

In-Warehouse Solution



POWER&FLEET[®]

People Powered IoT

29th May 2026

EVERY 3 DAYS,
A LIFE IS LOST
TO MATERIAL
HANDLING
EQUIPMENT*



POWER FLEET®

*IN THE UNITED STATES ALONE



Challenges in Warehouse Operations



Escalating Operational Demands

As business scales, increasing bottlenecks and longer turnaround times challenge the efficiency of warehouse operations.



Critical Labor Shortages

The growing gap in skilled labor availability is leading to rising labor costs and increased overtime, severely stretching operational budgets.



Elevated Accident Risks

A high incidence of forklift accidents compels the need for enhanced safety measures to protect workers and reduce liability.



Compliance Challenges

Staying compliant with ever-evolving safety regulations is crucial to ensure smooth operations and to safeguard your organization's reputation.



Operational Inefficiencies

Reliance on manual processes significantly slows operations and introduces errors, negatively impacting decision-making and operational visibility.



Disparate System Integration

The lack of seamless data integration across systems hampers effective real-time decision-making and limits operational transparency.



Balancing Cost, Productivity, and Safety

Continuously reducing costs while simultaneously boosting productivity and maintaining safety presents an ongoing strategic challenge.



Technological Adoption Hurdles

High upfront costs and lengthy implementation phases pose significant barriers to automation and the adoption of advanced technologies.

In-Warehouse Challenges



Growing Demands & Labor Shortages

Escalating Operational Demands

As market demands intensify, pressure on warehouse operations escalates, leading to significant bottlenecks and extended turnaround times.

Critical Labor Shortages

The widening gap in skilled workforce availability is pushing up labor costs and increasing reliance on overtime, stretching operational budgets.



Safety Risks & Compliance Demands

Elevated Accident Risks

With statistics showing high accident rates involving forklifts, prioritizing safety in your operations is more critical than ever to protect your workforce and reduce liability.

Compliance Challenges

Keeping up with safety regulations is not just about avoiding fines—it's about ensuring smooth, uninterrupted operations and safeguarding your reputation.

In-Warehouse Challenges



Operational Inefficiencies & Technological Barriers

Reducing Manual Processes

Reliance on manual operations not only slows you down but also introduces errors that can affect critical decisions and operational visibility.

Integrating Disparate Systems

The lack of seamless data integration across platforms can hinder real-time decision-making and obscure a clear view of your operations.



Balancing Cost, Productivity, and Safety

Elevated Accident Risks

With statistics showing high accident rates involving forklifts, prioritizing safety in your operations is more critical than ever to protect your workforce and reduce liability.

Compliance Challenges

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Inaction: What's at stake?

Ignoring these challenges not only hampers efficiency but also exposes your operations to significant risks.

Increased Operational Costs

Failure to streamline operations can lead to escalated costs due to inefficiencies, repeated tasks, and extended downtimes.

Decreased Productivity

Inefficiencies and outdated practices can drastically reduce productivity, affecting output and delaying delivery times.

Elevated Safety Incidents

Neglecting safety enhancements increases the risk of workplace accidents, leading to potential injuries and higher insurance premiums.

Non-compliance Penalties

Failing to meet industry regulations can result in hefty fines and legal challenges, damaging your reputation and financial standing.

Loss of Competitive Edge

Without adopting modern solutions, your operations may fall behind competitors, resulting in lost market share and diminished customer trust.

Reduced Equipment Lifespan

Lack of proper maintenance and outdated equipment can lead to frequent breakdowns, necessitating costly replacements and repairs.



The desired state: Overcoming Key Pain Points

Save time, save money, save lives...



