







level managers and specialists (32 percent).

Reliability test results measured by Cronbach's alpha are presented in Table 3.

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.

**Table 3. Cronbach's Alpha Analysis for Major Variables**

	Cronbach's alpha
Business performance measures	0.83
Involvement	0.91
Consistency	0.89
Adaptability	0.88
Mission	0.93

## Business Performance

Statistical analysis of the questionnaires identified that all four cultural traits influence business performance, confirming the findings of Denison *et al.* (2003).

The first step undertaken was to assess respondent's opinions on the impact of cultural traits on business performance. Although respondents overall considered all traits important, there were some differences with *consistency* (mean 3.99) scoring the highest, while *adaptability* (mean 3.92) scoring the lowest of corporate cultural traits (See Table 4).

**Table 4. Respondents' Opinions as to the Importance of Corporate Cultural Traits to Business Performance**

		Involvement	Consistency	Adaptability	Mission
N	Valid	80	80	80	80
	Valid	0	0	0	0
	Valid	3,98	3,99	3,92	3,97

Overall, respondents considered all performance measures important, though there were different values placed on each measure (See Table 5). For example, some respondents felt traditional financial measures

**Table 5. Business Performance Measures**

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

were not as important as the non-financial measure of *customer satisfaction*. Respondents ranked *net profit* (mean= 3.68) and *return on investment* (mean =3.68) the lowest, followed by, in ascending order, *market share* (mean 3.75) *sales trend* (mean 3.76) *efficiency trend* (mean 3.79) and *customer satisfaction* the highest (mean 3.86). This suggests a belief that customer satisfaction is a precursor to achieving financial objectives.

We further studied strength of the relationship between the four cultural traits and business performance in Australian automobile organisations using correlation analysis (See Table 6). This confirmed the opinions of respondents that all four cultural traits have a strong relationship with business performance as all achieved  $r > 0.5$  level. *Adaptability* had the strongest relationship with business performance ( $r=0.573$ ); followed by *involvement* ( $r=0.505$ ), *mission* ( $r=0.510$ ). The regression analysis identified that those traits that really improve performance are the exact opposite to the traits respondents perceive as important.

**Table 6. Correlation Analysis between Four Cultural Traits and Business Performance**

	Variables	1	2	3	4
1	Business Performance				
2	Involvement	.505**			
3	Consistency	.545**	.761**		
4	Adaptability	.573**	.720**	.721**	
5	Mission	.541**	.779**	.817**	.757**
** $p < .01$ (2-tailed)					

A breakdown of the components of each of the cultural traits identified that the key variables with the greatest relationship with business performance were *creating change* ( $r=0.652$ ), *team orientation* ( $r=0.532$ ), *strategic direction and intent* ( $r= 0.525$ ), and *core value* ( $r=0.503$ ) (See Table 7).

**Table 7. Correlation Analysis between all Cultural Trait Indices and Business Performance**

The findings suggest that automotive organisations in turbulent times may increase their organisational performance with more attention to *adaptability* attributes (being customer focused,

Cultural Traits	Variables	1	2	3	4	5	6	7	8	9	10	11	12
	1 Business Performance												
Involvement	2 Empowerment	0.497**											
	3 Team Orientation	0.532**	0.786**										
	4 Capability Development	0.276*	0.430**	0.512**									
Consistency	5 Core Value	0.503**	0.574**	0.635**	0.510**								
	6 Agreement	0.488**	0.610**	0.634**	0.328**	0.631**							
Adaptability	7 Coordination and Integrati	0.309**	0.569**	0.579**	0.152	0.508**	0.487**						
	8 Creating Change	0.652**	0.673**	0.647**	0.353**	0.538**	0.555**	0.513**					
	9 Customer Focus	0.332**	0.456**	0.501**	0.162	0.484**	0.506**	0.570**	0.407**				
Mission	10 Organisational Learning	0.312**	0.581**	0.632**	0.329**	0.491**	0.378**	0.506**	0.476**	0.468**			
	11 Strategic Direction & Inte	0.525**	0.576**	0.652**	0.389**	0.658**	0.540**	0.619**	0.613**	0.486**	0.497**		
	12 Goals and Objectives	0.471**	0.654**	0.681**	0.429**	0.696**	0.603**	0.581**	0.584**	0.537**	0.478**	0.715**	
	13 Vision	0.294*	0.559**	0.591**	0.425**	0.573**	0.397**	0.497**	0.463**	0.343**	0.567**	0.517**	0.628**
** $P < .01$ (2-tailed)													

building organisational learning, and creating change). This may be more appropriate than focusing on *consistency* attributes (enhancing greater coordination and control or building and refining existing systems), which appear more attuned to the needs of organisations operating in a stable environment.

