

Indian Automotive Logistics... Hot on its Heels!



Rhea Vazirani

Indian auto-component industry is fast emerging as a force in the global market. However, going ahead there are some serious challenges on supply chain front. And some of these irritants are external as well.

A recent global automotive conference report states that among most promising emerging markets, China is not the sole contender in the race to become the world's leading automotive supplier-India is racing too and it has begun racing fast. It's the only country in the world with a population and low-cost labour force comparable to China.

India's thriving automotive sector is virtually spearheading a manufacturing renaissance of sorts. In spite of the 8% appreciation of rupee since April 2007, the Indian automobile industry witnessed a double-digit positive growth in absolute figures during the financial year 2007-2008. The automotive sector is said to expand five times by 2017 to nearly \$150 billion. Of this figure, auto parts will account for \$40 billion- 50 percent exports and 50 percent domestic sales. India expects to produce two million cars annually by 2010-11 and three million by 2015-16, with 10 per cent exports. At present India is already exporting more cars for customers oversea than China.

Factors such as the growing mergers and acquisitions, leaner supply networks, growing customer expectations, and the myriad variations in demand are all affecting the market for supply chain management solutions in the automotive sector. The convolutions of globalization have intensified the requirements of auto consumers. Now more and more consumers want a vehicle which meets their personalised demands, making it imperative for the automakers to make mass products that are also customised. The number of variants and the related complexity of in-house logistics and assembly processes are increasing with every arriving model. The challenge is to attain high process suppleness and additionally uphold an efficient supply chain that supports Just-in-Time (JIT) and Just-in-Sequence (JIS) manufacturing.

The developing automotive world is defined by rapid delivery time, increased quality, and customer centric relationships. This era calls for the adoption of Build-to-Order (BTO) model as against the "off-the-lot" model to improve profitability and customer responsiveness. BTO is the capability to quickly build standard or mass-customized products upon receipt of spontaneous orders without forecasts, inventory, or purchasing delays.

SUPPLY CHAIN CONCERNS

The automotive industry supply chain consists of car automakers, original equipment manufacturers, supplier, retailer (distributors and resale) and the final customer. Due to complication in operations and the many existing number of auto parts and components, it is very important to manage the supply chain successfully, mainly regarding to logistics cost reduction and integration of all links that constitutes the chain. The complex product life cycle of an automobile with thousands of suppliers and sub contractors demands that an OEM must have complete visibility into its supply chain to reduce costs and stay innovative.

Indian Automotive Sector: Industry Highlights

Growth of CAGR of 15% per annum over the last 5 years. The automotive industry has emerged as a key contributor to growth and maturity of the economy.

- **2 wheelers:** 2nd largest market in the world. Likely to emerge as one of the largest in the world
- **Commercial vehicle :** 4th largest commercial vehicle market in the world
- **Passenger Cars:** 11th largest market in the world. Expected to be 7th largest market by 2016

One of the main supply chain problems is that there are lots of delays in the communication because of lack of trust among supply chain partners. Securing a tight-knit chain between a vendor and the OEM can solve most of the problems. The logistics service provider (LSP) also must find a place to add value and become an integral part of the value chain. The role of an LSP is to address the issues of visibility and velocity. A viable option to lower costs and make the supply chain more efficient is to reduce the number of suppliers. A lot of Indian auto manufacturers are working in this direction.

Another alternative is prolific agglomeration of suppliers keeping in mind the geographic vicinity of the suppliers and sub-suppliers to car automakers. This would reduce transport costs, warehousing and stock maintenance activities.

PORT PROBLEMS

India's port infrastructure faces capacity constraints. There are hardly any roll-on roll-off, or Ro-Ro export and import facilities at the ports to ferry cars. Mumbai is not a finished vehicle port, but is more used for containerized cargo. Due to such constraints a lot of business is being diverted to ports like Mundra and Kandla. With export volumes rising sharply, by 2015, if ports operate the same way they do today, they will come to a standstill.

The capacity constraints at ports can be reduced by focusing on space solutions. There is a need to source additional land nearby berths, cut down on storage period, increase ship call frequency and develop multi-storey parks.

INFRASTRUCTURE GAPS

Transportation in India is severely plagued by underdevelopment. 97 percent of the cars in India are moved by road and rest by rail. Rail Freight has not been developed and is virtually non-existent for the automotive industry. There are barely any dedicated rail cars for auto transport and vast distances to cover within the country to move cars from the traditional as well as emerging clusters. About 40 percent of all road freight is carried on four national highways. The cost of transportation is also high. Our country's logistics faces momentous challenges to get the cars reach to the customers.

On the positive side, Golden Quadrilateral, an express highway that connects Delhi, Mumbai, Kolkata, and Chennai corridors is about 90 percent complete. Some new investments for building freight corridors have also been announced. This would enable much quicker freight movement from the hinterland to the ports.

TAXATION WOES

Another inhibitor of proficient logistics is restrictive legislation. Interstate movement of cars and auto components in India is hampered by excessive bureaucracy and differing tax laws. The lack of capacity for automotive components and cars gives a call to the carmakers and logistics providers to collaborate to fill backhauls but due to the traditional competitive relationship between them, it is easier said than done.

The VAT regime rolled out by the government is believed to bring some changes to tax regulations which would ease the interstate crossing.

LSP

In the world of dynamic and complex product portfolios, a seamless process is necessary. To achieve this, an OEM needs to integrate backward in all of its internal processes. Availing services of a LSP who provides value added services in areas such as inventory management, kitting and warehousing is a progressive step that can be taken by the OEM. LSPs can play a major role in the automotive industry by providing end-to-end supply chain logistics services with requisite competencies and asset-based networks.

FINISHED VEHICLE TRANSPORT

Finished vehicle distribution costs in India are high due to traditional competition among the automakers, disorganized transportation, lack of freight consolidation and poor equipment and packaging.

Collaboration coupled with cooperation is necessary to bring efficiency. Investing in shared capacity would reduce the huge loss of capacity that occurs from empty returns. Apart from collaborative load balancing, another strategy to make distribution efficient is hub and spoke network. To realize this network, the industry needs to create vehicle terminals at the manufacturing centers and at various strategic locations across the country. When vehicles are moved to the logistics centers by rail and from there to the dealers by road, a hub and spoke arrangement can decrease the inventory cost and can also provide a better level of customer service.

A systematic approach and global consistent processes coupled with an efficient logistics strategy is the mantra to sustainable automotive growth in India. ❏

Rhea Vazirani is Head Corporate Strategy at Robinsons Global Logistics. She has done her Masters in Supply Chain Management from Bordeaux, France.

