

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 36  
Average Utilization: 80.6%  
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	100.6%	2,100	2,343	96.6%	61.7%	Improvement Needed
	Dallas, TX	43.3%	2,366	3,950	95.8%	83.9%	Optimized
	Atlanta, GA	65.4%	1,182	3,823	98.2%	85.4%	Optimized
	Los Angeles, CA	57.0%	1,824	3,694	97.6%	80.3%	Optimized
	Newark, NJ	45.6%	1,541	1,698	95.4%	91.7%	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