

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 49  
Average Utilization: 69.9%  
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	36.7%	1,906	1,978	97.2%	68.4%	Improvement Needed
Distribution Center B	Dallas, TX	40.6%	1,386	3,250	95.1%	62.1%	Improvement Needed
Distribution Center C	Atlanta, GA	110.1%	1,455	2,173	96.7%	62.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	65.0%	1,433	2,647	99.1%	73.5%	Improvement Needed
Distribution Center E	Newark, NJ	60.1%	1,546	2,658	95.5%	83.2%	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