AETHER DIGITALIZATION SUCCESS PLAYBOOK!

Introduction

Welcome to the AETHER Digitalization Success Playbook!

This playbook gives fleet owners a clear, step-by-step approach to digitalizing their fleet operations — moving from manual processes and inaccurate reporting to accurate, real-time data and verified insights.

At AETHER, digitalization is built around three core objectives — stopping fuel pilferage, eliminating data misrepresentation, and optimizing asset performance. By following this playbook, fleet owners can reduce losses, improve accountability, and make better operational decisions based on accurate data.

LIFE CYCLE OF FUEL

Purchasing Fuel from Major Suppliers

Diesel is bulk-purchased from major fuel suppliers (e.g., 20,000 liters per delivery) and loaded into tankers for delivery to the project site.

01

Delivery to Project Site

02

Underground petrol bunks

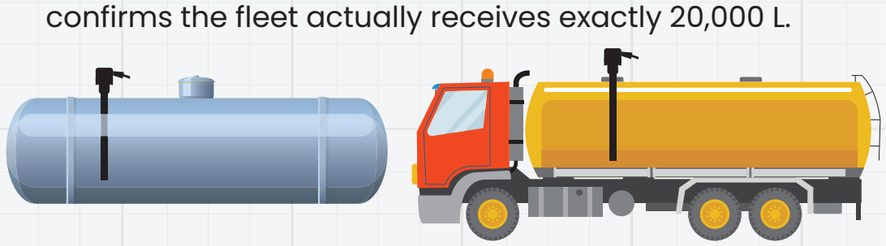
Mobile refuelers

The tanker reaches the construction site. Fuel is offloaded into underground petrol bunks or mobile refuelers.

03

Verification of Received Quantity

IoT and LLS (fuel level sensor) verify every fuel delivery. For example, if IOCL invoices 20,000 L, the AETHER portal confirms the fleet actually receives exactly 20,000 L.



04

Distribution of Fuel to On-Site Vehicles

Fuel is then assigned to different on-site assets — excavators, dumpers, DG sets, etc. Site teams share fuel distribution data, which is cross-verified with the AETHER portal to ensure accuracy.

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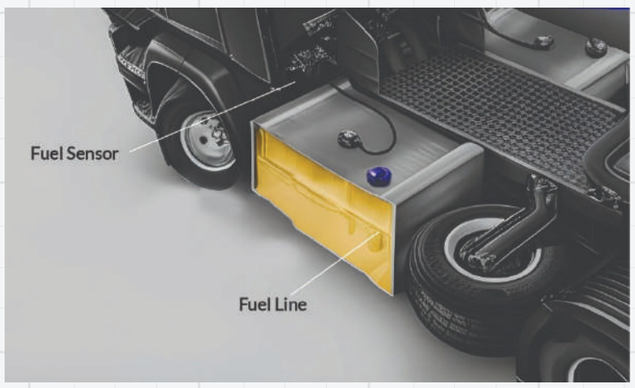


06

Fuel in assets- consumed or theft?

Once fuel is in the asset tank, two paths emerge:

Genuine Consumption

Fuel is used efficiently in operations.

Fuel Theft/Drainage

Fuel is intentionally drained or diverted, often disguised as normal consumption

07

Digital Logsheet

Site staff or operators may attempt to manipulate logs — inflating kilometers, engine hours, or fuel consumption. AETHER's digital logsheet, powered by GPS data, engine data, and fuel monitoring, provides tamper-proof records that instantly flag any discrepancies.

Digital logs expose mismatches

OUR OBJECTIVES

STOP FUEL PILFERAGE

We implement fleet and fuel monitoring systems (IoT and LLS) to detect and report fuel draining and refueling mismatch, so your team can apply debits and take action.

DATA MISREPRESENTATION

We identify and report incorrect or manipulated data by detecting mismatches in fuel, asset operations, and reported data, ensuring engine hours, kilometers, and fuel data are accurately recorded and verified.

OPTIMIZE ASSET PERFORMANCE

Once fuel pilferage and data misrepresentation are controlled, we use accurate data to identify actual asset requirements, helping reduce extra assets, lower unnecessary fuel consumption, and improve overall fleet efficiency.

01 100% Digitalization - All Assets Are Tagged

What Digitalization Means

At AETHER, digitalization goes beyond just installing IoT and LLS devices and collecting data. It is about using accurate and verified data to control operations, prevent losses, and improve asset utilization. It integrates digital systems into daily workflows, enabling teams to take action, enforce accountability, and achieve measurable improvements across operations.

