The relationship between organisational culture and strategy formulation in South African firms

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In this article the relationship between organisational culture and strategy formulation in South African firms is investigated. The intention is to analyse whether South African firms with specific organisational culture types formulate strategies in the same manner. Literature available on the individual concepts of organisational culture and strategy formulation is extensive, but the relationship between the two concepts is generally ignored. During the empirical survey a self-administered questionnaire was send to 3000 firms. The culture type exhibited by firms was compared to the manner in which these firms formulate strategies. The findings confirm statistical significant relationships between firms with different organisational culture types and how strategies are formulated. Firms should therefore increase their emphasis on aligning culture and strategy.

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Introduction

In this article the relationship between organisational culture and strategy formulation in South African firms is investigated. The intention is to analyse whether South African firms with specific organisational culture types formulate strategies in the same manner. In the literature (see for example Hellriegel & Slocum, 1996; Johnson & Scholes, 1999 and Rowe, Mason, Dickel, Mann & Mockler, 1994) environmental analysis forms an important element of the strategic management process. The process of monitoring the organisational environment to identify threats and opportunities, creates many challenges for the strategic manager. The firm's strategy reflects how it plans to adapt to changing environmental conditions and maintain its effectiveness. Despite this notion, it is often said that strategic management has failed. Wilson (1994:12), however, is of the opinion that strategic planning is not dead, but it has changed dramatically since its inception in the early 1970's. It might be said that strategic planning has reflected the turbulence, change and uncertainty of the times in which it has evolved. Mintzberg (1994:107) concurs that strategic planning is certainly not dead) only a new approach has been taken. Both David (1993:274) and Johnson and Scholes (1999:231) are of the opinion that organisational culture should form an important element of the strategic management process. The question can be posed whether South African firms implement strategic management, although their organisational culture is not conducive to do so? In this article, a theoretical exposition of organisational culture and strategy formulation will first be given. Thereafter, the results of an empirical study to investigate the relationship between culture and strategy formulation variables, will be outlined, as well as the main conclusions and recommendations.

Organisational culture and strategy formulation: A theoretical overview

Definition of concepts

Defining the concept organisational culture is a difficult task – one that many writers avoid by simply not defining the concept and assuming the reader understands the concept (Silvester & Anderson, 1999:1). According to Fey and Claes (1999:9) and Williams, Dobson and Walters (1990:9), most people agree that organisational culture exists, but few agree on what it is. Various definitions have been given to the concept 'organisational culture' within the context of anthropology, organisational psychology and management theory. According to Schein (1990:111) it is 'a pattern of basic assumptions; invented, discovered or developed by a given group ... as the correct way to perceive, think and feel in relation to cope with problems.' Gibson, Ivancevich and Donnelly (1991:46) concur by describing it as the "personality or feel" of the organisation, explaining how organisations and people within the organisation behave in different circumstances. Johnson (1992:31) indicates that organisational culture consists of various stories, myths, rituals, symbols, routines and control systems. For the purpose of this article, organisational culture refers to the dominant beliefs, values and norms of the members of the group that form the organisation.

Strategy formulation, on the other hand, is a comprehensive process and plays a fundamental role in the strategic management process. According to Hunger and Wheelen (1993:13), strategy formulation is the development of long-range plans for the effective management of environmental opportunities and threats in the light of corporate strengths and weaknesses.

McCarthy, Minichiello and Curran (1987:315) also view strategy formulation as the continuous monitoring and evaluation of the present strategy and begins with the identification and description of that strategy. Various authors (see for example Ansoff & McDonnell, 1990; Godet, 1987; Pearce & Robinson, 1991 and Thompson & Strickland, 1984) highlight the various components which constitute strategy formulation: defining the business; formulate a mission statement; identify objectives and goals; set strategies and policy guidelines. An in-depth discussion of these strategy formulation elements falls beyond the scope of this article.

Organisational culture types

Although Fombrum (1983:139) advocates that the culture of each organisation is unique in scope and content, many frameworks (see for example Hellriegel & Slocum, 1996; Kono, 1990 and Thompson, 1993) have been developed for describing different types of organisational cultures. With a few exceptions, these descriptions are extensions of four basic types (Handy, 1985:188), namely:

- Power culture

The power culture depends on a central power source, with rays of power and influence spreading out of a central figure. There are few rules and procedures in this type of culture) control is exercised largely by the centre figures. The power culture is also sometimes referred to as the club culture (Thompson, 1993:74). Size is a problem for power cultures. Another characteristic of power cultures is that much faith is put in the individual and little in committees or team work. The power culture also correlates with the market culture described by Hellriegel and Slocum (1996:561).

