0.002767 | 0.530974 |
| | 0.203885 | 0.503000 | 0.812912 | 0.547681 | 0.988852 | 0.003647 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P17 | -0.289606 | 0.200623 | 0.301575 | 0.248338 | 0.221402 | 0.347122 |
| | 0.134959 | 0.306000 | 0.118856 | 0.202577 | 0.257525 | 0.070327 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P18 | 0.198498 | 0.055752 | -0.316908 | 0.200191 | -0.063852 | -0.273740 |
| | 0.311258 | 0.778110 | 0.100356 | 0.307063 | 0.746848 | 0.158673 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P19 | -0.022000 | 0.087214 | -0.029481 | 0.113291 | -0.106227 | 0.568014 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | P6 | P7 | P8 | P9 | P10 | P11 |
|---|---|---|---|---|---|---|
| OCA | -0.441168 | 0.170682 | -0.226948 | -0.072392 | 0.127639 | 0.065399 |
| | 0.018773 | 0.385184 | 0.245490 | 0.714307 | 0.517461 | 0.740921 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P1 | 0.018861 | -0.017055 | 0.513637 | 0.471226 | 0.041117 | 0.272490 |
| | 0.924108 | 0.931357 | 0.005180 | 0.011368 | 0.835434 | 0.160660 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P2 | 0.132470 | 0.296987 | 0.059032 | -0.054856 | -0.076714 | -0.132700 |
| | 0.501599 | 0.124851 | 0.765407 | 0.781591 | 0.698020 | 0.500848 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P3 | 0.227185 | 0.159520 | 0.268098 | 0.151570 | -0.075040 | 0.199343 |
| | 0.244984 | 0.417465 | 0.167781 | 0.441341 | 0.704312 | 0.309159 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P4 | 0.138715 | 0.107889 | 0.181325 | -0.163490 | 0.057096 | 0.123850 |
| | 0.481457 | 0.584745 | 0.355786 | 0.405816 | 0.772898 | 0.530072 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P5 | 0.794525 | 0.101871 | 0.137865 | 0.413452 | -0.125411 | 0.167868 |
| | 0.000000 | 0.605980 | 0.484174 | 0.028746 | 0.524858 | 0.393182 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P6 | 1.000000 | -0.028727 | 0.032211 | 0.277553 | -0.053275 | 0.181678 |
| | 0.000000 | 0.884625 | 0.870743 | 0.152721 | 0.787744 | 0.354836 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P7 | -0.028727 | 1.000000 | 0.232891 | 0.091508 | 0.091967 | -0.134736 |
| | 0.884625 | 0.000000 | 0.233008 | 0.643285 | 0.641612 | 0.494241 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P8 | 0.032211 | 0.232891 | 1.000000 | 0.349229 | 0.278557 | 0.129068 |
| | 0.870743 | 0.233008 | 0.000000 | 0.068526 | 0.151180 | 0.512744 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P9 | 0.277553 | 0.091508 | 0.349229 | 1.000000 | 0.110306 | 0.097040 |
| | 0.152721 | 0.643285 | 0.068526 | 0.000000 | 0.576310 | 0.623258 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P10 | -0.053275 | 0.091967 | 0.278557 | 0.110306 | 1.000000 | 0.571387 |
| | 0.787744 | 0.641612 | 0.151180 | 0.576310 | 0.000000 | 0.001493 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P11 | 0.181678 | -0.134736 | 0.129068 | 0.097040 | 0.571387 | 1.000000 |
| | 0.354836 | 0.494241 | 0.512744 | 0.623258 | 0.001493 | 0.000000 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P12 | 0.058036 | 0.173793 | 0.447052 | 0.209430 | 0.524619 | 0.334981 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 0.769259 | 0.376449 | 0.017074 | 0.284803 | 0.004156 | 0.081424 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P13 | 0.233957 | 0.066477 | 0.294189 | 0.441447 | 0.012096 | -0.131516 |
