In March 2020, supermarkets were left with empty shelves as customers began panic buying products such as pasta and cereals

Real-time transparency in food and groceries logistics

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Businesses that move from a reactive to a predictive supply chain have the opportunity to be miles ahead of their competition.

The outbreak of the coronavirus pandemic rendered retailers' long-term plans and forecasts irrelevant in the space of a week. The announcement of the UK's first lockdown in March 2020 resulted in panic buying, leaving supermarkets with empty shelves and putting a massive strain on their stock and logistics networks. This was followed by skyrocketing demand for online grocery shopping as consumers avoided visiting stores in fear of infection, putting an additional strain on operations as items had to be picked and deliveries organised.

The pandemic has shown, once again, that when a crisis occurs businesses that have a clear and consistent view across their full supply chain, particularly of their transportation activities, fare better. That is because supply chain visibility enables suppliers and retailers to make more accurate forecasts based on shared data and insights. Real-time access to accurate estimated time of arrival (ETA) helps to optimise operations. The resulting transparency increases network stability, shortens the reaction time needed to take preventative action and creates cross-functional cost efficiencies.

Supply chain visibility in the B2B sector

Although it is already standard in the B2C segment, real-time supply chain visibility was not available in the B2B sector for a long time, partly due to the sheer size and heterogeneous nature of the market. Europe alone has around 600,000 logistics providers that use up to 600 telematics systems to trace the position and other data of their vehicles. Until a few years ago it was simply not possible to set up such a complex tracking system due to a lack of data and affordable computing capacities.

However, thanks to modern algorithms, artificial intelligence and big data, a delivery's ETA can now be predicted and communicated so precisely that possible delays no longer lead to long waiting times at the loading dock. This technology is particularly useful for the retail sector, where staff expect trucks carrying new merchandise to deliver at a specific time. If the tracking system informs the supermarket of any changes to the ETA early on, calls to the warehouse, the freight forwarder or the driver become a thing of the past. Waiting times at the dock are reduced, and fines for delayed deliveries decreased. Software solutions can enable carriers to cut the average idle time for a truck from 110 to 60 minutes — that is, by almost half.

Business value of ETAs

A truck's ETA is an important indicator for minimising waiting times at the loading dock and improving capacity planning. Real-time ETAs help shippers gain greater

Case study

A successful example of using an end-to-end real-time transport visibility (RTTV) platform comes from Carrefour Group, one of the biggest supermarket chains in Europe. In Belgium, around 250 trucks make 450 trips throughout Carrefour's store network every day, delivering to 850 stores. One of the main challenges for supply chain management here was ensuring a high level of store owner satisfaction; 90% of the supermarket chain's store network is franchised, making franchisees' satisfaction incredibly important to the brand's overall success. Delivering a high-quality experience for franchisees involves ensuring consistent product availability and ensuring on-time deliveries of stock. Without access to delivery information, staff became stressed, resorting to phone calls and emails to follow up on shipment statuses. Receiving a delivery meant spending time away from the shop floor, where they could be making sales or restocking shelves. If a delayed delivery arrived at a busy time for the store, it could mean missed sales or disgruntled customers.

Carrefour used Shippeo's RTTV platform to streamline operations at depots and provide franchisee store owners with accurate and reliable information on their incoming deliveries. The platform combines the different transport activities from Carrefour's various transport platforms into one platform, in real-time. Trucks equipped with onboard computer devices facilitate the real-time tracking of their position. A machine learning algorithm takes information from systems across Carrefour's transportation network and predicts shipment ETAs. Stores are automatically notified of shipment statuses via email and SMS, and can track their deliveries in real-time, enabling them to better organise their daily routines.

While the resulting improvements keep franchisee satisfaction levels high, Carrefour's supply chain logistics teams are also able to monitor transportation performance to measure the difference between planned and actual arrival time, which focuses efforts on enhancing productivity within stores. In the same way, carrier turnaround times are objectively measured, to help optimise performance.

