

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 33  
Average Utilization: 76.5%  
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	64.9%	2,040	3,391	96.6%	74.5%	Improvement Needed
Distribution Center B	Dallas, TX	84.9%	2,756	3,061	96.0%	61.2%	Improvement Needed
Distribution Center C	Atlanta, GA	58.2%	1,934	3,286	96.3%	81.8%	Optimized
Distribution Center D	Los Angeles, CA	51.5%	1,330	2,810	99.0%	83.3%	Optimized
Distribution Center E	Newark, NJ	42.6%	2,921	1,940	95.5%	81.9%	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