

Some questions remain over how exactly suppliers will fit into the big automotive portals. In theory, trade exchanges such as Covisint offer two principle benefits:

1. Using the web as a common platform that reaches all players.
2. An opportunity for reducing and standardising the number of transactions between players, significantly cutting costs.

There is concern that it will purely be used to reduce supplier profit margins.

LOGISTICS

Logistics providers, particularly in out-bound delivery, lack a universal, open access data system. Whilst they have their own IT systems, these are not fully integrated with VM systems.

Out-bound logistics suffers from inadequate real-time forward data for delivery planning from the VMs. The 3DayCar means the end of long lead-time based load consolidation and requires smart, fast routing systems.

Transport providers currently utilise routing and load planning software, but more sophisticated network planning systems that learn from route planning are under development. This software uses 'genetic algorithms' that claim to cut journeys through experience and recalculation. Mobile 'in-cab data units' should be used to monitor job progression on out-bound delivery, as is the case currently on in-bound delivery.

SUMMARY

The major areas of the supply chain which need to be addressed can be summarised as follows: Standardisation of data formats & protocols, car descriptions and invoicing across the motor industry.

Elimination of batch processing and system legacy, particularly within vehicle manufacturers. Industry capability for real-time processing of individual customer orders in real time which are open/visible across the total supply chain. In order to achieve this, further research is required into the following enabling technologies:

- E-commerce
- Internet trade exchanges
- 'Geo-fencing'
- The 'Vehicle Lifetime Identification Chip'

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EXECUTIVE BRIEFING

Current IT Systems: The Barriers to 3DayCar

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This report examines the major IT Systems Barriers in the current automotive supply chain at the dealer, manufacturer, component supplier and logistics companies. It contains details of current and emerging technology that can minimise or eliminate these barriers.

DEALER

IT Systems barriers centre on the lack of integration between Dealer Management Systems (DMS) and Dealer Communication Systems (DCS).

Excessive hand keying, manual controls and duplication of information are involved in the new car purchasing process. Around 20 'hard copies' of invoices and certificates are required per vehicle.

There is inadequate system support for dealers by VMs, particularly on Sundays, a busy day for customer enquiries. Dealers are generally not being consulted regarding relevant system improvements by VMs.

Dealers can typically only sell what is on their computer screens. Visibility is generally good for stock but poor for orders.

Whilst technology such as Middleware and XML can go some way towards helping dealers improve their daily flow of information, many of the present issues involve changes at a more fundamental level. The rise of the Internet is currently redefining traditional sales territories and customer relationships, causing uncertainty amongst many dealers and manufacturers over what future business model they should adopt.

VEHICLE MANUFACTURER

'Batch Processing' represents the major IT Systems barrier to 3DayCar. The current configuration of internal systems results in individual mainframe systems updating once a day, processing batches or 'buckets' of orders in a time intensive cycle that adds 4 to 5 days to the order to delivery time of a vehicle.

The generic IT Systems map developed in this research illustrates current 'stovepipe/ chimney mentality'. It shows how systems reflect functional characteristics, rather than an integrated supply chain approach.

Legacy systems were originally built for a 'different world' of IT capability and manufacturer rather than customer led production, and where technology was associated with control. Existing IT infrastructure is often too costly to replace en masse leaving the VMs who run the most complex systems, with a serious disadvantage in terms of reducing order leadtime.

Central management systems are popular amongst VMs, because of the ease of maintenance and the purchasing advantage gained through economies of scale. However, the time lag introduced at regional plant level, where central batch processing cannot allow for local time differences, can result in higher levels of inventory. Is there a case for examining the balance between central and plant systems?

SUPPLIER

Suppliers perceive the lack of adherence to EDI standards by VMs, both in terms of language protocol and data format, to be the major barrier to the OTD process.

Opinion is divided as to whether 'EDI is dead' (ie: bespoke, dedicated communication links between two businesses) or the arrival of the Internet has rejuvenated existing EDI formats by allowing them to be placed on a web page.

There is concern by suppliers who have adopted web-enabled systems that they do not offer the same reliability or security to conduct transactions between businesses as bespoke EDI systems. However, web enabled mission critical systems do exist in other industries such as Finance.

Uncertainty exists amongst suppliers over what new technologies should be adopted, resulting in a rather haphazard uptake within the industry of technologies such as Odette, Edifact, web enabled PCs and membership of internet trade exchanges.

There is evidence to suggest that at some levels the industry is recognising the need for implementing homogenous operating procedures and standards. In February 2000 a shared exchange called 'Covisint' was established in principle, whose membership includes Ford, GM, Daimler Chrysler, Renault Nissan and major suppliers. However, there is an opinion that the European motor industry will take 5 years to obtain priority of benefits with the USA.