- Role culture

The role culture is often stereotyped as bureaucracy. The organisational culture is build around defined jobs, rules and procedures. This culture operates according to logic and rationality. The firm with a role organisational culture rests its strength in its functions or specialities. Top management is characterised by a small span of management. The firm operates within a stable external environment where creative or innovative behaviour is discouraged as a rule. This culture type is slow to perceive the need for change and slow to change even if the need is seen. The role culture correlates with the process culture identified by Rue and Holland (1986:443).

- Task culture

The task culture is job or project oriented. This culture is also extremely adaptable. For a particular problem situation, people and other resources can be drawn from various parts of the firm on a temporary basis. The so-called matrix organisation is one structural form of the task culture. Influence within the firm is based on expertise rather than on personal authority. This culture corresponds with the work-hard, play-hard culture identified by Deshpandé and

Parasuraman (1986:31).

- Person culture

The individual is the central point in the person culture. The firm exists to help the individual rather than the other way round. Groups of professional people, such as doctors, dentists and architects are examples of a person culture. Clearly, not many firms can exist with this sort of culture, since firms have objectives besides the collective objectives included in a person organisational culture.

The interaction between organisational culture and strategy formulation

A comprehensive device, known as McKinsey's 7-S framework was developed to help strategists evaluate organisations along seven dimensions, thereby identifying organisational strengths and weaknesses (Peters & Waterman, 1982:9). These seven dimensions are: strategy, skills, staff, style, systems, structure and shared values. The interactive role between strategy and culture is clearly highlighted. Thompson and Strickland (1984:253) allege that this framework conceptualises the interconnections among what an organisation does and why these interconnections are important in trying to affect change. Schrivastava (1985:105) argues that although cultures are conceptually elusive, it has important influences on corporate strategy. Any changes in strategy should be accompanied by corresponding changes in organisational culture, otherwise the strategy is likely to fail. The strategy is most likely to succeed when there is cultural alignment - that is when the right strategy is aligned with a supportive culture. Alignment can result from changes in strategy, culture or both (Montanari, Morgan & Bracker, 1990:233).

David (1993:274) maintains that 'strategists should strive to preserve, emphasise and build on aspects of an existing organisational culture that support proposed strategies'. Aspects of an existing organisational culture that are antagonistic to a proposed strategy, should be identified and changed. Organisational culture can therefore facilitate or hinder a firm's strategic actions. The significance of organisational culture for implementing strategies is that it influences the behaviour of employees, directed at achieving organisational objectives (Lankford & Mintu-Wimsatt, 1999:5). Often during strategy formulation, individual values, skills and abilities needed for successful strategy implementation, are not considered. David (1993:279) stresses the need to match individual abilities and aptitudes with strategy implementation tasks to be considered in strategy selection. Management can develop the best and most impressive strategies, but these strategies are doomed for failure when implemented in a firm with an organisational culture that does not support that strategy (Maron & van Bremen, 1999:86). Even more important is that organisational culture should be taken into account when a strategy is formulated. Morgan (1993:110) argues that although an organisation's culture may be taken for granted when it is in harmony with a company's business, changes that do not take culture into account are fraught with peril.

A diagnosis has to be made of which aspects of the present culture are strategy supportive and which are not. The first step to harmonise the culture with the strategic plan, is to be consciously alert to shape organisation's habits and values to fit the needs of the strategy. The second step is to exploit available opportunities to make changes that improve the alignment of culture and strategy. The third step is to ensure that the actions and decisions of subordinates and managers are in line with the purposeful creation of the desired culture. Step four is to proactively build and nurture the organisation's psychological and attitudinal commitment to the strategy in order to produce a temperamental fit between culture and strategy (David, 1993:237). Figure 1 provides a framework for managing the strategy-culture relationship.

|		High	Low
Necessary changes in key organisational factors to implement new strategy	Many	**1** Link changes to basic mission and organisational norms	**4** Reformulate strategy or prepare for long-term change
	Few	**2** Synergistic focus on reinforcing culture	**3** Managing around the culture

Potential compatibility of changes with existing culture

Figure 1: Framework for managing the strategy-culture relationship

Source: Pearce and Robinson (1991:348)

