

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 22  
Average Utilization: 81.0%  
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	96.3%	1,676	3,813	98.1%	79.2%	Improvement Needed
Distribution Center B	Dallas, TX	73.8%	1,947	1,876	98.1%	90.0%	Optimized
Distribution Center C	Atlanta, GA	53.6%	2,435	3,465	97.6%	78.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	106.0%	1,345	3,760	98.7%	65.4%	Improvement Needed
Distribution Center E	Newark, NJ	48.4%	2,195	3,701	99.1%	91.7%	Optimized

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment voice-  
picking  
system to  
improve  
accuracy to  
99.8%

- Upgra  
de WMS  
integration  
for real-time  
inventory  
visibility

- Add au  
tomated  
sortation  
system for  
small  
package  
handling

- Imple  
ment  
predictive  
analytics for  
demand-  
based  
staffing

- Consid  
er AS/RS  
system for  
high-  
velocity  
SKUs