UnboxSort System for Order Consolidation

For a leading Fashion Retail Brand

ABOUT THE CUSTOMER

One of India's largest e-commerce companies for fashion and lifestyle products with a choice of apparel, accessories, cosmetics, and footwear from over 500 leading Indian and international brands

Location: Fulfillment Center located in Western India

THE CHALLENGE

Due to low picking and consolidation staff productivity in the manual process, the client was compelled to recruit and manage a significant number of people, resulting in a long order fulfilment time and cost.

As per the end-customer's order, bulk picking of order items were performed; then, all orders were manually sorted into 1000 putwall locations. Upon retrieval, parcels were scanned again for verification. The customer wants to automate the order consolidation process of apparel, shoe boxes, and fashion accessory items, dispatched to destinations in put-walls, at a rate of 2500 packages per hour, with the need of a minimal footprint.

UnboxSort became the obvoius choice for an automated put-wall for this Fashion E-commerce player since its the only solution having robots sorting vertically into a multiple levels with a high productivity.

SOLUTION

Industry	Fashion E-Commerce
Process	Order Consolidation
Throughput	2500 pph
No. of Robots (SR450)	41
Destinations	966
Racks Type	6 level; chutes
Area	350 sqm.
Personnel (Feeding + Order closing)	9 (3+6)

An comb (E) shaped layout was designed to accommodate 966 destinations with 6-Level put-walls and variable sized pigeon holes for orders ranging from 2-10 packages.

The system was installed on a mezzanine floor which had multiple pillars within the layout, without hampering the overall system performance and scalability.

The pick-to-pack time was reduced to 60 min with end-to-end sorting and minimal touchpoints.
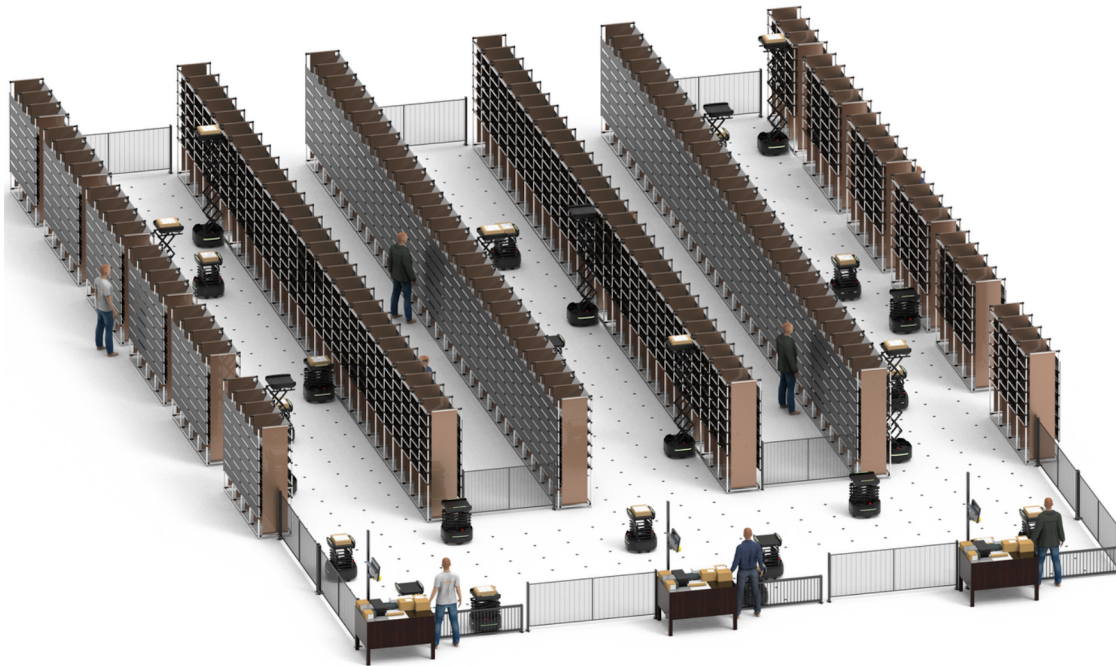
BENEFITS

- **Compact Automated Put-Wall:** UnboxSort could compress nearly 1000 pigeon holes of varying dimensions in a floor-space of merely 350 sqm. reducing no. of touchpoints and improving productivity by 3X while also improving sorting accuracy

- **Pick-to-Pack SLA improvement:** Processing time dropped by nearly 40% due to reduced touchpoints and end-to-end sorting thus improving order processing time and improved SLA compliance for the customer. This was a crucial KPI impacting customer satisfaction in the fashion fulfillment space.

- **Customization in System Design & Integration:** Owing to the dynamic nature of trends and order profiles in the fashion e-commerce space, the system was designed to handle higher variations in load profile and parcel types and sizes. The system also had additional features like Rejection at Source, Manual merging which helped customer deal with potential overload situations

- **Pay-per-Use:** RaaS alternative helped the customer even further by seeing month-on-month savings from the get-go. Modular system allowed the customer to stagger their capital investments as per scale instead of investing on capacity for 3-5 years upfront.