Safety compliance

enforce best practices
(licensing, training and
certifications, inspections)



Coaching initiatives

provide insights and
scoring where they are
needed most



Minimize unsafe environment

proactively warn and
interject in real-time



Capture incidents

including ownership,
video evidence and
event profiles

Right equipment

ensure its available when
and where it is needed



Optimize maintenance

for supporting operations
needs while minimizing
costs



Right-size equipment and employees

to maximize shift
performance

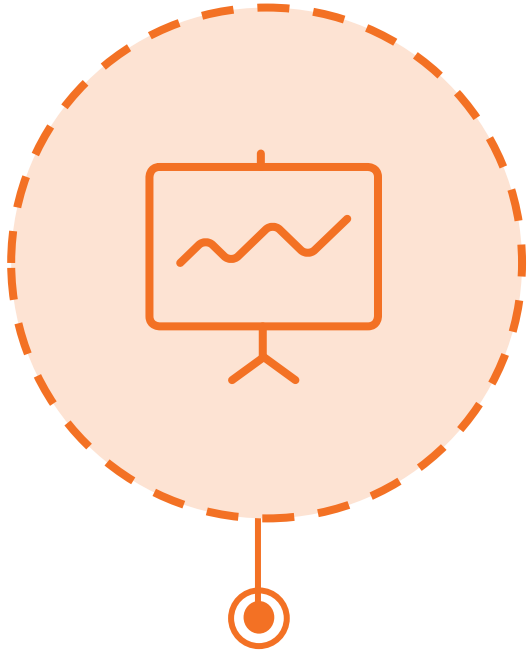


Energy costs

contains costs to
improve sustainability



Discover a **Better Way To...**



IMPROVE
PRODUCTIVITY



CONTROL
COSTS



PROTECT THE SAFETY
OF YOUR PEOPLE

INTRODUCING THE **POWERFLEET DIFFERENCE**

Powerfleet transforms how warehouses operate



Our solutions offer real-time, real-world insights for all powered industrial vehicles, significantly optimizing safety, productivity and maintenance.

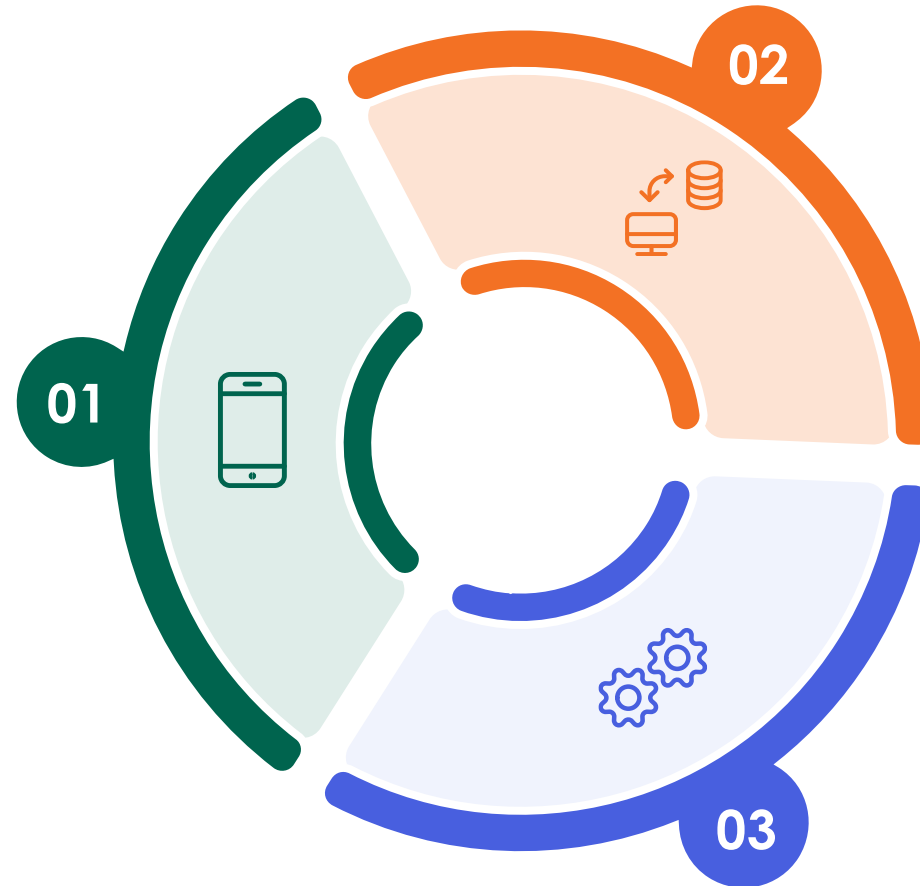
Leveraging advanced AI, we streamline compliance and drive operational excellence.

With our unified platform, organizations of any size can achieve a new standard of efficiency and cost-effectiveness.

