

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 79.9%  
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	84.2%	1,867	1,956	95.5%	94.8%	Optimized
Distribution Center B	Dallas, TX	77.6%	2,068	3,617	99.4%	70.7%	Improvement Needed
Distribution Center C	Atlanta, GA	67.7%	1,456	2,505	97.6%	71.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	110.4%	2,197	3,810	98.2%	81.0%	Optimized
Distribution Center E	Newark, NJ	69.3%	1,492	1,512	97.7%	80.9%	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