

# 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: 79.6%  
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	64.1%	2,732	2,897	96.5%	80.1%	Optimized
Distribution Center B	Dallas, TX	67.4%	1,555	1,662	99.4%	65.1%	Improvement Needed
Distribution Center C	Atlanta, GA	39.6%	2,996	1,867	98.7%	73.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.4%	2,031	2,205	97.0%	89.4%	Optimized
Distribution Center E	Newark, NJ	43.8%	1,734	2,657	96.4%	90.3%	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