Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 79.8%
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	39.5%	2,147	3,513	96.6%	70.1%	Improvement Needed
Distribution Center B	Dallas, TX	83.8%	2,507	1,502	98.5%	87.8%	Optimized
Distribution Center C	Atlanta, GA	100.0%	1,281	3,494	98.1%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	64.5%	2,784	2,684	98.8%	63.6%	Improvement Needed
Distribution Center E	Newark, NJ	82.2%	1,096	2,631	99.4%	82.5%	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