

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 17  
Average Utilization: 77.7%  
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	67.1%	1,491	1,657	96.5%	72.6%	Improvement Needed
Distribution Center B	Dallas, TX	47.0%	2,938	2,114	95.5%	79.0%	Improvement Needed
Distribution Center C	Atlanta, GA	34.4%	2,364	3,907	98.3%	70.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	84.5%	1,394	2,622	96.0%	73.4%	Improvement Needed
Distribution Center E	Newark, NJ	73.9%	2,268	2,847	96.7%	93.1%	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