

EVIDEN

Driving Efficiency: Navigating the Future with Connected Fleet Services



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Understanding Your Challenges

Fleet owners and operators encounter daily challenges in managing their fleet while striving to meet their business objectives. With traditional and decentralized systems, managing a large fleet volume can lead to costly inefficiencies. This means to fleet owners and operators, it is all about finding a balance for:



Cost Control:
Manage fuel, maintenance, and insurance expenses.



Driver Management:
Oversee and support drivers, monitor performance.



Communication and Knowledge Sharing:
Reduce service timelines for vehicle breakdowns, provide accurate info about schedules or deliveries.



Fleet Utilization Optimization:
Maximize efficient use of all fleet vehicles, including under- and over-utilized ones.



Compliance and Regulations:
Adhere to vehicle safety, emissions, driver hours-of-service regulations, and laws.



Vehicle Tracking:
Continuously monitor vehicle locations in real-time for compliance and optimization.



Driver and vehicle safety:
Prioritizing the well-being of drivers and the safe operation of vehicles.



Data security and privacy:
To safeguard vehicles and personal data against potentials cyber threats.



Environmental concern:
Reducing carbon emissions, implementing eco-friendly practices.

From a Connected Vehicle to a Connected Fleet

Eviden offers cutting-edge solutions and a comprehensive suite of services and technologies for the connected vehicle ecosystem. Our Connected vehicles offering is aligned with the current megatrends covering the four segments Connected Vehicles, Autonomous Driving, Shared Usage, and Electrification of the drivetrain.

It covers the complete value-chain from device through connectivity, data and application platforms, 3rd party integration, Analytics, value added services, and E2E service Mgt.

Efficient fleet management is critical for businesses that rely on a connected fleet of vehicles. Connected fleets depends on the connectivity and data transmission capability of connected vehicles for effective fleet management and operation.

Eviden offers its services in this space to facilitate fleet owners, managers, and fleet service providers with real-time visibility into their operations. This enables them to optimize routes, reduce fuel consumption, improve driver safety, and enhance overall fleet efficiency.

Strong Track Record



Eviden is managing over 15 million connected vehicles in more than 52 countries. We ensure a fast and compliant service deployment to address the needs of connected fleet.



Eviden key expertise & capabilities:

- Digital Platforms (NextGen Platforms & Data Management)
- Artificial Intelligence & Automation
- Cloud & Edge Management
- Secure Operations of Critical Systems
- Continuous Service Development & Deployment
- Connected Fleet Business Ecosystem Know-how

Eviden at Connected Vehicle

15TB of Telco Data per Month

10,000 Software Updates per day

50 million Transactions per day

Services Offered:



Consultancy Services



Connectivity



Connected Fleet Platform Services



Service Integration with Partners



Analytics Platform Services



Payments & Billing



Value-Add Services

Eviden at Connected Fleet & Platform Services

Our connected Fleet Solutions and Services

Eviden is a provider of Connected Fleet services with about two decades of experience and is adapting all current megatrends in the automotive industry.

Connected fleet platform and Fleet Management services: to design and develop a customized Connected Fleet /Telematics platform with open application programming providing an interface for external systems enabling salient fleet management use-cases e.g.:

