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# Automotive **LOGISTICS**

BREAKING DOWN BARRIERS IN THE  
AUTO INDUSTRY'S SUPPLY CHAINS

OCTOBER/DECEMBER 2003



# Little by little

**Axel Wiklund outlines Peugeot Citroën's strategy**

# Fishing around for downstream profits

While the automotive industry has been successful with its upstream logistics it still needs lessons to improve its downstream. Integrated strategies such as those used in the retail sector hold the key to this improvement, writes **Ben Waller**

In most retail sectors the logistics of supplying the final point of sale is a key source of strategic advantage. This is true for fast moving consumer goods (such as food and clothing), as well as other more durable goods such as PCs. The primary aim is to optimize the availability of product, achieving a certain level of availability at a certain cost, in order to avoid stock outs, where there is no product to meet the consumer's requirements and substitution sales, where the customer is obliged to pick an alternative product. The aim of this strategy is to minimize the loss of profit opportunities at the interface with the consumer, while controlling the costs of doing this effectively.

All this relies on the right measures, and the visibility of accurate, real-time information for all partners in the supply chain, from transport, retailer head office functions, store and warehouse activities, through to the manufacturers and suppliers of product. The measures are set by the retailer, and in some sectors are standardized across competitors, as illustrated by the Efficient Consumer Response (ECR) movement.

## Focus on costs

For outbound automotive logistics – moving cars from the factory to storage compounds and then to dealers – the traditional focus has been on cost minimization. Implicitly, the strategic focus is still based upon the stock replenishment model, and has not changed to reflect the growing share of build to order. The concentration is on cost per car movement and storage charges.

Product availability is not really measured, damage being the only quality indicator for the chain. On-time delivery is measured only in relatively long periods, and separately for each segment in the chain.

It is not surprising that the performance of logistics is showing no improvement. Between 1999 and 2002 the overall order-to-delivery cycle for the car manufacturers benchmarked by the International Car Distribution Programme (ICDP) has improved from 52 to 41 days with a time saving in order processing (33% down) and production planning (26% down), but the delivery lead time has increased, from nine days to 10. The impact of this lack of focus on availability can be seen by comparing the performance of the car manufacturers in their respective home markets, where the supplying plant is located, and export markets – the other three major markets included in ICDP's benchmarking. In all cases, for the home market a shorter lead time between production and



dealer (7.5 days less on average, reinforced by greater reliability in delivery) allows higher build to order (15% more) and lower stock (6.5 days less), which results in lower lost sales (2.3% less) and lower alternative specification sales (3.3% less).

## Measuring availability

The measurable effects of availability used in other retail organizations are directly transferable to the outbound automotive sector. For new vehicle supply ICDP's benchmarking measures:

- "Lost" sales, equivalent to stock-outs since the system is not reliant on stock only
- "Alternative specification" sales, where the customer accepts a substitution for the preferred mix.

The factors determining availability in outbound automotive can be turned into targets. Many of the measurable causes of availability are the same for automotive as for other sectors:

- Right product (car production accuracy, accurate stock identification, component availability)
- Right time (flow and delays, on-time delivery to retailer and/or customer, in-window handover along the chain)
- Event management (rates of synchronization error, visibility of operations, data integrity, forecast accuracy, receipt and inventory accuracy).



Increasing product availability will mean spending more on faster, more accurately synchronized logistics

## ICDP

The International Car Distribution Programme is a collaborative research program into all aspects of car distribution, including the supply and retailing of new and used cars, after sales, network structures and operations. It is funded by participants from car makers, dealers, car industry suppliers, representative bodies and governments. ICDP's reports are published and available to researchers worldwide.

ICDP does not represent any of its members or their individual policy views. Opinions expressed in this document are those of the author and not necessarily those of ICDP.