Objective

Ensure IoT and LLS are installed on every asset and integrated with the AETHER fleet management system, providing real-time data for all assets.

Challenges

- **Resistance to Technology:** Vendors and operators resist digitalization due to concerns about complexity or impact on their existing workflows.
- **Asset Damage Concerns:** There are concerns that installation of IoT and LLS can result in malfunctions or damage to vehicle systems.
- **Privacy & Security Concerns:** There are concerns about sensitive operational data being exposed to cyber threats or unauthorized access.
- **Compatibility with older systems:** New systems may not easily integrate with older or existing fleet management systems.

How to Implement

- Install IoT and LLS on All Assets: Install IoT and LLS on every asset to enable real-time tracking and fuel monitoring.
- Integrate with AETHER: Integrate all IoT and LLS devices with the AETHER fleet management system to view asset data and monitor operations through a centralized dashboard.

Results:

Fleet owners achieve complete visibility of all assets, reducing the risk of theft or misplacement. With accurate real-time data, they can monitor operations more effectively, improve planning and make better decisions — improving overall operational efficiency.

02 Digital Health - All Operational Assets Are Reporting

Objective

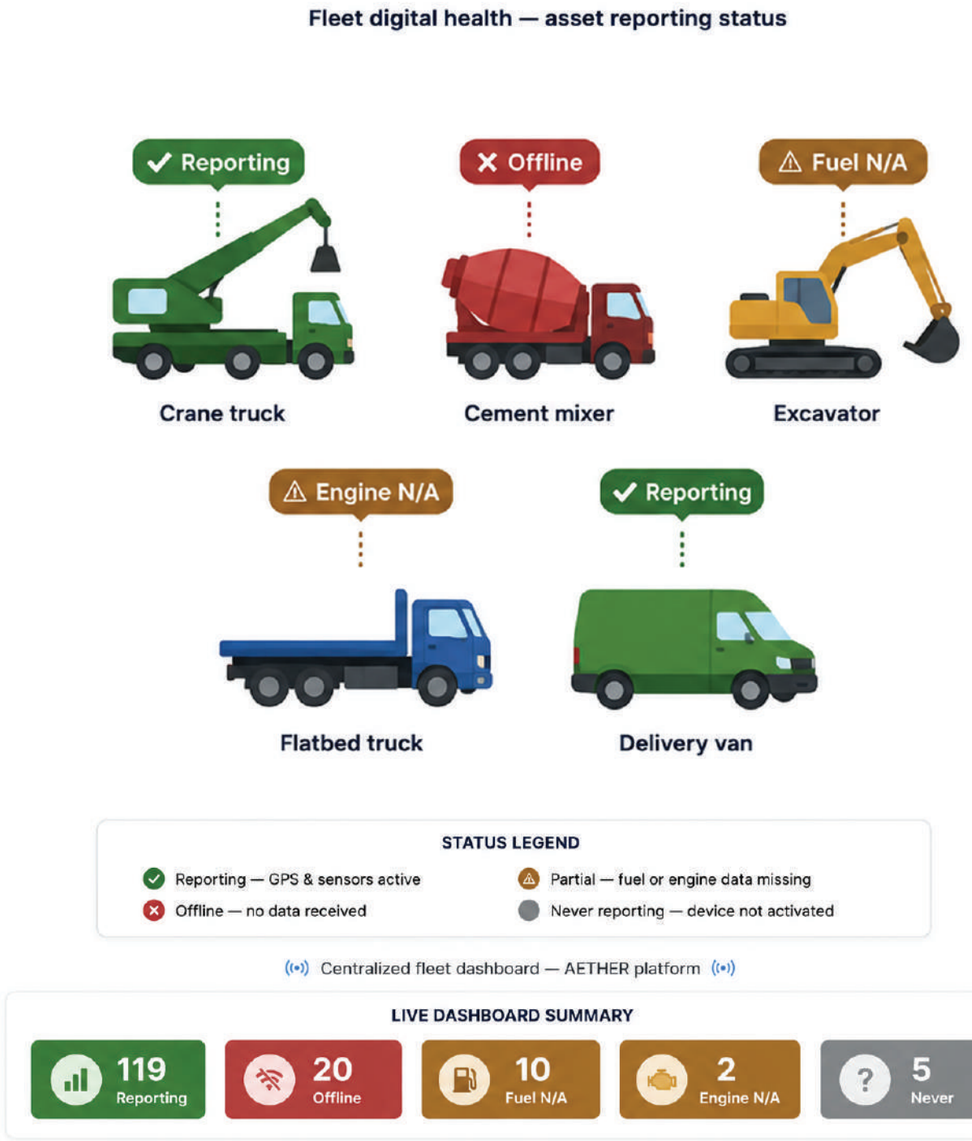
Ensure all deployed operational assets actively report data to the AETHER portal, enabling real-time monitoring of performance, usage, and potential issues.

