

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 73.7%  
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	73.1%	2,538	3,134	95.9%	64.7%	Improvement Needed
Distribution Center B	Dallas, TX	48.2%	1,881	2,964	97.0%	66.9%	Improvement Needed
Distribution Center C	Atlanta, GA	78.4%	2,764	2,222	95.6%	80.6%	Optimized
Distribution Center D	Los Angeles, CA	63.1%	1,133	2,050	95.4%	94.5%	Optimized
Distribution Center E	Newark, NJ	60.1%	2,850	1,919	95.9%	61.9%	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