Why Powerfleet?

One Stop Shop Across all Mobile Asset Types

Providing mission-critical solutions from warehouse to trailer to vehicle, allowing customers to consolidate suppliers and gain end-to-end visibility



Device Agnosticism

Ingesting data from multiple data sources, harmonizing and transforming the dataset, and delivering simply understood insights through a unified SaaS platform

Unified Operations

Comprehensive ability to improve performance of the asset, the individual in charge of the asset, and the business process

Optimizing All Your In-Warehouse Equipment

A Universal solution for ANY make/model/type of powered industrial vehicle

- Powered Industrial Vehicles:
 - Forklifts, Standups, Counterbalance, Powered Jacks, Walk/Ryder Pallet Jacks, Order Pickers, Tuggers and many more...
- Man-lifts – Boom and Scissor
- Scrubbers and Sweepers
- Yard Tractors



System Overview



POWERFLEET®

Features

- Access Control
- Electronic Safety Checklist
- Impact Management
- Fleet Utilization
- Preventive Maintenance
- Text Messaging
- Battery Monitoring
- Automated Notification
- On Demand & Scheduled Reporting
- Pedestrian Proximity Detection
- Speed management
- Incident reconstruction
- Location assessment
- APIs

Solution Enablers

Forklift Gateway (VAC)



Automated, wireless tracking and management for industrial vehicles and operators, seamlessly integrating into forklifts as a key part of fleet tracking systems.

Pedestrian Proximity Detection



AI edge processing vision system to help drivers avoid objects of interest in the path of travel while minimizing false alarms.

Digital Video Recorder



Rolling DVR that saves clips of interesting VAC events to rapid, accurate investigations.

Speed Manager



Throttle/pedal override to slow vehicles down based on VAC or PPD events.

