# Warehouse Automation Analytics

Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 69.7%
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 | 94.5% | 2,587 | 3,638 | 95.2% | 68.4% | Improvement Needed |
| Distribution Center B | Dallas, TX | 72.0% | 2,477 | 2,694 | 95.1% | 73.1% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 69.9% | 2,170 | 3,989 | 98.1% | 69.6% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 36.1% | 2,738 | 2,274 | 96.0% | 64.3% | Improvement Needed |
| Distribution Center E | Newark, NJ | 45.0% | 1,924 | 3,029 | 97.1% | 73.0% | 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