Multiple regression was then used to indicate how much of the variance in *business performance* can be explained by each cultural trait. Given the sample size is smaller than normally desirable for multiple regression, the results need to be reviewed with caution, so the adjusted R Square was used as it is a more accurate estimate of the influence of each trait on business performance (Anderson *et al.*, 1999). Results showed that 44 percent of business performance variations could be explained by *creating change* (a subcomponent of *adaptability*) (See Table 8). The sub-components of *business performance* were broken down further to help identify which cultural traits explained their variations. This analysis identified that *creating change* (subcomponent of *adaptability*) was a major influence in all areas of *business performance* explaining 18 percent of *net profit* variations, 24 percent of *market share* variations, and 23 percent of *sales trends*. It was also a major factor in explaining *return on investment*, *efficiency trend*, and *customer satisfaction* variations (See Table 8).

When looking at the results of high performing organisations versus low performing organisations, one of the key findings was that all large organisations surveyed could be categorised as low performing organisations.

**Table 8. Summary of Relationship between Business Performance and Cultural Traits**

P Value	R Square	Creating Change
Business Performance	.44	0
Net Profit	.18	0
Customer Satisfaction	.31	.003
Market Share	.24	0
Return on Investment	.35	.003
Efficiency trend	.38	.011
Sales Trend	.23	0

The following paragraphs further outline these findings and potential implications in achieving high performance (See Table 7) for a detailed summary of the mean scores for all cultural traits and their subcomponents). It should be noted that the mean provided immediately after each trait subcomponent heading refers to the mean for the eighty organisations in this survey.

## Consistency Trait

Respondents' opinions 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. Yet the study identified that this trait is least likely to lead to increased performance. Closer analysis of the sub-components of this trait revealed that high performing small to medium firms did things differently to low performing firms.

When it comes to *core values* (See Table 9), we found that small to medium high performing firms were more likely to demonstrate core values through having leaders and managers who promote their core values such as "practicing what they preach"; using a distinct management style and setting a clear code of practice, whilst conducting business in an ethical manner.

High performing small to medium firms were more likely to work hard to achieve win-win solutions when disagreements occurred; tended to reach *agreement* by consensus; and generally had clear *agreement* on the right and wrong way to do things, all within a strong culture. Interestingly, we found that low-performing small to medium firms were less likely to dispute key issues, suggesting top management decisions are perhaps not open for debate and criticism.

Related to *coordination and integration*, we found that high performing small to medium firms were

more likely to have a consistent and predictable approach to business. They easily coordinate projects across the organisation. Such firms have the employees who feel comfortable working in cross-functional teams, sharing common perspective, and ensuring there is good alignment of goals across all areas of the business.

## Adaptability Trait

The comparatively lower score of *adaptability* in the overall results indicates that the Australian automobile industry may not yet recognise the importance of adapting to environmental change in order to improve its business performance (Pennington, 2003). *Adaptability* is often considered as a key strength of firms that are able to make decisions quickly and be flexible.

Respondents confirmed the importance of *creating change* to business performance in their organisations as found in previous study of Nwokah and Maclayton (2006). However, although this trait is identified as the most important one to achieve high performance, it is ranked lower than expected by respondents. A common response is that their organisations are not very interested in being innovative. Some respondents stated that this was due to the 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.

A higher score for *creating change* may be an indicator of an organisational core competence (Ljungquist 2007). However, given the current perception by respondents that *adaptability's* influence on business performance is lower than other factors, even though incorrect, it may be that some organisations do not understand the importance of developing *creating change* as potential core competency in a competitive environment. This situation appears to be typical for firms with small margins and lack of funding for innovation.

**Table 9. Detailed Summary of the Mean Scores for all Cultural Traits and their Subcomponents**

	Total Firms	Total SMEs	SMEs HP	SMEs LP	Large Firms	Summated Mean Difference
<b>Consistency</b>	3.76	3.82	3.99	3.58	3.3	20.5
Core Value	4.1	4.14	4.35	3.86	3.66	24.5
Agreement	3.65	3.75	3.97	3.45	3.03	<b>26.0</b>
Coordination and Integration	3.54	3.58	3.68	3.44	3.2	12.0
<b>Adaptability</b>	3.64	3.66	3.81	3.47	3.41	17.0
Creating Change	3.77	3.81	4.06	3.46	3.4	<b>30.0</b>
Customer Focus	3.59	3.58	3.68	3.45	3.6	11.2
Organisational Learning	3.56	3.6	3.67	3.5	3.23	8.5
<b>Mission</b>	3.77	3.81	3.97	3.6	3.31	18.5
Strategic Direction	3.7	3.76	3.98	3.48	3	25.0
Goals and Objectives	4.02	4.05	4.23	3.81	3.63	21.0
Vision	3.59	3.62	3.71	3.51	3.29	10.0
<b>Involvement</b>	3.87	3.9	4.05	3.69	3.59	18.0
Empowerment	3.98	4.02	4.21	3.75	3.57	23.0
Team Orientation	4.06	4.09	4.28	3.83	3.77	22.5
Capability Development	3.57	3.58	3.67	3.46	3.43	10.5

\*SMEs-small to medium firms; \*\*HP- high performing firms, \*\*\*LP – low performing firms

Further analysis identified that high performing firms were more likely than low performing organisations to do things in a flexible, easy to change way; they respond well to competitors and

other changes in the business environment; they adopt innovative ways to work. In such organisations, different sectors cooperate to create change.

