

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 51  
Average Utilization: 80.4%  
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	93.8%	2,995	3,536	96.5%	65.3%	Improvement Needed
Distribution Center B	Dallas, TX	59.7%	1,720	2,660	97.3%	75.8%	Improvement Needed
Distribution Center C	Atlanta, GA	61.3%	2,592	2,059	97.0%	81.0%	Optimized
Distribution Center D	Los Angeles, CA	96.2%	1,116	2,804	99.5%	89.0%	Optimized
Distribution Center E	Newark, NJ	52.1%	2,371	2,110	96.7%	91.0%	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