

# 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: 76.9%  
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	80.3%	1,567	2,049	98.1%	81.1%	Optimized
	Dallas, TX	51.7%	2,964	3,889	95.3%	81.7%	Optimized
Distribution Center B	Atlanta, GA	85.5%	2,432	2,949	97.6%	68.8%	Improvement Needed
Distribution Center C	Los Angeles, CA	39.6%	1,098	2,433	98.1%	62.2%	Improvement Needed
Distribution Center D	Newark, NJ	68.9%	2,001	1,618	97.6%	90.7%	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