

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 40  
Average Utilization: 80.9%  
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	44.3%	1,762	2,039	97.0%	80.5%	Optimized
	Dallas, TX	55.1%	2,105	2,438	96.1%	94.0%	Optimized
Distribution Center B	Atlanta, GA	53.7%	1,412	3,636	99.4%	65.3%	Improvement Needed
Distribution Center C	Los Angeles, CA	52.6%	2,735	3,848	98.2%	79.0%	Improvement Needed
Distribution Center D	Newark, NJ	43.5%	1,426	2,363	98.4%	85.8%	Optimized

## Optimization Opportunities

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

picking  
system to  
improve  
accuracy to  
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs