# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

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#### **Automation Overview**

Total Warehouses: 5
Total Robots: 46

Average Utilization: 68.1% Throughput Increase: 34.2% Labor Cost Reduction: 28.5%

ROI Period: 2.3 years

### **Warehouse Performance**

| Warehouse Location             |                  | Capacity<br>Used | Inbound/<br>Day | Outbound/<br>Day | Picking<br>Accuracy | Automation Status<br>Level |                        |
|--------------------------------|------------------|------------------|-----------------|------------------|---------------------|----------------------------|------------------------|
| Distribution Ch<br>Center A    | hicago, IL       | 93.0%            | 2,568           | 1,959            | 98.5%               | 66.7%                      | Improvemen t Needed    |
| Distribution Da<br>Center B    | allas, TX        | 54.7%            | 2,563           | 1,843            | 99.3%               | 72.7%                      | Improvemen t Needed    |
| Distribution At Center C       | lanta, GA        | 53.8%            | 1,901           | 2,855            | 97.3%               | 77.4%                      | Improvemen t Needed    |
| Distribution Lo<br>Center D Ar | os<br>ngeles, CA | 62.3%            | 2,671           | 3,080            | 97.8%               | 63.5%                      | Improvemen t Needed    |
| Distribution Ne<br>Center E    | ewark, NJ        | 92.4%            | 2,897           | 2,940            | 95.2%               | 60.2%                      | Improvemen<br>t Needed |

# Optimiz ation O pportun ities

Deploy 5 additional AGVs in Warehouse 3 to increase throughput

by 20%

- Imple ment voicepicking 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 highvelocity SKUs