

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 60  
Average Utilization: 83.2%  
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	47.4%	2,797	1,972	96.6%	79.9%	Improvement Needed
Distribution Center B	Dallas, TX	62.7%	2,135	1,858	96.2%	68.0%	Improvement Needed
Distribution Center C	Atlanta, GA	67.5%	1,862	2,117	98.9%	94.2%	Optimized
Distribution Center D	Los Angeles, CA	51.1%	1,498	2,083	98.1%	92.4%	Optimized
Distribution Center E	Newark, NJ	59.5%	2,668	3,283	97.7%	81.5%	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