

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 39  
Average Utilization: 75.1%  
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	64.0%	1,190	2,269	97.2%	84.7%	Optimized
	Dallas, TX	83.3%	1,153	2,132	95.5%	86.4%	Optimized
Distribution Center B	Atlanta, GA	109.5%	2,827	2,563	97.1%	67.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	74.2%	1,129	1,932	96.8%	75.5%	Improvement Needed
Distribution Center D	Newark, NJ	107.0%	1,473	1,658	95.9%	61.7%	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