

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 66  
Average Utilization: 77.2%  
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	45.2%	2,057	2,757	98.4%	67.6%	Improvement Needed
Distribution Center B	Dallas, TX	57.8%	1,375	2,726	98.1%	83.9%	Optimized
Distribution Center C	Atlanta, GA	91.1%	1,657	2,641	96.4%	60.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.4%	1,987	2,945	98.8%	85.3%	Optimized
Distribution Center E	Newark, NJ	76.8%	1,926	3,915	99.4%	88.6%	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