

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 55  
Average Utilization: 78.4%  
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	74.6%	2,839	2,377	98.2%	74.1%	Improvement Needed
Distribution Center B	Dallas, TX	46.3%	2,365	3,003	98.2%	85.4%	Optimized
Distribution Center C	Atlanta, GA	63.2%	1,902	2,385	97.3%	67.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	99.0%	1,953	3,679	95.8%	84.6%	Optimized
Distribution Center E	Newark, NJ	51.2%	2,350	2,723	97.9%	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