

Case study

Transportation Modeler

Wegmans

Driving Savings from Wegmans' Transportation Network

4.75%

cost reductions from commodity group consolidations

5.8%

cost savings from improved backhaul operations

Transportation modeling

Wegmans is a family-owned supermarket chain headquartered in Rochester, NY. With over 100 stores across the northeast and mid-Atlantic states and almost \$10 billion in revenue, Wegmans is both one of the largest private companies in the U.S. and a customer favorite for its European-like open-air market displays and broad selection of organics, vegan offerings and restaurant-quality prepared foods. They pride themselves on a “near telepathic” level of customer service.

To get all of those fresh, frozen and dry foods and ingredients to their network of stores, Wegmans employs a private fleet. But with a network of this size and complexity, Wegmans wondered if they were getting the most utility possible from their fleet investments. To find out, and help them model other potential transportation strategies, Wegmans turned to logistics consulting firm, enVista, and Blue Yonder's transportation modeling capabilities.

Blue Yonder's modeling was utilized to model the complexities of Wegman's transportation network. Its extensive functionality enabled enVista to accurately capture multiple constraints and parameters in Wegman's network and allowed efficient and accurate future state analyses.

Challenges

- Wegmans store delivery windows were tight, not allowing much opportunity for order consolidation or routing options.
- Routing opportunities were restricted by type of commodity being shipped such as bakery, frozen, grocery, meat or produce. These restrictions limited cost-saving consolidations.



- There was virtually no visibility to cost savings available from the use of backhauls, making it impossible to effectively use this option to reduce costs.

Delivery window expansion

Wegmans' fleet delivery schedule was set up with minimal time windows for when shipments could leave from the distribution center and arrive at the store. This schedule was originally established with product freshness and ease of receiving in mind, but it significantly limited the opportunities for order consolidation and routing options that could reduce costs without impacting freshness.

enVista used Blue Yonder's transportation modeling capabilities to measure the impact of adjusting the delivery windows by three hours to enable order consolidation and routing opportunities to be evaluated. The results of testing this scenario showed cost savings of 0.9% through simply expanding the delivery window. The reason the savings from this adjustment were not greater was due to other constraints such as routing restrictions and limitations on commodity group consolidation.

Routing group consolidations

Wegmans' fleet routing was restricted by commodity groups such as bakery, frozen, grocery, meat, and produce. enVista saw opportunities to reduce costs by consolidating certain commodity groups for more efficient shipping. They used the Blue Yonder modeling capabilities to analyze different combinations of commodity groups during routing while still abiding by restrictions such as maintaining product temperature and humidity limitations that required certain types of vehicles. This analysis found Wegmans could expect 4.75% cost reductions would be captured by these consolidations while abiding by all other routing constraints.

Improving backhaul efficiency

In Wegmans' network, backhauls were opportunistic rather than planned because Wegmans had virtually no visibility to backhaul costs or savings. Blue Yonder's modeling capabilities enabled enVista to analyze Wegmans' current and potential backhaul

vendors to see where additional opportunities for cost savings might exist. The analysis evaluated both current backhaul vendors' viability and the opportunities to expand the list of potential backhaul vendors to create a broader backhaul network. The results of the technology-driven analysis showed that an additional 5.8% cost reduction could be captured by expanding the backhaul network.

Solution benefits

- Cost savings of 0.9% from expanded delivery windows even with other restrictions still in place
- Consolidation of commodity group shipments produced 4.75% cost reductions
- Evaluation of backhaul operations identified 5.8% in additional cost reduction was available by expanding the backhaul network

enVista and Blue Yonder expertise

Wegmans relied on enVista's extensive consulting expertise and Blue Yonder's decades of technical excellence to help them analyze their transportation network and evaluate alternatives. enVista studied the management of multiple carriers within the Blue Yonder solution to enable accurate modeling of the mix of fleet and dedicated carriers that Wegman's utilizes. The solution also enabled enVista to model the further complexity caused by relays, drop and hooks and tandem trailers used within Wegman's network. In addition, multiple equipment types and commodity compatibilities were modeled within the solution to analyze and enforce routing constraints such as ensuring frozen products ship on reefer trailers. A host of additional parameters were employed to accurately and effectively model the complexities of Wegman's entire transportation network. The combination of enVista expertise and Blue Yonder technical excellence enabled Wegmans to find double-digit savings while improving service to stores.



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