

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 56  
Average Utilization: 77.8%  
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	105.2%	1,949	3,428	96.2%	60.4%	Improvement Needed
Distribution Center B	Dallas, TX	47.5%	2,573	1,643	96.8%	93.5%	Optimized
Distribution Center C	Atlanta, GA	81.1%	2,320	2,428	97.5%	71.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	41.4%	2,725	3,772	97.8%	94.7%	Optimized
Distribution Center E	Newark, NJ	89.9%	1,196	2,418	95.7%	68.6%	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