

INDUSTRY: *Off-Price Retail, Apparel*
USE CASE: *Store Replenishment Fulfillment*
BG SOLUTION: *Robotic Product Sortation*

THE CHALLENGE:

A leading national discount retailer was running store replenishment through a tilt-tray sorter that had reached end-of-life. The system had become a single, aging choke point with outages threatening outbound throughput and service levels.

With store count growing and volume increasing, the retailer needed a replacement that matched current capacity and scaled for the future. The challenge: it had to be deployed without interrupting operations.



SOLUTION: Phased, Redundant, and Future-Ready

Berkshire Grey deployed a mezzanine-based sortation system that ran in parallel with the legacy sorter — eliminating downtime during install and ramp. Designed to meet today’s volume and tomorrow’s growth, the system blends robotic and manual picking with orchestration software to optimize SKU handling and labor efficiency.

KEY ATTRIBUTES OF THE SOLUTION:



Hybrid picking: System routes SKUs in real time to robotic or manual stations via automated SKU eligibility routing.



Simulation-led design: Validated for 30% store growth to stress-test performance and expandability.



Flexible staffing strategy: Simulations included peak/off-peak demand and store mix to guide labor planning.



Scalable architecture: Modular design enables phased expansion without changes to core conveyance or logic.

QUANTIFIED BENEFITS

45%

smaller footprint

40%

labor reduction

0

downtime during installation

AFTER GO-LIVE: Partnership and Continuous Optimization

After installation, the system was refined through close collaboration to boost efficiency and protect downstream operations.

- **Jointly managed ramp-up of robotic picking** to validate SKU eligibility and build operator confidence in automated routing and induction.
- **Smarter staffing** through orchestration software that directs operators across stations, balancing throughput and labor hours.
- **Deployed shuttle upgrades and divert sensor** to improve sortation accuracy.

The result is a resilient fulfillment backbone that not only replaced a tilt-tray sorter without disruption but continues to deliver scalable efficiency gains, with the customer now entrusting the system to handle items their legacy sorter could not.

“We used to hold our breath every time the tilt-tray groaned. Now we have a system built for the long haul.”