# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

## Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 80.5%
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 | 58.1% | 1,114 | 3,397 | 98.0% | 82.8% | Optimized |
| Distribution Center B | Dallas, TX | 91.2% | 1,914 | 3,260 | 95.9% | 86.6% | Optimized |
| Distribution Center C | Atlanta, GA | 85.9% | 1,767 | 1,819 | 97.1% | 65.4% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 75.4% | 2,468 | 3,549 | 97.0% | 83.1% | Optimized |
| Distribution Center E | Newark, NJ | 73.5% | 2,259 | 3,600 | 95.2% | 84.9% | 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