

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 52  
Average Utilization: 77.9%  
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	59.1%	2,273	2,475	99.2%	64.5%	Improvement Needed
Distribution Center B	Dallas, TX	65.9%	1,680	2,830	96.3%	92.4%	Optimized
Distribution Center C	Atlanta, GA	52.2%	2,527	3,511	96.5%	65.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	83.9%	1,365	2,149	96.1%	84.5%	Optimized
Distribution Center E	Newark, NJ	65.1%	1,069	3,368	99.0%	82.2%	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