# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 70.1%
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 | 39.9% | 1,138 | 2,381 | 97.0% | 70.0% | Improvement Needed |
| Distribution Center B | Dallas, TX | 58.6% | 2,635 | 1,856 | 96.6% | 84.3% | Optimized |
| Distribution Center C | Atlanta, GA | 54.6% | 2,920 | 2,717 | 97.1% | 61.4% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 82.2% | 1,907 | 3,479 | 98.8% | 61.6% | Improvement Needed |
| Distribution Center E | Newark, NJ | 116.1% | 2,673 | 2,133 | 97.7% | 73.2% | 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