

IS ADAPTABILITY TO ENVIRONMENTAL CHANGES IN THE AUSTRALIAN AUTOMOBILE INDUSTRY A KEY TO ITS SUCCESSFUL BUSINESS PERFORMANCE?

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Abstract

Whilst the influence of corporate cultural traits on business performance has been researched worldwide, few have focused on industries undergoing rapid change. This paper, based on an Australian automobile industry survey, analyses the link between corporate cultural traits of involvement, mission, consistency and adaptability and business performance in a changing environment. The research findings indicate that firms within this industry can enhance their business performance during environmental change through the effective alignment of key cultural traits. The study found that although all cultural traits were important, adaptability has the greatest influence over business performance, while consistency has the lowest.

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INTRODUCTION

For decades researchers have assessed the influence of corporate culture on the management style within organisations and how this influences employee performance (Lee and Yu, 2004). Corporate culture can be characterised through employees' values, beliefs and their behaviour within the organisation (Singh, 2006; Petrovic-Lazarevic, 2006). Due to the important role corporate culture plays on forming the core identity of an organisation, it is considered one of the most powerful tools which can improve business performance (Denison, *et al.*, 2003). Further, the organisation with a highly adaptive corporate culture can actively respond in a changing environment and capture market opportunities (Singh, 2006).

By displaying distinctive cultural traits of *consistency*, *mission*, *involvement*, and *adaptability*, corporate culture can be used as a tool to influence business performance (Sun *et al.*, 2000; Barraud-Didier and Guerrero, 2002; Rotenberry and Moberg, 2007; Denison, *et al.*, 2003; Denison and Mishra, 1995). These cultural traits can be defined as follows:

Consistency characterizes the organisation's core values; methods used to achieve agreement; and the coordination and integration systems that hold the company together (Denison *et al.*, 2003; Shelton *et al.*, 2002). Cultural *consistency* improves business performance by creating coordination from top level management to first line employees (Mavondo and Farrell, 2003).

Mission describes the strategic direction and intent an organization is aiming to achieve; its goals and objectives; and its vision. Hence, employees who have a clear *mission* in their mind can significantly improve their productivity (Bart *et al.*, 2001; Buckingham, 2005).

Involvement covers the level of staff empowerment in decision making; its team orientation; and the capability development undertaken by the firm. It is used to measure the company's ability to drive commitment and develop ownership with employees (Denison *et al.*, 2003; Rotenberry and Moberg, 2007).

Adaptability measures the company's ability to read and scan the business environment and to respond to change (Denison *et al.*, 2003). Organisations which have an adaptable culture tend to both actively and openly receive and interpret opportunities and threats from the external environment and respond to these external signals appropriately (Pennington, 2003). An adaptive culture encourages and supports employees to improve their ability by learning from day-to-day tasks (Denison *et al.*, 2003).

Business performance can be measured in a variety way, including financial and non-financial performance measures (Allen and Helms, 2002). Financial indicators include profit, efficiency trend, sales trend (Kloot, 1999), return on investment (Kennerley and Neely, 2003) and market share (Bloodgood and Katz, 2004); whilst customer satisfaction is considered an important non-financial indicator (Vukmir, 2006).

Adaptability as a cultural trait may have a major influence in a changing environment. It has three components that positively relate to business performance: *creating change*, *customer focus* and *organisational learning* (Denison *et al.*, 2003).

Creating change indicates organisational flexible way of doing business to respond to environmental changes (Mavondo, 2000). According to Mavondo (2000), *creating change* is crucial to business performance as it is a source for generating a best fit business strategy to respond to the change in the industry. Ljungquist (2007) sees the concept of *creating change* as a source of organisational core competence.

Customer focus is a tool to measure business performance by evaluating the quality of business performance based on the satisfaction of customers' needs and wants (Byus and Lomerson, 2004).

Organisational learning is seen as an opportunity for the organisation to learn and improve; encourage innovation and risk taking; and ensure effective transfer of knowledge and understanding of task performance (Vakola and Rezgui, 2000).

