

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 69.8%  
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	66.1%	1,397	1,947	98.9%	63.7%	Improvement Needed
Distribution Center B	Dallas, TX	53.9%	1,434	1,845	97.5%	65.2%	Improvement Needed
Distribution Center C	Atlanta, GA	68.5%	1,756	2,920	96.9%	75.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	51.9%	2,744	3,007	96.1%	75.2%	Improvement Needed
Distribution Center E	Newark, NJ	51.0%	1,652	2,184	95.2%	69.0%	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