Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28
Average Utilization: 81.0%
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	71.4%	1,165	2,106	96.2%	91.9%	Optimized
Distribution Center B	Dallas, TX	56.4%	1,596	3,644	98.4%	74.7%	Improvement Needed
Distribution Center C	Atlanta, GA	54.8%	1,004	3,492	96.4%	86.2%	Optimized
Distribution Center D	Los Angeles, CA	64.9%	2,777	1,848	95.8%	89.0%	Optimized
Distribution Center E	Newark, NJ	60.2%	2,575	2,891	98.6%	63.3%	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