# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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## Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 74.5%
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 | 37.0% | 1,053 | 2,232 | 97.5% | 70.5% | Improvement Needed |
| Distribution Center B | Dallas, TX | 87.3% | 2,301 | 2,968 | 98.3% | 92.1% | Optimized |
| Distribution Center C | Atlanta, GA | 56.7% | 1,065 | 3,972 | 97.0% | 70.5% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 85.0% | 1,420 | 2,185 | 97.1% | 78.8% | Improvement Needed |
| Distribution Center E | Newark, NJ | 58.4% | 2,879 | 1,933 | 96.6% | 60.7% | 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