| | 0.230815 | 0.736799 | 0.128616 | 0.018689 | 0.951290 | 0.504711 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P14 | 0.135449 | 0.116795 | 0.272393 | 0.175330 | -0.301286 | -0.299898 |
| | 0.491939 | 0.553934 | 0.160815 | 0.372179 | 0.119228 | 0.121022 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P15 | -0.135449 | 0.275636 | 0.280132 | 0.170623 | 0.149235 | 0.114810 |
| | 0.491939 | 0.155694 | 0.148787 | 0.385351 | 0.448491 | 0.560736 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P16 | 0.404262 | -0.038675 | 0.260045 | 0.536854 | 0.013813 | -0.013654 |
| | 0.032871 | 0.845086 | 0.181412 | 0.003225 | 0.944381 | 0.945022 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P17 | 0.289786 | -0.067986 | 0.284939 | 0.277171 | -0.083859 | 0.067820 |
| | 0.134705 | 0.731037 | 0.141648 | 0.153309 | 0.671380 | 0.731671 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P18 | -0.249367 | -0.164098 | 0.090781 | -0.052969 | 0.487799 | 0.627394 |
| | 0.200652 | 0.404048 | 0.645935 | 0.788933 | 0.008458 | 0.000352 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P19 | 0.611276 | 0.090160 | 0.043011 | 0.362135 | 0.043473 | 0.027931 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | P12 | P13 | P14 | P15 | P16 | P17 |
|---|---|---|---|---|---|---|
| OCA | -0.055353 | 0.058586 | -0.035011 | 0.291241 | -0.247643 | -0.289606 |
| | 0.779661 | 0.767131 | 0.859614 | 0.132671 | 0.203885 | 0.134959 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P1 | 0.148336 | 0.032830 | -0.000997 | 0.098690 | 0.132040 | 0.200623 |
| | 0.451259 | 0.868279 | 0.995983 | 0.617335 | 0.503000 | 0.306000 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P2 | 0.115406 | -0.095696 | 0.245052 | -0.238687 | 0.046837 | 0.301575 |
| | 0.558690 | 0.628099 | 0.208810 | 0.221252 | 0.812912 | 0.118856 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P3 | 0.029195 | -0.136114 | -0.086721 | -0.076715 | 0.118630 | 0.248338 |
| | 0.882758 | 0.489794 | 0.660813 | 0.698015 | 0.547681 | 0.202577 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P4 | 0.617057 | 0.399731 | 0.197953 | 0.141556 | 0.002767 | 0.221402 |
| | 0.000470 | 0.035074 | 0.312616 | 0.472435 | 0.988852 | 0.257525 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P5 | 0.162642 | 0.295327 | 0.111487 | 0.031588 | 0.530974 | 0.347122 |
| | 0.408287 | 0.127074 | 0.572208 | 0.873222 | 0.003647 | 0.070327 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P6 | 0.058036 | 0.233957 | 0.135449 | -0.135449 | 0.404262 | 0.289786 |
| | 0.769259 | 0.230815 | 0.491939 | 0.491939 | 0.032871 | 0.134705 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P7 | 0.173793 | 0.066477 | 0.116795 | 0.275636 | -0.038675 | -0.067986 |
| | 0.376449 | 0.736799 | 0.553934 | 0.155694 | 0.845086 | 0.731037 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P8 | 0.447052 | 0.294189 | 0.272393 | 0.280132 | 0.260045 | 0.284939 |
| | 0.017074 | 0.128616 | 0.160815 | 0.148787 | 0.181412 | 0.141648 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P9 | 0.209430 | 0.441447 | 0.175330 | 0.170623 | 0.536854 | 0.277171 |
| | 0.284803 | 0.018689 | 0.372179 | 0.385351 | 0.003225 | 0.153309 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P10 | 0.524619 | 0.012096 | -0.301286 | 0.149235 | 0.013813 | -0.083859 |
| | 0.004156 | 0.951290 | 0.119228 | 0.448491 | 0.944381 | 0.671380 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P11 | 0.334981 | -0.131516 | -0.299898 | 0.114810 | -0.013654 | 0.067820 |
| | 0.081424 | 0.504711 | 0.121022 | 0.560736 | 0.945022 | 0.731671 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P12 | 1.000000 | 0.508238 | 0.098595 | 0.133652 | 0.010749 | 0.290670 |
| | 0.000000 | 0.005756 | 0.617673 | 0.497755 | 0.956709 | 0.133466 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P13 | 0.508238 | 1.000000 | 0.608596 | 0.302147 | 0.299352 | 0.331877 |
| | 0.005756 | 0.000000 | 0.000590 | 0.118123 | 0.121733 | 0.084464 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P14 | 0.098595 | 0.608596 | 1.000000 | 0.230038 | 0.186651 | 0.206701 |
| | 0.617673 | 0.000590 | 0.000000 | 0.238947 | 0.341589 | 0.291268 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P15 | 0.133652 | 0.302147 | 0.230038 | 1.000000 | 0.225946 | 0.115888 |
| | 0.497755 | 0.118123 | 0.238947 | 0.000000 | 0.247635 | 0.557036 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P16 | 0.010749 | 0.299352 | 0.186651 | 0.225946 | 1.000000 | 0.327479 |
| | 0.956709 | 0.121733 | 0.341589 | 0.247635 | 0.000000 | 0.088920 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P17 | 0.290670 | 0.331877 | 0.206701 | 0.115888 | 0.327479 | 1.000000 |
| | 0.133466 | 0.084464 | 0.291268 | 0.557036 | 0.088920 | 0.000000 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P18 | -0.026899 | -0.299216 | -0.447639 | 0.089118 | -0.120604 | -0.339275 |
| | 0.891925 | 0.121911 | 0.016912 | 0.652012 | 0.540988 | 0.077356 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P19 | 0.006765 | 0.341980 | 0.218736 | 0.095069 | 0.542219 | 0.236468 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | P18 | P19 | P20 | P21 | Prospector | Analyser |
|---|---|---|---|---|---|---|
| OCA | 0.198498 | -0.022000 | -0.025414 | -0.104089 | 0.037963 | 0.208701 |
| | 0.311258 | 0.911522 | 0.897858 | 0.598118 | 0.847907 | 0.286520 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P1 | 0.055752 | 0.087214 | 0.178471 | 0.450432 | 0.233243 | 0.038794 |
| | 0.778110 | 0.658999 | 0.363536 | 0.016158 | 0.232283 | 0.844614 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P2 | -0.316908 | -0.029481 | 0.005325 | 0.013783 | 0.186462 | -0.288986 |
| | 0.100356 | 0.881618 | 0.978546 | 0.944504 | 0.342088 | 0.135834 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P3 | 0.200191 | 0.113291 | 0.212071 | 0.137228 | 0.164767 | 0.009615 |
| | 0.307063 | 0.565968 | 0.278635 | 0.486215 | 0.402107 | 0.961271 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P4 | -0.063852 | -0.106227 | 0.414253 | 0.280880 | -0.219637 | 0.171516 |
| | 0.746848 | 0.590577 | 0.028408 | 0.147660 | 0.261436 | 0.382830 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P5 | -0.273740 | 0.568014 | 0.149231 | 0.758442 | 0.034154 | 0.366912 |
| | 0.158673 | 0.001616 | 0.448502 | 0.000003 | 0.863015 | 0.054783 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P6 | -0.249367 | 0.611276 | 0.090336 | 0.539428 | 0.051143 | 0.176116 |
