

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 76.3%  
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	36.7%	2,444	2,992	96.0%	83.2%	Optimized
	Dallas, TX	36.2%	2,453	3,914	98.9%	80.9%	Optimized
Distribution Center B	Atlanta, GA	46.1%	2,627	3,240	96.5%	72.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	77.0%	1,493	2,315	97.7%	76.5%	Improvement Needed
Distribution Center D	Newark, NJ	83.3%	1,085	2,035	98.3%	68.4%	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