

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 30  
Average Utilization: 81.0%  
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	61.6%	2,805	2,074	97.6%	70.5%	Improvement Needed
Distribution Center B	Dallas, TX	66.2%	1,061	3,706	95.2%	86.3%	Optimized
Distribution Center C	Atlanta, GA	47.9%	2,358	2,533	96.3%	90.0%	Optimized
Distribution Center D	Los Angeles, CA	100.2%	1,813	3,787	98.8%	91.1%	Optimized
Distribution Center E	Newark, NJ	68.6%	1,452	2,990	98.6%	67.2%	Improvement Needed

## 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