| | 0.200652 | 0.000549 | 0.647559 | 0.003053 | 0.796055 | 0.370005 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P7 | -0.164098 | 0.090160 | -0.021496 | 0.127718 | -0.130151 | 0.144774 |
| | 0.404048 | 0.648201 | 0.913541 | 0.517198 | 0.509182 | 0.462320 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P8 | 0.090781 | 0.043011 | 0.520506 | 0.395461 | 0.181358 | -0.169538 |
| | 0.645935 | 0.827962 | 0.004517 | 0.037256 | 0.355698 | 0.388426 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P9 | -0.052969 | 0.362135 | -0.021657 | 0.494321 | 0.234767 | 0.078584 |
| | 0.788933 | 0.058262 | 0.912894 | 0.007499 | 0.229158 | 0.691012 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P10 | 0.487799 | 0.043473 | 0.325080 | 0.097556 | 0.022644 | -0.109579 |
| | 0.008458 | 0.826143 | 0.091424 | 0.621404 | 0.908944 | 0.578842 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P11 | 0.627394 | 0.027931 | 0.278254 | 0.100951 | 0.429262 | -0.235686 |
| | 0.000352 | 0.887801 | 0.151645 | 0.609256 | 0.022636 | 0.227290 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P12 | -0.026899 | 0.006765 | 0.575560 | 0.493419 | -0.153542 | -0.009474 |
| | 0.891925 | 0.972744 | 0.001353 | 0.007626 | 0.435352 | 0.961838 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P13 | -0.299216 | 0.341980 | 0.444382 | 0.589077 | -0.342172 | 0.172030 |
| | 0.121911 | 0.074874 | 0.017829 | 0.000973 | 0.074701 | 0.381385 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P14 | -0.447639 | 0.218736 | 0.309510 | 0.259089 | 0.027894 | -0.164880 |
| | 0.016912 | 0.263446 | 0.108992 | 0.183079 | 0.887951 | 0.401780 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P15 | 0.089118 | 0.095069 | 0.317886 | 0.029270 | 0.129116 | 0.169931 |
| | 0.652012 | 0.630363 | 0.099254 | 0.882461 | 0.512583 | 0.387309 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P16 | -0.120604 | 0.542219 | -0.020546 | 0.349665 | 0.136840 | -0.028319 |
| | 0.540988 | 0.002876 | 0.917348 | 0.068158 | 0.487462 | 0.886254 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P17 | -0.339275 | 0.236468 | 0.236993 | 0.322853 | 0.105106 | -0.071307 |
| | 0.077356 | 0.225704 | 0.224646 | 0.093796 | 0.594524 | 0.718413 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P18 | 1.000000 | -0.365853 | 0.110263 | -0.329761 | 0.186325 | -0.121560 |
| | 0.000000 | 0.055540 | 0.576460 | 0.086587 | 0.342449 | 0.537762 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P19 | -0.365853 | 1.000000 | 0.091820 | 0.522189 | -0.045285 | 0.221695 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | Defender |
|---|---|
| OCA | -0.104997 |
| | 0.594909 |
| | 28.000000 |
| P1 | -0.419060 |
| | 0.026442 |
| | 28.000000 |
| P2 | 0.016793 |
| | 0.932408 |
| | 28.000000 |
| P3 | -0.144320 |
| | 0.463740 |
| | 28.000000 |
| P4 | 0.223192 |
| | 0.253600 |
| | 28.000000 |
| P5 | 0.182368 |
| | 0.352980 |
| | 28.000000 |
| P6 | 0.172933 |
| | 0.378852 |
| | 28.000000 |
| P7 | 0.225563 |
| | 0.248460 |
| | 28.000000 |
| P8 | -0.267867 |
| | 0.168161 |
| | 28.000000 |
| P9 | -0.439194 |
| | 0.019373 |
| | 28.000000 |
| P10 | -0.436822 |
| | 0.020115 |
| | 28.000000 |
| P11 | -0.623443 |
| | 0.000394 |
| | 28.000000 |
| P12 | -0.256661 |
| | 0.187364 |

