

# Impact of organisational culture on product quality

## *Organisational Culture*

This study examined the relationship between organisational culture and product quality in the manufacturing industry. Using the Human Synergistics Organisational Culture Inventory (OCI) and measuring quality outcomes such as warranty claims cost and defect rates, the researcher found significant relationships between culture and quality at the individual business level. Those organisations with the more constructive cultures reported significantly more effective quality outcomes whilst those with more defensive cultures reported less effective quality outcomes.

### *Inquiry*

Does culture have any impact on quality in a manufacturing environment? Is there a relationship between culture and product quality?

### *Research Opportunity*

When a student candidate for the Masters in Technology degree approached Human Synergistics with a particularly well-designed research model to study the relationship between organisational culture and quality performance in the manufacturing sector, we saw this as study well worth supporting.

### *Population*

A broad range of manufacturing companies, from the food and beverage, textiles, chemicals, mechanical equipment, metal products and wood products industries.

### *Methodology*

The Human Synergistics Organisational Culture Inventory (OCI) was used to measure culture amongst a wide variety of manufacturing businesses. The Australian Manufacturing Council questions, relating to quality outcome measures, were used at the same time.

What was interesting about this survey was that not only did it collect data on organisational member perceptions of quality, it included 'hard' measures of quality such as warranty claims cost as a percentage of total sales and total defects as a percentage of production volume.

### *Results*

**I. Culture is linked to cost of warranty claims.** Those organisations with higher Constructive Styles in their cultures had lower warranty claims as a percentage of total sales. Those organisations with lower Constructive Styles had higher warranty claims cost. It was also found that those organisations with lower Passive and Aggressive Defensive Styles in their culture had lower warranty cost and those that had higher Passive and Defensive Styles had higher warranty costs (see organisational culture profiles on the reverse side).

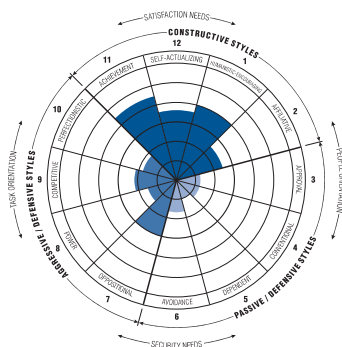
Those organisations with the more constructive and less defensive cultures had significantly less warranty claims as a percentage of total sales. A more constructive organisational culture is associated with significantly better product quality, based on this measure.

---

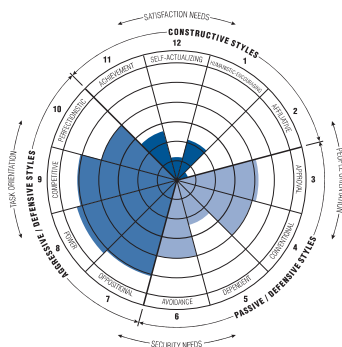
**The higher growth stores have cultures that reinforce more constructive behaviours**

---

# Impact of organisational culture on product quality



**Figure 1:**  
Organisations with lower warranty claims as a percentage of total sales



**Figure 2:**  
Organisations with higher warranty claims as a percentage of total sales

## 2. Culture is linked to defect rate.

Those organisations with higher Constructive Styles had the lower defect rate and those with lower Constructive Styles had higher defect rates. It appears that in this case the Defensive Styles do not have great influence, the difference in defect rates having more to do with the Constructive Styles.

Those organisations with the more constructive culture had significantly lower defect rates.

## 3. Culture is also linked to Managements' perceptions of organisational members' sense of responsibility for quality.

Whilst this is a 'softer' measure of quality, it does reflect a key attitude of interest to most organisations. This study found a significant relationship between higher scores in the Constructive Styles and higher scores in management's perceptions that 'organisational members believe that quality is their responsibility'.

## Implications

The implications this study has for organisational culture in manufacturing businesses is quite significant. Quality of product impacts profitability, customer satisfaction, repeat business, reputation, and ultimately the long-term viability of the business. This study indicates that, right at the factory floor, culture is linked to measurable outcomes. In a globally competitive economy, quality is paramount.

This study provides further evidence that organisational culture is not simply a 'concept', but something very real. It can be measured. It does impact on measurable outcomes and there is genuine commercial and organisational payback for developing a constructive culture.

*This Research Series summary is based on the research undertaken by Kate Nicole Rastrick and is based on her thesis "Culture and Quality in New Zealand Manufacturing Organisations" (as yet unpublished) for the degree of Master of Management Studies in Technology, Victoria University of Wellington New Zealand 1977.*



**Auckland**  
10 York Street  
PO Box 37-483  
Telephone 09 309 9010  
Facsimile 09 379 2263

**Wellington**  
1 Willeston Street  
PO Box 27-327  
Telephone 04 470 7700  
Facsimile 04 470 7711

**Sydney**  
8 Windmill Street  
Millers Point NSW 2000  
Telephone 02 9271 5900  
Facsimile 02 9247 6310

**Melbourne**  
470 Collins Street  
Melbourne, VIC 3000  
Telephone 03 9675 0100  
Facsimile 03 9629 3095