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UnBoxSort Case Study



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Forward Sorting Simplified with UnBoxSort

About the Customer

Founded in 2015, this company is one of India's fastest-growing express logistics providers, handling over 3 million parcels daily across 100 hubs. It offers comprehensive end-to-end supply chain solutions.

Location: First Mile Pickup Hub, Western India, in an apparel manufacturing hub.

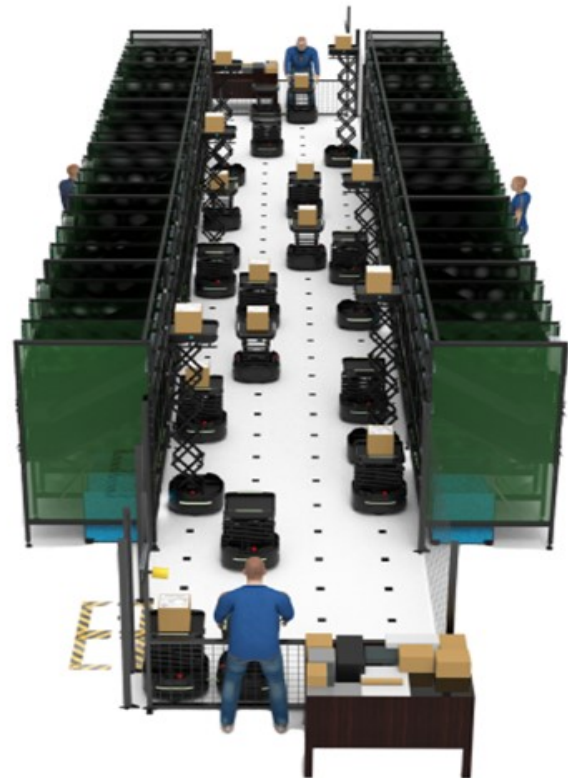
The Challenge

Following the Covid-19 pandemic, the company experienced a surge in volumes, doubling every six months. They sought a flexible and scalable sorting automation solution using a Robotics-as-a-Service (RaaS) model to replace their inefficient manual process, which had lower sorting accuracy and longer turnaround times due to multi-tiered sorting. Pre-sorting was done manually into six trolleys, followed by further sorting at secondary stations serving 24 locations. The customer required automated sorting of polybags and cartons to 140 destinations at a rate of 2,000 packages per hour, with high-load chutes sorting directly into bags.

The Solution

Industry	3PL
Process	First Mile Sorting
Throughput	2000pph
No of Robots (SR450)	23
Destinations	180
Rack Types	3 level hybrid racks
Area	180 SqM
Personnel	4 (2+2)

A linear layout was implemented with feeding at both ends. Two personnel manually scanned parcels and placed them on robots, while another two retrieved packages from chutes and trolleys. To optimise robot usage, battery-swapping was introduced. Three-level hybrid racks with bottom-level trolleys and top-level slide chutes enabled direct-to-bag sorting for high-volume destinations.



Benefits

- **Productivity Boost:** UnBoxSort's end-to-end sorting minimised handling, scanning, and movement, tripling productivity per worker. Its intuitive design enabled near-perfect sorting, improving customer satisfaction, retention, and reducing the need for audits and supervision.
- **Enhanced Visibility:** UnBoxSort's integrated control system offered dashboards for real-time monitoring, providing flexibility and control. The system allowed the company to adjust for changes in network, load profiles, and parcel types, with analytics for better decision-making.
- **Scalability:** The quick installation, completed in weeks, caused minimal operational disruption. UnBoxSort's flexibility enables easy relocation to larger facilities as capacity grows.
- **Cost Savings:** Vertical sorting reduced space requirements by 50%, lowering rental and utility costs.