

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 75.3%  
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	62.9%	2,968	2,260	99.3%	71.0%	Improvement Needed
Distribution Center B	Dallas, TX	47.8%	1,749	2,268	96.7%	63.1%	Improvement Needed
Distribution Center C	Atlanta, GA	54.9%	1,200	2,572	96.3%	92.2%	Optimized
Distribution Center D	Los Angeles, CA	105.7%	1,017	3,809	95.4%	85.1%	Optimized
Distribution Center E	Newark, NJ	39.4%	1,390	2,371	96.9%	65.0%	Improvement Needed

### Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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