

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 65  
Average Utilization: 82.0%  
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	73.5%	1,121	1,906	99.4%	61.4%	Improvement Needed
Distribution Center B	Dallas, TX	73.6%	1,816	3,463	97.0%	79.3%	Improvement Needed
Distribution Center C	Atlanta, GA	82.2%	1,330	2,317	96.4%	84.1%	Optimized
Distribution Center D	Los Angeles, CA	79.5%	1,934	2,473	96.1%	93.0%	Optimized
Distribution Center E	Newark, NJ	113.1%	1,758	2,711	98.8%	92.3%	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