

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 83.4%  
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	44.9%	2,535	2,295	95.6%	73.1%	Improvement Needed
Distribution Center B	Dallas, TX	39.4%	1,016	2,284	95.5%	80.0%	Improvement Needed
Distribution Center C	Atlanta, GA	31.3%	2,456	2,376	98.0%	90.7%	Optimized
Distribution Center D	Los Angeles, CA	73.8%	1,016	2,394	96.8%	81.9%	Optimized
Distribution Center E	Newark, NJ	91.3%	2,361	2,018	97.4%	91.2%	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