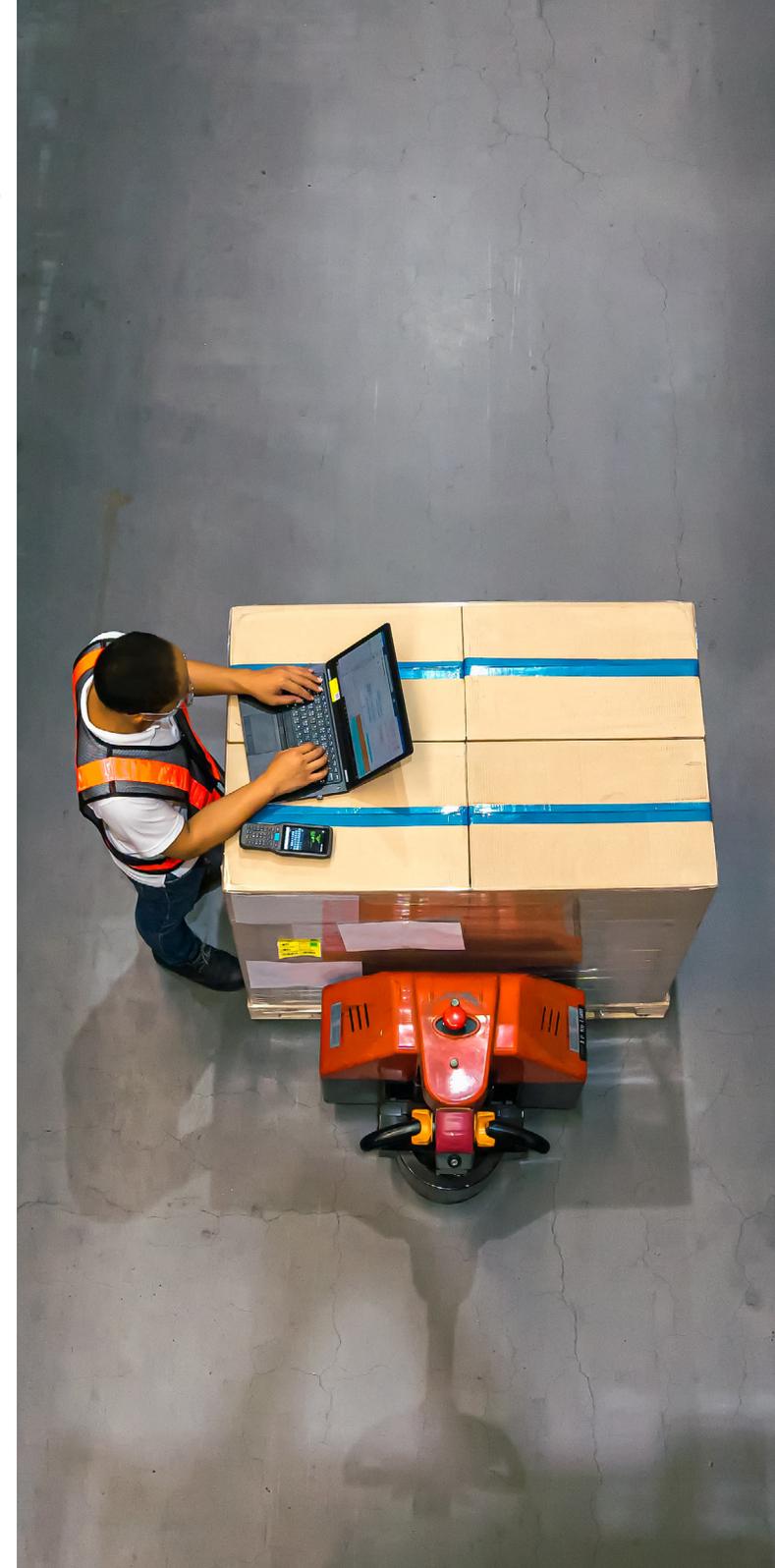
Live Fleet Visibility – to provide fleet operators real-time access to the location and status of every vehicle in the fleet on the map to have better visibility and control of critical fleet resources, increasing productivity by:

- Monitoring how drivers, operate vehicles
- Predicting vehicle arrival time with respect to specified destinations
- Raising alerts and notification through screen pop-ups, SMS, and e-mail on violations like speeding, harsh breaking, off-hour operations, zone or region violations, emergency (e-call)/ breakdown (b-Call), driver identification failure temperature thresholds, Stolen Vehicle Tracking (SVT), Overload detection etc
- Tracking drivers driving hours and rest hours related infringement
- Monitoring engine idling and performance of other major vehicle systems

Fleet Safety and Security – Improves driver and vehicles safety and reduces the Risk of Liability by managing excessive speeding by driver, tracking maintenance requirements, raising violation alarms for route deviation or un-scheduled usage/stoppage and establishing two-way communication between driver and fleet manager

Fleet Maintenance – increase vehicle availability by monitoring vehicle maintenance schedule and identifying potential issues before they become significant problems to avoid costly measures in the future by

- Raising predictive maintenance alerts based on real-time events & fault data to stakeholders, including Dealers and workshop for reducing unplanned vehicle downtime.
- Maintain history of maintenance activities, to analyse costs and monitor trends in wear, neglect, and exploitation of vehicle.



