

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 40  
Average Utilization: 82.4%  
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	52.3%	2,755	1,908	95.1%	63.3%	Improvement Needed
Distribution Center B	Dallas, TX	67.4%	1,037	2,306	97.1%	81.4%	Optimized
Distribution Center C	Atlanta, GA	38.6%	1,585	3,569	97.8%	93.9%	Optimized
Distribution Center D	Los Angeles, CA	59.8%	2,135	2,812	96.3%	88.9%	Optimized
Distribution Center E	Newark, NJ	74.9%	1,582	3,762	95.6%	84.4%	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