Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 79.4%
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	52.7%	2,490	2,739	98.7%	71.4%	Improvement Needed
Distribution Center B	Dallas, TX	124.2%	2,009	3,550	95.0%	87.4%	Optimized
Distribution Center C	Atlanta, GA	80.2%	2,118	1,535	99.5%	86.5%	Optimized
Distribution Center D	Los Angeles, CA	102.6%	2,517	3,135	97.4%	75.7%	Improvement Needed
Distribution Center E	Newark, NJ	51.8%	2,181	2,531	95.3%	75.9%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment 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