

# 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: 77.9%  
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	56.3%	1,388	3,794	95.4%	80.4%	Optimized
	Dallas, TX	76.1%	2,934	3,286	97.4%	88.9%	Optimized
Distribution Center B	Atlanta, GA	53.6%	2,156	1,740	95.0%	78.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	40.4%	2,143	3,349	98.4%	61.1%	Improvement Needed
Distribution Center D	Newark, NJ	64.7%	1,174	2,563	96.1%	80.8%	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