# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 69.5%
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 | 65.4% | 1,832 | 2,687 | 97.4% | 82.7% | Optimized |
| Distribution Center B | Dallas, TX | 43.0% | 2,782 | 2,172 | 98.3% | 66.4% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 100.6% | 2,795 | 3,272 | 96.6% | 64.7% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 111.1% | 2,092 | 2,515 | 95.9% | 67.7% | Improvement Needed |
| Distribution Center E | Newark, NJ | 47.4% | 1,216 | 1,993 | 95.4% | 65.7% | 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