

DIGITAL DRIVE FINISHED VEHICLE LOGISTICS

Real-time monitoring of finished vehicles – from factory to dealer



LIFE IS FOR SHARING.



STAKEHOLDER FOR DIGITAL DRIVE

OEM



Supplier



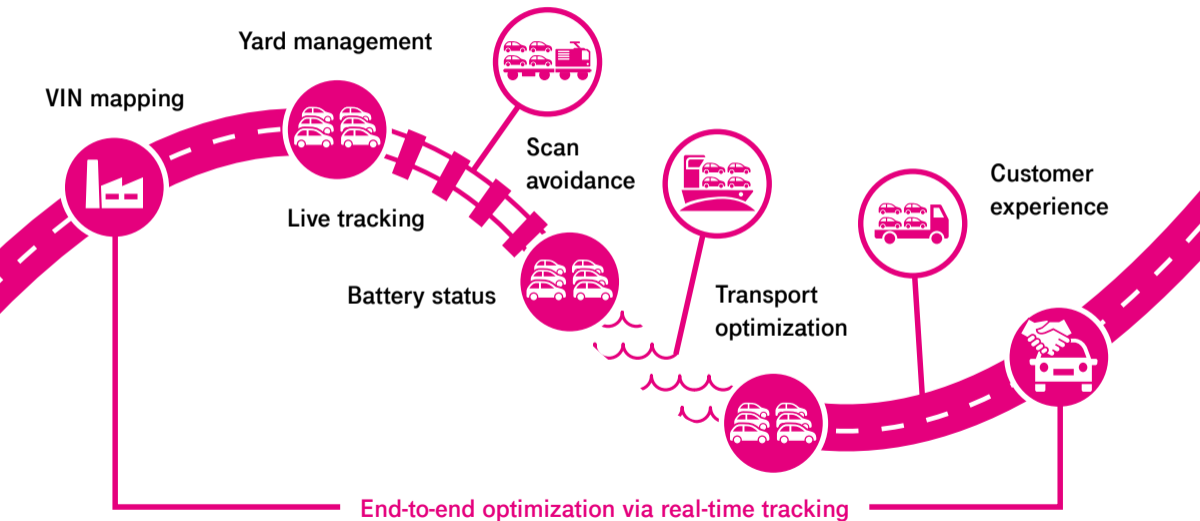
Dealership



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REAL-TIME MONITORING OF FINISHED VEHICLES – FROM FACTORY TO DEALER



FVL PROCESS INNOVATION

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Mit Digital Drive überwachen Sie Ihre Neufahrzeuge auf dem Weg **von der Fabrik bis zum Händler** – automatisiert, effizient, intermodal und in Echtzeit.

Begeistern Sie auch Ihre Endkunden mit Tracking-Informationen in Echtzeit zu ihrem Neufahrzeug und individuellen Zusatzangeboten.

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With Digital Drive you monitor your new vehicles en route **from the factory to the dealer** – in an automated, efficient and inter-modal way, and in real-time.

Delight your end customers too with tracking information for their new vehicle in real-time, and with individual supplementary offers.



OUR AMBITION

Transport, which can take up to 8 weeks, must become faster, more secure and more economical.

PAINS

- Lack of transparency in the delivery chain
- High transport and process costs
- Long delivery times

Vehicles are scanned
up to 40 times

GAINS

- Greater reliability, transparency and efficiency
- Lower costs due to automated information
- Improved customer experience through ETA tracking

