A Case Study

FOOD TRANSPORTATION NETWORK POSES A CHALLENGE – **TECHNOLOGY DELIVERS A COST SAVING SOLUTION**

Major European food manufacturer uses a transportation optimization platform to manage an unusual order/demand profile environment, reduce transportation costs, cut down on CO_2 emissions, and improve end-to-end supply chain visibility







As a worldwide manufacturer of some of the world's best-loved pasta products, the 138 year-old corporation knew it needed state-of-the-art technology to elevate it to the "next level" of supply chain management. Based in Italy, the company relies on numerous warehouses situated throughout Europe to serve as the distribution network for its pastas, bakery products and other edible creations. Until recently, the company relied on a combination of proprietary software systems and manual processes to manage its transportation network.

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Doug Surrett, VP of International Solutions, MercuryGate International

One of the manufacturer's biggest challenges, for example, tied directly to a core distribution model that relied on static schedules (shipping directly to stores) that were previously handled manually. Using those static schedules, the company would attempt to "lock up" carrier capacity early in the morning to ensure that the vehicles were available to handle schedule runs. Managing this process was difficult at best in a non-automated environment. "It was basically impossible for a human being to manage manually," says Doug Surrett, Vice President of International Solutions at MercuryGate in Cary, N.C. "Multiply the process across multiple DCs, and for a volume of several hundred orders/demand profiles (several times a day), and the challenge quickly became insurmountable."

Adding to the problem was the fact that the manufacturer lacked visibility of "actual" orders for much of the day and, as such, relied on its SAP enterprise resource planning (ERP) system to create "expected" bookings for later in the day. These expectations were based on uncertain forecasts that solidified into actual orders as the day progressed. "Where most companies plan out shipments that are based on real orders," says Surrett, "this food manufacturer combines demand and forecasts to project orders throughout the day." The orders are then immediately turned around and dispatched to trucks. In this dynamic environment, assuring that the right



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shipments are matched up with the right routes and the right carriers is an ongoing hurdle for the manufacturer.

The manufacturer turned to technology for help in optimizing its distribution network. Marcos Serrano Timonet, Senior Manager at Accenture, says his company was brought in to help find a "new operating model that would effectively bring all of its logistical operations together in a standardized and normalized manner." As part of that goal, the consultancy examined the manufacturer's various logistics operations, which were split across different warehouses and run in very different ways.

"We defined an operating model to show them the benefits they would achieve through this exercise," says Timonet. As part of the process, Accenture introduced the manufacturer to the supply chain "control tower" concept. "We showed them how a control tower would help them merge flows from one distribution center (DC) to the next," says Timonet, "and how it would help them negotiate better costs with carriers and gain better supply chain visibility."

A Solution that Met Unique Requirements

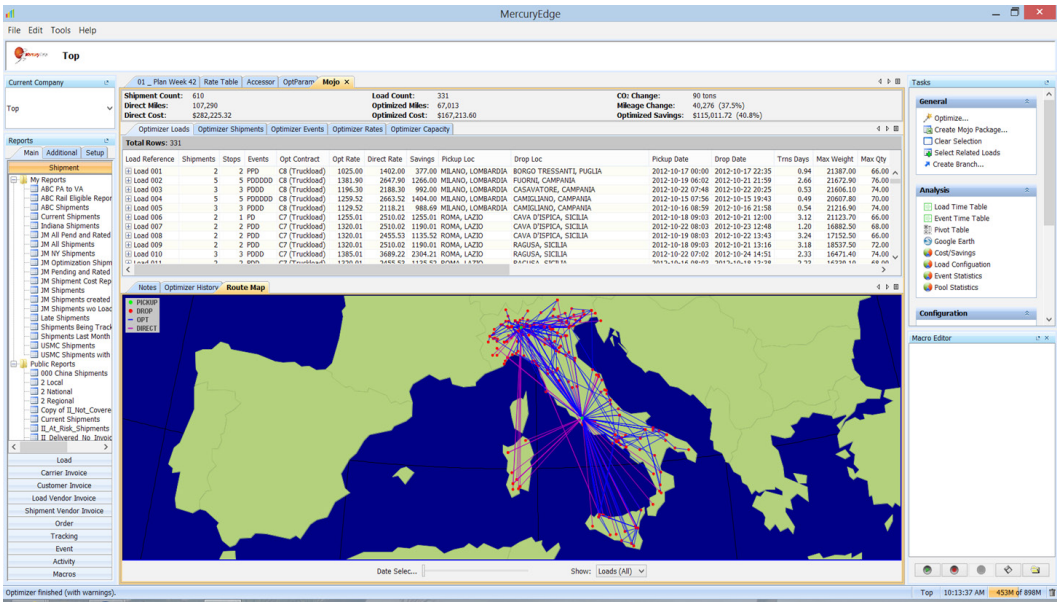
After exploring transportation management systems (TMS) options on the market, Timonet and his team recommended MercuryGate for its value, capabilities, and general "good match" for the client's needs. "Taking into account all of the manufacturer's requirements," says Timonet, "MercuryGate's Mojo Transportation Optimization solution was the best software for the value."