According to this framework, an organisation is faced with four basic situations in managing the strategy-culture relationship, namely to link all changes to the mission and norms of the organisation, to reinforce the current culture, to manage around the culture or to reformulate the strategy. According to David (1993:275), there are various elements available to management in linking culture to strategy, for example designing of physical space, facades and buildings; formal statements of organisational philosophy; reward and status symbols; promotion criteria; leader reactions to critical incidents; how the organisation is designed and structured and organisational systems and procedures. These elements can be purposeful attempts from management's side to link the culture of the organisation to the proposed strategy. Within the context of strategic management, organisational culture forms part of the internal capabilities analysis (organisational profile), strategy formulation phase and implementation phase (refer to Figure 2).
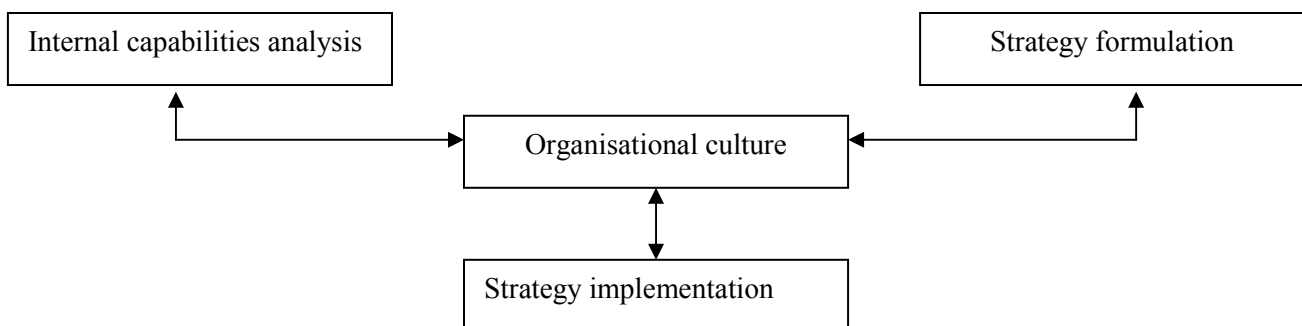
Figure 2: The central role of organisational culture in strategic management

From Figure 2 it can be concluded that organisational culture is important in both strategy formulation and strategy implementation, and it forms part of the internal capabilities analysis step in the strategic management process. When the strengths and weaknesses of the organisation are determined, special attention needs to be paid to the nature and extend of an organisation's culture. Also during the strategy formulation and implementation phases, the cultural compatibility of the organisation needs to be considered. No research, however, has been done to investigate the relationship between organisational culture types and strategy formulation.

Objective and hypotheses

The main objective of this article is to investigate whether firms with different culture types differ in the manner in which they formulate strategies. In order to investigate the relationship between organisational culture (independent variables) and strategy formulation (dependent variables), the following null-hypotheses are tested:

$H0_1 =$ *There is no relationship between organisations with a power culture and the manner in which they formulate strategies.*

$H0_2 =$ *Organisations with a role culture show no relationship with the manner in which strategies are being formulated.*

$H0_3 =$ *There is no relationship between organisations exhibiting a task culture and the manner in which strategies are being formulated.*

$H0_4 =$ *Organisations with a person culture show no relationship with the manner in which strategies are being formulated.*

The research hypotheses (H_1 to H_4) can be stated as the exact opposite of the above null-hypotheses, indicating that there is a relationship between the variables tested.

Research methodology

To investigate the relationship between organisational culture and strategy formulation, an empirical study was undertaken.

The sample

For the purpose of this research project, the target population was chosen from South African firms. Private and public companies, and close corporations employing more than 100 employees were included in the population. It can be argued that firms employing more than 100 employees are larger in scope and operation and will more likely implement strategic management. The sample was randomly drawn by Matrix Marketing. A probability sampling procedure was used and a proportional stratified random sample was drawn, including public companies (16%), private companies (74%) and close corporations (10%). Clear instructions were given on how the sample should be drawn. For this project, it was decided to include firms from the following categories/activities in the sample frame: manufacturing, electricity, construction, trade, transport and other activities not listed.

The questionnaire

The questionnaire is divided into three sections. Section A of the questionnaire consists of questions investigating the type organisational culture that exists in each firm. Section B of the questionnaire scrutinised the way in which strategies are being formulated in South African firms. Section C provides the classification data of respondents. During the empirical study, only close-ended questions were used. The type of ordinal scale used in Section A of the questionnaire is forced ranking. The type of ordinal scale used in Section B of the questionnaire is a seven-point Likert-type scale, which involves a series of statements related to attitudes towards various aspects of strategy formulation. Section C of the questionnaire contained a nominal scale of measurement.

