

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 82.2%  
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	87.1%	1,962	2,538	97.3%	63.6%	Improvement Needed
Distribution Center B	Dallas, TX	36.3%	2,108	3,606	98.6%	92.9%	Optimized
Distribution Center C	Atlanta, GA	96.8%	1,791	3,597	95.6%	90.9%	Optimized
Distribution Center D	Los Angeles, CA	80.0%	2,380	2,710	95.7%	76.4%	Improvement Needed
Distribution Center E	Newark, NJ	61.2%	1,266	3,860	98.7%	87.2%	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