

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 82.4%  
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	51.1%	2,210	3,715	97.3%	77.8%	Improvement Needed
Distribution Center B	Dallas, TX	36.1%	1,894	3,590	99.2%	83.3%	Optimized
Distribution Center C	Atlanta, GA	60.8%	1,221	2,335	96.9%	88.0%	Optimized
Distribution Center D	Los Angeles, CA	60.6%	1,069	3,182	97.3%	77.8%	Improvement Needed
Distribution Center E	Newark, NJ	101.4%	2,697	2,965	96.0%	85.2%	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