Pilot study

In order to pretest the questionnaire it was given to 10 local organisations and a few academics in the field of management, industrial psychology and statistics. After processing and analysing the data obtained, the questionnaire was refined and some minor changes were made regarding wording, sequence and layout.

Data collection

Three thousand covering letters, questionnaires and return-paid envelopes were posted to 490 public companies, 2212 private companies and 298 close corporations. Due to factors as such as cost, time and low response rates, a sample of 3000 (1000 x 3) was chosen and it was decided not to do a follow-up study. The response rate of this survey is 6,70% (201 firms from a possible 3000 included in the sample). The effective response rate (usable questionnaires) is 6,27% (188 responses). Various measures were implemented to deal with the problem of low response rates associated with mail surveys: pretest of the questionnaire to test acceptability; issue of anonymity and confidentiality were ensured; reply-paid envelopes were included with questionnaires; questionnaires were printed in blue and in a smaller format in order to make it appear more attractive and easier to complete; postage of questionnaires was done after month-end and results of the study were made available on request.

Data processing and analysis

Once a questionnaire was received from a respondent, it was inspected to determine its acceptability and coded. The data was transferred to a database in the Quattro-Pro V4.0 computer programme. A statistical computer package, named SPSS-PC, was used to process the results. Techniques used during data analysis included: descriptive statistics, factor analysis and multivariate analysis of variance (MANOVA).

Survey results

Descriptive statistics

The total sum values for the different culture types are as follows: first overall ranking (task culture = 4931); second overall ranking (role culture = 6597); third overall ranking (power culture = 7755) and fourth overall ranking (person culture = 8217). The task culture seemed to be the most dominant culture type (ranked overall first as lowest sum value indicates its dominance). In analysing the mean scores for the four culture types, it correlates with the overall ranking order/preference of the culture types. The mean score for the task culture (1.749) is the lowest which

indicates its dominance). The low standard deviation scores indicate that there is a low variance in dispersion of scores around the mean. In analysing the mean values of the strategy formulation variables, it appears that the majority of the variables have a mean value above the neutral value of four (a seven-point scale was used). The respondents on average tend to formulate strategies according to the suggested variables. Seventy-percent of the respondents falls in the value range of five to seven (indicate agreement); 13% were neutral (value four) and 17% of the respondents fall in the value range of one to three (indicate disagreement). A broad demographic profile of respondents reveals the following: 51% of responding organisation's main activity is manufacturing; 63% of respondents are being employed in organisations which are private companies; 25% of the organisations have an employment size of between 100 and 199 and 22% of the organisations employ more than 1000 employees; 79% of participating organisations have an annual gross revenue of more than R10 million and more than half (51%) of these organisations describe their environments as being characterised by moderate changes/innovations.

Factor analysis

To establish the reliability of the measures used in this study, Cronbach's alpha was used. The overall reliability coefficient of Cronbach's alpha for Section B of the questionnaire (strategy formulation) is 0,9078. The value of 0,9078 indicates that the measures are internally reliable (Cronbach's alpha > 0,7). External reliability is tested when the degree of consistency over time is measured. As it is not the objective of this project to develop a measurement instrument, this aspect was not calculated. The face validity of measures was ensured both by means of consulting secondary sources to incorporate theoretical aspects and a pretest of the questionnaire.

A method known as factor analysis, was used to group the variables in Section B of the questionnaires. The SPSS-PC computer package was used to conduct this factor analysis.

The results were obtained by selecting four factors, using varimax rotation of factors, that constitute strategy formulation: planning of strategies; mission formulation; policy formulation and defining the business. The 20 strategy formulation variables were grouped into these four factors. Most of these factor loadings were above 0.7.

MANOVA

For the purpose of this project, multivariate analysis of variance (Manova) was used. The Manova procedure, which uses Wilks' lambda multivariate test of significance, was used to investigate whether firms with different culture types differ in the manner in which they formulate strategies. The different culture types namely power, role, task and person culture, are the independent variables and strategy formulation the dependent variables.

- **The relationship between power culture and strategy formulation**

The results on the relationships between power culture and how strategies are being formulated in such firms, are given in Table 1.

