

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 63  
Average Utilization: 76.6%  
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	71.8%	1,277	2,066	95.9%	93.1%	Optimized
	Dallas, TX	72.6%	2,436	2,894	98.6%	92.6%	Optimized
	Atlanta, GA	92.2%	1,582	2,870	96.1%	60.2%	Improvement Needed
Distribution Center B							
Distribution Center C	Los Angeles, CA	86.4%	2,545	3,116	96.7%	67.0%	Improvement Needed
	Newark, NJ	75.7%	2,991	3,500	98.3%	70.2%	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