

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 78.5%  
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	33.0%	2,134	1,547	99.0%	83.1%	Optimized
	Dallas, TX	77.4%	1,456	1,957	98.6%	84.2%	Optimized
Distribution Center B	Atlanta, GA	66.6%	2,778	2,228	95.5%	61.1%	Improvement Needed
Distribution Center C	Los Angeles, CA	91.4%	2,274	2,358	98.0%	79.1%	Improvement Needed
Distribution Center D	Newark, NJ	44.0%	2,904	2,843	95.5%	85.1%	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