

# 1 EXECUTIVE SUMMARY

Supply chain profitability relates to the efficiency of the supply chain, (acting as a whole) and the ability of supply chain entities to work together to reduce costs. The key issues for supply chain efficiency are:

- the level of stock at each point in the supply chain and the time that stock is located at each point in the supply chain

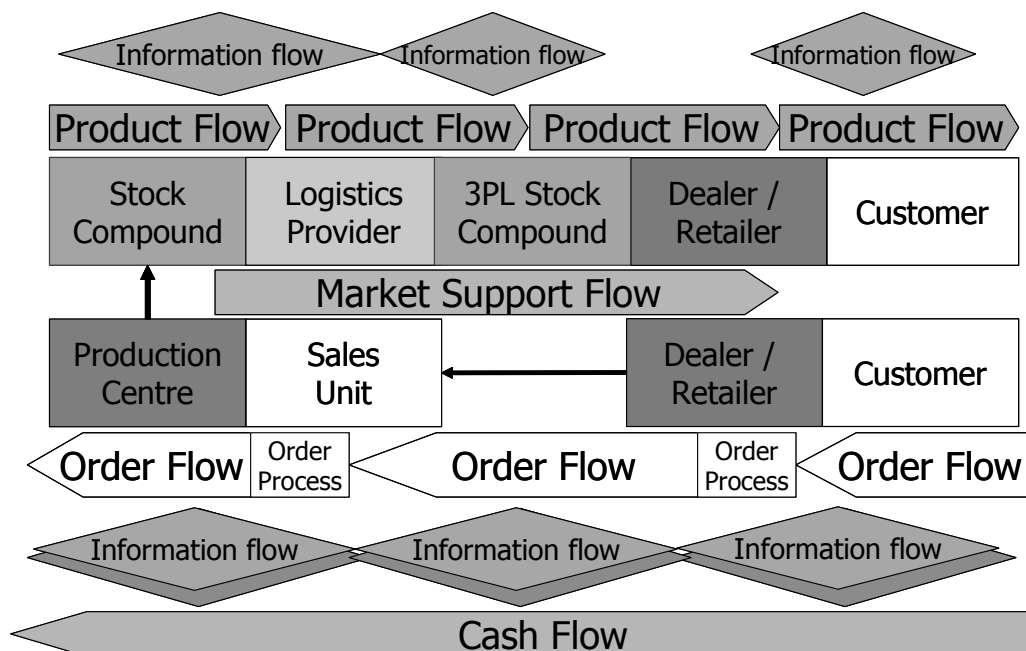
- the level of duplication of activities and processes

- the visibility of supply to all entities

- the ability to satisfy the customer with the right product at the right time.

The structure of Australian automotive distribution involves four local manufacturers, 30 imported brands, five national logistics service providers and a large number of interstate and intrastate vehicle transporters, and 1520 franchised and manufacturer-owned dealerships. In 2002 Australian manufacturers produced 249,000 vehicles for local sale and 304,000 passenger motor vehicles were imported. The supply chain in Australia is characterised by dis-jointed information flows, product flows with a number of stocking points, and extensive marketing support of dealerships by the manufacturers/importers. An overview of the supply chain is illustrated in Figure 1-1

Figure 1-1 Supply Chain overview



## **1.1 Order processing**

There are a number of activities that do not create value in the order processing systems. On receiving a customer order, dealers will spend up to 60 minutes checking stock availability in the system to match the customer needs. Clear visibility of stock can significantly reduce this time and increase the speed of response to the customer. When an order is placed on the manufacturer or importer the dealer will follow up the order status on a weekly basis and will telephone the manufacturer/importer when they do not have access to on-line computerised systems providing real-time information. This adds approximately 60 minutes to the administration checks for each vehicle and can result in the manufacturer/importer spending up to four hours per day answering order enquiries.

Many of the order entry systems available to dealers provide only limited service. The barriers to efficient order processing are:

- order entry systems that provide no visibility of existing manufacturer or dealer stock in the production schedule.

- order confirmation processes that take up to five days.

- weekly batching and processing of orders by the manufacturer or importer.

