# Warehouse Automation Analytics

### Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 75.1%
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 | 65.3% | 2,241 | 1,668 | 96.0% | 70.2% | Improvement Needed |
| Distribution Center B | Dallas, TX | 77.2% | 2,050 | 2,912 | 96.9% | 66.4% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 39.4% | 2,014 | 2,277 | 98.4% | 77.5% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 80.5% | 1,079 | 1,915 | 96.6% | 94.3% | Optimized |
| Distribution Center E | Newark, NJ | 95.7% | 1,591 | 2,693 | 98.5% | 67.2% | 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