

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33
Average Utilization: 79.3%
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 Status | |
|-----------------------|-----------------|---------------|-------------|--------------|------------------|-------------------|--------------------|
| Distribution Center A | Chicago, IL | 94.1% | 1,331 | 3,418 | 96.6% | 88.1% | Optimized |
| | Dallas, TX | 67.9% | 1,079 | 2,189 | 98.5% | 72.9% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 87.9% | 2,520 | 1,629 | 97.7% | 70.6% | Improvement Needed |
| Distribution Center C | Los Angeles, CA | 90.7% | 1,870 | 3,999 | 99.1% | 83.3% | Optimized |
| Distribution Center D | Newark, NJ | 83.3% | 1,398 | 3,444 | 99.1% | 81.7% | Optimized |
| Distribution Center E | | | | | | | |

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