- the need to make telephone enquiries on available production stock because the batch order systems contain inaccuracies.

Inefficiencies in the order system lead to reduced visibility of the order process and order status and increase the time spent by all organisations in checking orders.

Finance and insurance organisations have established order systems that provide sales staff at the dealership with the tools to customise the service for each customer, qualify and approve the customer on site and prepare the necessary documents. In current best practice the customers' needs are identified, the type of product they are qualified to purchase identified and the customer approved for purchase in 45 minutes. The average time from initial customer contact to final approval of the finance or insurance product is four hours or overnight processing. Quality of the Internet service chosen affects the efficiency of the service and systems with regular system crashes will experience delays in processing and duplication of effort as orders are manually processed.

## **1.2 Vehicle delivery**

Locally manufactured vehicles are quality inspected at the end of the production process. The time taken for quality inspection is determined by the manufacturer's quality processes. The vehicle is then moved to a compound. In best practice systems the vehicle is moved directly from the manufacturer to the logistics service provider's storage compound and then to the dealership. Best examples show that this process can be completed in less than five hours when the dealership is located in the same metropolitan region as the manufacturer. At the other extreme, this process can take between two and seven days.

For imported vehicles, the logistics company provides specialised services including vehicle plating, cleaning, and fitting of some accessories. Vehicles are prepared on order and then transported to the dealership. Franchises with on-line computerised order systems will have visibility of all vehicles available for order. In franchises where the orders are batch processed or ordered using a paper based system the dealer will have little visibility of available stock or accurate delivery times.

Current best practice systems provide a delivery window of four hours to the dealership who allocates resources for vehicle receipt and processing, and forward books all pre-delivery work. In typical systems the dealership has a delivery window of one day and the vehicle delivery truck will turn up within a two day time frame. Allocation of resources for vehicle receipt and booking of vehicle pre-delivery work occurs after the arrival of the transport, resulting in delays and non-productive activities for both the dealers and the transport company. Lack of accuracy in the Estimated Time of Arrival (ETA) doubles the processing time at the dealership. Lack of preparation by a dealership can increase unloading times by 30 minutes for the transport company. The delays have a cumulative affect.

## **1.3 Stock**

The average time a vehicle spends in the supply chain from manufacturer to customer is 77 days with significant time spent in stock compounds at the manufacturer, logistics service provider or dealership. Vehicles spend an average of 45 days in stock at the dealership and 10% of vehicles have been at the dealership for 90 days or more. Older vehicles retain less margin as the costs of floor-plan charges, stock management and stock maintenance accumulate with time.

The number of total days supply of new vehicles for different manufacturer and importer supply chains varies considerably from a minimum of 67 days supply to a maximum of 212 days. A model developed to calculate return on assets (ROA) in supply chains, the Strategic Profit Model, has been used to calculate the impact of increasing stock levels. The ROA for 50 days supplier stock and 45 days dealer stock is 100% lower than for a supply chain that delivers vehicles to customer order. Supply chains with over 120 days supply of vehicles located throughout the chain have an ROA that is 140% lower than for a supply chain based on vehicles built to order.

#### **1.4 Marketing support programs**

Manufacturer marketing support to sell ageing stock or stock in excess of targets assists in selling stock but also has an impact on the overall profit pool available to supply chain organisations. Marketing support programs can be in the form of dealer bonuses, discounts, special accessories packages or incentives. There has been an increase in the number of bundled incentives and discounts offered in current sales programs, similar to the trends emerging in the U.S.A. These programs are not always linked to vehicle sales or volumes and the specific affect on the profit available to manufacturers and dealers is difficult to assess. When marketing support information is included in the Strategic Profit Model we can see that the overall impact of stock and incentives combine to significantly lower the return on assets, which for this study are the new vehicles available for sale.

