Case Study: OPTIMIZING A NETWORK WITH A HOLISTIC SUPPLY CHAIN ANALYSIS

How a Supply Chain Analysis Improves Business Success

$\downarrow$ REDUCES TOTAL LANDED COST

$\neq$ ELIMINATES UNDERUTILIZED EXPENSES/FACILITIES

$\leftarrow$ IDENTIFIES SUPPLY CHAIN EFFICIENCIES

$\rightarrow$ OPTIMIZES DISTRIBUTION FOOTPRINT

$\leftarrow$ UNLOCKS GREATER SAVINGS WITHIN A NETWORK

When Schneider was approached to conduct a supply chain analysis for a national beverage company, it didn’t just look at the obvious parts of the picture. Instead, the provider’s seasoned experts conducted a holistic review of the shipper’s operation, and provided a recommendation that would optimize and improve business success.

CASE STUDY KEY TAKEAWAYS

• The expansive review, including transportation, production, storage and handling costs, unlocked greater savings within the network

• The supply chain distribution analysis reduced total landed cost

• Network optimization delivered same-year savings and scalability for future growth

INITIATING A SUPPLY CHAIN ANALYSIS

A national beverage company was experiencing healthy growth and, in turn, anticipating a 37 percent transportation cost increase resulting from changes to its distribution footprint. These changes left the company searching for ways to minimize the increase. The company began its own research on how to minimize costs, reviewing details of its production savings analysis, historical business data, future production facilities and the product for each facility.

With a strategy already in mind and the impression it only needed minimal assistance, the beverage company approached Schneider. It requested that the transportation provider’s Supply Chain Management (SCM) engineering team recommend a distribution footprint to service its wholesalers and minimize the anticipated cost increase. The shipper also asked the SCM team to assign the wholesalers to a shipping cycle that would level the week-over-week volume distribution and maximize any consolidation opportunity.
IMPLEMENTING A NETWORK OPTIMIZATION

When the beverage company reached out to Schneider’s SCM group, its supply chain consisted of two production facilities, three distribution facilities and approximately 700 wholesalers. The beverage company had transferred one-third of its overall production and distribution volume to its partner company, enabling company growth. The remaining brands were produced and distributed at its own facilities, but this operational change was going to lead to increased transportation costs and under-utilized resources.

Cost conscious, the beverage company initially limited the scope of the overall project to include only transportation cost at predetermined facilities, roles and the available products at each facility. Schneider’s SCM team realized that this approach would limit the potential savings and proposed a holistic solution versus the more siloed approach the company wanted. After several conversations, the company agreed. Included in the all-encompassing approach were factors such as the customer’s tactical push-pull inventory replenishment approach, a wholesaler vendor inventory management (which allowed control of frequency and quantity of shipments) and product shelf life.

Schneider’s SCM group collaborated with a key analyst from the shipper to understand the business rules and available data. Schneider developed a network model that was robust, yet flexible, to allow for quick modifications of new parameters and what-if scenarios, optimizing to the shipper’s specific business rules. During weekly meetings between the shipper and Schneider, the approach, progress and setbacks were discussed. This collaborative environment provided the ability to uncover business rules and solutions that would have otherwise hindered the results.

The Schneider team recommended a strategic network optimization plan that included:

- Cost savings
- Facility volume throughput
- Guidance on which brands to produce at specific facilities
- Wholesaler distribution assignments for each implementation phase

Schneider also provided a tactical wholesaler shipping cycle that would balance the week-over-week distribution. Lastly, Schneider identified secondary cube utilization risk and mitigation options. By incorporating unbiased transportation rates into the modeling, Schneider was able to represent its network and compare current lanes that were heavily utilized against future lanes with no current utilization.

Overall, the holistic supply chain analysis allowed Schneider to optimize assignment of the beverage company’s wholesalers based on the total supply chain cost instead of on transportation cost alone. The outcome resulted in a customized model that uncovered a huge cost avoidance — the customer’s research and initial approach would have increased its transportation cost by 37 percent.
REALIZING SAVINGS FROM THE SUPPLY CHAIN ANALYSIS

The collaborative and holistic supply chain analysis and resulting network optimization gave the beverage company a $3.3 million overall cost avoidance, with $2.9 million in transportation cost savings. The solution also gave it a distribution footprint to implement that generates an annual overall savings of 3 percent and annual transportation cost avoidance of 28 percent. Additional results include:

• Sixteen percent reduction in over-capacity facilities, improving productivity and eliminating the need for an overflow facility
• Eliminated underutilized facility, reducing overall supply chain cost
• Minimized secondary cube utilization, improving trailer utilization and reducing transportation cost and miles driven per load
• Balanced week-over-week delivery schedule, driving operating efficiencies

The beverage company overwhelmingly saw the value of a holistic project scope to reduce its transportation-specific costs, along with its end-to-end supply chain costs. Schneider’s network optimization model successfully aligned with the shipper’s objectives, quenching the company’s thirst for cost and service improvements.