Consistent transport optimization and acceleration
based on real-time data

HOW YOU BENEFIT

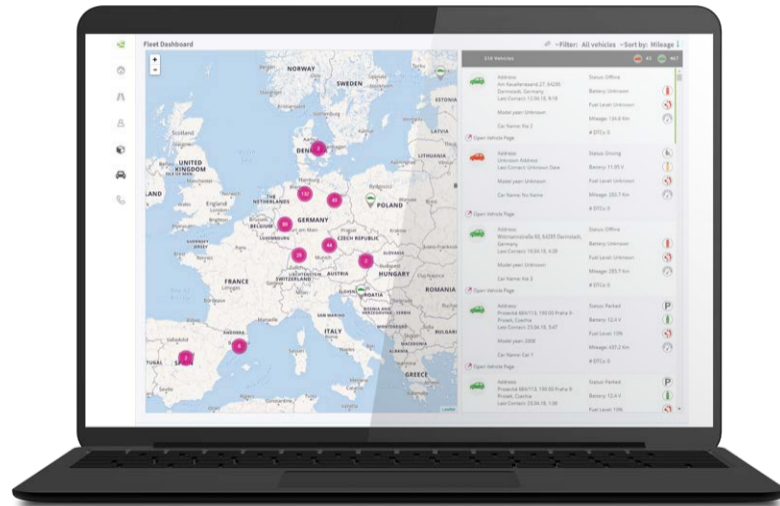
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- Sie überwachen **jedes einzelne Fahrzeug** via VIN in Echtzeit, selbst bei großen Fahrzeugmengen
- Sie steigern die Verlässlichkeit auf dem gesamten Weg
- Sie reduzieren manuelle Scan- und Wartungsprozesse
- Sie optimieren das Transport- und Yard-Management und liefern so Ihre Neufahrzeuge schneller aus
- Sie nutzen die Vorfreude und bieten Ihren Kunden zusätzliche Produkte und Services an

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- You monitor **each individual vehicle** via VIN in real-time, even with large numbers of vehicles
- You enhance reliability across the entire transit route
- You reduce manual scanning and maintenance processes
- You optimize transport and yard management, and therefore deliver your finished vehicles quicker
- You use the anticipation to offer additional products and services to your customers

OBTAIN A DIGITAL TWIN OF VEHICLES IN THE SUPPLY CHAIN



- VIN
- Location
- Trips
- Status
- Battery voltage
- DTCs

FINISHED VEHICLE LOGISTICS WITH DIGITAL DRIVE

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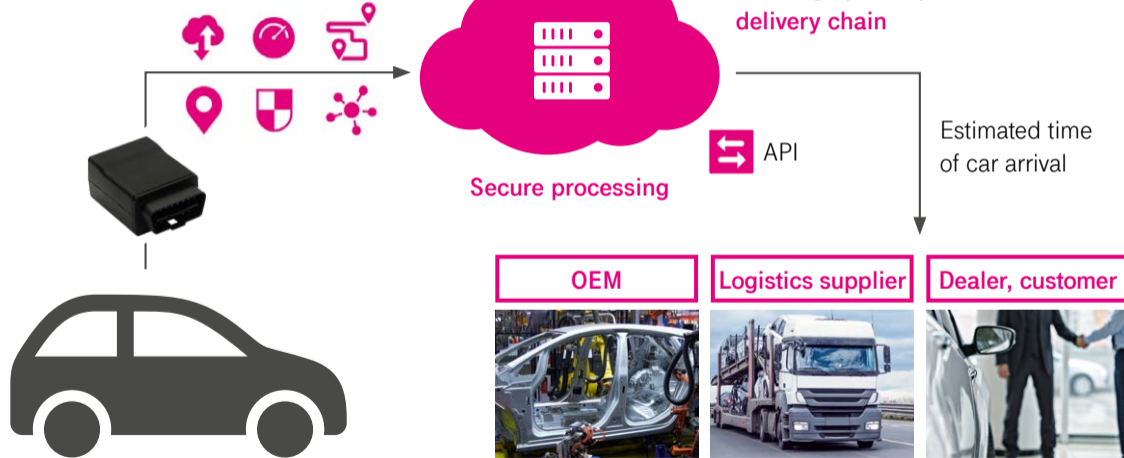
- **Ende-zu-Ende-Telematik-Lösung** für das Echtzeit-Monitoring von Fahrzeugen im Lieferprozess
- **Automatisierte Datenerfassung** und -bereitstellung auf dem Weg von der Fabrik bis zum Händler
- Der digitale Zwilling bildet je Fahrzeug alle Daten ab: VIN, Standort und gefahrene Strecken, Status, Batteriespannung und Diagnostic Trouble Codes