The Australian automobile industry was chosen for this study because it is a key sector in the Australian economy. In 2007 this industry's exports were around \$5.1 billion and imports were \$27.9 billion. Exports now accounts for around 40 percent of domestic motor vehicle production. The industry's domestic value added component total was over \$5.6 billion, representing 5.6 percent of the total Australian manufacturing sector's value added (Department of Foreign Affairs and Trade, 2008).

Since free trade agreements between Australia and other nations have been signed, the Australian automobile industry is gradually moving towards a more open trading environment and low levels of protection from Australian Federal and State governments. In order to produce higher quality and better value of products continually, and above all help the Australian economy to overcome present global economic crisis - the Australian automobile industry should improve its business performance. One of the ways in which this can be achieved is through developing performance orientated corporate culture.

This paper explores links between corporate culture and business performance while considering the relevance of *adaptability* to changing environment in the Australian automobile industry. This paper is organised as follows: after the methodology, we present and discuss the project results. The paper ends with concluding remarks and future research interests.

METHODOLOGY

A multi-method study based on both quantitative and quantitative research is chosen for better understanding of data and an in depth and valid analysis of research findings (Creswell, 2003) relevant to the Automobile Industry in Australia.

A quantitative approach has been applied based on the *Denison Organisational Culture Survey* (Denison and Neale, 1996). The survey measured twelve indices of organisational culture (See Table 1) using five questions for each index, thus reaching a total of 60 questions. For all items a five-point Likert scale with response categories ranging from strongly disagree to strongly agree was applied. The twelve indices were used to measure four main cultural traits: *involvement*, *consistency*, *adaptability* and *mission*. The survey also evaluated the chief executive officers' perception of organisational performance on the following variables: *net profit*, *customer satisfaction*, *market share*, *return on investment*, *efficiency trend*, and *sales trend*. All measures were aggregated at the organisational level.

In order to obtain accurate information, the selection of the organisations was based on three main sources:

- Member list of the Federation of Automotive Products Manufacturers
- Australian Automotive Aftermarket Association – Exporters Directory, and
- Registered Automotive Retailers from Yellow Pages

These sources were used to create a mailing list for distribution of the questionnaire. 250 organisations were selected in total for this project.

Chief executive officers and/or general managers were chosen research subjects to complete the questionnaire. The criterion for the choice was based on the statement from the Australian Automotive Aftermarket Association – Exporters Directory.

The Table 1 points to details of every cultural trait.

Table 1: Four Cultural Traits and Major Elements

Cultural Trait:		Indices Under Each Cultural Trait		
1	Involvement	Empowerment	Team Orientation	Capability Development
2	Consistency	Core Value	Agreement	Coordination and Integration
3	Adaptability	Creating Change	Customer Focus	Organisational Learning
4	Mission	Strategic direction and Intent	Goals and Objectives	Vision

SPSS for Windows 15.0 was applied for data analysis procedures. All of the analysis calculations were conducted at the 5% level with $p < 0.05$. Results which were significant at the $p < 0.10$ level were also identified as they may have had some implications to the research.

DISCUSSION OF RESULTS

The overall response rate was 32%, which being above 25% is considered as satisfactory (Sellitto, 2006). Based on the demographic data, three groups have been identified: manufacturer (51%), retailer (46%) and others (3%). Of these 34% of the organisations had been operating less than 10 years and 66% over 10years. The majority of respondent organisations were subsidiaries of overseas firms (48.5%), another 44% were privately owned domestic firms and 7.5% publicly owned domestic firms.

The survey shows that about 54% of respondents were in general management position, while the rest of respondents were either chief executives officers (14%) or lower level managers (19%). Most respondents' primary functional areas of responsibility were: general management (39%), financial/ accounting (20%), and sales/ marketing (18%). The rest of the respondents' primary functional activity areas were in customer relations (6%), production/ manufacturing (5%) and other (1%).

Reliability test measured by Crobach's alpha is presented in Table 2:

Table 2: Crobach's alpha

	Crobach's alpha
Business performance measures	0.83
<i>Involvement</i>	0.91
<i>Consistency</i>	0.89
<i>Adaptability</i>	0.88
<i>Mission</i>	0.93

According to Liu and Zumbo (2007), a Cronbach's alpha of 0.70 and above is an acceptable reliability coefficient. Hence, as all the summated measures used to assess business performance and cultural traits in this study were above 0.70, they were treated as reliable.

