

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 29  
Average Utilization: 77.3%  
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	70.5%	2,960	3,085	95.4%	63.7%	Improvement Needed
Distribution Center B	Dallas, TX	59.0%	2,682	1,848	98.6%	84.8%	Optimized
Distribution Center C	Atlanta, GA	57.3%	2,641	3,008	96.7%	61.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	78.5%	2,965	3,962	97.5%	82.1%	Optimized
Distribution Center E	Newark, NJ	69.8%	2,788	3,464	98.4%	94.7%	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