

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 55  
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	36.2%	1,259	3,201	99.1%	80.3%	Optimized
	Dallas, TX	57.7%	2,683	3,961	95.9%	87.0%	Optimized
	Atlanta, GA	38.8%	2,095	3,571	98.7%	93.8%	Optimized
	Los Angeles, CA	58.7%	2,808	1,926	95.3%	65.2%	Improvement Needed
	Newark, NJ	40.2%	2,649	3,346	96.0%	83.6%	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