Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 79.2%
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	63.9%	2,100	1,876	95.6%	82.9%	Optimized
Distribution Center B	Dallas, TX	58.0%	2,672	2,952	97.5%	70.3%	Improvement Needed
Distribution Center C	Atlanta, GA	113.5%	1,336	3,502	96.5%	83.4%	Optimized
Distribution Center D	Los Angeles, CA	96.7%	1,493	2,405	95.8%	81.9%	Optimized
Distribution Center E	Newark, NJ	46.9%	2,945	3,222	98.3%	77.3%	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