∧ Retail sector growth shows no signs of slowing over the long term
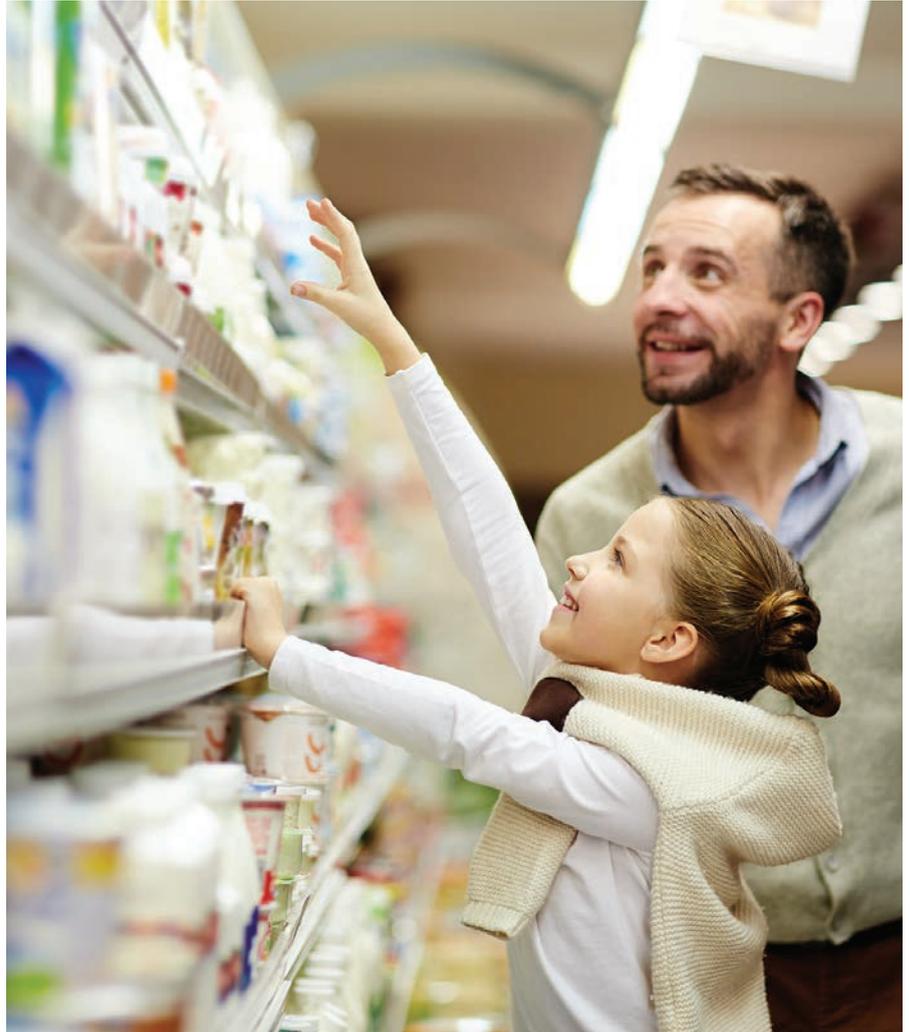
transparency of carrier operations, ensuring that costs associated with freight are fair and reasonable, particularly for unanticipated costs through workflows. In turn, carriers benefit from advance notice of a shipment's change in status, helping to reduce dwell times, wait-times and penalties. This allows them to adapt their operations more easily to make better use of their fleet and resources.

Obtaining an ETA for a shipment in transit can reduce administration costs by automating processes and allowing teams to focus on exceptions. This in turn can increase productivity of customer service teams, as well as operations teams at warehouses and distribution centres. It allows these teams to make short-term changes to dock scheduling, optimising the labour at cross-docks by receiving proactive ETAs.

Sharing ETAs provides customers with visibility of their shipment and helps shippers to manage expectations, helping to ensure deliveries are on time, avoiding production line halts or stock outs. Giving advance notice of delays allows for reactive measures to be taken, mitigating negative customer impacts and leading to higher levels of customer satisfaction. In this way, the visibility of ETAs unlocks greater value from a supply chain, shifting its capabilities from proactive to predictive.

In conclusion

As the world's population grows and becomes more affluent, retail sector growth shows no signs of slowing over the long term. Increasingly complex supply chains resulting from retailers' efforts the better to meet rising customer expectations and demands are creating new challenges and opportunities for the sector. Retailers that move from a reactive to a predictive supply chain will find themselves miles ahead of their competition.

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