

# TARGET CORPORATION

## REDUCING AIR SHIPPED FROM THE SHIP-FROM-STORE NETWORK

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Target Corporation is an upscale discount retailer that provides high quality on-trend merchandise at attractive prices, generating \$70B in annual revenue. Target has 11 fulfillment centers and 1,800+ retail store locations in the United States. With 50% of all Americans living within five miles of a Target store, Target launched the Ship-from-Store (SFS) capability in 2013 to fulfill guest (customer) orders quicker and cheaper. Currently there are 1,000+ stores enabled with the SFS capability, with plans to activate additional stores by year end 2017. Direct-to-guest fulfillment is expected to grow more than 30% this year and is a critical component of Target's omnichannel distribution strategy.

To rapidly roll out this SFS capability, a network-wide standard suite of seven boxes was selected to fulfill digital guest orders. This suite is a subset of the fulfillment center (FC) network's current suite and throughout the past three years has remained constant based on the external box supplier's analysis. Unlike the FC's box suites, the SFS suite was not optimized for the orders shipped, resulting in the delivery of excess void space (air) to guests. The Tauber team was engaged to conduct a gap analysis between the current and future state of void space shipped to guests via the SFS network, with the objective of reducing shipping and material expenses.

As Target embarks on the journey of continuous improvement to transform its supply chain, the team followed a DMAIC problem-solving methodology to structure the 14-week project. In the Define phase, the team established a baseline and set an improvement target driven by an industry benchmark. Through the Measure phase, the team learned 77% of void was the result of a suboptimal box suite. With this discovery, the team realized a box suite designed around guest orders was needed. As part of the Analyze phase, a box suite optimization tool—which minimizes void space shipped—was developed, allowing for the creation of an optimal suite. During the Improve phase, the tool was piloted, revealing an optimal box suite that reduced void space shipped by 13% and closed the gap between current state and the benchmarked future goal. The optimized box suite was tested in-store to validate the void space reduction.

Deploying the tool developed by the team to optimize box suites within the SFS network will avoid more than \$10M per year in shipping and material costs. To fully realize the benefits presented by the tool, the team developed a three-phase implementation plan, to be rolled out between the end of the project and December 2018.