

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 76.2%
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 | 35.1% | 2,426 | 2,417 | 97.0% | 89.4% | Optimized |
| | Dallas, TX | 88.5% | 2,858 | 1,551 | 96.3% | 68.1% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 109.2% | 1,446 | 2,193 | 98.0% | 77.8% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 60.1% | 2,136 | 2,172 | 98.3% | 63.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 64.9% | 2,161 | 1,673 | 96.6% | 82.2% | 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