# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 76.1%
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 Level | Status |
|---|---|---|---|---|---|---|---|
| Distribution Center A | Chicago, IL | 40.5% | 1,934 | 2,653 | 96.9% | 74.1% | Improvement Needed |
| Distribution Center B | Dallas, TX | 97.0% | 1,410 | 3,897 | 97.6% | 90.1% | Optimized |
| Distribution Center C | Atlanta, GA | 92.8% | 1,827 | 2,606 | 97.4% | 78.8% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 61.1% | 1,005 | 2,178 | 95.2% | 60.8% | Improvement Needed |
| Distribution Center E | Newark, NJ | 49.5% | 1,080 | 2,200 | 99.0% | 76.7% | 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