## **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: 45

Average Utilization: 87.8% 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<br>Level | n Status  |
|--|---------------------|-----------------|------------------|---------------------|---------------------|-----------|
| Distribution Chicago, IL                     | 70.7%               | 2,857           | 1,831            | 96.9%               | 93.9%               | Optimized |
| Center A<br>Distribution Dallas, TX          | 42.3%               | 2,310           | 2,504            | 98.9%               | 89.2%               | Optimized |
| Center B<br>Distribution Atlanta, GA         | 50.0%               | 1,570           | 2,449            | 97.4%               | 88.9%               | Optimized |
| Center C<br>Distribution Los                 | 52.9%               | 1,139           | 3,505            | 95.4%               | 83.3%               | Optimized |
| Center D Angeles, CA Distribution Newark, NJ | <sup>\\</sup> 50.9% | 2,691           | 3,223            | 98.5%               | 83.7%               | Optimized |
| Center E                                     |                     |                 |                  |                     |                     |           |

# 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