

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 14  
Average Utilization: 74.7%  
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	45.6%	1,204	1,764	97.3%	82.6%	Optimized
	Dallas, TX	77.9%	1,422	2,651	98.4%	86.1%	Optimized
Distribution Center B	Atlanta, GA	45.6%	1,899	2,716	96.2%	71.7%	Improvement Needed
Distribution Center C	Los Angeles, CA	78.7%	1,119	3,936	95.9%	61.0%	Improvement Needed
Distribution Center D	Newark, NJ	45.9%	1,739	2,661	96.7%	72.0%	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