# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 69.1%
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 | 63.2% | 2,916 | 2,060 | 97.7% | 66.2% | Improvement Needed |
| Distribution Center B | Dallas, TX | 73.6% | 2,582 | 2,968 | 96.8% | 68.0% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 109.5% | 1,567 | 2,848 | 97.8% | 64.7% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 63.7% | 2,518 | 3,672 | 95.4% | 62.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 58.5% | 1,329 | 1,516 | 95.0% | 84.4% | Optimized |

## 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