Swinburne University of Technology

Submission to the Productivity Commission Review of the Australian automotive m

Understanding the Problem

Competitive opportunity

In the simplest terms, competitiveness from the supplier's perspective may be defined as the difference between the cost and perceived value of a product or service. In the Australian automotive industry, intense emphasis is placed on cost as the primary factor for competitiveness. For suppliers in the automotive sector, meeting the value expectations - requirements and quality standards – is not negotiable, therefore the only lever is price.

It is well known that any business that competes solely on cost will be driven into the commodity corner and become uncompetitive as the substitute products and services enter the market and undercut each other on price until profitability gets squeezed to impossible lows. This includes imported products and offshore outsourced services. The commodity corner is simply illustrated on a matrix, with value on one axis and price on the other. The low price – low value quadrant represents the commodity corner. Luxury goods would occupy the high price – high value quadrant. The other two quadrants represent anomalies of either overstated value or unrealised price.

The final quadrant, unrealised price, is the ideal position to be in terms of competitiveness. This position is defined by added value and is often achieved via innovative features and technology in the product or service. In other words, product differentiation and market awareness underpin competitiveness.

An example of unrealised price that is sadly a lost opportunity for Australia relates to the Aluminium industry with the looming closure of smelters. In contrast, the explosive growth in applications of aluminium

Under these circumstances the suppliers tend to focus on cost reduction via incremental advances in lean production technology and superior quality delivery to stay competitive. Added to the risk of R&D is the fact that the lifespan of any product technology advantage in the global market is quickly overcome by fast follower strategies coming predominantly from China[viii]. However given enough time China is also susceptible to being stuck in a commodity corner. As with Japan in the late 1970's, it is expected that China will eventually transform to an innovation leadership strategy.

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The ability to be creative and responsive is greatly enhanced by this strategy. Fast followers no longer have an advantage and technology development is accelerated by the concept of open innovation[xiv] and collaborative design.

Recommendations

Swinburne has developed three recommendations that can be incorporated into future automotive policy settings to ensure that industry assistance drives the transformation needed to ensure the longer term survival of automotive manufacturing in Australia.

Recommendation 1: enable distr ibuted and CKD manufacturing models , with local ownership

A logical recommendation, based on the finding of the Bracks Report issued in 2008, would be continued Government support for a diversification strategy. However a more future focused approach is needed that takes into consideration and facilitates building the capabilities required to enable distributed manufacturing. This would include supporting proposals to facilitate investment in assets for flexible and rapid manufacturing systems and government funding capability mapping using the new filter of distributed manufacturing. Manufacturers that had been dedicated to automotive supply would be encouraged to develop business capability for other industries (eg: medical equipment, robotics, building, defence, aerospace and mining).

To maintain a stable foundation of employment in the automotive industry, the transition to complete knock-down kit[xvii] (CKD) production should be supported. (eg: from 2014 – 2020). This may be initially developed with the existing OEMs (Ford, Holden and Toyota) however further incentives may be proposed to encourage other leading marques such as BMW, Mercedes, Audi, VW, Renault, Tata-Jaguar and Tesla to assemble their vehicles in Australia, providing the opportunity to apply local content to the vehicles and re-build capability where it no longer exists. In addition, the capability to support the aftermarket with locally manufactured replacement parts should be developed. While the Australian Government continues to comply with World Trade Organisation guidelines, bold proposals adopted in other jurisdictions (eg: the USA) entail a mandatory level of local content / localised assembly once a certain volume of sales is exceeded. (-)Tj -1ab1s the added benefit of helping to offset currency fluctuations.

With Government assistance, a locally managed and locally owned design and development agency could develop a vehicle platform based on collaborative design and open innovations principa

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