

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 20  
Average Utilization: 75.2%  
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	64.5%	1,179	2,761	99.0%	77.2%	Improvement Needed
Distribution Center B	Dallas, TX	96.6%	2,867	3,781	98.3%	73.3%	Improvement Needed
Distribution Center C	Atlanta, GA	37.1%	2,697	2,249	96.4%	69.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	91.3%	1,756	1,892	97.6%	66.0%	Improvement Needed
Distribution Center E	Newark, NJ	42.3%	1,965	2,292	97.5%	89.8%	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