# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 35
Average Utilization: 70.4%
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 | 54.5% | 1,456 | 3,245 | 95.5% | 81.8% | Optimized |
| Distribution Center B | Dallas, TX | 74.1% | 2,102 | 3,718 | 97.5% | 65.5% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 60.9% | 1,403 | 2,230 | 98.8% | 60.3% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 46.6% | 1,072 | 1,649 | 99.1% | 78.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 107.8% | 2,673 | 2,170 | 97.7% | 66.1% | Improvement Needed |

## 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