Considering the P-value of the Wilks' lambda F-test of significance of 0,000 it can be concluded that there is a highly significant relationship between a power culture and the manner in which these firms formulate strategies. The P-value of 0,000 falls within the rejection region and the null-hypothesis, $H0_1$, is therefore rejected. These differences occur in all the elements of strategy formulation. According to the Univariate F-test of significance, power cultures show a highly significant relationship with all the elements of the strategy formulation process. It therefore appears that firms with a power culture differ in how they plan strategies, formulate mission statements and policies and how they define the business of the firm (H_1 accepted).

Table 1: The results of the tests to investigate the relationships between power culture and strategy formulation

Tests	Dependent variables	P-value
1. Wilks'lambda F-test of significance	All	0,000**
2. Univariate F-test of significance	Planning	0,000**
	Mission statement	0,000**
	Policy formulation	0,000**
	Defining the business	0,001**

** Significance level of 0,01

- **The relationship between role culture and strategy formulation**

The results of the Manova and Univariate analysis of variance tests used to investigate whether firms with a role culture differ in the manner in which they formulate

strategies, are given in Table 2.

From Table 2, it can be concluded that there is a significant relationship between a role culture and the manner in which these firms formulate strategies. The Wilks' lambda P-value of 0,017 shows that $H0_2$ can be rejected. In analysing the P-

values of the Univariate F-test of significance, this difference occurs only in the planning of strategies (a highly significant difference, P-value < 0,01). Firms exhibiting a

role culture differ in the manner in which they plan strategies for the firm (H_2 accepted).

Table 2: The results of the tests to investigate relationships between role culture and strategy formulation

Tests	Dependent variables	P-value
1. Wilks' lambda F-test of significance	All	0,017**
2. Univariate F-test of significance	Planning	0,001**
	Mission statement	0,050
	Policy formulation	0,284
	Defining the business	0,182

**Significance level of 0.01

- **The relationship between task culture and strategy formulation**

The results of whether firms exhibiting a task culture differ regarding the strategy formulation process, are illustrated in Table 3.

From Table 3, the following conclusions can be made:

The Wilks' lambda F-test of significance indicates that there

is a highly significant relationship between a task culture and strategy formulation (P-value < 0,01). The null-hypothesis, $H0_3$, can therefore be rejected. These highly significant differences occur in all the strategy formulation elements (P-value < 0,01). It thus appears that firms with a task culture differ regarding the manner in which they formulate strategies (H_3 accepted).

Table 3: The results of the tests to investigate relationships between task culture and strategy formulation

Tests	Dependent variables	P-value
1. Wilk's lambda F-test of significance	All	0.000**
2. Univariate F-test of significance	Planning	0.000**
	Mission statement	0.000**
	Policy formulation	0.001**
	Defining the business	0.001**

** Significance level of 0.01

- **The relationship between person culture and strategy formulation**

The results of the relationship between firms with a person culture and the strategy formulation process, are given in Table 4.

Considering the P-value of the Wilks' lambda F-test of significance of 0,112, it can be concluded that there is no significant relationship between firms with a person culture and strategy formulation in a firm. The P-value of 0.112 indicates that $H0_4$ falls outside the rejection region. Firms with a person culture place a high emphasis on the person

working in that firm - everything involves the person in the firm. The person culture is typically eminent in professional firms, such as lawyer and doctor practices. Figure 3 illustrates the relationship between culture types variables and strategy formulation variables.

Figure 3 clearly shows the relationship between the variables tested during the empirical study. Firms with power and task cultures show a significant relationship with all the elements of strategy formulation. Firms with a role culture only show a relationship with the planning stage of strategy formulation. Firms with a person culture show no relationship with any of the strategy formulation elements.

Table 4: The results of the test to investigate relationships between person culture and strategy formulation