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- **End-to-end telematics solution** for monitoring vehicles in the delivery process in real-time
- **Automated data collection** and provision en route from the factory to the dealer
- The digital twin maps all data for each vehicle: VIN, GPS coordinates and traveled routes, status, battery voltage and Diagnostic Trouble Codes

FROM DATA TO VALUE

Transmission of the vehicle data,
such as GPS coordinates



DIGITALISATION IS KEY

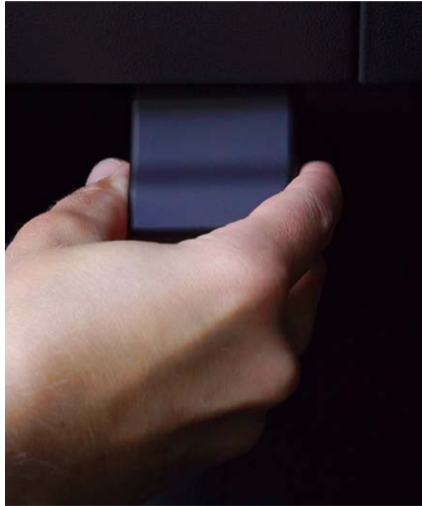
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- **Plug & Play** – den OBD2-Adapter nur einstecken
- Die Hardware ist für die Konnektivität mit SIM-Karte ausgestattet, um die Daten zu übermitteln
- Der Adapter sendet die Daten während des Transports regelmäßig zur sicheren Plattform
- Über Schnittstellen gelangen die jeweils relevanten **Daten in Ihre eigenen Systeme**, z. B. Logistik-Software, ERP, CRM, BI, SAP, Salesforce

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- **Plug & Play** – simply plug in the OBD2 adapter
- The hardware is equipped with a SIM card for connectivity, to facilitate the data transfer
- The adapter transmits the data to the secure platform regularly during transport
- The requisite relevant data is transferred via interfaces **to your systems**, e. g. logistics software, ERP, CRM, BI, SAP, Salesforce

THE OBD2 ADAPTER: PLUG IN AND GO



The OBD2 interface is available as **standard in all cars and light commercial vehicles.**

The adapter is **compact and hardly visible** in the driver's compartment (available with extension cable upon request).

RELIABLE AND EASY-TO-USE HARDWARE

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- Nach dem Einstecken sendet der OBD2-Adapter vollautomatisch und konfigurierbar im **24-Stunden-Intervall** die VIN, Position und Batteriespannung
- **Bei laufendem Motor alle 10 Sekunden:** VIN, Position, Geschwindigkeit, Batteriespannung, DTCs, starke Bremsvorgänge, Fahrtstart und Fahrtende
- **Alarm in Echtzeit** beim Auftreten von Anomalien, z. B. beim Entfernen der Hardware
- **Benachrichtigung bei Betreten und Verlassen definierter räumlicher Bereiche (Geofences)**

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- After plugging in, the OBD2 adapter transmits the VIN, GPS coordinates and battery voltage fully automatically and according to your configuration at **24 hour intervals**
- **With a running engine, every 10 seconds:** VIN, GPS coordinates, speed, battery voltage, DTCs, heavy braking operations, trip start and end
- **Alarm in real-time** if anomalies arise, e. g. if hardware is removed
- **Notification when entering and exiting defined areas (Geofences)**



MORE INDIVIDUALITY

“The automatic mapping between device and car (VIN) is the key to process improvements based on individual cars rather than batches of cars.”