Challenges

- **Hardware Tampering:** Operators tamper with hardware or bypass the system to hide data mismatches, especially when penalties are applied for not following defined processes.
- **Wire Cutting or Shorting:** In some cases, wires are cut or incorrectly reconnected to disable the device or create a false malfunction.
- **Post-Service Tampering:** After AETHER engineers resolve tampering issues, some operators disconnect or tamper with device connections and falsely claim the asset stopped working after service, misleading P&M or HQ and undermining trust in the system.

How to Achieve:

- **Continuous Monitoring and On-Ground Resolution:** The AETHER BI team continuously monitors asset data reporting and device status. If any asset stops reporting or shows irregular data, the team coordinates with the site P&M team or Admin team and deploys an AETHER field engineer to fix wiring or device-related issues and ensure proper system functioning.
- **Tamper Detection Alerts:** AETHER's system automatically detects tampering events such as device disconnection or wiring manipulation and generates alerts by an email for immediate action.



Results:

These practices ensure all assets consistently report data, improving visibility and control. Tampering and misreporting are quickly identified, increasing uptime. It also enables faster response to genuine issues while filtering out false claims.

03 Draining Reported (AETHER)

Objective

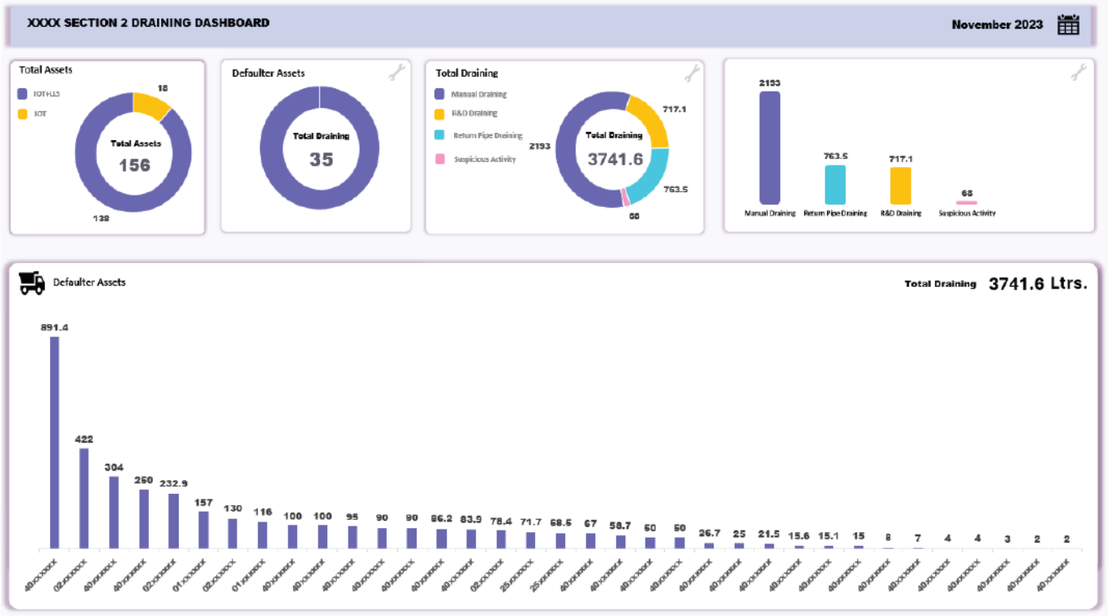
Detect and report unauthorized fuel draining through the AETHER portal, with real-time monitoring by the AETHER BI team and verification through reconciliation with manual logs (logsheet) or your company's ERP data.

Challenges

Lack of Action from Fleet Owners: Even with reports and timely alerts, their effectiveness is reduced when fleet owners do not take timely action.

Event Validation Challenges: Some draining events require validation to confirm actual unauthorized fuel draining.

Delayed Actions: Slow response to fuel draining reports results in continued unauthorized fuel draining and higher financial losses.



How to Resolve

- Continuous Monitoring and Manual Verification: The AETHER BI team continuously monitors fuel data and manually verifies draining events by comparing AETHER-generated data with site log sheets, ERP data, and other relevant data sources to confirm actual unauthorized fuel draining.
- Discrepancy Identification and Reporting: Fuel data mismatches are identified and reported to fleet owners, enabling timely action to control unauthorized fuel draining.

