

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 40  
Average Utilization: 79.5%  
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	44.0%	1,744	2,602	95.5%	92.7%	Optimized
	Dallas, TX	89.7%	2,366	2,095	95.2%	90.3%	Optimized
Distribution Center B	Atlanta, GA	63.7%	1,135	2,619	95.7%	72.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	56.2%	1,351	2,368	96.2%	67.3%	Improvement Needed
Distribution Center D	Newark, NJ	72.7%	1,254	3,587	98.8%	74.7%	Improvement Needed

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement AI-driven inventory tracking in Warehouse 1

ment voice-  
picking  
system to  
improve  
accuracy to  
99.8%

- Upgra  
de WMS  
integration  
for real-time  
inventory  
visibility

- Add au  
tomated  
sortation  
system for  
small  
package  
handling

- Imple  
ment  
predictive  
analytics for  
demand-  
based  
staffing

- Consid  
er AS/RS  
system for  
high-  
velocity  
SKUs