The growing importance of technology in finished vehicle logistics

A fast growing, sophisticated and global consumer is no longer willing to put up low quality cars, and the advances in technology mean that more new brands have entered this crowded industry, increasing competition and driving down the price of new cars.

On top of this you can add the continued economic weakness in the European and other global areas compounding the efforts of many manufacturers to make a profit. The last decade has seen success in reducing costs in the inbound and manufacturing sectors with Just-in-Time, Six Sigma, and Kaizen amongst a host of strategies for improving production efficiency and cutting out waste.

The outbound or finished vehicle logistics sector has also been working hard to improve efficiencies in the delivery of new cars by re-designing the specialist road, rail and sea carrier resources to maximize volumes carried, as well as improving network planning and reducing empty spaces on all journeys.

The use of technology has also become vital in improving information used in the management of the supply chain, and ensuring that vehicles get to their destination within lead time for the ‘best’ possible cost. But there is still a belief that the sector can do better, much better in fact, and there are a number of leading manufacturers who have set themselves the task of not just knowing where their cars are in the global supply chain, but also wanting to manage vehicles through the supply chain in the most efficient way possible.

This, they believe, will not only keep their customers happy, but will also improve their delivery costs whilst generating sustainable margins for their logistics service providers, a win-win-win solution that has eluded most manufacturers up until now.

And whilst margins are vital to ensure that logistics service providers (road, rail and sea transporters plus inland and port compound operators) can continue to invest for the future, operational efficiency is also a high priority to ensure that vehicles stay within delivery lead times, a key element of the manufacturers brand promise, and one that can make the difference between gaining or losing a new car sale.

SyncroTESS Finished Vehicle Logistics

Getting a quart out of a pint pot

Today’s global automotive industry continues to be a tough place to work in

As the impact of the global economic crisis of 2008 continues to affect the automotive sector in most regions of the world, the drive for efficiency continues to be the ‘holy grail’ for manufacturer and logistics service provider alike.

Efficiency is a term that has been widely used to describe a need to reduce costs. But efficiency is a constantly moving target in such a dynamic environment, and improving one element in a supply chain can lead to a detrimental effect in another part of the chain. Intelligent Technology has the power to calculate the multiple outcomes of any planned action in the blink of an eye, and therefore give the operator a powerful new tool to improve efficiency like never before.
**INFO PAPER**

**SyncroTESS Finished Vehicle Logistics**

**So what do they do now?**

All the main stakeholders (manufacturers and logistics service providers) have developed IT solutions to handle the logistics involved in moving tens or hundreds of thousands of cars from anywhere in the world to the destination market (which could be anywhere else in the world).

For a manufacturer, IT solutions range from mid and long-term strategic planning tools that provide a forecast of expected delivery volumes to the global regions at a very high level, through to operational tools that instruct their logistics providers to move vehicles based on individual VINs. For most, these solutions lack the flexibility to react to the dynamically changing environment, causing inefficiencies, delays and extra costs to get vehicles to their destination within their promised lead times.

Manufacturer logistics departments struggled to justify the significant budgets that would be required to build such systems because R&D, manufacturing and marketing are seen as higher priority for investment funds in developing and selling the fresh new models that are required to maintain market share. Logistics is viewed as a cost rather than an income generating function, and therefore is targeted with achieving delivery lead times at the lowest appropriate cost.

**Added value or cost?**

For the logistics service provider, IT solutions have been important to operational efficiency, although many companies are still struggling with a mix of paper-based and technology-based solutions for their operatives to know what needs to be done with a car on arrival in a compound or at the vehicle processing center. The manufacturers have also demanded that the logistics service provider supply the IT solution to be able to report on daily or weekly activities. These solutions can also give final delivery visibility to the franchised dealerships or leasing/rental companies.