Fleet/Driver performance Monitoring – using Fleet Dashboards and reports to steer critical fleet and driver performance indicators such as

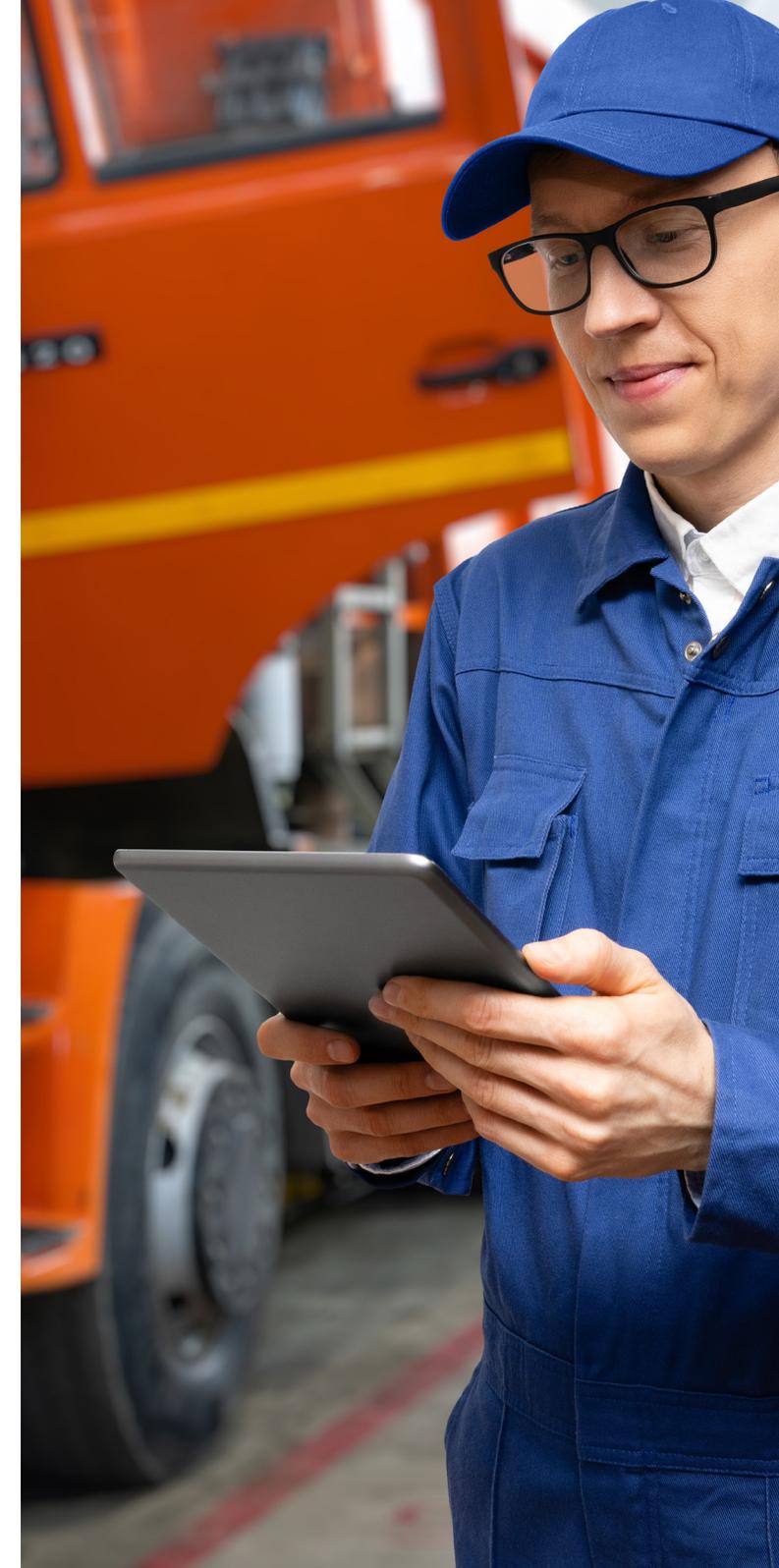
- Fleet key performance indicators (KPI) Monitoring
- Summary and trends of driver's eco scoring for past periods
- Driver scorecard based on fuel consumption and driving behaviour and to identify best/worst drivers
- Number of events occurred such as over-speeding, harsh braking
- Vehicles not plying on designated routes
- CO2 emissions monitoring
- Fuel Benchmarking and deviation
- Comparison of KPI with corresponding vehicle group averages and industry benchmark
- Vehicle / Fleet Utilization Report

Multi-tier Communication – to improve information and knowledge sharing by efficiently communicating with drivers, informing customers ahead of time when a driver is going to be delayed, alerting customers when a driver has reached an important site, or delivery location.

Legislative Compliance and Regulations- for adhering to vehicle safety, emissions, and driver hours-of-service regulations and laws. Fulfilment of legal requirements of data archiving/ management in accordance with regulations for Commercial Fleet and Driving Personnel, in addition to tracking of infringements.

