

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 77.9%  
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	45.8%	1,656	3,771	96.2%	89.4%	Optimized
	Dallas, TX	92.6%	1,466	3,628	96.3%	81.5%	Optimized
	Atlanta, GA	66.0%	2,180	2,158	95.5%	84.5%	Optimized
	Los Angeles, CA	82.3%	1,627	2,232	96.9%	66.8%	Improvement Needed
	Newark, NJ	91.1%	1,813	3,330	97.7%	67.1%	Improvement Needed

## 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