UNIQUE FROM DATA TO COMPLETENESS

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- Der OBD2-Adapter ist direkt **mit dem Fahrzeug verbunden** und übermittelt vollautomatisch
- Auf den Prozess der **Neufahrzeuglogistik optimierte Hardware** mit niedrigem Energieverbrauch im Park- und Transportmodus für die Übertragung wichtigster Daten wie GPS-Position, Batteriestatus
- **Ende-zu-Ende-Lösung** inklusive Hardware, Konnektivität, Plattform, API, Services und **Betrieb in deutschen Rechenzentren**

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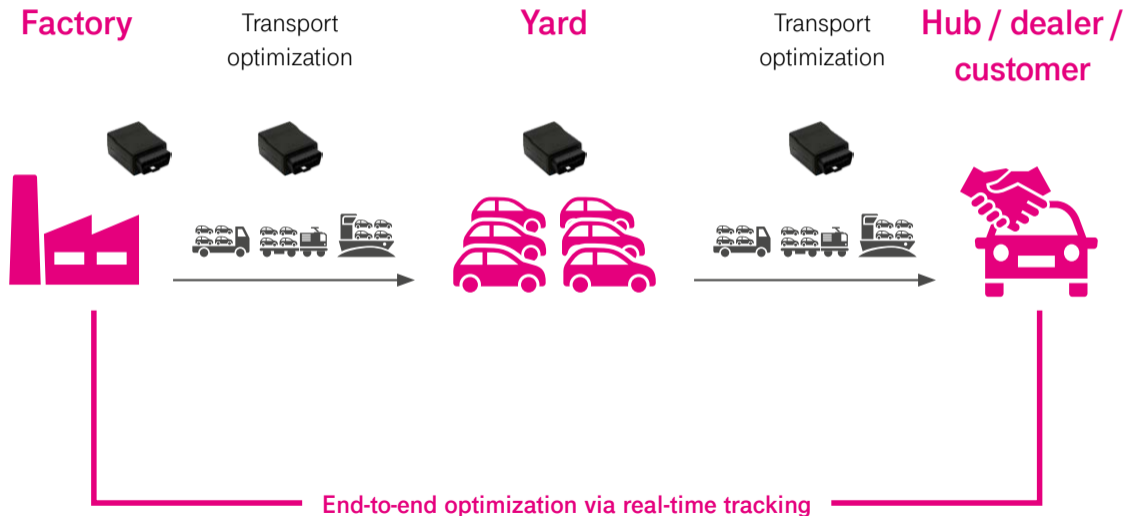
- The OBD2 adapter is **connected directly with the vehicle** and transmits fully automatically
- **Hardware optimized** for the **finished vehicle logistics process** with low energy consumption in parking and transport mode, for transmission of the most important data, such as GPS location, battery status
- **End-to-end solution** including hardware, connectivity, platform, API, services and **operation in German data centers**

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MORE POSSIBILITIES

“Many more relevant data types are available or can be made available i.e. open windows detection, relative position on hub, hybrid battery status...”

INCREASE VELOCITY THROUGH TRANSPARENCY END-TO-END



REDUCING EFFORTS AND COSTS

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Scan-Vermeidung

- Die automatischen Status-Updates von Digital Drive ersetzen manuelle Scan-Vorgänge

Ende-zu-Ende-Optimierung

- Analyse der gesammelten Daten und Echtzeitinformationen, um die Planung, Ressourcenauslastung und Transportzeit zu verbessern
- Optimierung von Transport- und Yard-Management-Prozessen

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Scan avoidance

- The automatic Digital Drive status updates replace manual scanning processes

End-to-end optimization

- Analysis of the data and real-time information collected, to improve planning, resource utilization and transport time
- Optimization of transport and yard management processes

SURVEYS REVEAL HIGH INTEREST AMONG CAR BUYERS IN RECEIVING FREQUENT STATUS UPDATES DURING CAR SHIPMENT

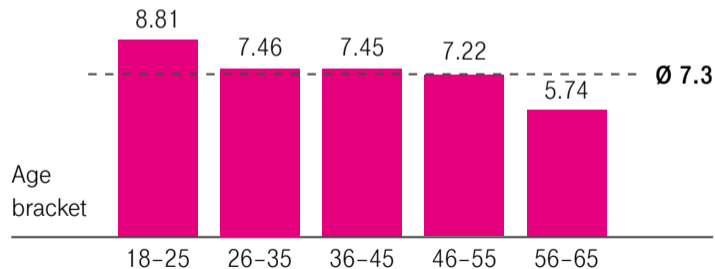
How interested are you in receiving delivery updates on a scale from 1 to 10 (10 being the highest interest)?