Results:

Fleet owners receive verified, accurate reports of unauthorized fuel draining, enabling them to take timely action, reduce ongoing losses, and maintain better control over fuel usage.

04 Draining Debited (Customer)

Objective

Ensure that all verified unauthorized fuel draining cases are clearly communicated and debited by the fleet owner to establish accountability.

Challenges

- **Data Acceptance Issues:** Fleet owners may question or challenge the reported data, leading to delays or rejection of debit actions.

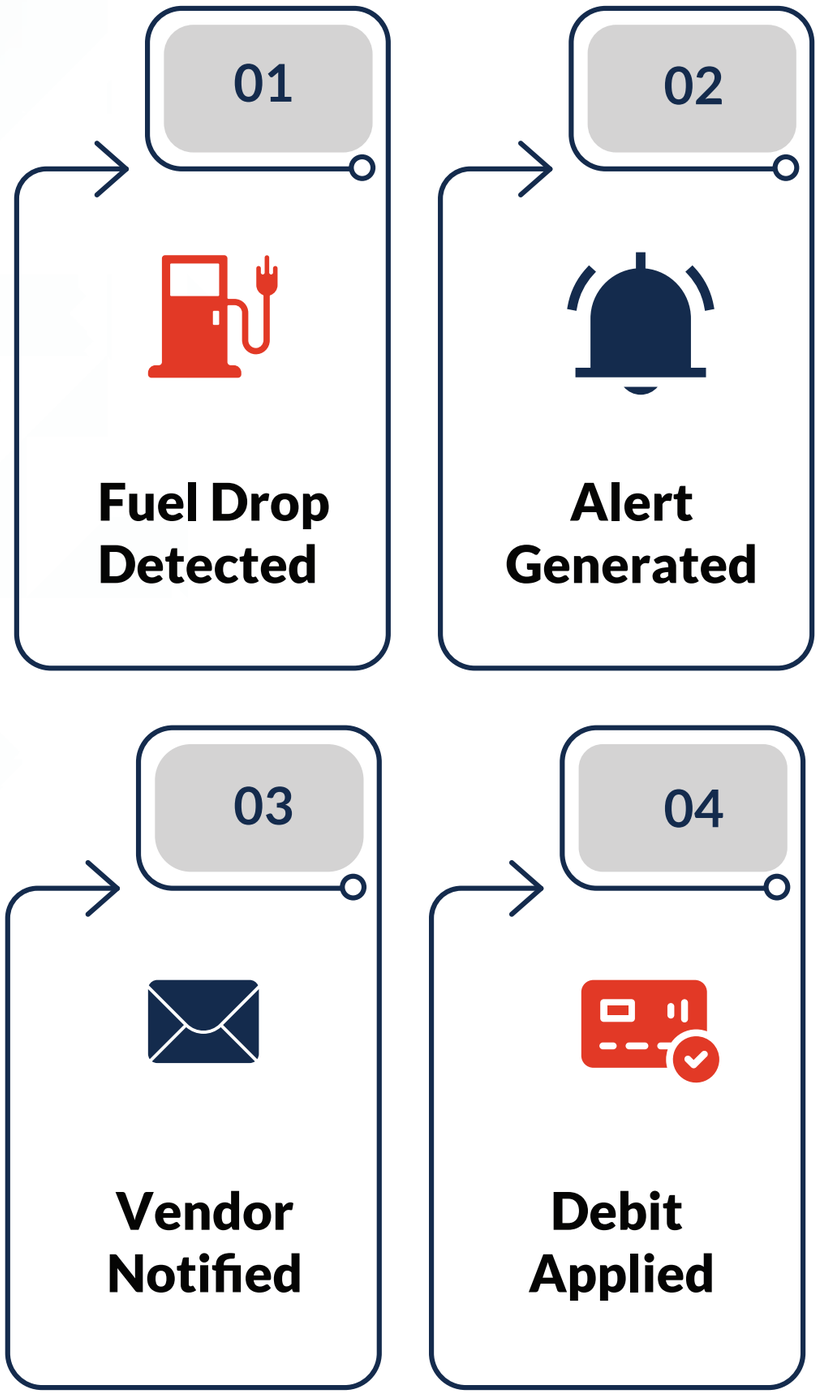
How to Implement

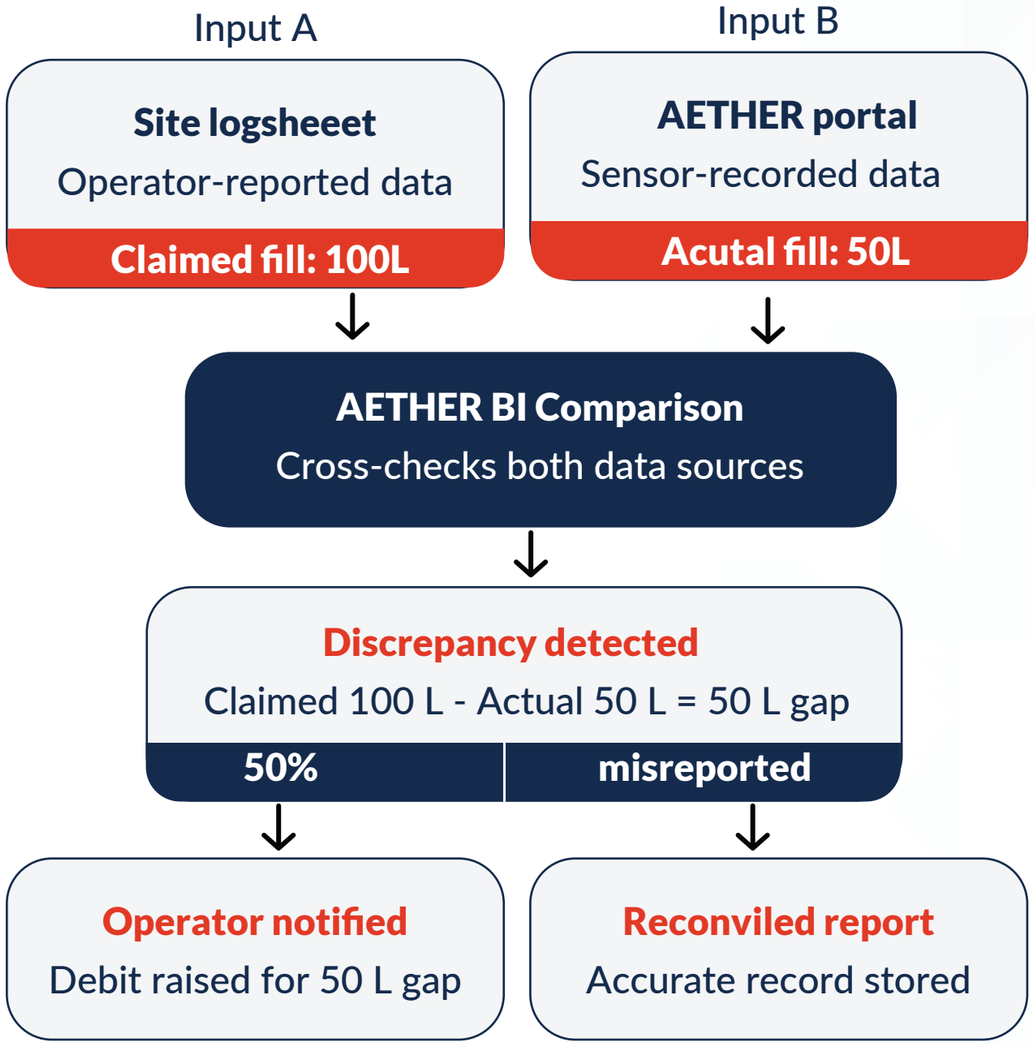
- **Actionable Debit Process**: Verified draining cases are shared with fleet owners along with supporting data, enabling them to raise debit notes against vendors/operators.

Results:

Establishes a systematic debit actions for verified cases, enhancing operational accountability and enabling tighter control over fuel-related losses.

Fuel Drop Alert Process





05

Refueling Reconciled (AETHER)

Objective

Reconcile fuel usage across all assets by comparing AETHER data with site records, ensuring transparency and accurate fuel consumption reporting.

Challenges

- **Internal Manipulation & Employee Collusion:** In some cases, fuel data may be intentionally misrepresented by the company's own staff, including manipulation of fuel entries or coordination with fuel stations, leading to discrepancies between actual refueling and reported data.
- **Refueling Data Manipulation & RFID Bypass:** Operators may record higher fuel quantities than actually refuelled (for example, fill 50L, claim 100L) and divert the rest. In both RFID and manual systems, refueling data can be misrepresented through incorrect entries, inaccurate readings, or bypass of standard procedures.

