

# 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: 76.1%  
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	68.1%	1,935	2,792	96.8%	73.1%	Improvement Needed
Distribution Center B	Dallas, TX	40.2%	2,433	1,634	96.3%	78.8%	Improvement Needed
Distribution Center C	Atlanta, GA	87.5%	2,896	1,804	99.1%	67.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	94.6%	2,372	1,645	97.1%	66.4%	Improvement Needed
Distribution Center E	Newark, NJ	69.1%	1,304	3,848	95.5%	94.9%	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