

TARGET CORPORATION

Improving Trailer Load Accuracy

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Target Corporation is an upscale, discount retailer business that provides high-quality, on-trend merchandise at attractive prices, generating \$75.4B in annual revenue through online and in-store sales. Target has a vast distribution center network, operating 42 distribution centers, to replenish both stores and Fulfillment Centers (FC), which deliver e-commerce orders straight to guests. Its Regional Distribution Center (RDC) network receives goods from more than 8,000 vendors and replenishes both Target stores and Target.com. Target maintains both small-format discount stores and SuperTarget hypermarkets, totaling 1,871 locations in the U.S. and employing over 360,000 people. The company sells a variety of merchandise, including beauty and health products, bedding, clothing and accessories, electronics, food, furniture, jewelry, lawn and garden, pet supplies, shoes, small appliances, and toys and games.

As Target's digital business continues to grow at a substantial rate, the company requires improved store inventory accuracy to support the digital fulfillment processes. RDC-to-store trailer defects directly lead to inventory discrepancies in Target's stores. Items missing from store inventory contribute to lost sales with in-store guest purchases, canceled digital orders due to the inventory not found during store fulfillment, and excess labor needs as time is spent researching and resolving discrepancies.

Seeking to resolve this issue, Target implemented a pilot program to capture trailer load defects. The Tauber team validated that the current pilot captures defects that result from an unreliable scan-to-load verification process, preventing the ability to effectively detect legitimate trailer load defects. To address this, the team anchored towards designing a new process that was capable of scanning 100% of conveyable cartons loaded onto the trailer.

The Tauber team's proposed solution was to extend pilot testing to compare two scan-to-load programs: an optimized presentation scanner and a wearable wrist-mounted computer. Upon successful testing, the team recommended a phased rollout to a select number of RDCs within the legacy replenishment network and then across the entire network. If scaled across the network, this program will reduce up to \$960M worth of trailer inaccuracies annually.