Drivers are very interested in frequent updates

The interest is particularly prevalent among younger customers



Results over all responses: n = 156



Results by age bracket: n = 156

ENHANCE CUSTOMER EXPERIENCE

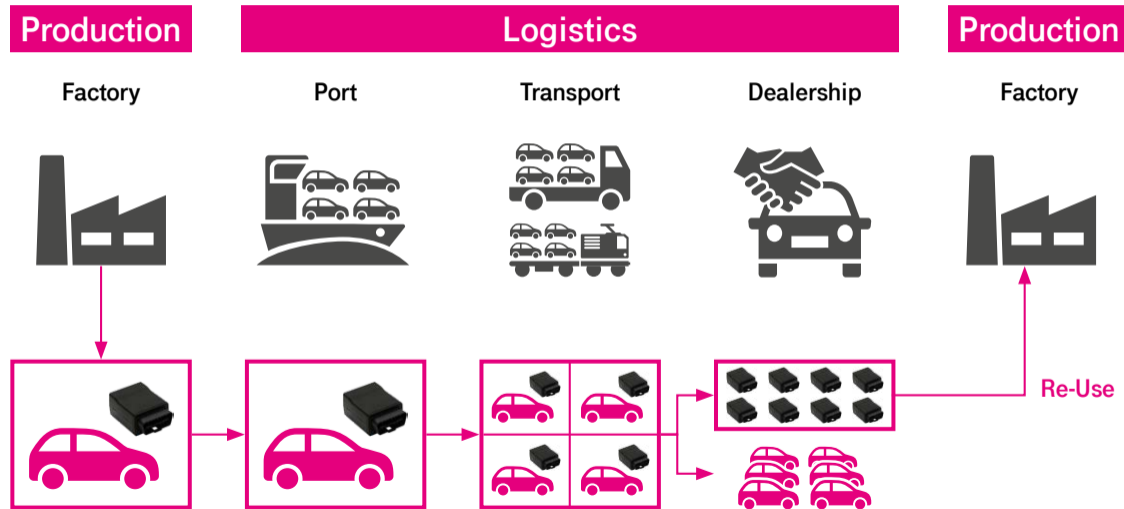
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- Möglichkeit für **neuen Endkundenservice**
- Bestellte Fahrzeuge in Echtzeit nachverfolgen, regelmäßige Updates an Käufer z. B. per SMS bei Erreichen von Zwischenzielen
- Erhöhung der Kundenzufriedenheit und -bindung
- **Mehr Kundenkontaktpunkte** ermöglichen Zusatzverkäufe, z. B. von Accessoires und Services, während des Transports als Beitrag zum Aftersales-Geschäft

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- Option of **new end customer service**
- Track ordered vehicles in real-time, regular updates to the buyer, e. g. by SMS upon reaching interim destinations
- Enhancement of customer satisfaction and loyalty
- **More customer touchpoints** facilitate additional sales, e. g. of accessories and services during transport, as a contribution to the aftersales business

OPERATIONAL PROCESS AND RE-USE



OUR INDIVIDUAL OFFER

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Kaufmodell: Einmalzahlung der Hardware, Buchung der Konnektivität, Daten- und Plattformservices mit monatlicher Servicegebühr

Mietmodell: Full-Service inklusive Hardware, Konnektivität, Daten- und Plattformservices sowie Rückführungslogistik für die Hardware*

*Einschränkungen in bestimmten Regionen sind möglich (Steuern, Zoll)

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Purchase model: One-off payment for the hardware, booking of connectivity, data and platform services subject to a monthly service fee

Lease model: Full-service including hardware, connectivity, data and platform services, as well as hardware reverse logistics*

*Restrictions may apply in certain regions (taxes, duties)



FURTHER INFORMATION AND CONTACT DETAILS

INFORMATION

Digital Drive Website

www.telekom.de/en/digital-drive

CONTACT

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