

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 76.4%
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 | 64.6% | 2,286 | 3,919 | 96.7% | 94.4% | Optimized |
| | Dallas, TX | 47.4% | 1,493 | 3,683 | 98.1% | 74.0% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 73.4% | 1,729 | 3,862 | 97.1% | 70.9% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 88.5% | 1,381 | 3,843 | 96.9% | 81.2% | Optimized |
| Distribution Center E | Newark, NJ | 62.4% | 2,048 | 2,978 | 95.0% | 61.7% | Improvement Needed |

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