

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 80.7%  
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	64.2%	2,648	3,896	95.1%	67.6%	Improvement Needed
Distribution Center B	Dallas, TX	60.7%	2,486	3,048	95.1%	94.5%	Optimized
Distribution Center C	Atlanta, GA	72.8%	1,539	3,951	95.2%	94.3%	Optimized
Distribution Center D	Los Angeles, CA	53.3%	1,041	2,138	98.4%	87.0%	Optimized
Distribution Center E	Newark, NJ	40.0%	1,131	2,521	97.9%	60.0%	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