Our proposal

- **Refueling Reconciliation:** The AETHER BI team compares fuel logs provided by the site team with AETHER portal records to identify discrepancies and detect misrepresentation in reported refueling quantities.
- **Pattern Detection and Action Enablement:** The AETHER portal identifies irregular refueling patterns and enables the fleet owner or internal teams to take corrective action through defined processes and controls.

Results:

Fleet owners achieve accurate visibility into actual refueling quantities across all assets. Discrepancies and misrepresentation are identified, enabling timely action, better control over fuel-related losses, and optimized fuel usage.

06

Penalization Plan (Customer)

Objective

Establish a structured penalization system to address unauthorized activities such as fuel draining and device tampering, ensuring accountability and escalating action for repeated violations.

Challenges

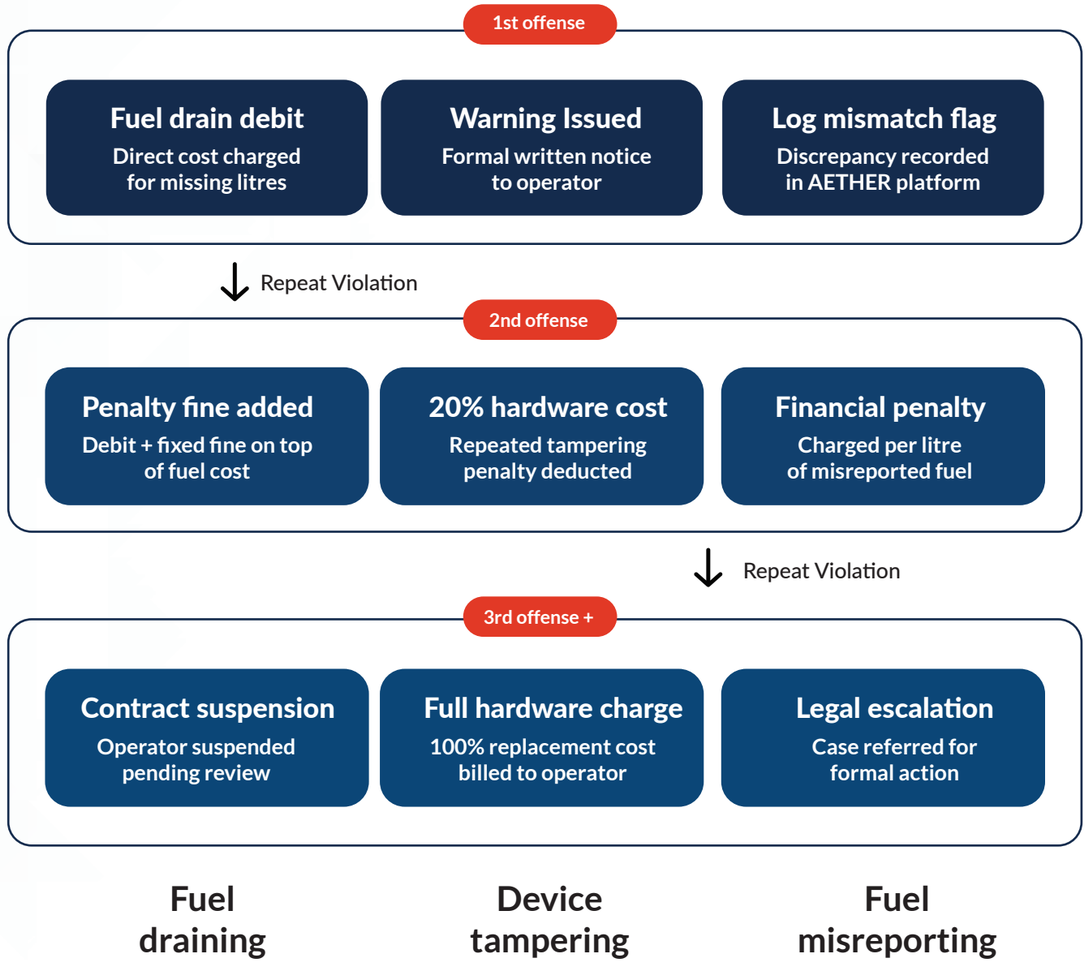
- **Discrediting Data:** Operators or vendors may question the authenticity of reported data, leading to disputes over penalty actions.
- **Blaming Device Failure:** In some cases, operators claim that hardware damage was accidental or caused by operational conditions rather than intentional tampering.