After conducting a proof of concept and a parallel adoption (to ensure that criteria for the new system was met), the manufacturer went live on a single warehouse and then subsequently rolled out the TMS to the rest of its DCs over the following months. According to Surrett, MercuryGate built an interface with the manufacturer's existing SAP system. That interface takes the demand/forecast data that's generated early in the day and brings it into a queue (as if it were an order). Batched information from the ERP at 8AM, for example, is 100 percent forecast/zero percent orders. The balance of forecast and orders shifts throughout the day until it reaches 100 percent orders/zero percent forecast by the end of the day.

"The orders/forecast profiles run all day long through Mojo for validation," Surrett explains, "and are used

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MercuryGate
TMS that delivers.



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to firm up the delivery trucks throughout the day. By the end of the day, the manufacturer starts booking trucks and getting carriers assigned – in most cases within a few hours." Because the process is completely automated and optimized, the food manufacturer can look at the "big picture," rather than trying to manually address the trickle of orders that comes in throughout the day. It now has a reliable database of executable information that's updated by the TMS at least once an hour (at which point Mojo runs the data and creates a plan based on actual orders and forecasted orders).

As part of the international food manufacturer's transportation optimization initiative, the company also focused on fixed delivery appointments. This additional step effectively addressed the fact that every "stop" includes a one-hour window that's not always easy to manage or plan around. "There are cases when one stop has to follow the next stop, even when that may not necessarily be the best route," Surrett explains. "To accommodate this need, MercuryGate quickly added the capability to Mojo to honor those constraints."

Measuring the Benefits

Initially run as a proof of concept (POC) trial at one DC, the company's new TMS started to reveal cost and time savings almost immediately. When the implementation was rolled out across four DCs, the manufacturer's initial ROI expectations were quickly exceeded. "They achieved the value that they thought they would get, as identified via the POC phase," says Surrett, who sees the savings on manpower involved with planning complex routes as a top benefit for the manufacturer. "This company is doing things that it just couldn't do with human labor; the process is now fully automated," says Surrett. "As an entity that deals with an extremely complex transportation scenario on a daily basis, this manufacturer has achieved some real benefits and value by integrating technology into the process."

With its transportation optimization platform in place, the international food manufacturer has not only been able to streamline its transportation processes, but has also enhanced its customer service levels, lowered its freight costs, and reduced the CO_2 emissions for the vehicles it uses to transport goods across Europe. "Because truck fill rates have increased significantly," says Timonet, "they're getting better usage out of the vehicles and lowering CO_2 emissions. It's a win-win for the company and the environment." ▼

About MercuryGate International, Inc.

MercuryGate International, Inc. offers the world's only cloud-based omni-modal transportation management software. Companies of all sizes quickly locate capacity, select carriers & rates and significantly reduce their transportation spend. Using any mode of transportation, including parcel, shippers and logistics companies optimize 100% of their domestic and international shipments.

Mojo is a transportation optimization solution from MercuryGate that integrates with any TMS. Actual rates, approved carriers, specified capacities, transit times, and other available data is used by Mojo to rapidly produce realistic and executable load plans. The load plans are delivered back to the TMS for execution.

When it comes to the challenges of managing complex transportation scenarios, turn to the TMS that delivers.

MercuryGate
TMS that delivers.