

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
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 | 69.4% | 1,796 | 2,450 | 97.8% | 67.2% | Improvement Needed |
| Distribution Center B | Dallas, TX | 137.8% | 2,316 | 3,666 | 97.4% | 80.2% | Optimized |
| Distribution Center C | Atlanta, GA | 95.8% | 1,971 | 3,180 | 95.9% | 64.9% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 110.1% | 1,594 | 1,818 | 99.1% | 79.2% | Improvement Needed |
| Distribution Center E | Newark, NJ | 80.0% | 1,888 | 3,499 | 98.9% | 80.8% | 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