FUTURE PROOFING FOR A HEALTHIER NETWORK

OVERVIEW

An international health care manufacturing company had recently gone to market for warehouse and transportation services in order to consolidate their warehouse footprint and carrier base, and to improve their cost position. To thoroughly evaluate the options, they wished to conduct a modeling study of the various network configurations that were proposed by each service provider. They wanted to hire a proven partner to model the bid location results with their historical shipment data to identify the optimal network design, and Supply Chain Solutions team provided the needed expertise.

SupplyChain Solutions

OPPORTUNITY

The customer had an internal initiative to optimize their supply chain warehouse costs and infrastructure while maximizing synergies across their distribution network and multiple business disciplines. The study focused on their United States warehouse footprint and the multiple service providers which serviced these locations, encompassing 18 distribution facilities across two business units with multiple domestic and international modes. The customer had three service providers who had provided alternate network designs and the proposed costs to manage the network. Our role was to evaluate the current network in terms of service levels and transportation costs by business unit to establish baseline, and to quantify each of the alternate network proposal's impact on their overall network performance in terms of service levels and transportation costs.

SOLUTION

After receiving numerous files and culling anomalies to form a singular data set, we established the universe of shipments which formed the baseline of their network model and would be used in quantifying each of the proposed alternate network scenarios.

The analytics we provided brought new visibility to their current supply chain performance. This was key for the customer, as it formed the basis for conversations about their future footprint, what the business could tolerate for change, as well as their need for certain services. With this new understanding of their supply chain, the customer realized they would need to choose a service provider per business unit rather than a single provider for both business units. Individual business unit baselines were subsequently developed in order to ensure the customer had a clear apples to apples comparison of their existing network to the alternate network options.

For Business Unit I, the company wanted to understand the impact of the single service provider's proposal to consolidate their network from nine warehouse locations to six (Scenario 1). The baseline analytics revealed it was feasible to test an additional hypothesis and so the network was also modeled consolidating from nine warehouse locations to five (Scenario 2).

For Business Unit II, the company wanted to understand the benefits and offsets between two different provider's network design proposals: Provider A proposed a network that would consolidate from ten warehouse locations to their seven locations; Provider B proposed a network that would consolidate from ten warehouse locations to their six locations.

The customer also requested that we expand the project to include a study of the miles traveled in order to understand the impact on the environment and travel time.

RESULTS

Business Unit I: There was no material difference in the annual transportation spend under Scenario 1 vs. 2, which allowed the customer to turn their attention to the impact on inventory and operational efficiencies as the driving forces behind their decision of which provider's network proposal to select.

Business Unit II: Based solely on transportation costs, we identified that implementing the network proposed by Provider B would save the customer 11% in annual spend (considering inbound + outbound costs). The majority of the savings came from inbound air and ocean cargo movements to the consolidated footprint of the proposed six locations.

By providing the customer visibility into how their current network performed, and validating some of their assumptions while clarifying others, we were able to efficiently and effectively model each of the network design proposals the customer wanted to evaluate. The project was delivered to the customer on time and in budget. The value we brought to this project was in our objectivity, the visualization of their existing network, and our clear and concise deliverables. Our level of expertise drove new questions and helped the customer think differently not only about what their warehouse network should look like, but also how they approached the model. This ensured that the final result was a collaborative solution that the customer could rely upon to make an informed choice of the best service provider's network design for each business unit. The customer was able to confidently implement their choice with positive results.