

# 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: 80.2%  
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	79.9%	2,453	2,209	95.1%	61.9%	Improvement Needed
Distribution Center B	Dallas, TX	93.4%	1,413	2,500	96.6%	91.4%	Optimized
Distribution Center C	Atlanta, GA	74.3%	2,730	3,000	95.8%	93.0%	Optimized
Distribution Center D	Los Angeles, CA	46.4%	2,317	3,868	95.7%	83.2%	Optimized
Distribution Center E	Newark, NJ	66.6%	2,573	1,641	99.5%	71.4%	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