Customer-Led Resolution Approach:

- **Implement Debit for Fuel Draining:** Apply fuel cost debits on detection of unauthorized fuel draining, ensuring operators are held accountable for fuel discrepancies.
- **Introduce Penalties for Tampering:** After fuel debit enforcement, some operators begin tampering with devices to avoid detection. Enforce clear penalties for hardware tampering or disconnection — whether reported or caught via system alerts.
- **Act on Tampering Before Service Request is Attended**: Penalize tampering from the moment an alert is generated and manually verified, rather than waiting for the service request to be closed. This prevents continued unauthorized fuel draining during the waiting period.
- **Penalize Refueling Misrepresentation:** Once tampering is restricted, operators may resort to refueling misrepresentation — claiming more fuel than actually filled. Enforce penalties for mismatched refueling logs (e.g., manual logs vs. AETHER portal data) or detected RFID bypassing.
- **Monitor All Violations via AETHER Portal:** Track all violations — Track all violations — including tampering, fuel draining, and refueling mismatches — through the AETHER portal and enforce structured penalties accordingly.

Penalty escalation - repeated violations

Each repeat offense triggers stricter enforcement



Results:

Fleet owners achieve improved fleet performance and greater compliance with operational standards. Clear consequences for violations reduce repeat incidents and minimize operational risks.

07

Digital Logsheet - Kms, Hrs, Ltrs

Objective

Digitize and centralize all vehicle usage logs — capturing distance (Kms), engine hours (Hrs), refueling data, and fuel consumption — to enable accurate reconciliation, informed maintenance planning, and efficient asset utilization.

Challenge

- **Missing or Delayed Logs:** Missing or delayed manual logs can interrupt reconciliation and affect the accuracy of reported data.

How to Resolve

- **Collect Manual Log Sheets:** Collect manual log sheets from the site, including daily Hour Meter Reading (HMR) / Kilometer Reading (KMR), working hours, and refueling data.
- **Extract AETHER Data:** Retrieve corresponding kilometers, engine hours, and refueling data from the AETHER portal for the same asset and date.
- **Compare & Reconcile:** Compare site log sheet data with AETHER portal data and identify any mismatches for investigation - such as missing entries or significant variances.
- **Finalize Digital Logsheet:** Once manual and AETHER portal data align, finalize and record the verified data as the official digital logsheet.

Results:

Fleet owners achieve accurate and reliable data on asset operations, including kilometers, engine hours, and fuel consumption. This enables better reconciliation, improved maintenance planning, and more efficient asset utilization

08

Asset Utilization Optimization - Use of Innovative Alerts, Reports, & Communications

Objective

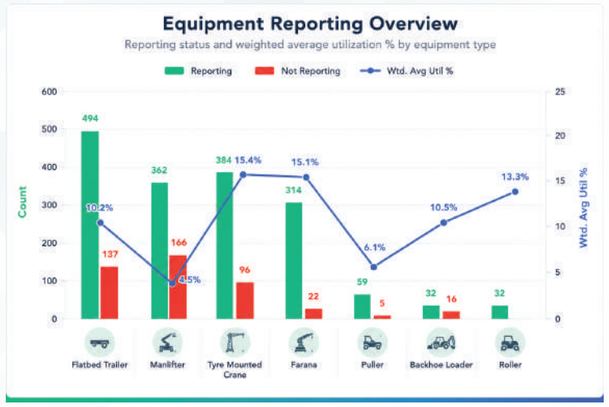
Maximize asset utilization by using alerts, reports, and dashboards to monitor asset deployment and enable timely operational decisions.

Challenges

- **Underutilization or Overutilization:** Without accurate data, assets may remain idle or be overworked, leading to inefficiency, breakdown and increased costs.
- **Lack of Operational Benchmarks: W**ithout defined norms, it is difficult to identify when an asset is performing below or above expected levels.

How to Implement

- **Use Dashboards:** Monitor asset location, usage, and performance through the AETHER portal to make data-driven decisions on allocation and maintenance.
- **Define Operational Norms Based on Historical Data:** Analyze historical data to establish fuel consumption benchmarks for each asset — such as expected daily usage, fuel efficiency benchmarks, and standard operating hours.
- **Set Utilization Alerts:** Configure alerts for underutilized and overutilized assets to ensure timely action and optimal asset utilization.