| | | |
|---|---|---|
| | 28.000000 | |
| P13 | 0.003404 | |
| | 0.986283 | |
| | 28.000000 | |
| P14 | 0.118082 | |
| | 0.549544 | |
| | 28.000000 | |
| P15 | 0.018756 | |
| | 0.924530 | |
| | 28.000000 | |
| P16 | -0.092011 | |
| | 0.641454 | |
| | 28.000000 | |
| P17 | -0.083680 | |
| | 0.672041 | |
| | 28.000000 | |
| P18 | -0.429171 | |
| | 0.022668 | |
| | 28.000000 | |
| P19 | 0.106856 | |
| Cronbachs Alpha = 0.729008 | | Standardized Cronbachs Alpha = 0.749736 |

**Pearson Correlations Section (Row-Wise Deletion)**

| | OCA | P1 | P2 | P3 | P4 | P5 |
|---|---|---|---|---|---|---|
| | 0.911522 | 0.658999 | 0.881618 | 0.565968 | 0.590577 | 0.001616 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P20 | -0.025414 | 0.178471 | 0.005325 | 0.212071 | 0.414253 | 0.149231 |
| | 0.897858 | 0.363536 | 0.978546 | 0.278635 | 0.028408 | 0.448502 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P21 | -0.104089 | 0.450432 | 0.013783 | 0.137228 | 0.280880 | 0.758442 |
| | 0.598118 | 0.016158 | 0.944504 | 0.486215 | 0.147660 | 0.000003 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Prospector | 0.037963 | 0.233243 | 0.186462 | 0.164767 | -0.219637 | 0.034154 |
| | 0.847907 | 0.232283 | 0.342088 | 0.402107 | 0.261436 | 0.863015 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Analyser | 0.208701 | 0.038794 | -0.288986 | 0.009615 | 0.171516 | 0.366912 |
| | 0.286520 | 0.844614 | 0.135834 | 0.961271 | 0.382830 | 0.054783 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Defender | -0.104997 | -0.419060 | 0.016793 | -0.144320 | 0.223192 | 0.182368 |
| | 0.594909 | 0.026442 | 0.932408 | 0.463740 | 0.253600 | 0.352980 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | P6 | P7 | P8 | P9 | P10 | P11 |
|---|---|---|---|---|---|---|
| | 0.000549 | 0.648201 | 0.827962 | 0.058262 | 0.826143 | 0.887801 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P20 | 0.090336 | -0.021496 | 0.520506 | -0.021657 | 0.325080 | 0.278254 |
| | 0.647559 | 0.913541 | 0.004517 | 0.912894 | 0.091424 | 0.151645 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P21 | 0.539428 | 0.127718 | 0.395461 | 0.494321 | 0.097556 | 0.100951 |
| | 0.003053 | 0.517198 | 0.037256 | 0.007499 | 0.621404 | 0.609256 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Prospector | 0.051143 | -0.130151 | 0.181358 | 0.234767 | 0.022644 | 0.429262 |
| | 0.796055 | 0.509182 | 0.355698 | 0.229158 | 0.908944 | 0.022636 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Analyser | 0.176116 | 0.144774 | -0.169538 | 0.078584 | -0.109579 | -0.235686 |
| | 0.370005 | 0.462320 | 0.388426 | 0.691012 | 0.578842 | 0.227290 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Defender | 0.172933 | 0.225563 | -0.267867 | -0.439194 | -0.436822 | -0.623443 |
| | 0.378852 | 0.248460 | 0.168161 | 0.019373 | 0.020115 | 0.000394 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | P12 | P13 | P14 | P15 | P16 | P17 |
|---|---|---|---|---|---|---|
| | 0.972744 | 0.074874 | 0.263446 | 0.630363 | 0.002876 | 0.225704 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P20 | 0.575560 | 0.444382 | 0.309510 | 0.317886 | -0.020546 | 0.236993 |
| | 0.001353 | 0.017829 | 0.108992 | 0.099254 | 0.917348 | 0.224646 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P21 | 0.493419 | 0.589077 | 0.259089 | 0.029270 | 0.349665 | 0.322853 |
| | 0.007626 | 0.000973 | 0.183079 | 0.882461 | 0.068158 | 0.093796 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Prospector | -0.153542 | -0.342172 | 0.027894 | 0.129116 | 0.136840 | 0.105106 |
| | 0.435352 | 0.074701 | 0.887951 | 0.512583 | 0.487462 | 0.594524 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Analyser | -0.009474 | 0.172030 | -0.164880 | 0.169931 | -0.028319 | -0.071307 |
| | 0.961838 | 0.381385 | 0.401780 | 0.387309 | 0.886254 | 0.718413 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Defender | -0.256661 | 0.003404 | 0.118082 | 0.018756 | -0.092011 | -0.083680 |
| | 0.187364 | 0.986283 | 0.549544 | 0.924530 | 0.641454 | 0.672041 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | P18 | P19 | P20 | P21 | Prospector | Analyser |
|---|---|---|---|---|---|---|
| | 0.055540 | 0.000000 | 0.642146 | 0.004367 | 0.819010 | 0.256880 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P20 | 0.110263 | 0.091820 | 1.000000 | 0.453459 | -0.157337 | 0.091154 |
| | 0.576460 | 0.642146 | 0.000000 | 0.015371 | 0.423950 | 0.644574 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| P21 | -0.329761 | 0.522189 | 0.453459 | 1.000000 | -0.178090 | 0.329688 |
| | 0.086587 | 0.004367 | 0.015371 | 0.000000 | 0.364577 | 0.086660 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Prospector | 0.186325 | -0.045285 | -0.157337 | -0.178090 | 1.000000 | -0.319564 |
| | 0.342449 | 0.819010 | 0.423950 | 0.364577 | 0.000000 | 0.097383 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Analyser | -0.121560 | 0.221695 | 0.091154 | 0.329688 | -0.319564 | 1.000000 |
| | 0.537762 | 0.256880 | 0.644574 | 0.086660 | 0.097383 | 0.000000 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |
| Defender | -0.429171 | 0.106856 | -0.064090 | -0.027457 | -0.504685 | 0.468708 |
| | 0.022668 | 0.588368 | 0.745935 | 0.889694 | 0.006165 | 0.011876 |
| | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 | 28.000000 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

