SMART MOVES

Steve Jones, MD of Vehnet, a leading supplier of tracking systems for the finished vehicles distribution chain, looks at how technology is transforming finished vehicle distribution.

Although car manufacturers would deny it, making a vehicle is almost the easy bit. What happens after the end of the line, as vehicles with individual specifications — some made to stock, some to a specific customer order — try to find their proper destination in an increasingly complex global distribution network, is anyone's business. In fact, it's Vehnet's business.

Vehnet specializes in systems that help manufacturers, or their distributors, track vehicles from line-end to dealer or customer. It also helps to improve the process and reduce the amount of expensive metal that is lying around incurring charges.

Steve Jones says: "We build systems that can develop and optimize the processes for each car, and enable the rules that govern the movement of the car through the different parties to be automated as far as possible. That's a boon to all the logistics providers in the chain — shippers, rail, truck and vessel operators, homologation and PDI centres — not just for new vehicles but also in getting demonstrators and ex-rental vehicles back into the dealer chain. Anywhere there is volume and complexity."

Jones says Vehnet can offer particular benefits in three areas:

- handling and storage in compounds
- processing through workshops, inspection centres and the like
- and in load building and transportation.

"The efficiency comes from the pull principle, just as in the factory. So we are working on and reflecting customer demand. For example, in a compound, people often put a particular model in a particular area "because that's where they always go." We can be more scientific by looking at what is going on. If you park the vehicle next to one that needs moving, you've cut out a lot of walking. The system is constantly making suggestions based on simple triggers derived from customer priorities."

Not surprisingly, Vehnet offers a big boost for RFID. Conventional wisdom has it that at current costs you need flows of about 300,000 vehicles a year to justify RFID tagging. But, says Jones: "In the right place, where RFID can signal that the car has just passed a choke point, we can put that into our workflow and gain the benefits on much smaller flows." The benefits aren't just about preventing people wasting time, though by verifying that the vehicle has completed a certain process (a repair, an inspection or a transport movement), the whole payment cycle for that operation can be triggered. Accurate charging of storage time is also valuable; storage is costly, and conventional calculations of time and charges are, typically, out by 7% or more, says Jones.

"Knowing where your car is — and in what status — is key," says Jones. "If we know that, we can stop sending people to the wrong place; we can sequence work so we don't block in a car that is about to be moved; we can get away from the traditional work patterns of pulling cars out for a process and putting them back again in batches. This will create big savings, not just in time and labour, but also in petrol, and reduce the risk of damage while vehicles are being needlessly shunted around compounds.

"In workshops, we can give you a more scientific control of the time an operation should take (which is probably the basis of how you are being paid) and what it is actually taking. Little savings on big flows equal big savings — which is why we sell our product on a volume basis," he adds.

Vehnet's systems clearly offer benefits now, but Jones believes they will be even more important in the future. He says: "I believe every car has an identity and life of its own. It's born in a factory, it needs to get to the people who will love and cherish it, and to do that it passes through many hands. But if it were a person, its readiness to pay for a particular speed and quality of transport would vary. I believe each car should 'buy its own ticket.'" But, in reality, says Jones, car makers set false expectations about the service they or their customers demand, which cause logistics companies to act in certain ways. Unsurprisingly, when the makers measure the performance, they don't think their logistics providers are doing a good job." And, of course, each distribution network is separate: there is no visibility of other parallel flows, so there is no opportunity to eliminate waste in the supply chain.

Steve Jones

Jones visualizes Vehicle Movement Exchanges, probably on a regional basis. Essentially, each vehicle (with details of destination, time constraints, other work required etc) would be 'put up' by its manufacturer, and accredited logistics companies would bid for the business as an individual transaction. As a result, normal pricing mechanisms could reflect many factors: spare capacity on a particular sailing; or a capacity shortage on the route; a fast, direct route for a customer order or a slow boat if the vehicle is simply going to replenish dealer stocks.

Production ramp-ups can be very jumpy, Jones points out — although the logistics provider may have an overall commitment to move thousands of vehicles prior to a product launch, there may be days or even weeks when there is nothing to move and capacity is lying idle, but could be used to bid for other flows. Backloading becomes conceivable in a way that is rarely seen at present. An exchange would be a mechanism to trade-off logistics cost against criticality of service … this is what Jones means by each car buying its own ticket.

The result should be less waste, better asset utilization, lower carbon footprints and, if the pricing signals work properly, lower costs and better, more tailored customer service. And, of course, to ensure the integrity of the operation and that contractors are performing as they bid — on a car by car basis — systems like Vehnet would be essential. •