

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 79.4%  
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	63.9%	1,015	3,344	95.9%	61.6%	Improvement Needed
Distribution Center B	Dallas, TX	63.0%	2,349	2,200	98.8%	82.9%	Optimized
Distribution Center C	Atlanta, GA	74.1%	2,002	1,577	95.7%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	74.4%	1,814	3,089	97.7%	76.9%	Improvement Needed
Distribution Center E	Newark, NJ	50.7%	1,666	2,842	98.3%	80.7%	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