

CASE STUDY

Investment in Fulfillment Solution Provides Competitive Advantage in E-Commerce Distribution



Increased

↑
Thru Put



Reduce
Capital
Investments
↑
Capacity

C³FE[®]
Waveless Order Processing
Starts Here

Fastest
Order
Cycle Time

Minim
WM
Function

Adaptive



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About Gap

Gap is a leading global retailer specializing in clothing, accessories and personal care products for men, women and children offered under the Gap, Banana Republic, Old Navy and Athletica brands. The company also offers designer clothing through Intermix®, a collection of specialty boutiques.

Summary

Cognizant of the unrelenting growth in e-commerce and continued demands from customers who are looking for their orders to arrive faster, Gap chose to approach its e-commerce distribution with a customer-first philosophy, knowing that investing in its e-commerce distribution is crucial. In its Q3 2018 quarterly report, Gap reported that it was on track to reach more than \$3.5 billion in online sales, an increase over 2017, which was just over \$3 billion. While Gap already had significant capabilities in efficiently processing orders, it turned to VARGO® for help to put the company on the path to continue meeting customers' ever-increasing demands. VARGO®'s system design capabilities and its warehouse execution system enabled the global retailer to map out a plan to process orders efficiently and process them with the fastest order cycle time in the retailer's network.



The Challenge

A low point for Gap arrived just before the 2016 peak online holiday shopping season when a fire at Gap's Fishkill, New York, distribution center destroyed more than \$100 million worth of equipment and inventory. While no one was injured in the fire, the retailer had to quickly address the situation to be able to fill orders that peak season. VARGO® stepped up to help Gap get over that hurdle by working with Gap to build a multi-brand, online fulfillment center that served as a life preserver to save the upcoming 2017 peak.

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Gap knew it needed to address its facility in Gallatin, Tennessee, and the challenge was to reconfigure the facility — from design to go-live — in less than a year, what Gap referred to as a “lift and shift” of an existing system. The system design needed to be engineered to accommodate equipment in a tighter footprint, and it needed to include an all-active inventory system capable of holding 200,000 cartons.

Gap also wanted to address a facility in Fresno, California, where it wanted to repurpose and convert existing equipment into a large e-commerce fulfillment operation.

The Solution

At the Gallatin, Tennessee, location, VARGO® worked quickly to design the fulfillment center and outfit it with VARGO®'s waveless Continuous Order Fulfillment Engine (COFE®) warehouse execution system. The facility went live in less than a year from beginning of design to go-live in 2017. In 2018, VARGO® worked with Gap to add new workflows to expand the fulfillment center to four workflows — two for multis, one for singles and one for retail discrete order picks. In addition, VARGO® also upgraded



the facility with an inbound automated storage and retrieval system with nine aisles, as well as an automated bagging system for completed orders that is capable of bagging 900-plus packages an hour. The entire fulfillment center is designed to minimize the number of times product is touched between receiving and shipping.

At the Fresno facility, VARGO® designed the facility to include conveyors for automated receiving as well as put-away routing to a four-floor pick module. VARGO® engineers also repurposed the routing sorter to feed a high-speed unit sorter that matches items to incoming e-commerce orders. The entire system is managed by VARGO®'s COFE® warehouse execution system. As a systems integrator, VARGO® supplied pack tables and conveyance for single-line order processing, empty tote transport and trash removal for pick modules, and a high-speed tilt tray sorter to accommodate outbound order packages to bulk bins (gaylords), trailers and automated loaders.

Gallatin Fast Facts

- 560,000 square feet
- Serves multiple brands
- Ships multiple products – apparel, footwear and accessories.
- Handles 100,000 SKUs, and up to 170,000 during holiday peak
- Processes 250,000 to 300,000 units on a typical day, and 450,000 to 500,000 during holiday peak

Fresno Fast Facts

- 997,000 square feet
- Serves multiple brands
- Ships multiple products – apparel, footwear and accessories.
- Handles 60,000 SKUs, and up to 100,000 during holiday peak
- Processes 150,000 to 300,000 units on a typical day, and 450,000 to 500,000 during holiday peak

The Results

The work that VARGO® completed for Gap at its Gallatin and Fresno facilities helped turn distribution from a cost center into a competitive advantage. The Gallatin facility is capable of processing 500,000 units a day during peak with an average order cycle time of 25 minutes. In addition, Gap realized the benefits of VARGO®'s waveless COFE® WES in record time. The WES exceeded goals for Gallatin's first year in the first 90 days after the facility went live. Those results were enough to encourage Gap to hire VARGO® to work on the Fresno project. In Fresno, the first four weeks of go-live — when 60 percent of the workforce had been on the job less than a week — proved to be a good stress test for peak and results demonstrated that the facility and its workforce were on track to being able to manage picking 450,000 to 500,000 units a day during peak.

