

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 42  
Average Utilization: 80.1%  
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	60.9%	1,456	2,060	96.0%	92.1%	Optimized
Distribution Center B	Dallas, TX	86.2%	2,822	2,532	97.9%	69.9%	Improvement Needed
Distribution Center C	Atlanta, GA	65.6%	1,524	3,424	96.0%	78.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	39.9%	1,685	3,011	96.7%	80.2%	Optimized
Distribution Center E	Newark, NJ	114.9%	1,967	3,317	97.5%	80.0%	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