Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 80.1%
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	61.1%	2,839	2,194	97.2%	76.2%	Improvement Needed
Distribution Center B	Dallas, TX	31.3%	1,463	2,481	96.4%	65.8%	Improvement Needed
Distribution Center C	Atlanta, GA	38.5%	2,337	2,101	96.9%	90.7%	Optimized
Distribution Center D	Los Angeles, CA	75.6%	2,448	1,990	95.3%	88.0%	Optimized
Distribution Center E	Newark, NJ	87.6%	2,208	2,156	98.0%	79.9%	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