

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 56  
Average Utilization: 77.8%  
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	42.5%	1,591	2,918	99.5%	66.6%	Improvement Needed
Distribution Center B	Dallas, TX	69.7%	2,653	3,862	98.6%	84.2%	Optimized
Distribution Center C	Atlanta, GA	112.9%	1,466	2,100	96.1%	65.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	36.1%	2,495	2,702	95.1%	90.8%	Optimized
Distribution Center E	Newark, NJ	59.5%	2,787	2,387	97.5%	82.1%	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