Device Management – management of device lifecycle (i.e. device provisioning, automated activation/deactivation, commissioning). Provisioning field devices on the fleet backend platform after validating device parameters and security certificates. Decommissioning of devices based on parameters like subscription opt-out or others.

The above use cases can cater to the needs of different Industries e.g. Automotive, Transport, Logistic and Insurance Industry etc..





AUTOMOTIVE

Legislative Compliance

- Legal Fleet Data Management
- Infringements Tracking

Driver Management

- E-Call and B-Call
- Driver Communication
- Driver Scorecard

Vehicle Management

- M2M Gateway
- OTA AVL
- Pol Trip Geofence Subscription and Billing
- Fuel Management
- Vehicle Status Alerts
- Predictive Maintenance
- Tire Pressure Management



TRANSPORT

Fleet Management

- M2M Gateway
- OTA Backoffice Subscription & Billing
- Automatic Vehicle Locator (AVL)
- Pol Trip Geofence
- E-Call and B-Call
- Scheduling & Dispatch
- Route Schedule & Trip Management
- Driver Scorecard
- Communication & Notification (incl. Deviations)

Passenger Information

- ETA Calculation
- On-board & Off-board ETA Transmission Display



LOGISTICS

Fleet Management

- M2M Gateway
- OTA Backoffice Subscription & Billing
- Automatic Vehicle Locator (AVL)
- Pol Trip Geofence
- E-Call and B-Call
- Vehicle Dispatch
- Driver Scorecard
- Communication & Notification (incl. Deviations)
- Fuel Management
- Vehicle Status Alerts
- Remote Data Download
- Tire Pressure Management
- Consignment Tracking



INSURANCE

Usage-Based Insurance

- Driver Scorecard
- Pay As You Drive
 - Where
 - When
 - How

How we stand apart

Our accelerators enable the rapid development of customized connected fleet solutions and services, allowing for a faster time-to-market when launching new connected fleet services. These accelerators are built upon Eviden baseline solution that can be efficiently adapted for new customers.

Connected Fleet Reference Architecture:

A Modular, scalable, flexible microservices-based reference architecture designed to build robust platform and applications that fully leverage the capabilities and benefits of cloud computing that helps to collect data from vehicle Onboard Communication Unit (OCU), store and process device data securely throughout the platform at scale with capabilities to handle the amount of data generated from millions of devices in various geographies. It provides a framework to build upon a variety of use cases such as fleet management services, voice interaction, navigation and other location-based services, remote vehicle diagnostics and health monitoring, predictive analytics and required maintenance alerts, vehicle safety and security services, and mobile applications.

Machine to Machine(M2M) Gateway:

M2M gateway acts as a bridge between various machines or devices, and a backend platform. It enables communication, data exchange, and interoperability among different devices and applications. The gateway collects data from sensors or devices, processes it, and transmits it to the cloud/backend platform or other devices. It also facilitates the management and control of devices connected to the network, providing a centralized interface for monitoring, configuring, and troubleshooting.

Virtual Device Platform:

Enables performance of scalability and functional testing of IoT platforms. By creating virtual replicas of connected vehicles or vehicle components in hundreds/thousands/millions of numbers, the platform provides our customers the ability to perform load testing of the existing cloud infrastructure to be able to deploy new digital connected fleet features/capabilities in production without any unforeseen hiccups.

Engage with us

M4 Connected Vehicles is Eviden's proprietary methodology for optimizing connected fleets, addressing the challenge of aligning fleet programs with specific business goals. To tackle this, we employ an agile approach with clear objectives: identifying impactful IoT use cases, creating a connected fleet platform strategy, and implementing agile plans.

