# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 35
Average Utilization: 71.5%
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 | 63.2% | 1,842 | 3,793 | 95.8% | 72.0% | Improvement Needed |
| Distribution Center B | Dallas, TX | 47.7% | 1,273 | 3,635 | 95.5% | 68.2% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 103.6% | 2,991 | 1,871 | 95.8% | 66.4% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 58.2% | 2,571 | 3,566 | 98.9% | 68.3% | Improvement Needed |
| Distribution Center E | Newark, NJ | 86.4% | 2,097 | 3,859 | 96.0% | 82.6% | 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