# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 75.8%
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 | 43.7% | 2,133 | 1,906 | 98.9% | 74.8% | Improvement Needed |
| Distribution Center B | Dallas, TX | 124.8% | 2,992 | 2,486 | 97.7% | 69.5% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 96.7% | 2,526 | 1,701 | 97.0% | 65.9% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 59.3% | 1,590 | 3,040 | 97.3% | 77.1% | Improvement Needed |
| Distribution Center E | Newark, NJ | 66.3% | 1,934 | 2,399 | 99.1% | 92.0% | 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