Interestingly, through the interviews we found that low performing organisations were less resistant to change than high performing ones. Although this finding might seem surprising, it could also suggest low performing organisations may jump on each new opportunity to improve short-term performance, rather than build a long-term strategic direction.

*Customer focus* is seen by respondents to have a lesser influence on performance than other factors (See Table 9). This finding obviously conflicts with Allen and Helms (2002) who argue that customer satisfaction is critical for business success. Further analysis identified that although most organisations understand the link between customer focus and business performance, many respondents find unnecessary for all employees to have knowledge of their customer's needs; rather they need to have relevant knowledge to do their jobs. This finding suggests a potential dilemma for organisations to decide what level of customer knowledge their employees need to have. We found that in high performing firms, employees were encouraged to have direct contact with customers, to listen and act on customer comments; and have a deep understanding of customer wants and needs.

In accordance with Hyland *et al.* (2001), the respondents identified *organisational learning* as significant for business performance, but not very important as other factors are. In our study it did not rank highly compared to other factors. Many respondents state that full benefit of a *learning organisation* is not achievable because of the existing not stimulating reward systems.

According to our research results, the high performing firms are more likely to regard failure as an opportunity for learning. They encourage and reward innovation and risk taking. They also regard learning as an important objective in day-to-day work.

## Mission Trait

Given the current economic situation, a slightly lower ranking of *mission* compared to other traits was not surprising.

From the point of view of *strategic direction*, we found that high performing organisations are more likely to have long-term purpose and goals linked to an overall strategy. They have mission with clear meaning and direction to pursue business activities, indicating an intention to be the industry leader.

Interestingly, the respondents from the low performing firms have more clear strategic direction than high performing firms, although they have less capacity to effectively follow that direction.

When it comes to *goals and objective*, the high performing firms are more likely to have agreed goals by all employees. They have leaders who publically declare their ambitious and realistic goals, and continuously track progress against goals.

Further, we found that high performing firms are more likely to have shared *vision* that creates excitement and motivation for employees; thus indicating the employees' involvement in the planning process. Their leaders have defined that long-term goals meet short-term demands without compromising long-term *vision*.

## Involvement Trait

*Involvement* was considered very important by respondents, yet multiple regression identified it had little to do with explaining changes in business performance (See Table 7). Analysis between high performing firms and low performing firms identified the differences in *empowerment*, *team orientation* and *capability development*.

High performing firms motivate their employees to achieve superior results by making decisions at the level with the best available information, information sharing, and having an inclusive and on-going business planning process. Further, high performing firms have organisational structure based



on teams. Thus, they encourage cooperation across the organisation through teamwork and they delegate authority, allowing the employees to act on their own. Recognizing capabilities of their employees as an important competitive advantage, these firms continually invest in improving their employees' skills.

Overall, the respondents' consideration of consistency as the highest importance of cultural traits to achieving high performance is not in accordance with our findings. We have found that automotive organisations may increase their organisational performance by paying more attention to *adaptability* attributes, and in particular to *creating change* through doing things in a flexible, easy to change way; responding well to competitors and other changes in the business environment; adopting innovative ways to work; and encouraging cooperation between different parts of the organisation.

From the point of view of high performing organisations and low performing organisations we found that the two variables with the greatest summated means difference were *creating change* (30.0) and *gaining agreement* (26.0). This finding is consistent with the findings of multiple regression analysis and further demonstrates the importance of firms being adaptable in times of rapid change.

## CONCLUSIONS

The research project has revealed a link between corporate culture and business performance in the Australian automobile industry. *Adaptability* to environmental changes seems to be the key to sustainable business performance. This suggests that, the organisations should focus on all four cultural traits: *involvement*, *consistency*, *adaptability* and *mission*, as each plays an important, different and integrated role in achieving business performance outcomes.

Since the *adaptability* is identified as a key factor in enhancing business performance, a message to the Australian automotive industry is to concentrate on *creating change*, build strong customer focus, and become learning organisations. Low performing firms need to create an environment that encourages change, adopt new ways to do work, and improve teamwork.

When it comes to *involvement*, companies should encourage *team orientation* and employees' *empowerment*.

For *mission* trade, the companies' goal setting should include employees' participation in the planning process.

Finally, for *consistency* trait improvement, companies should act more ethically.

Future research could focus on both internal and external environmental factors affecting business performance, their measurement and use to gain a sustainable competitive advantage.

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