

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 79.1%  
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	67.6%	2,639	3,173	98.2%	82.5%	Optimized
	Dallas, TX	69.0%	1,836	2,179	98.1%	71.8%	Improvement Needed
Distribution Center B	Atlanta, GA	45.1%	1,532	1,997	97.4%	89.8%	Optimized
Distribution Center C	Los Angeles, CA	62.6%	2,317	1,683	95.7%	88.4%	Optimized
Distribution Center D	Newark, NJ	73.8%	2,251	2,568	95.5%	62.9%	Improvement Needed
Distribution Center E							

## 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