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UnBoxSort Case Study

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UnBoxSort System for Forward Sorting

For a Leading Global E-commerce Giant

About the Customer

Founded in 1994, this global e-commerce leader specializes in retail, groceries, and logistics. Recently, the company has expanded its logistics platform to support other D2C brands, strengthening its presence in the logistics space.

Location: Southern India

The Challenge

The customer faced challenges with labour management and reduced sortation accuracy due to increased touchpoints. Currently, shipments are manually sorted into 10 primary locations by 11 staff and then into 16 secondary locations by 22 staff. To improve efficiency, the customer sought to automate sorting for polybags, cartons, apparel, and other parcels into 156 chutes at a rate of 8,000 packages per hour, reducing touchpoints and improving ROI.

Solution

Industry	E-Commerce	
Process	Forward	
Throughput	8000 pph	
No. of Robots (SR450)	99	
Destinations	264	
Rack Types	3 level; direct to bag	
Area	600 sqm	
Personnel (Feeding + Bag closing)	16 (8+8)	

A linear layout with dual-end feeding was implemented, covering 264 destinations. The facility featured 88, 3-level C53 racks for direct sorting into bags. Dynamic binning and battery swapping reduced robot requirements. Handheld scanners were used to handle inconsistent return packaging and labels. Eight staff fed parcels into the system, while another eight retrieved them from chutes and trolleys.

Benefits

- **Productivity Boost:** End-to-end sorting reduced handling and scanning, tripling productivity per person. The intuitive system interface also simplified onboarding, minimizing training efforts.
- Increased Capacity: UnBoxSort extended the building's operational life by six years, avoiding costly relocation or expansion, accommodating 25% annual growth.
- Safety: Compared to traditional conveyor systems, UnBoxSort is safer and more flexible, improving working conditions and helping to retain top talent.
- **Scalability:** The modular system allowed staggered investments, saving 40% on financing and maintenance. The RaaS (Robotics as a Service) option delivered immediate cost savings.