Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 81.2%
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	89.1%	2,014	1,561	98.3%	75.3%	Improvement Needed
Distribution Center B	Dallas, TX	42.9%	2,441	3,739	95.3%	94.3%	Optimized
Distribution Center C	Atlanta, GA	79.0%	2,937	1,609	98.5%	87.3%	Optimized
Distribution Center D	Los Angeles, CA	42.0%	2,055	3,645	95.8%	64.1%	Improvement Needed
Distribution Center E	Newark, NJ	101.8%	1,952	2,856	96.2%	84.7%	Optimized

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