

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 80.4%  
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	83.0%	2,381	3,408	95.9%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	56.5%	1,517	2,774	96.0%	90.4%	Optimized
Distribution Center C	Atlanta, GA	70.3%	2,004	1,937	97.6%	81.3%	Optimized
Distribution Center D	Los Angeles, CA	49.7%	1,490	1,979	99.2%	64.6%	Improvement Needed
Distribution Center E	Newark, NJ	66.6%	1,853	2,444	98.0%	89.7%	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