Kasila and Poskiparta (2004) and Denison *et al.*, (2003) identified that all four cultural traits influence business performance. Statistical analysis of questionnaires confirmed this. However, respondent's opinions on the impact of cultural traits and the intensity of their affect on the components of business performance varied slightly. *Consistency* (mean 3.99) scored the highest, while *adaptability* (mean 3.92) scored the lowest of corporate cultural traits (See Table 3).

Table 3: Importance of Corporate Cultural Traits to Business Performance

		Involvement	Consistency	Adaptability	Mission
N	Valid	80	80	80	80
	Missing	0	0	0	0
	Mean	3.98	3.99	3.92	3.97

Respondent's opinion that *consistency* is the most important cultural trait, suggests their belief that a key to business success is to develop and maintain core values, have clear methods to reach agreement on issues, and maintain clear coordination and integration systems. Overall this result suggests the desire to follow a consistent format to deal with the day to day activities of operations within the firm. This might be appealing and appropriate in a stable, slow or low changing environment, but entrenched systems can be significant barriers in a rapidly changing environment. However, further analysis identified that respondent organisations generally did not have well structured coordination and integration systems, perhaps due to the current turbulent environment they are in.

The comparatively lower score of *adaptability*, indicates that the Australian automobile industry may not yet recognise the importance to adapt to environmental change in order to improve its business performance (Pennington, 2003).

Since *adaptability* reflects the organisational response to the environmental change, its sub-components have been further analysed (See Table 4). *Creating change* scored the highest (mean=3.77). Yet, the surveyed respondents did not confirm the importance of *creating change* to business performance in their organisations as found in previous studies of Nwokah and Maclayton, (2006) and Byus and Lomerson (2004). The respondents also indicated that their organisations were not very interested in being innovative. This was often due to a lack of delegated power to be innovative; lack of appropriate resources, in particular financial resources; and the failure by many organisations to provide an appropriate reward system to encourage innovation.

Table 4: Sub-Components of Adaptability

		Creating Change	Customer Focus	Organisational Learning
N	Valid	80	80	80
	Missing	0	0	0
	Mean	3.77	3.59	3.56

The high score for *creating change* should be an indicator of this being an organisational core competence Ljungquist (2007). But given respondents relatively lower score of *adaptability's* influence to business performance compared to other factors (See Table 3), it may be that some firms do not understand the importance of developing this potential core competent in a

competitive environment. This appears to be particularly in small firms, where some respondents identified that in the current competitive environment their margins were small, making funding for innovation was a luxury they could not afford.

Further, *customer focus* (mean = 3.59) has lower relevance for *adaptability* (See Table 4), but as a measure that influences business performance it has the highest mean of 3.86 (See Table 5). The latter is in accordance with Allen and Helms (2002). It is clear that most firms understood that a strong customer focus leads to higher customer satisfaction and therefore better business performance. However, many respondents felt it unnecessary for all employees to have knowledge of their customer's needs; rather they needed to have relevant knowledge to do their jobs. This creates a potential dilemma for organisations as they need to decide what level of customer knowledge employees need. This appears particularly important when customer focus may be a core competency in many organisations.

Although with the lowest score (mean = 3.56) as indicated in Table 4, *organisational learning* for surveyed respondents seemed to be important for improving business performance. That statement is in accordance with Vakola and Rezugui (2000) and Hyland *et al.*, (2001). Yet, the respondents highlighted the problems of inadequate reward systems that, they believe, do not allow them to enjoy the full benefits of a learning organisation.

The value of business performance measures

In terms of business performance measures used in this survey, respondents felt some traditional financial measures were not as important as the non-financial measure of *Customer Satisfaction* (See Table 5). Respondents ranked *Profit* (mean= 3.68) and *Return on Investment* (mean =3.68) the lowest and *Customer Satisfaction* the highest (mean 3.86).

Further, the influence of environment change to the business of an organisation in any industry, including the automobile industry, is usually evidenced through the change of customer needs (Evans and Lindsay, 2005); thus the high priority given by respondent organisations suggests their understanding that customer satisfaction is a prerequisite to achieving desired financial returns.

