

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 78.1%  
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	111.8%	2,067	2,434	96.2%	90.5%	Optimized
	Dallas, TX	70.0%	2,951	2,584	99.4%	79.7%	Improvement Needed
Distribution Center B	Atlanta, GA	120.4%	1,401	2,664	98.2%	88.4%	Optimized
Distribution Center C	Los Angeles, CA	61.5%	1,357	2,196	95.2%	64.6%	Improvement Needed
Distribution Center D	Newark, NJ	72.8%	1,151	2,147	98.1%	67.3%	Improvement Needed

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for all automated systems

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