

Customer Success Story

TOMRA

Greening the Supply Chain with Integrated Logistics Solutions for its Recycling Operations

Founded in Asker, Norway in 1971, TOMRA operates today in 45 countries around the globe. In pursuing its mission of 'Helping the World Recycle', TOMRA maintains a strong commitment to ensuring that their activities contribute positively to society and the environment.

In North America, TOMRA has 250 employees and a fleet of 185 different trucks that collect and process deposit beverage containers in six different states. The containers are returned through different redemption strategies, some utilizing kiosks at supermarkets, others utilizing reverse vending machines and still others using the traditional person at a counter to accept the container. A network of 16 plants across the country process these containers. TOMRA's 8,000 customers include market-leading retail chains such as Kroger, Tops, Wegmans and Meijers.

Seasonal Operation Creates Complex Challenges

TOMRA operates in a seasonal market where the volume of returned beverage containers fluctuates with seasonal weather changes. As a result, its fleet would average 4,000 pick-ups during the course of a week in the winter, compared to an estimated 6,000 stops in the summer. A variable operating schedule also creates fluctuations in stops per truck per day, depending on the region. Stops could range from two in California to 16 in northern New York, for a company-wide average of five per day.

TOMRA's route planning was done manually, resulting in excessive driver hours, miles driven and fuel consumption. This manual system lacked information to track and evaluate customer service concerns and driver performance.

According to Steve Nee, Executive Vice President of Material Handling at TOMRA North America, "Operating a seasonal business can be challenging, especially since different route sets have to be created when changing over from one season to the next." At various points in the company's history it used some simplistic routing tools to try and address its concerns, but none provided the level of sophistication or flexibility that TOMRA required to meet the needs of its seasonal operations."

Descartes Routing and Scheduling Delivers Sophistication and Flexibility

Nee has been managing transportation operations for over 20 years. During his career, he has been exposed to a variety of technological solutions for routing and scheduling, but none had captured his attention like the Descartes Routing and Scheduling solution for route planning and logistics management. He knew that this was a logistics solution that could address TOMRA's complex transportation needs. "Throughout my career, I have had the opportunity to evaluate best-of-breed as well as proprietary solutions, and based on my past experiences, I knew that Descartes offered the most advanced functionality and provided unmatched levels of support."

Nee recommended that Descartes Routing and Scheduling be deployed on a wireless platform across TOMRA's North American operations. "The power and sophistication of the Descartes Routing and Scheduling software speaks for itself," explains Nee. Once TOMRA's IT staff understood how easily Descartes Routing and Scheduling could be integrated into the company's technological environment, a decision was made to move forward with the implementation.

After some initial strategy planning, the Descartes solution was rolled out across 16 sites in six states. The implementation began in Michigan, followed by New York, Connecticut, Vermont, Massachusetts, and, California. At each site, the implementation team would clean up customer data, propose master routes, and then, in an initial test run, each operator was shown the suggested routes.

"To ensure a seamless transition to Descartes Routing and Scheduling, our hands-on implementation team would get into trucks and ride with our drivers to show them how the solution would support them on their daily routes. This helped alleviate any concerns that drivers had about making the change to such advanced technology," says Nee. "Once our drivers were trained, they immediately saw the advantages and have not looked back since."

Breakthrough in Productivity Drives Results

Descartes Routing and Scheduling enables TOMRA to drive improvements in revenue performance through strategic sales and territory planning, enhanced customer service and responsiveness, and lower operational costs through day-to-day route planning. In fact, TOMRA operates today using a highly efficient, centralized dispatch call center model where routers work 24/7 to ensure routes are optimized for maximum performance.

Immediately after the implementation, TOMRA achieved a five percent productivity lift on average across all the businesses. "We were able to reduce the average number of vehicles at some locations. And the boost in productivity also meant we could support the growth in our dynamic account base, but without incurring any capital costs," says Nee. Customer feedback has also been positive: drivers are more efficient in their picks-up and the increased levels of service are now also very predictable.

Nee also appreciates that he and members of his team can "dig really deep" into the software, creating numerous scenarios to address whatever complex challenges may arise. "The software is so sophisticated that I can deal with practically any scenario for any of our 150 dynamic, static and semi-static routes." He explains that in snowy conditions, a router can now adjust the speed of the trucks, add in a second truck on the same route if needed, and re-forecast times. Previously, inclement weather would affect driver schedules. Delivery dates and times would then fall behind and a few days would be needed to catch up. "Now we can just add in an extra truck and recreate the metrics so that everyone gets the same service."

Since drivers now use GPS-enabled mobile phones, dispatchers have real time visibility into driver performance. Route metrics are also captured by the minute, ensuring that estimated times of arrival for subsequent stops are adjusted when exceptions or delays occur. Customers are then notified of any changes to the pick up schedule.

By integrating its solution with wireless capabilities, TOMRA can also import data in real-time into a centralized data repository that can be easily accessed through the report writing tool. The end result is improved service policies, streamlined transmission of data, improved dispatching processes and reduction in overall man-hours and duplication of effort. Improved routing also minimizes fuel consumption and lessens the overall impact of its fleet operations on the environment.

Summary

Challenge:

Operating a seasonal business was challenging, especially since TOMRA's route planning was done manually. A lot of extra miles were being driven, thereby increasing labor and fuel costs. TOMRA also had difficulty in predicting customer service. This lack of information made it difficult to evaluate driver productivity. There weren't any forecasted metrics to compare to actual pick up performance.

Solution:

TOMRA operates today using a highly efficient, centralized dispatch model on a wireless platform. Descartes Routing and Scheduling enables TOMRA to drive improvements in revenue performance through strategic sales and territory planning, enhanced customer service and responsiveness, and lower operational costs through day-to-day route planning.

Benefits:

Implementation of a highly efficient, centralized dispatch model; eight percent productivity lift on average through the business units immediately following implementation; reduced the average number of vehicles at some locations; growth in dynamic account base is managed without incurring any capital costs; feedback from customers is positive; drivers are more efficient in their picks up; increased levels of service are now also very predictable; sophisticated software can address whatever complex challenges may arise; GPS-enabled mobile phones provide real time visibility into driver performance; route plans are adjusted on the fly when exceptions or delays occur; centralized data repository supports detailed reporting and predictive modeling.