Telemetry – Forklift Gateway – VAC4

VAC4

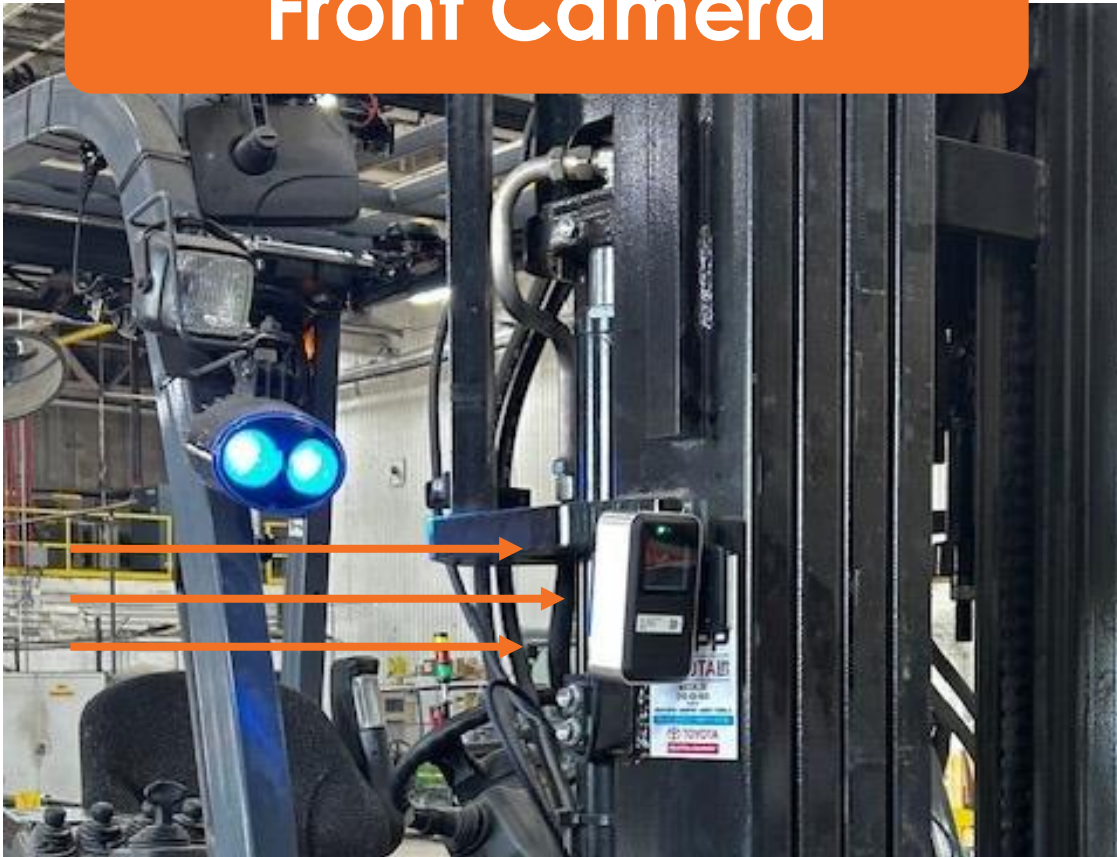


VAC4



Pedestrian Proximity Detection

Front Camera

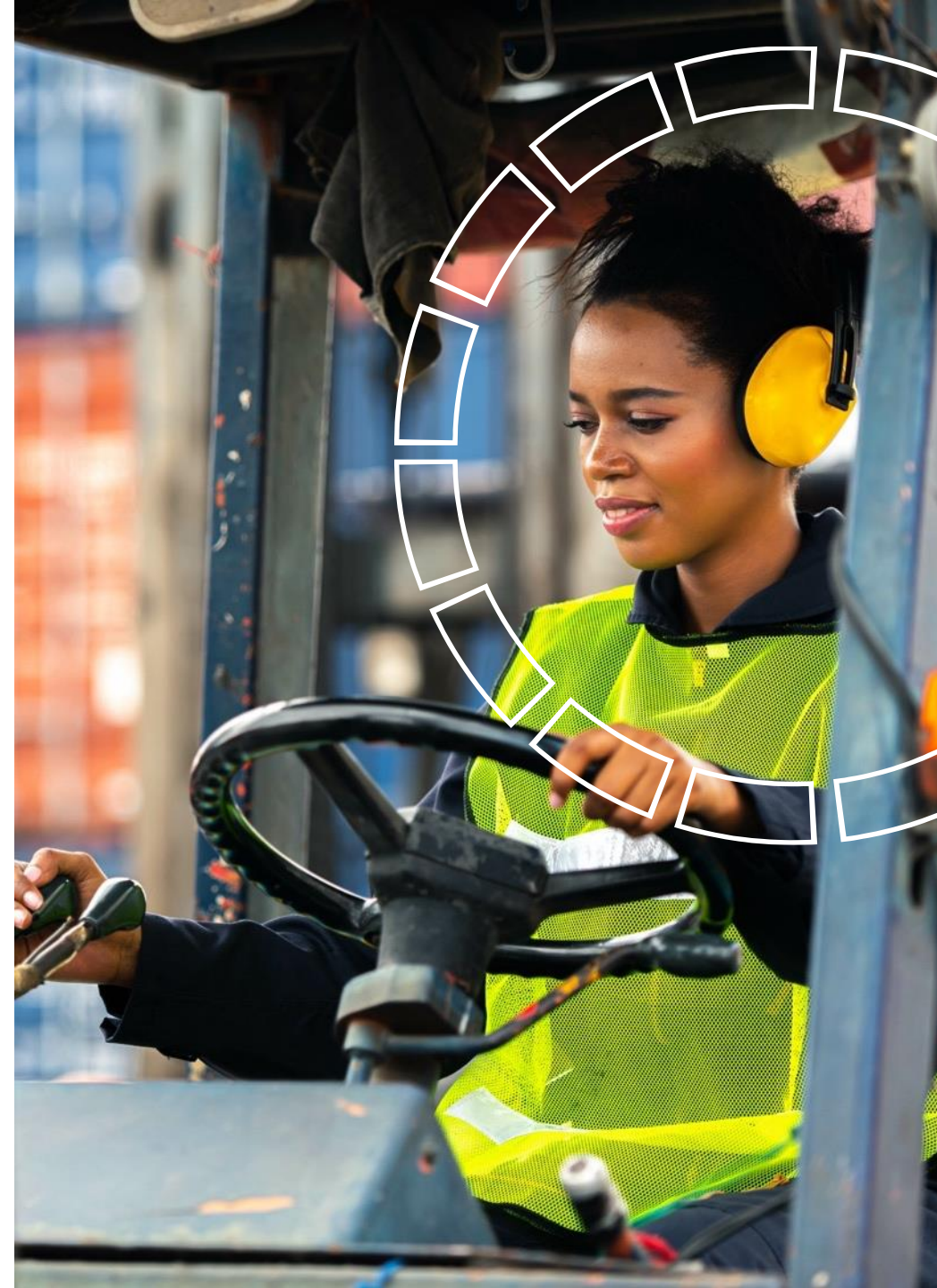


Rear Camera



Vehicle & Operator Access Control

- Only authorized operators can use equipment
- User configurations – which equipment they're allowed to operate and when it's allowed
- Access levels set based on user experience level
- Know who is driving what and when
- Idle timeout by vehicle type
- Automatic operator expirations for license, training certification
- Reduces IC truck PMs/fuel use/emissions
- Superior tamper resistance
- Reader matches existing employee ID



Electronic Safety Inspections

Benefits: Eliminate paper handling, regulatory compliance and improved maintenance.

- Configurable
- Event-based for most effective reactions
- Reports prioritized by severity of problem
- Severe impact triggers supervisor checklist
- Moderate impact triggers driver self-checklist
- Problem identified on main checklist triggers drill-down sub-checklist
- Auto-notifications to maintenance/safety
- Multi-language checklists can be triggered
- Randomized answers (no 'finger-whipping')
- Auto-verification of checklist answers that require vehicle to be motion (e.g. braking)
- Prompt to stop/park vehicle safely before shutdown



Impact Management

Benefits: Halo effect, reduced collisions, risk measurement, and investigation evidence.

- Combination sensor leveraging accelerometers and other chips sets to detect movement and forces
- Machine learning algorithm for automated calibration and continuous set point readjustment to optimize event creation and minimize nuisance alarms
- Incident severity assignment with configurable post-event actions (lockout, emails/SMS, forced inspections, etc.)
- Connected to external alarm for supervisor alert
- Driver coaching [real-time event notification/feedback, leaderboard analysis]
- “Black box” analysis of vehicle performance before, during and after impact



