Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 67
Average Utilization: 80.2%
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	71.0%	1,154	3,779	96.2%	86.2%	Optimized
Distribution Center B	Dallas, TX	89.4%	2,436	2,109	97.9%	68.5%	Improvement Needed
Distribution Center C	Atlanta, GA	90.1%	1,027	2,728	98.6%	92.5%	Optimized
Distribution Center D	Los Angeles, CA	71.8%	1,943	3,412	98.9%	93.7%	Optimized
Distribution Center E	Newark, NJ	40.2%	1,755	2,248	95.5%	60.0%	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