#### **1.5 Issues for the Supply Chain**

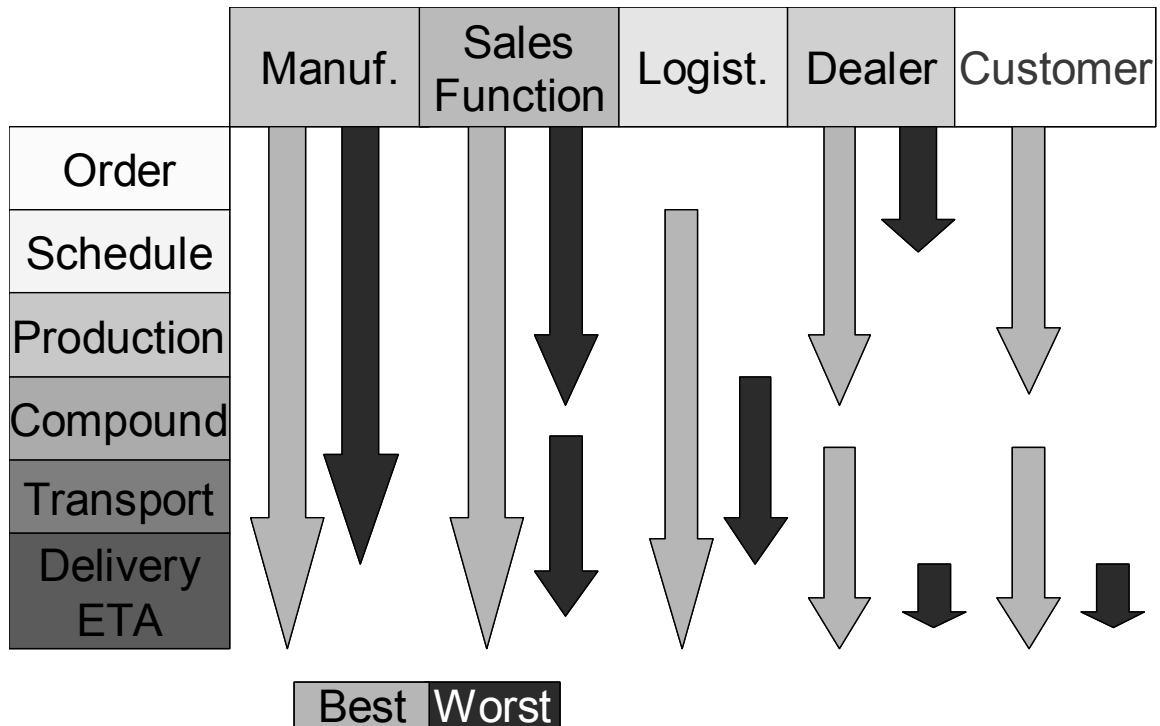
Dealerships rely on the revenue generated from finance, insurance and aftermarket products to remain profitable, and dealerships are achieving penetration rates of 47%, 16% and 30% respectively for each type of product. However each product has its own sales processes and sales people increasing the overall administrative impact on the dealership. The current sales process to cover all products is 3-4 hours and customer “process fatigue” is a major factor facing dealership sales.

The other major issues that affect the overall profitability of the supply chain are:

- visibility of supply to all organisations in the supply chain (Figure 1-2)
- visibility of available product and inventory for all organisations

- knowledge of total costs of delivery, government charges, and compliance costs
- impact of delivery issues, such as late or early delivery, on third party logistics companies and dealerships.

**Figure 1-2 Visibility of supply**



## 1.6 Benchmarking the franchise

Success factors in other franchise systems can be used as a foundation for benchmarking the automotive franchised dealership network. Some key characteristics of successful franchises appear to be:

- close, trusting relationships between franchisor and franchisee in which the contract is the document of last resort.
- high levels of standardisation and tight operating disciplines and a strong influence of the franchisor over the franchisees.
- owner-operated businesses, with a tendency to move away from company owned outlets.
- an appropriately scaled franchise outlet that allows the franchisee to work “on” rather than “in” the business.

- the extensive use of information technology to manage the franchise *system* and provide appropriate information technology to allow the individual franchisees to manage their own businesses.
- the ability of the franchise system to re-invent the business to keep pace with changing consumer needs.
- a special case of re-invention in which some franchises seek co-location arrangements with other franchises to boost the success of both systems. A bold and creative move by an automotive manufacturer could be to establish new vehicle-only show/sales rooms co-located with franchised auto accessory, vehicle service and tyre outlets.