## **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: 62

Average Utilization: 85.8% 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                                    | 47.2%              | 2,620           | 2,690            | 95.1%               | 89.4%               | Optimized              |
| Center A<br>Distribution Dallas, TX                         |                    | 1,952           | 1,736            | 95.7%               | 93.8%               | Optimized              |
| Center B<br>Distribution Atlanta, GA                        | 90.9%              | 1,996           | 2,882            | 98.0%               | 82.3%               | Optimized              |
| Center C<br>Distribution Los                                | 67.4%              | 2,409           | 3,721            | 97.4%               | 87.0%               | Optimized              |
| Center D Angeles, CA<br>Distribution Newark, NJ<br>Center E | <sup>4</sup> 44.1% | 2,685           | 3,793            | 99.4%               | 76.5%               | 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