

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 72  
Average Utilization: 76.1%  
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	67.5%	2,396	2,898	99.1%	70.4%	Improvement Needed
Distribution Center B	Dallas, TX	83.6%	2,146	1,508	96.1%	67.9%	Improvement Needed
Distribution Center C	Atlanta, GA	112.0%	1,581	2,149	97.7%	83.3%	Optimized
Distribution Center D	Los Angeles, CA	80.5%	1,262	3,876	95.7%	89.6%	Optimized
Distribution Center E	Newark, NJ	105.6%	1,224	2,089	96.9%	69.4%	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