Test	Dependent variables	P-value
1. Wilks' lambda F-test of significance	All	0,112
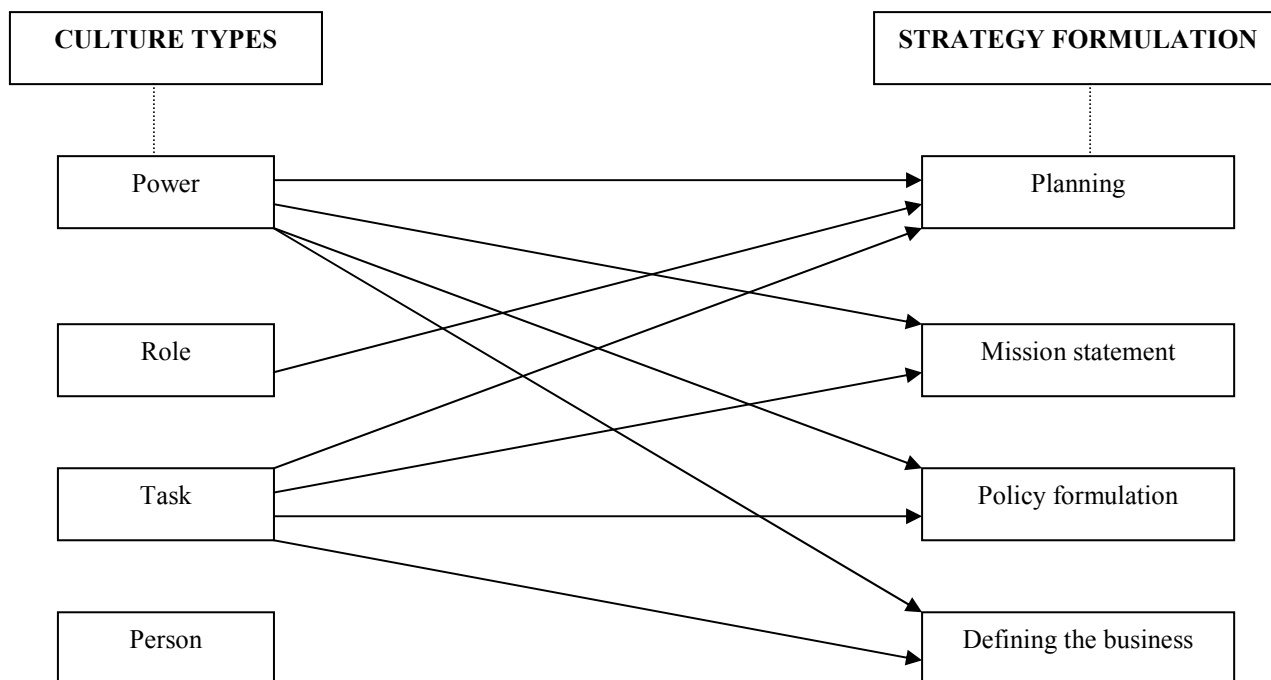
Figure 3: The relationship between culture type variables and strategy formulation variables

Conclusions and recommendations

No attempt was made in previous research to investigate the relationship between different types of organisational culture and the manner in which these firms execute strategy formulation. This aspect was examined during the empirical study. During the literature study it was found that there should be purposeful attempts to ensure that alignment of both strategy and culture takes place. The culture of an organisation should form an important element of the strategic management process. Recommendations, based on the conclusions drawn from the relationship between organisational culture and strategy formulation, are listed below:

• Increased emphasis should be placed on the need for alignment between organisational culture and the strategy of the firm.

• A general guideline in this regard should be that strategy formulators should select a strategy compatible with the prevailing culture. Once a strategy has been chosen, the organisational culture must be brought into close alignment with the strategy. A diagnosis has to be made of which aspects of the

present culture are strategy supportive and which are not.

• Implanting the needed culture-building values and behaviour depends on the sincere, sustained and committed effort of top management.

• Management should realise that there is a highly significant relationship between a firm with a power culture and the manner in which they formulate strategies. Firms with a power culture will differ in how they plan strategies, formulate mission statements and policies and how they define the business of the firm. All the aspects of strategy formulation need to be looked at if the firm exhibits a power culture, because power cultures show a highly significant relationship with the manner in which they formulate strategies.

• If it appears that the firm exhibits a role culture, management should pay particular attention to the planning of strategies, because there is a significant relationship between a role culture and the manner in which they plan strategies.

• Management should note that firms with a task culture

formulate strategies in a certain manner (indicates that there is a strong relationship). Task cultures differ significantly regarding all aspects of strategy formulation.

- Strategy formulators belonging to firms that exhibit a person culture should realise that there does not seem to be a significant relationship between the culture of the firm and the strategy formulation process in the firm.

It can be concluded that firms should place increased emphasis on aligning culture and strategy. Attempts should be made to include the culture of a firm when formulating strategies. Each firm needs to develop a keen awareness of its own culture and purposefully link all changes and strategies to its culture. The selection of strategies cannot only be based on financial implications, while cultural aspects are being ignored.

The following extract is appropriate with which to conclude this article:

> '... growing emphasis on organisation and culture as critical ingredients in the execution of strategy. The attention to culture represents perhaps the greatest departure from the past - it represents a recognition that the values, motivation and behaviour of organisational members are critical determinants of corporate performance and so of the success or failure in implementing strategy.' (Wilson, 1994:23)

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