**Pearson Correlations Section (Row-Wise Deletion)**

| | Defender |
|---|---|
| | 0.588368 |
| | 28.000000 |
| P20 | -0.064090 |
| | 0.745935 |
| | 28.000000 |
| P21 | -0.027457 |
| | 0.889694 |
| | 28.000000 |
| Prospector | -0.504685 |
| | 0.006165 |
| | 28.000000 |
| Analyser | 0.468708 |
| | 0.011876 |
| | 28.000000 |
| Defender | 1.000000 |
| | 0.000000 |
| | 28.000000 |

Cronbachs Alpha = 0.729008 Standardized Cronbachs Alpha = 0.749736

## APPENDIX G – CHI-SQUARED TEST OF INDEPENDENCE DATA

**Counts Section**

| | OrgType | | | | |
|---|---|---|---|---|---|
| **Porter** | **ME** | **MO** | **OM** | **OR** | **Total** |
| **D** | 3 | 1 | 7 | 5 | 16 |
| **F** | 1 | 1 | 3 | 5 | 10 |
| **L** | 0 | 2 | 3 | 3 | 8 |
| **Total** | 4 | 4 | 13 | 13 | 34 |

The number of rows with at least one missing value is 0

**Chi-Square Contribution Section**

| | OrgType | | | | |
|---|---|---|---|---|---|
| **Porter** | **ME** | **MO** | **OM** | **OR** | **Total** |
| **D** | 0.66 | 0.41 | 0.13 | 0.20 | 1.40 |
| **F** | 0.03 | 0.03 | 0.18 | 0.36 | 0.60 |
| **L** | 0.94 | 1.19 | 0.00 | 0.00 | 2.13 |
| **Total** | 1.63 | 1.63 | 0.31 | 0.56 | 4.13 |

The number of rows with at least one missing value is 0

**Chi-Square Statistics Section**

| | | |
|---|---|---|
| Chi-Square | 4.135577 | |
| Degrees of Freedom | 6.000000 | |
| Probability Level | 0.658335 | Accept Ho |

WARNING: At least one cell had an expected value less than 5.

