

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 21  
Average Utilization: 77.5%  
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	99.8%	2,356	3,605	97.0%	84.3%	Optimized
	Dallas, TX	65.6%	1,575	3,971	97.1%	81.1%	Optimized
	Atlanta, GA	66.9%	2,046	2,515	97.1%	75.7%	Improvement Needed
Distribution Center B							
Distribution Center C	Los Angeles, CA	48.0%	1,769	2,154	96.9%	65.7%	Improvement Needed
	Newark, NJ	81.2%	2,851	3,661	97.1%	80.6%	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