# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 24
Average Utilization: 73.1%
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 | 72.7% | 1,602 | 1,696 | 97.3% | 61.4% | Improvement Needed |
| Distribution Center B | Dallas, TX | 63.9% | 2,980 | 2,303 | 95.3% | 63.4% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 116.8% | 1,055 | 3,683 | 97.9% | 90.2% | Optimized |
| Distribution Center D | Los Angeles, CA | 36.6% | 2,919 | 2,245 | 97.1% | 72.9% | Improvement Needed |
| Distribution Center E | Newark, NJ | 127.2% | 1,396 | 2,868 | 99.3% | 77.4% | 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