

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 80.7%  
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	128.3%	2,549	1,834	95.0%	65.2%	Improvement Needed
Distribution Center B	Dallas, TX	89.5%	1,309	3,563	95.5%	90.4%	Optimized
Distribution Center C	Atlanta, GA	72.0%	2,203	2,505	95.9%	90.6%	Optimized
Distribution Center D	Los Angeles, CA	74.5%	2,403	2,158	95.7%	93.6%	Optimized
Distribution Center E	Newark, NJ	104.2%	1,617	1,798	96.8%	63.8%	Improvement Needed

### 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