

# 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: 69.4%  
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	96.5%	2,732	3,897	95.4%	62.3%	Improvement Needed
Distribution Center B	Dallas, TX	57.6%	2,320	2,842	99.1%	72.6%	Improvement Needed
Distribution Center C	Atlanta, GA	57.5%	1,505	2,802	98.3%	68.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.5%	1,974	1,847	96.2%	62.9%	Improvement Needed
Distribution Center E	Newark, NJ	34.9%	2,666	3,466	97.7%	80.8%	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