

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 74  
Average Utilization: 82.8%  
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	90.7%	1,924	3,413	97.3%	70.2%	Improvement Needed
Distribution Center B	Dallas, TX	39.8%	2,933	1,849	95.6%	89.7%	Optimized
Distribution Center C	Atlanta, GA	56.1%	1,956	2,393	96.4%	70.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	69.7%	2,182	2,363	96.1%	89.4%	Optimized
Distribution Center E	Newark, NJ	103.8%	2,444	3,208	95.8%	94.0%	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