# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 70.3%
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 | 36.2% | 1,946 | 2,905 | 95.4% | 68.9% | Improvement Needed |
| Distribution Center B | Dallas, TX | 44.5% | 1,003 | 3,937 | 98.6% | 68.3% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 46.8% | 1,853 | 1,926 | 95.1% | 61.2% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 43.5% | 2,692 | 2,834 | 97.6% | 81.7% | Optimized |
| Distribution Center E | Newark, NJ | 67.5% | 2,528 | 3,612 | 96.1% | 71.5% | 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