# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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## Automation Overview

Total Warehouses: 5
Total Robots: 23
Average Utilization: 74.3%
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 | 52.8% | 1,263 | 3,818 | 96.0% | 73.8% | Improvement Needed |
| Distribution Center B | Dallas, TX | 57.0% | 2,721 | 2,195 | 98.7% | 75.5% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 79.5% | 1,980 | 2,079 | 96.7% | 68.7% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 80.3% | 1,911 | 2,229 | 95.8% | 63.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 46.1% | 1,927 | 1,836 | 95.2% | 90.0% | 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