

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 27  
Average Utilization: 78.6%  
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	73.5%	2,332	1,917	97.8%	90.7%	Optimized
	Dallas, TX	48.8%	2,462	2,959	96.2%	72.0%	Improvement Needed
Distribution Center B	Atlanta, GA	68.1%	2,753	2,518	97.9%	89.7%	Optimized
Distribution Center C	Los Angeles, CA	65.4%	1,212	2,269	97.9%	78.4%	Improvement Needed
	Newark, NJ	93.0%	1,349	2,817	95.4%	62.1%	Improvement Needed

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

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