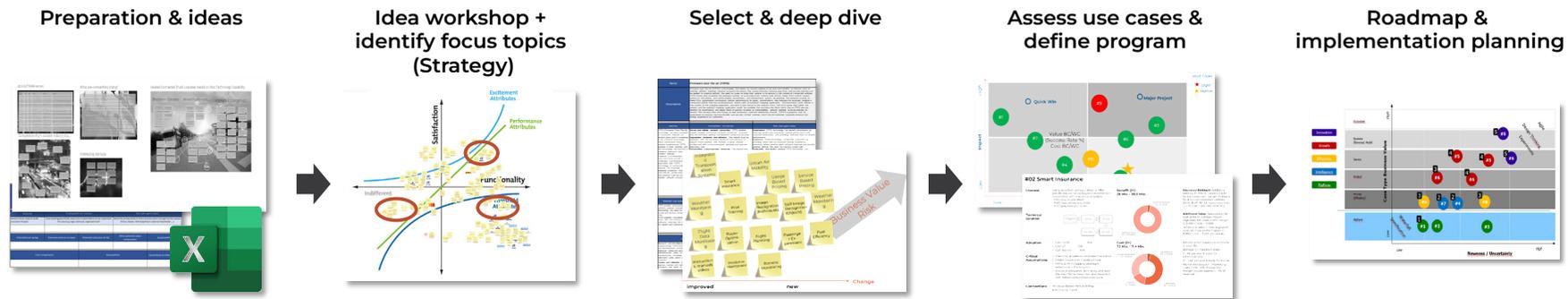
 Governance	 Autonomous	 Location & Routing	 Financial Innovations
 Connectivity & Payment	 Assistance & Support	 Trailer/Equipment Integration	 Security
 Vehicle Health/ Diagnostics	 Fleet Management	 Emergency Handling	 Service & Maintenance.
	 Data Monetization & Ecosystem	 Basic Platform Functionalities	

Grounded in Eviden's library of 120+ connected fleet use cases across 14 functional areas, our approach involves assessing use cases collaboratively during workshops, prioritizing based on business impact and effort, and calculating the overall investment case. Once viable use cases are identified, we create a focused roadmap and plan.

Typical engagements span two phases, with the second deepening technical details and stakeholder benefits, ensuring a strategic project progression. This proprietary methodology is efficient and risk-aware, enabling the design of a resilient connected fleet program.

Methodology approach for Connected Vehicle

Value Driven Roadmapping based on an extensive use case catalogue



> 100 ideated & prepared connected truck use cases from

- our references in connected vehicle and other industries
- analyst reports
- emerging technologies
- competitor analysis
- ecosystem analysis
- startup analysis

Presentation & discussion of connected truck use cases

- use case maturity
- kano –model
- connected truck competitive positioning to define & prioritize topic clusters & focus areas for further evaluation e.g.
- tolling & in-truck payment
- data monetization
- driver coaching & monitoring
- servitization
- 3rd party ecosystem

Down-select 20-25 use cases & evaluation

- Impact & Value
- Feasibility & Cost
- Connection to / synergies with other cases
- Riskiest assumptions (technical/customer value) for business case

Assess impact vs. effort

- major projects
- quick win
- fill-in
- time waster
- Define program & calculate business plan

Prioritization & timing of use cases according to:

- product strategy
- business case
- timeline
- resource availability

Define next step per use case (evaluate, design, POC/POV, MVP)

Derive governance model and measures to drive agile implementation

Why Eviden

A key player in Connected fleet and vehicles:

Business Outcome generated in the Connected Vehicle environment

Illustrating the future of vehicle-experience and -operation



Capability Enablement for: Dutch Truck OEM
Improved transparency on sustainability and optimized fleet operations

- Connected Truck Platform for Data Analytics and Monetization (161k trucks)
- Ecosystem created to allow Partners of the Truck OEM to join the platform



Increased Profitability for: Global Truck OEM in NA
Empowering drivers and fleet owners to minimize maintenance costs.

- Reduced unplanned vehicle downtime by 30 percent Integrate failure analytics data information to provide insights to engineering department and suppliers to strengthen vehicle component quality. (260k+ trucks connected)
- Integrate failure analytics data information to provide insights to engg. department and suppliers to strengthen vehicle component quality.



New Revenue Streams for: German automotive parts manufacturing company
Enabling new revenue streams for connected onboard devices on Commercial Vehicles

- 29k Fleet Customers, 280k Commercial vehicles
- Data monetization through export / import of tachograph data
- Legal Requirements fulfilment and adherence

Enabling enhanced Capabilities, creating Competitive Advantage and Sustainability-Transparency



Competitive Positioning for: German Automotive OEM
Secure, over-the-air software updates for a leading car manufacturer

- Updates help consumers keep their vehicles up-to-date, increases customer centricity and improve overall vehicle desirability.
- Reduction in warranty and time to market for new feature introduction



Increased Customer Loyalty for: Global Car Manufacturer
Increasing customer loyalty by adding new services

- Developed Connected Vehicle convergent platform and increased the production capacity to launch new services
- Deployed a new device management platform to support customer EV launch strategy .
- Enriched in-vehicle user experience
- IoT platform aligned to sustainable mobility goals

Connect with us



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