Impact Trigger – Vehicle to Vehicle Impact



Vehicle to vehicle impact – video and audio

- Vehicle hits the parked truck
- The PowerFleet external alarm goes off – Impact trigger is activated on DVR
- The impact is recorded and upload to the cloud.
- Notice the operator says everything is alright and keeps moving. Did not inspect for damage...
- You can download the video as part of a report just like I dropped the MP4 file onto this presentation.

A screenshot of the SENTINEL dashboard. The dashboard shows various metrics and a table of events. The event table has the following data:

Vehicle	Event type	Event time
#0 M-1162	Alarm Impact	2021-05-05 00:04:06
New #15 M-3503	Alarm Impact	2021-05-04 18:36:38
New #13 M-3501	Alarm Impact	2021-04-30 17:12:16
#7 M-2570	Alarm Impact	2021-04-29 17:37:14
New #16 6476	Event	2021-04-28 03:38:02

The dashboard also shows a video player with two camera views side-by-side, showing the impact event. The video player has a play button and a progress bar. Below the video player, there are buttons for "View Details", "Download", and "Share".

DVR

Benefits: Simplified investigations, indisputable proof of conditions and events.

- Looping mobile DVR capturing video in front of and behind the forklift on an SD card
- DVR collects before/after video clips when events (impact, speeding, driver prompt) occur
- Connected to the Forklift Gateway (VAC) to trigger event clip information
- Available driver assist display
- Cloud connection option via Wi-Fi or Cellular to event review and live stream cloud application



Pedestrian Proximity Detection

Benefits: Collision avoidance, increased pedestrian safety, and facility and driver risk assessment.

- Artificial Intelligence vision-based system
- Identified high risk objects (people and vehicles) in the path of travel
- Warns drivers of object incursions
- Connected to the Forklift Gateway (VAC) through a Sensor Hub
- No wearables for infrastructure required!