**Counts Section**

| | OrgType | | | | |
|---|---|---|---|---|---|
| **S_M_Class** | **ME** | **MO** | **OM** | **OR** | **Total** |
| **1** | 1 | 0 | 5 | 5 | 11 |
| **2** | 1 | 0 | 6 | 4 | 11 |
| **3** | 2 | 4 | 2 | 4 | 12 |
| **Total** | 4 | 4 | 13 | 13 | 34 |

The number of rows with at least one missing value is 0

**Chi-Square Contribution Section**

| | OrgType | | | | |
|---|---|---|---|---|---|
| **S_M_Class** | **ME** | **MO** | **OM** | **OR** | **Total** |
| **1** | 0.07 | 1.29 | 0.15 | 0.15 | 1.66 |
| **2** | 0.07 | 1.29 | 0.77 | 0.01 | 2.14 |
| **3** | 0.25 | 4.75 | 1.46 | 0.08 | 6.54 |
| **Total** | 0.39 | 7.33 | 2.38 | 0.24 | 10.34 |

The number of rows with at least one missing value is 0

**Chi-Square Statistics Section**

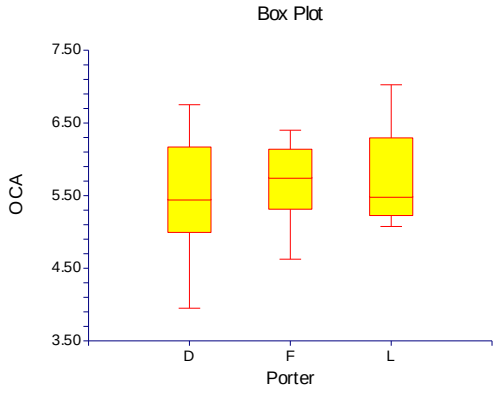
| | | |
|---|---|---|
| Chi-Square | 10.322844 | |
| Degrees of Freedom | 6.000000 | |
| Probability Level | 0.111698 | Accept Ho |

WARNING: At least one cell had an expected value less than 5.

# APPENDIX H – ANOVA DATA

## Analysis of Variance Report – Porter's (1980) Generic Strategy

### Box Plot Section




### Kruskal-Wallis One-Way ANOVA on Ranks

**Hypotheses**

Ho: All medians are equal.

Ha: At least two medians are different.

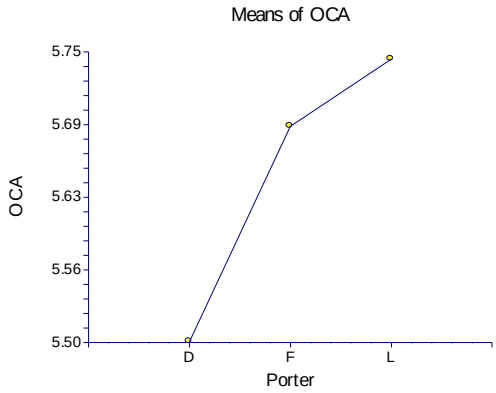
### Test Results

| Method | DF | Chi-Square (H) | Prob Level | Decision(0.10) |
|---|---|---|---|---|
| Not Corrected for Ties | 2 | 0.3447479 | 0.841664 | Accept Ho |
| Corrected for Ties | 2 | 0.3448533 | 0.841620 | Accept Ho |
| | | | | |
| Number Sets of Ties | 2 | | | |
| Multiplicity Factor | 12 | | | |

