

AMR FLEET ECONOMICS STUDY 2023

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NaviFloor Robotics, Inc.

Confidential & Proprietary

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1. EXECUTIVE SUMMARY

This Fleet Economics Study analyzes the operational and financial metrics of NaviFloor Robotics' Autonomous Mobile Robot (AMR) deployments across various installations during FY2023. The study encompasses data from 127 active cu

sites utilizing NaviFloor's proprietary terrain-mapping AMR systems.

2. STUDY METHODOLOGY

2.1 Data Collection Parameters

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Operational data collected from January 1, 2023 through November 30, 2023

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Real-time telemetry from 847 deployed AMR units

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Customer facility profiles ranging from 50,000 to 500,000 square feet

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Multi-surface navigation metrics across concrete, epoxy, metal grating, and c

2.2 Performance Metrics

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Robot utilization rates

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Navigation accuracy scores

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Surface adaptation times

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Power consumption patterns

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Maintenance intervals

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Fleet coordination efficiency

3. ECONOMIC ANALYSIS

3.1 Customer ROI Metrics

Average customer ROI metrics based on facility size:

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Small facilities (50k-100k sq ft): 187% annual ROI

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Medium facilities (100k-250k sq ft): 243% annual ROI

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Large facilities (250k-500k sq ft): 298% annual ROI

3.2 Operating Cost Analysis

Per-unit operating costs:

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Power consumption: \$0.47/hour

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Preventive maintenance: \$1.28/operating day

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Software licensing: \$2.83/operating day

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Network infrastructure: \$0.92/operating day

3.3 Labor Cost Displacement

Average labor savings per facility:

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Manual material handling reduction: 76%

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Inventory management efficiency increase: 64%

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Workforce reallocation potential: 42%

4. TECHNICAL PERFORMANCE METRICS

4.1 Navigation Accuracy

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Surface type adaptation success rate: 99.7%

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Path optimization accuracy: 98.9%

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Collision avoidance effectiveness: 99.99%

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Multi-level transition success rate: 99.8%

4.2 System Reliability

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Mean time between failures: 2,847 hours

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Software update success rate: 99.9%

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Battery lifecycle: 4,200 charging cycles

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Sensor calibration stability: 99.6%

5. COMPETITIVE BENCHMARKING

5.1 Market Position Analysis

NaviFloor AMR performance versus industry standards:

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Navigation accuracy: +27% above industry average

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Operating cost efficiency: +34% above industry average

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Implementation time: -42% below industry average

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Customer ROI: +31% above industry average

6. RISK FACTORS AND LIMITATIONS

This study is subject to the following limitations:

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Data collection limited to customers with >6 months operational history

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Excludes facilities with custom surface treatments

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Performance metrics may vary based on facility-specific conditions

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Future results may differ from historical performance

7. LEGAL DISCLAIMERS

This Fleet Economics Study ("Study") is confidential and proprietary to NaviFloor Robotics, Inc. ("Company"). The Study contains forward-looking statements and analyses based on data collected through November 30, 2023. Company makes no representations or warranties regarding the accuracy, completeness, or reliability of the information contained herein.

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8. AUTHENTICATION

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