

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 82.9%  
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	51.3%	1,388	2,507	95.8%	64.7%	Improvement Needed
Distribution Center B	Dallas, TX	70.4%	1,776	2,900	97.1%	87.5%	Optimized
Distribution Center C	Atlanta, GA	67.0%	1,385	2,204	95.7%	86.2%	Optimized
Distribution Center D	Los Angeles, CA	74.3%	2,789	1,706	97.3%	85.5%	Optimized
Distribution Center E	Newark, NJ	71.0%	1,099	1,559	98.0%	90.5%	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