Table 5: Business Performance Measures

	Mean	SD
Financial measures		
Profit	3.68	.839
Market Share	3.75	.907
Return on Investment	3.68	.938
Efficiency Trend	3.79	.758
Sales Trend	3.76	.903
Non-financial measures		
Customer Satisfaction	3.86	.707

To analyse the strength of the relationship between the four cultural traits and business performance in the Australian automobile organisations, correlation analysis was undertaken.

Table 6: Correlation Analysis between Four Cultural Traits and Business Performance

	Variables	1	2	3	4
1	Business Performance				
2	Involvement	.540**			
3	Consistency	.507**	.822**		
4	Adaptability	.554**	.810**	.848**	
5	Mission	.510**	.807**	.849**	.820**

Table 6 indicates that all four cultural traits have a strong relationship with business performance as all achieved > 0.5 level. *Adaptability* has the strongest relationship with business performance ($r=0.554$); and *consistency* was found to have the weakest relationship with business performance ($r=0.507$). Some key links between cultural traits and performance measures are outlined below.

As *adaptability* was identified as having a major impact on business performance, this cultural trait was analysed in more detail. Assessment of the three subcomponents of adaptability being: *creating change*, *customer focus*, and *organisational learning* provided some insights into corporate culture variations between higher and lower performing organisations. Although lower performing firms may need to develop good cultural habits overall to improve their business performance, in the current environment of rapid change they may find it useful to emulate current higher performance firms and become more adaptable.

To achieve greater performance outcomes, it seems all firms in the Australian automotive industry need to look at the way they create change. In particular, current poorer performing firms need to create an environment that encourages change, adopt new ways to do work, and improve cooperation between different parts of their organisations. Both high and low performing respondents identified that their firms need to find ways to reduce resistance to change.

Currently higher performing firms in this survey were found to value a strong customer focus. Poorer performing firms were found not to have a deep understanding of their customer's wants and needs. This appears to be particularly the case for manufacturers rather than retailers. Some potential solutions include greater use of customer feedback, and improving communication between customers and automotive organisations. Manufacturers may need to improve relationships with their channel customers and ensure they understand end-customer needs as well. Current priorities that appear to be in place amongst all respondents include: using customer comments and recommendations to make changes; using customer feedback to influence company decision-making; focus on customer interests; and encouraging direct contact with customers by the firm. Although these might be recognised as important across all organisational types, how these influence performance may not be as strong. This particularly appears the case in organisations that do not reward staff for excellence in customer service.

Organisational learning was identified in this survey as an area for attention for all organisations in the Australian automotive industry, but in particular lower performing companies. The survey identified that these firms need to better understand that failure can be an opportunity for learning and improvement; that learning is an important daily objective; and that it is important that in organisations there is a more effective communication to coordinate employees to perform the tasks effectively and efficiently. Survey results make it clear that in this industry more attention is required to ensure innovation and risk taken is rewarded, and that greater attention is given to detail in day to day activities.

CONCLUSIONS

The research project has revealed a link between corporate culture and business performance in the Australian automobile industry. Adaptability to environmental changes was found to be an important key to business performance success in the Australian automotive industry. However it was identified that organisations need to focus on all four cultural traits: *involvement*, *consistency*, *adaptability* and *mission* as each played an important, different and integrated role in achieving business performance outcomes.

Successful companies were analysed in depth to identify strategies others could learn from. Firstly, it was found that those firms that ranked their performance against competitors as higher or much higher, had a stronger belief about the importance of cultural traits than those firms with lower performance outcomes. Secondly, high performing firms were more likely to value all the cultural traits as important or very important, compared to lower performing firms. Finally, higher performing firms appeared to be more prepared for dealing with the changes taking place in their industry than lower performing firms.

Because in times of rapid change it appears *adaptability* is an important trait that can provide sustainable performance success, this trait was analysed in greater depth. *Adaptability* was found to have a strong link to profit, sales and market share in higher performance firms. However, even current higher performing firms were found needing to focus more on organisational learning and greater customer focus. Lower performing firms were identified to need to pay more attention to all the subcomponents of adaptability: *creating change*, *customer satisfaction* and *organisational learning*.

Future research could include more analysis of both internal and external environmental factors impacting of firm performance and how these can be better assessed, monitored and utilised to gain a sustainable competitive advantage.

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