

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 20  
Average Utilization: 81.1%  
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 Status |                    |                    |
|-----------------------|-------------|-----------------|-------------|--------------|------------------|-------------------|--------------------|--------------------|
| Distribution Center A | Chicago, IL | 74.1%           | 2,083       | 2,445        | 96.9%            | 88.1%             | Optimized          |                    |
|                       | Dallas, TX  | 79.0%           | 1,226       | 3,860        | 96.3%            | 79.9%             | Improvement Needed |                    |
| Distribution Center B |             | Atlanta, GA     | 58.2%       | 1,826        | 1,518            | 95.4%             | 75.9%              | Improvement Needed |
| Distribution Center D |             | Los Angeles, CA | 43.7%       | 2,639        | 3,739            | 97.2%             | 74.1%              | Improvement Needed |
| Distribution Center E |             | Newark, NJ      | 68.2%       | 1,229        | 1,760            | 95.0%             | 87.4%              | 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