

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 75.5%
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 | 50.1% | 2,566 | 2,858 | 97.1% | 88.1% | Optimized |
| | Dallas, TX | 76.6% | 2,386 | 2,465 | 96.2% | 70.9% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 94.8% | 1,212 | 3,963 | 98.9% | 72.8% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 106.1% | 2,948 | 3,500 | 95.4% | 64.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 46.9% | 2,475 | 3,790 | 98.1% | 81.3% | Optimized |

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs