Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 79.4%
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	72.1%	2,386	3,015	97.2%	87.5%	Optimized
Distribution Center B	Dallas, TX	36.9%	2,661	1,803	98.7%	71.3%	Improvement Needed
Distribution Center C	Atlanta, GA	78.0%	1,918	2,546	96.9%	92.4%	Optimized
Distribution Center D	Los Angeles, CA	96.0%	1,027	2,650	98.2%	74.9%	Improvement Needed
Distribution Center E	Newark, NJ	39.3%	2,687	2,543	98.5%	71.1%	Improvement Needed

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%

• Upgrade WMS integration for real-time inventory visibility

• Add automated sortation system for small package handling

• Implement predictive analytics for demand-based staffing

• Consider AS/RS system for high-velocity SKUs