Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 75.8%
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	89.9%	2,590	1,610	99.4%	67.8%	Improvement Needed
Distribution Center B	Dallas, TX	84.0%	2,347	3,276	97.1%	94.3%	Optimized
Distribution Center C	Atlanta, GA	91.2%	2,376	2,030	98.8%	60.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	40.0%	2,082	1,709	97.3%	81.3%	Optimized
Distribution Center E	Newark, NJ	75.3%	1,555	3,126	96.2%	74.8%	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