However, such capability is usually provided as an integrated part of the contract rather than an added-value service. This is important to recognize as it reduces IT to a part of the overhead of running a contract and therefore the logistics service provider has to treat it as a cost that needs to be minimized. This approach will inevitably lead to development being limited to ‘essential requirements’ with little capability or incentive to innovate in excess of the manufacturers stipulated outputs such as exception reporting and track and trace. This is a dilemma that needs a new solution and INFORM can provide that solution.

**So what's the alternative?**

The development of the independent IT provider in the finished vehicle logistics sector has been a story of struggle against adversity. Software development over the years has gone through rapid and radical changes. For many years, bespoke development was the only solution possible and was done by an in-house IT team who had their own server environment and their own programmers. This required significant investment in time and resource to build these solutions, and getting the various in-house systems to communicate with each other was difficult and restricted the facilitation of data sharing and industry standardization.

The exponential growth in technology has bought with it a need to constantly be at the forefront of the latest developments. For many companies this is difficult to achieve if they have limited exposure to these developments. Independent IT providers typically focus on creating innovative solutions with the latest solutions and also work across many sectors, giving them the ability to exchange ideas between industries.

**A fresh approach from INFORM**

INFORM’s SyncroTESS is an example of this technology ‘leap’ and is able to provide technologies to the finished vehicle sector that will bring significant benefits in terms of genuine efficiency and measurable cost savings. January 2012’s Finished Vehicle Logistics Magazine focused on Optimization for the first time and it is this type of intelligent technology that provides the core for a range of solutions that have been specifically built around the Vehicle Identification Number (VIN) system that is uniquely used in the automotive sector. But optimization is only part of the story. The dynamic nature of the finished vehicle supply chain means that plans made for the next day can be instantly ruined by delays or changes that cannot be forecast until they happen.

The impact of these changes can be disastrous in their consequences and re-planning can take many man hours, which in a fast moving environment can delay the supply chain further. SyncroTESS is built with this in mind and the impact of one change is instantly re-calculated across all parts of the supply chain by the intelligent decision processes that are built in, enabling new instructions to be issued without delay, allowing operations to progress in the most efficient way. These decision processes can also be adjusted by the operators to reflect changes in contracts or the addition of new customers into the operation. No specialist programmers are required, and there is no delay waiting for the software to be updated – the control is in the hands of the operator!
SyncroTESS is a suite for Finished Vehicle Logistics that include a high level strategic central planning system and two operational level suites for compound management and transport management. All elements can work as stand-alone, connecting seamlessly to any third party IT for data exchange purposes. Implementations so far in various regions of the world have provided efficiency and cost benefits of between 8 and 10%.

**Minimising the risk, maximizing the opportunity**

As with all professional companies, no one wants to be seen to be taking a risk. This could lead to profound impacts on the business which no one can afford, especially in these tough times. The scale of the IT solutions discussed here mean that the capital expenditure (CAPEX) is significant and will require a ‘water-tight’ business case which can de-risk the investment, especially in the area of implementation and flexibility.

**SyncroTESS** for Finished Vehicle Logistics streamlines the vehicle supply chain using optimization and synchronization techniques for all processes in real-time. This goes further than the traditional automation of daily transactions and covers simultaneous business planning, compound operation and transport processes.

INFORM is a multi-sector technology expert with a dedicated finished vehicle logistics team which has significant experience in planning and implementing large scale projects around the world without any operational downtime. We use our multi-sector experiences to constantly improve our solutions and add the latest technology developments into our updates as part of our continuous improvement ethos.

With INFORM you will be getting all the benefits of a large multi-national corporate as well as the flexibility of a small dedicated local company. We can help you develop your business case which will put your company back in the driving seat!

**ABOUT INFORM**

INFORM is a technology expert providing software solutions globally, which enable real-time optimization through the unique intelligent planning and automated decision-making software SyncroTESS, built specifically for the finished vehicle logistics sector.

INFORM’s association with finished vehicles began in 2008 with VW’s outbound logistics in Mexico and has developed to include solutions into shipping and terminal operators across the world.

**MORE INFORMATION**

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