### Group Detail

| Group | Count | Sum of Ranks | Mean Rank | Z-Value | Median |
|---|---|---|---|---|---|
| D | 16 | 263.00 | 16.44 | -0.5866 | 5.45 |
| F | 10 | 185.00 | 18.50 | 0.3780 | 5.75 |
| L | 8 | 147.00 | 18.38 | 0.2842 | 5.4875 |

**Plots of Means Section**




**Kruskal-Wallis Multiple-Comparison Z-Value Test**

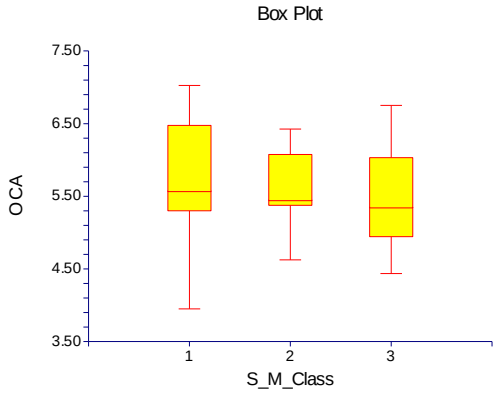
| OCA | D | F | L |
|---|---|---|---|
| D | 0.0000 | 0.5139 | 0.4494 |
| F | 0.5139 | 0.0000 | 0.0265 |
| L | 0.4494 | 0.0265 | 0.0000 |

Regular Test: Medians significantly different if z-value > 1.6449

Bonferroni Test: Medians significantly different if z-value > 2.1280

**Analysis of Variance Report – Miles & Snow (1978) Strategic Typology**

**Box Plot Section**




**Kruskal-Wallis One-Way ANOVA on Ranks**

**Hypotheses**

Ho: All medians are equal.

Ha: At least two medians are different.

**Test Results**

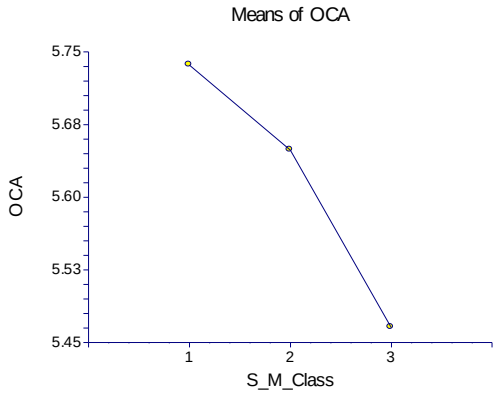
| Method | DF | Chi-Square (H) | Prob Level | Decision(0.10) |
|---|---|---|---|---|
| Not Corrected for Ties | 2 | 1.532009 | 0.464867 | Accept Ho |
| Corrected for Ties | 2 | 1.532477 | 0.464758 | Accept Ho |

| | |
|---|---|
| Number Sets of Ties | 2 |
| Multiplicity Factor | 12 |

**Group Detail**

| Group | Count | Sum of Ranks | Mean Rank | Z-Value | Median |
|---|---|---|---|---|---|
| 1 | 11 | 219.00 | 19.91 | 0.9755 | 5.575 |
| 2 | 11 | 198.00 | 18.00 | 0.2025 | 5.45 |
| 3 | 12 | 178.00 | 14.83 | -1.1532 | 5.35 |

**Plots of Means Section**




**Kruskal-Wallis Multiple-Comparison Z-Value Test**

| OCA | 1 | 2 | 3 |
|---|---|---|---|
| 1 | 0.0000 | 0.4497 | 1.2213 |
| 2 | 0.4497 | 0.0000 | 0.7619 |
| 3 | 1.2213 | 0.7619 | 0.0000 |

Regular Test: Medians significantly different if z-value > 1.6449

Bonferroni Test: Medians significantly different if z-value > 2.1280