

otonomo

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REASONS
WHY & HOW
TO FUTURE-PROOF
FLEET DATA

and how to utilize
embedded data for
fleet optimization

OTONOMO.IO

WHY SHIFT AWAY FROM OBDS AND OTHER AFTERMARKET DEVICES?



REASON WHY #1

EVERY VEHICLE IS A DATA WAREHOUSE ON WHEELS



For years, fleets have relied upon aftermarket telematics to gather and transmit data from vehicles. Proprietary hardware was used to export the data. These black boxes and OBDII plug-in devices are still used today.

The question is why? Vehicles are now producing a wider variety of data from multiple vehicular sensors, components, and systems, and they can utilize high-speed data communication frameworks to transmit the data.

Furthermore, with the increased influx of connected ICE and electric vehicles, fleets have an opportunity to get rich, harmonized data directly from their vehicles.

REASON WHY #2

MULTIPLE OEM DATA FROM CONNECTED VEHICLES

While factory installed telematics systems reduce logistics and operational costs, utilizing the wealth of data that is generated by vehicles through a direct integration with an OEM platform has a new set of challenges, such as laborious integrations, multiple data dictionaries, and complex regulatory compliance.

A select few connected vehicle data platforms can deliver multiple OEM data that meets privacy regulations and is ready to be used by any third-party TSP or VAS.



90% of cars will be connected by 2021

- Counterpoint

58% of new cars sold will be electric in US, Europe, and China

- Strategy&

30% of fleets will be electric by 2040

- Electric Vehicle Outlook 2020, BNEF

10% of fleet vehicles are replaced annually

- Transportation Energy Data Bank





BENEFITS FROM EMBEDDED DATA

REASON WHY #3

GAIN A COMPETITIVE EDGE

The incorporation of embedded data takes a forward-thinking data vision and quickly delivers business value.

Digital Transformation

- Immediate access to data
- Fast time to value

Business Efficiency

- Freedom to integrate with Best of Breed
- No installation, no logistics, no maintenance

Scalability & Simplicity

- Number and type of attributes
- Onboarding and defleeting
- Secure and governed access to data

BENEFITS FROM EMBEDDED DATA

REASON WHY #4

EMPOWER COLLABORATION & FLEXIBILITY



Evolve & Expand

With connected vehicle data, it is easy to evolve and expand the data attributes used and the amount and frequency of data consumption.

Collaboration

Direct access to rich, normalized connected vehicle data empowers the flexibility to connect and integrate various telematics systems and best of breed VAS offerings. Furthermore, the migration between tools is painless, and so is the sharing of the vehicle data within different business groups of the organization, partners and customers is made seamless.

Reduce Complexity

Embedded data enables your organization to shed layers of IT, logistics and operational complexity. This results in quicker time to value from the data. The no touch on-boarding and defleeting process of embedded telematics is an important benefit in the challenging times of COVID-19.

Build New Services

Access to diverse and rich vehicle data can enable innovative new services.

Direct access to embedded data gives you the freedom to create personalized driver and passenger experiences. Embedded data also gives you the tools to optimize fleet operations.

The increased transparency and ease of data access further enables the digital transformation of fleet operations.

REASON WHY #5

FASTER TIME TO CONNECTIVITY

Connected vehicle data is fast becoming a best practice in fleet management due to its proven benefits, which include easy access and seamless integration to multiple OEM data, and quick return on investment.

Multiple OEMs doesn't have to mean multiple negotiations or multiple integrations.

More fleets are turning to OEMs to tap into the potential of embedded vehicle data in order to take advantage of the rich datasets generated by the increasing number of vehicle sensors. Not all fleets have the corporate structure to manage multiple negotiations, the technical capabilities to facilitate multiple integrations, or to build consent management and data privacy systems needed. With embedded data they don't need to.

Synchronization of Data Attributes and Definitions

Another challenge when gathering data from multiple OEMs is the cleansing, harmonization, and enriching of data when there is no standard for vehicle attributes or their naming. A vehicle data platform delivers the vehicle data aligned to one data dictionary and ready to use within any fleet management system.

Quick Onboarding and Defleeting of Vehicles

Onboarding and defleeting of vehicles is efficiently managed by software. This translates to no installation or maintenance of devices or vehicle downtime. Additionally, as the data is taken directly from the vehicle, the fleet owner can start gathering data from the point of purchase or rental, tracking it before the vehicle reaches their lot. The data infrastructure can easily scale to handle an increase in the number of cars, number of attributes, and number of daily data points.



UTILIZING EMBEDDED DATA

HELP YOUR FLEET CUSTOMERS MOVE ALONG THEIR DATA JOURNEY

The following pages highlight how embedded vehicle data can help them make better and more informed decisions.

UTILIZING EMBEDDED DATA

DATA HELPS FLEETS DO THINGS RIGHT

BUY RIGHT

Use data on vehicle performance to determine optimal fleet age. This information will help maintain a more predictable purchasing budget.

REPAIR RIGHT

Use data and analytics to implement a predict-and-prevent model for maintenance management instead of working on a break-and-fix methodology. Vehicle data can identify repairs that are no longer economically relevant.

REPLACE RIGHT

Leverage data insights to implement effective replacement cycles fitting budget goals and corporate strategies.

DRIVE RIGHT

Use driver behavioral data to perform safety-focused driver training and to control costs.



THE SECRET SAUCE

Tips 'n' Tricks for Data Utilization

Data can be used for an endless array of initiatives ranging from safety, productivity, fuel consumption, scheduling, uptime, maintenance cost, depreciation, operating expenses, compliance, driver retention and more. That variety brings opportunity and value but can also lead to confusion if the data program is not focused on key business goals.

To ensure focus, clearly define business goals to which specific data attributes can be aligned and have an impact.

- Pick a definitive starting point. Historical data can be helpful, but it also distracts from utilizing new data. Pick a date, define goals and start executing.
- Focus on what moves the needle, define metrics for success, then choose the relevant data to achieve those objectives.
- Cost-related data should be top of mind.
- If it can't be measured, it can't be improved.
- Prevent dashboard blindness. Start with a limited set of reports and alerts so as not to overwhelm with data.
- Target data collection to get the right data to the right people at the right time.
- Consolidate data dashboards for multiple users to prevent duplicate activity.

UTILIZING EMBEDDED DATA

HOW #1

USING VEHICLE DATA TO IMPROVE DRIVERS' SAFETY

Vehicle data has been proven to improve driver behavior, safety, fleet efficiency and customer service.

Sample Attributes:

Vehicle Speed
Tire Pressure
Position Data
Airbag Status

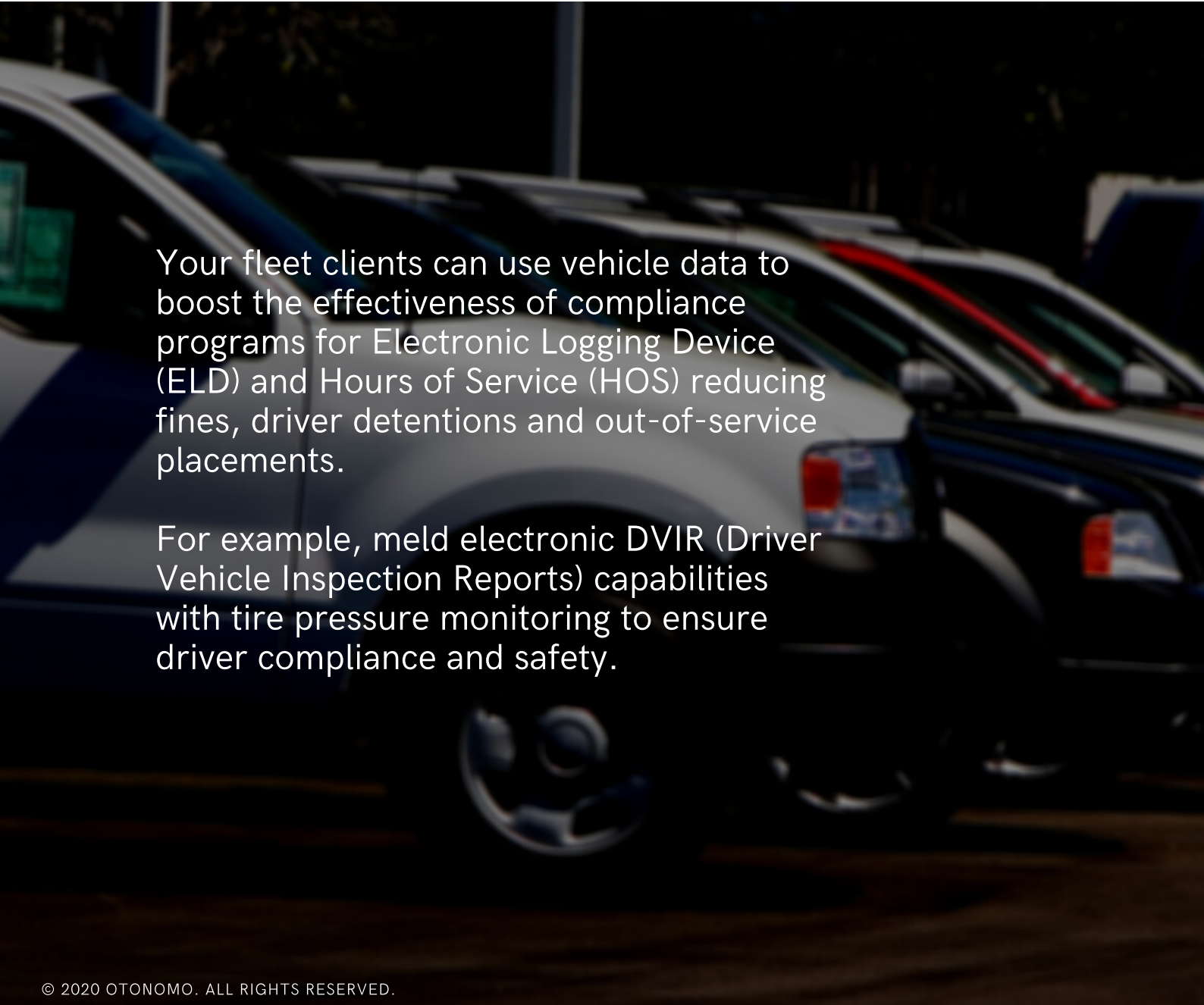
Vehicle data can be used to:

- Proactively identify aggressive driving behaviors that can lead to accidents and trigger driver training
- Improve driving, which can extend the life of brakes and tires, leading to reduced cost savings in safety, maintenance and downtime
- Boost performance: on-time departures and deliveries, service level, route adherence, customer satisfaction and the like
- Optimize routing with geo-fencing customer locations, and tracking of vehicle stops for extended time periods
- Alter driver behavior with MPG scores and provide ROI on data usage

UTILIZING EMBEDDED DATA

HOW #2

VEHICLE DATA HELPS WITH COMPLIANCE



Your fleet clients can use vehicle data to boost the effectiveness of compliance programs for Electronic Logging Device (ELD) and Hours of Service (HOS) reducing fines, driver detentions and out-of-service placements.

For example, meld electronic DVIR (Driver Vehicle Inspection Reports) capabilities with tire pressure monitoring to ensure driver compliance and safety.



WAY HOW #3

MAINTENANCE DATA IS KEY TO LIMITING COSTS & DOWNTIME

Do more with maintenance data.

Sample Attributes:

Next Service Date/ Mileage
Tire Pressure & Status
Warning Notifications
Odometer

Leverage maintenance data to:

- Enable proactive maintenance programs to mitigate engine failures and other preventable issues
- Track preventative maintenance compliance measures then consolidate their related data to reduce maintenance calls and related vehicle downtime
- Create a centralized hub
 - to gather and review alerts to promptly address maintenance issues before they result in roadside events or major repairs
 - to store data on maintenance activity: cost, supplier, and mileage, to prevent repair duplication, and ensure warranty coverage and minimize downtime
 - to accurately schedule preventative maintenance by miles or hours

UTILIZING EMBEDDED DATA

HOW #4

CONTROL FUEL COST WITH VEHICLE DATA

Increase fuel economy by both cost per engine hour and cost per engine mile.