Clearly, build to order increases the need to focus on delivery lead times. Manufacturers have been very successful in increasing the effectiveness of upstream logistics – inbound automotive is a leading edge model of supply chain excellence, used as an exemplar by other sectors. The automotive industry can learn from retailers in turn to improve its downstream logistics. In addition, there are already plenty of islands of best practice and innovative ideas in finished vehicle logistics, and given the myriad constraints logistics companies actually perform well.

## Integrating logistics

Increasing product availability will mean spending more on faster, more accurately synchronized logistics. However, a lost sale or a substitute discount costs both the manufacturer and retailer more than the required increased logistics cost. For example, discounts on alternative specification sales represent an opportunity cost for the business of a discount of 2.5% on 23% of sales (ICDP 2002). Lost sales due to lack of product availability can be estimated at 4.1% (ICDP 2002), and these sales can be assumed to make a contribution to gross margin of 30%. The net result of this on an average European car price of around €16,000 (\$17,992) is an opportunity profit of around €288 (\$324) per car sold, or 1.8% of turnover (3DayCar 2001, ICDP 2002). Faster coordinated delivery in the UK was estimated by 3DayCar research to add an additional 0.1% on system turnover; even if this is increased threefold to around €50 per vehicle (\$56), to take account of the markets with

lower population density and the need for faster export logistics, the net benefits are demonstrably greater than the additional system costs.

Furthermore, manufacturers can reduce these increased logistics costs through enabling the logistics providers to share facilities and services, without eroding the competitive advantage on dedicated systems and processes. For example, this study modeled in detail the effect of five manufacturer brands allowing multi-franchise logistics in the UK market. In such a scenario, logistics providers collaborate by mixing manufacturer brands on transporters as delivery loads by similar destination. Despite making some cautious assumptions, the study showed that mixing brands on delivery transporters could cut distance traveled by 12% (and therefore fuel costs), and cut driving time and therefore driver hours by 10%. Such a collaborative approach requires a renewed partnership between logistics companies and manufacturers; if the relationship is right, joint investment and risk can bring reward to all parties.

However, the focus on low cost movement, with multiple buyers of logistics at different tiers, is becoming a barrier to achieving improved system performance. There is a big prize from integrating the logistics of the downstream supply chain. In other sectors the retailer coordinates through a combination of its own expertise and subcontracted shared logistics services. In automotive, manufacturers, as the drivers of the system, need to coordinate or subcontract, but with a focus on availability: the strategic aim of the downstream supply chain should be to increase the product range available to retail channels within the right lead-time. ●●●  
Manufacturers perhaps need to think more like retailers.

## Room for change

The new Block Exemption regulatory framework for vehicle franchise agreements (1400/02) and the more general rationalization pressures in the industry and on the supply chain have taken their toll on automotive logistics. Added to this there is a pervasive impression now that the cost of distribution in the automotive industry is higher than it ought to be, while the overall quality of customer experience is somewhat poorer. Taken together it seems the cliché that “the car distribution industry is facing unprecedented change” is spot on. But so what? It is one thing to know that change is necessary or indeed inevitable, but this does not necessarily mean that all change is for the good. Both the danger and the challenge is to tell the difference between changes that are vital and to be encouraged, and those that are at best irrelevant or at worst damaging and so to be resisted. It is also not enough just to resist any change. The pressure for change is now hitting the ‘front’ end of the distribution system – the format and ownership for the customer interface for selling and servicing cars and light commercial vehicles – and the clear aim of the competition authorities is to minimize barriers to new formats in this area.

But distribution is a closely linked chain, one in which the precise format and ownership of retailing is perhaps one of the less critical details. What really matters is the value delivered to the customer. Success in implementing the necessary changes will depend less on the refinement for franchise contracts and more on the steps taken to improve the efficiency and effectiveness of the whole distribution system. This involves all states of the customer experience of buying and operating a new or used car, and it also involves all players from OEM parts producers to non-franchised repairers. The prime objective for the future is to deliver the highest level of customer fulfillment in the most efficient way.

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