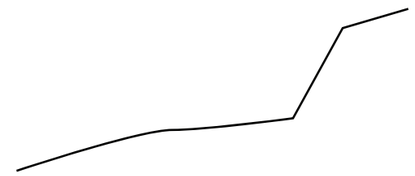


LLS failure

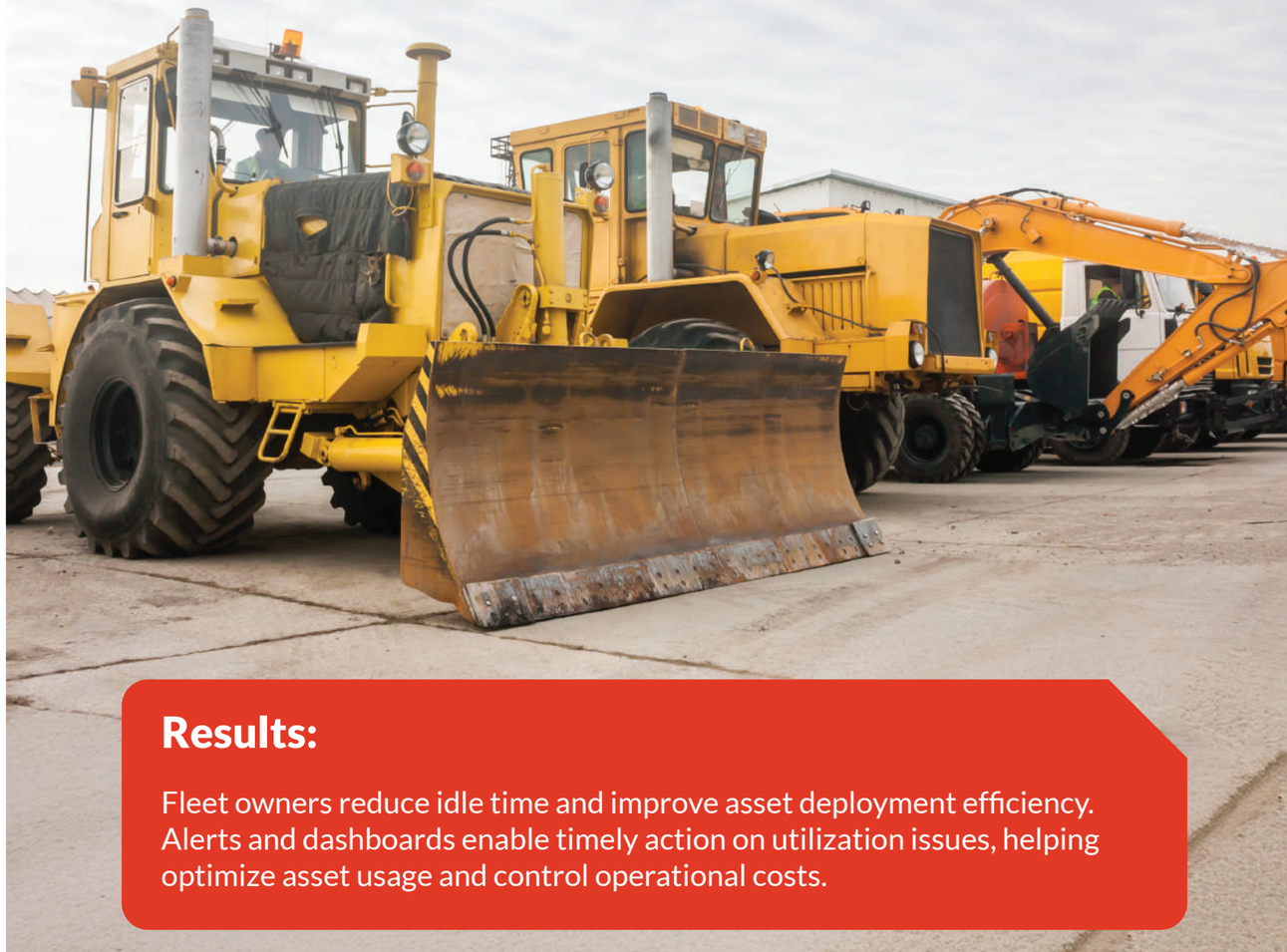
Draining alerts

Refueling alerts

Asset Utlization



Equipment used	Avg. Utilization
191/235	+25%



Results:

Fleet owners reduce idle time and improve asset deployment efficiency. Alerts and dashboards enable timely action on utilization issues, helping optimize asset usage and control operational costs.

CONCLUSION

By following this playbook, fleet owners can build a fully digitalized fleet operation — where fuel losses are controlled, data is accurate, and assets are used efficiently.

AETHER provides the tools, monitoring, and support needed at every step — from tagging assets and detecting draining to reconciling fuel and enforcing accountability.

The result is a fleet operation that is controlled, transparent, and built on verified data.

Ready to Elevate Your Enterprise Operations?

Contact us today to schedule a personalized demonstration and discover how our platform can revolutionize your enterprise operations.

Contact us

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