Utilize driver behavior-related data to minimize fuel costs whether its by monitoring gallons burned per mile or managing excessive idling.

Idling, at times, may be necessary for the driver to provide quality customer service, or it could be an indicator of bad driving habits. Limiting idling can not only save on fuel costs it can reduce CO2 emissions.

Aggressive driving , another fuel waster, can be monitored with vehicle data.

Sample Attributes:

- Fuel Level
- Engine On / Off
- Speed
- Position Data
- Odometer
- Warning Notifications
- Tire Pressure & Status
- Trip Information

UTILIZING EMBEDDED DATA

6 WAYS TO IMPACT FUEL SAVINGS



Route Optimization

Saving fuel with pre-planning and shortcuts



Preventative Maintenance

Good maintenance practices cut fuel expenses and increase vehicle life



Minimize Excess Idling

Stop wasting time, fuel, vehicle life span and profits



Speed Limiting

Limit speed to increase fuel economy and vehicle life



Tire Monitoring

Accurate tire pressure can increase fuel economy, tire life and safety



Driver Behavior

Reduce harsh acceleration, speeding and other wasteful driving habits

UTILIZING EMBEDDED DATA

HOW #5 USING VEHICLE DATA TO SPEED UP CAR RECOVERY SERVICES

Why rely upon an add-on telematics device for recovering stolen cars or car repossessions, when you can leverage data directly from the telematics device fitted at the factory?

Today's connected cars generate precise GPS coordinates that are updated as frequently as every few seconds. Insurance companies, leasing and finance companies, and rental car fleets can easily take advantage of new location services enabled by embedded telematics.

Deliver in near real-time clean, and enriched data to assist in the rapid retrieval of stolen cars, missing rental cars or cars marked for repossession. This location data can be instantly provided in human-readable formats.

Leveraging these data sources can make the vehicle tracking process cheaper and easier.

In addition, these data attributes can be a pathway to additional connected car services. For example, fleets that incorporate location services can easily blend with additional data for route optimization, monitoring vehicle health, risk assessments and automated parking payments.

Sample Attributes:

Location

Fuel Level

Engine On / Off

State of Charge

UTILIZING EMBEDDED DATA

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DATA-DRIVEN CHANGE RESULTS IN DATA-PROVEN GROWTH

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It is not the **what**, but the **why** that makes data valuable.

WHAT TYPE OF DATA*

WHY IT MAKES AN IMPACT

Vehicle Data

Overall Mileage
Idle Time
Fuel Consumption
Route Planning
Tire Pressure Monitoring

Enable Compliance
Opportunities for Improvement
Promote Driver Safety
Identify Waste
Optimize Vehicle Maintenance

Financial Data

Operating Costs:
tires, parts, insurance
Vehicle Depreciation
Rental Expenses
Revenue Generation
(if relevant)

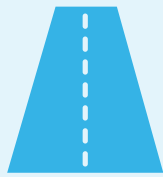
Influence decisions on
expenditures and expected
returns

** THIS IS A PARTIAL SAMPLING OF
DATA ATTRIBUTES AND THEIR IMPACT



IN SUMMARY

**EMBEDDED VEHICLE DATA
WILL FUTURE PROOF
YOUR FLEET
MANAGEMENT SOLUTION**



Monitoring
Mileage



Privacy &
Security



Improve
Safety



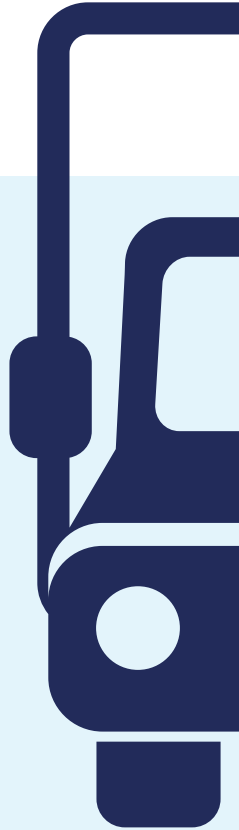
Driver
Compliance



Fuel
Economy



Vehicle
Assessment



As fleets integrate more and more connected, electric and eventually autonomous vehicles, the need for aftermarket telematics devices will diminish.