Improving Risk Profiles



Directed **coaching**



Adjusting **breaks and shift times**

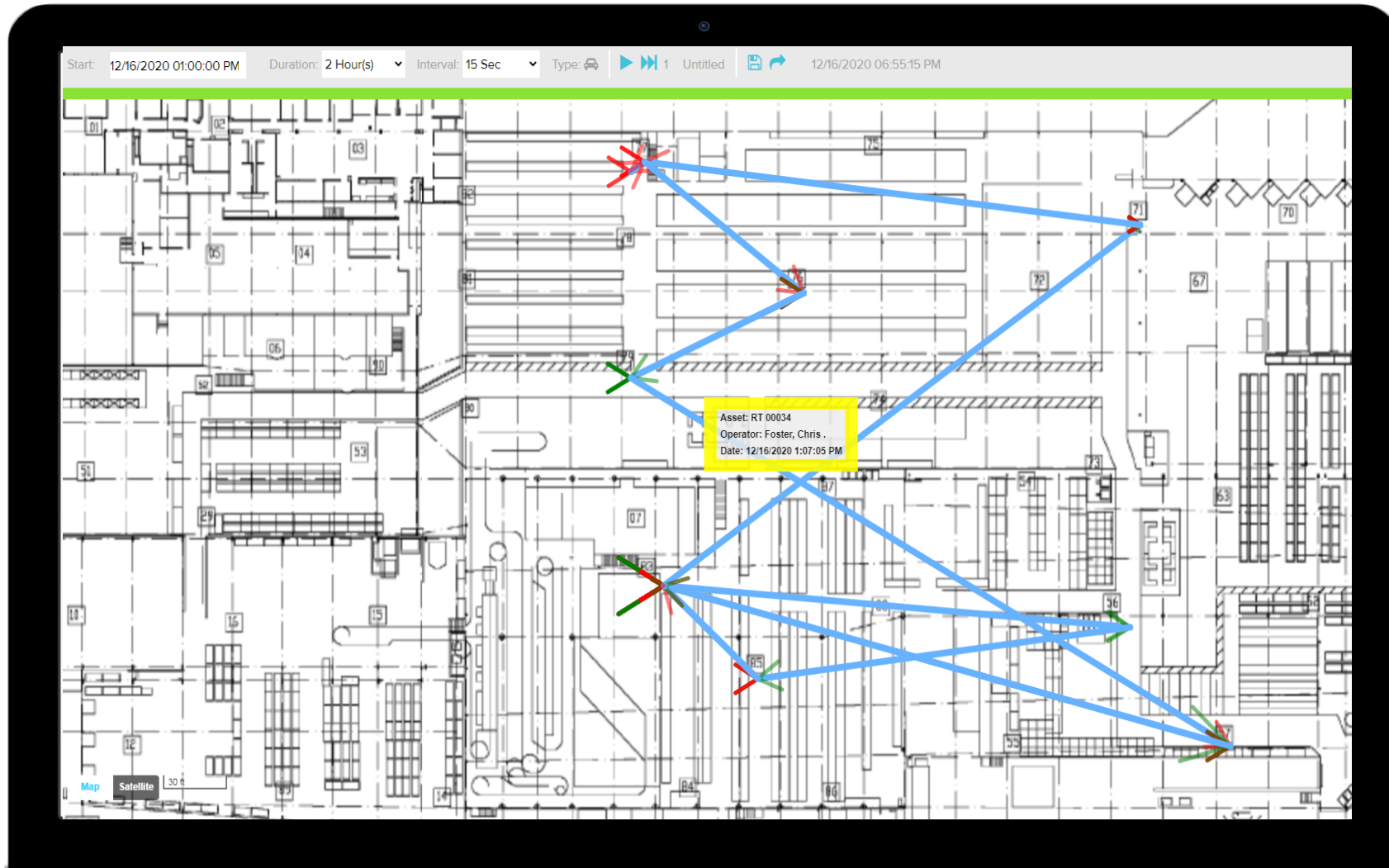


Adding **barriers, signage or walkway paint** where more impactful



Powerfleet Enterprise: Visibility (WiFi and/or GPS)

View play back to understand what work areas a vehicle/operator traveled during a selected time period



Customer Experience By Stakeholder



DRIVER

- Log in to VAC
- Complete inspection
- Perform work tasks
- Respond to events and alerts
- Log out



FLEET MANAGER

- Receive alerts
- Inspect and unlock vehicles and drivers
- Find vehicle
- Implement performance upgrades based on reports and dashboards



OPERATIONS

- Influence business change with data driven insights from reports and dashboards

