Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 79.0%
Throughput Increase: 34.2%
Labor Cost Reduction: 28.5%
ROI Period: 2.3 years

Warehouse Performance

Warehouse	Location	Capacity Used	Inbound/ Day	Outbound/ Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	94.8%	2,808	1,754	98.7%	86.4%	Optimized
Distribution Center B	Dallas, TX	74.9%	2,627	3,830	98.9%	75.9%	Improvement Needed
Distribution Center C	Atlanta, GA	60.2%	1,924	3,419	95.9%	80.9%	Optimized
Distribution Center D	Los Angeles, CA	64.8%	2,887	2,407	97.8%	80.8%	Optimized
Distribution Center E	Newark, NJ	96.3%	2,775	2,267	98.8%	71.0%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement voice-

picking system to improve accuracy to 99.8%

- Upgrade WMS integration for real-time inventory visibility
- Add automated sortation system for small package handling
- Implement predictive analytics for demand-based staffing
- Consider AS/RS system for high-velocity SKUs