Now is the time to incorporate embedded vehicle data and to start leveraging the benefits of connected vehicle data.

WHY OTONOMO?

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ONE AGREEMENT
ONE INTEGRATION
ONE DATA DICTIONARY
ONE API
&
MULTIPLE OEM DATA



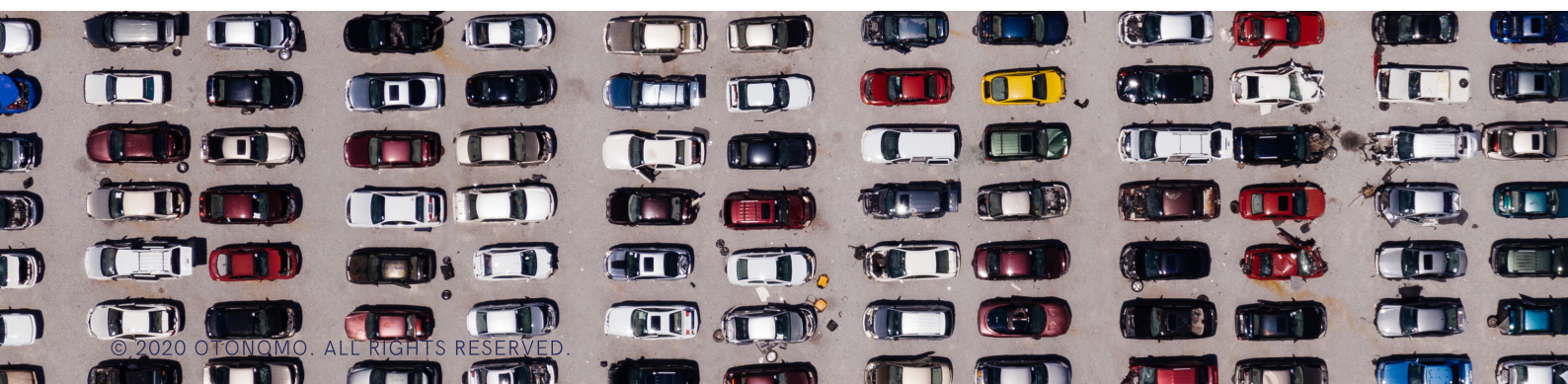
Gear up to improve fleet safety, efficiency and operations with Otonomo's tailored fleet solution.

The Otonomo Vehicle Data Platform expedites fleet connectivity with a quick integration and access to a unified set of attributes across multiple OEM brands. The platform is hardware agnostic. The data can be easily integrated into any Fleet Management System or even multiple FMS, simultaneously. Otonomo data can also be utilized in a mixed environment with data from other sources.

With Otonomo, gain access to value added, bespoke fleet-focused features and advantages to accelerate time to value:

- Unified enrollment of fleet vehicles
- Effortless privacy management and regulatory compliance
- Rich, diverse data sets
- Data consumption statistics
- Simulated vehicle testing
- Speedy access to an ecosystem of value-added services, such as EV services, On-demand fueling, driver safety, parking and more
- Pay per use – no additional cost
- Zero logistics
- Hardware agnostic

Get on the fast track to connected fleet data.
Contact us today, to learn more about our fleet solutions.





Otonomo fuels a data ecosystem of OEMs, fleets and more than 100 service providers. Our platform securely ingests more than 4 billion data points per day from over 22 million global connected vehicles, then reshapes and enriches it, to accelerate time to market for new services that improve the in-and-around the car experience. Privacy by design and neutrality are at the core of our platform, which enables GDPR, CCPA, and other privacy-regulation-compliant solutions using both personal and aggregate data. Use cases include emergency services, mapping, traffic management, EV management, subscription-based services, parking, predictive maintenance, insurance, media, in-vehicle services, and dozens of smart city solutions.



We hope that you have found this guide helpful and look forward to joining you on your fleet data journey.

Please contact us if Otonomo can be of assistance.

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