

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 70.6%  
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	89.5%	2,300	3,232	97.1%	79.5%	Improvement Needed
Distribution Center B	Dallas, TX	68.3%	2,525	3,881	95.7%	63.7%	Improvement Needed
Distribution Center C	Atlanta, GA	51.7%	2,678	2,923	97.0%	69.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	91.7%	2,534	3,643	97.3%	71.2%	Improvement Needed
Distribution Center E	Newark, NJ	91.8%	1,503	3,523	95.5%	69.3%	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