

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 80.4%  
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	96.5%	1,729	2,571	97.2%	78.2%	Improvement Needed
Distribution Center B	Dallas, TX	71.4%	2,693	3,679	98.1%	85.7%	Optimized
Distribution Center C	Atlanta, GA	120.7%	1,043	3,743	98.8%	76.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	60.5%	1,804	2,573	95.4%	74.1%	Improvement Needed
Distribution Center E	Newark, NJ	69.2%	2,696	3,043	96.2%	87.2%	Optimized

## 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