



Neckermann
Strategic Advisors

The Automated Fleet Breakthrough



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INTRODUCTION

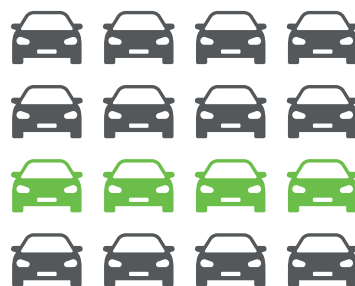


Beyond the obvious efficiencies that this connectivity brings, vehicle connectivity also creates significant opportunities for fleet management to digitize and automate entire processes - taking a considerable step toward self-managing fleets.

Connected, real-time fleet monitoring is a given.

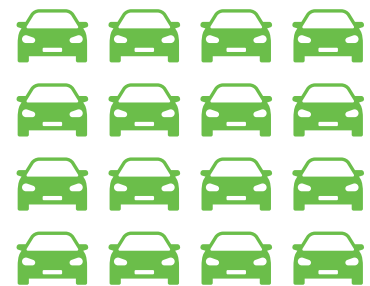
The next step-change in fleet management, however, is automation. Machine learning algorithms analyze real-time data automatically, so the most common and repetitive fleet operations are proactively managed – without manual input. And while these processes are automated, the fleet manager has more time to drive business success.

The basis for such automation is connectivity. Already, about one-quarter of all vehicles on Europe's roads are connected – either embedded via an OEM's connectivity, or via a third-party solution, such as a provider's telematics. And soon, all new vehicles sold in Europe will be connected by 2025² – able to communicate with the grid, their base station, or even each other. Their data will be shared among manufacturers, connectivity providers, insurers, and of course, fleet managers.³



**ONE-QUARTER OF ALL
VEHICLES ON EUROPE'S
ROADS ARE **CONNECTED****

<NOW> 2025>



**ALL NEW VEHICLES SOLD
IN EUROPE WILL BE
CONNECTED BY 2025²**



REAL-TIME DATA, LONG-TERM LEARNING



Speed, fuel consumption, mileage, location and engine performance are just some of the data-points that a fleet manager can rely on through connected fleet software. Fleet managers already reliably monitor vehicles from a central fleet dashboard in real-time. Most already make decisions on the safety, efficiency, and use of their vehicles based on these insights into fleet performance (and driver behavior).

For example, they might use telematics data to see which vehicles – or drivers – are consuming the most fuel. Based on this data, they may deploy a more efficient vehicle, or guide the driver toward an education program for developing a more efficient driving style.

Or they may redeploy a vehicle that is due for maintenance to a different route, in order to minimize downtime. Whereas unconnected fleets and drivers today lose several days per year, on average, in “downtime” from vehicles being brought to dealerships for recalls and maintenance, vehicles that are fully connected can be more efficiently – proactively – scheduled for critical maintenance.



UNCONNECTED FLEETS AND DRIVERS
TODAY LOSE SEVERAL DAYS PER YEAR,
ON AVERAGE, IN “DOWNTIME”



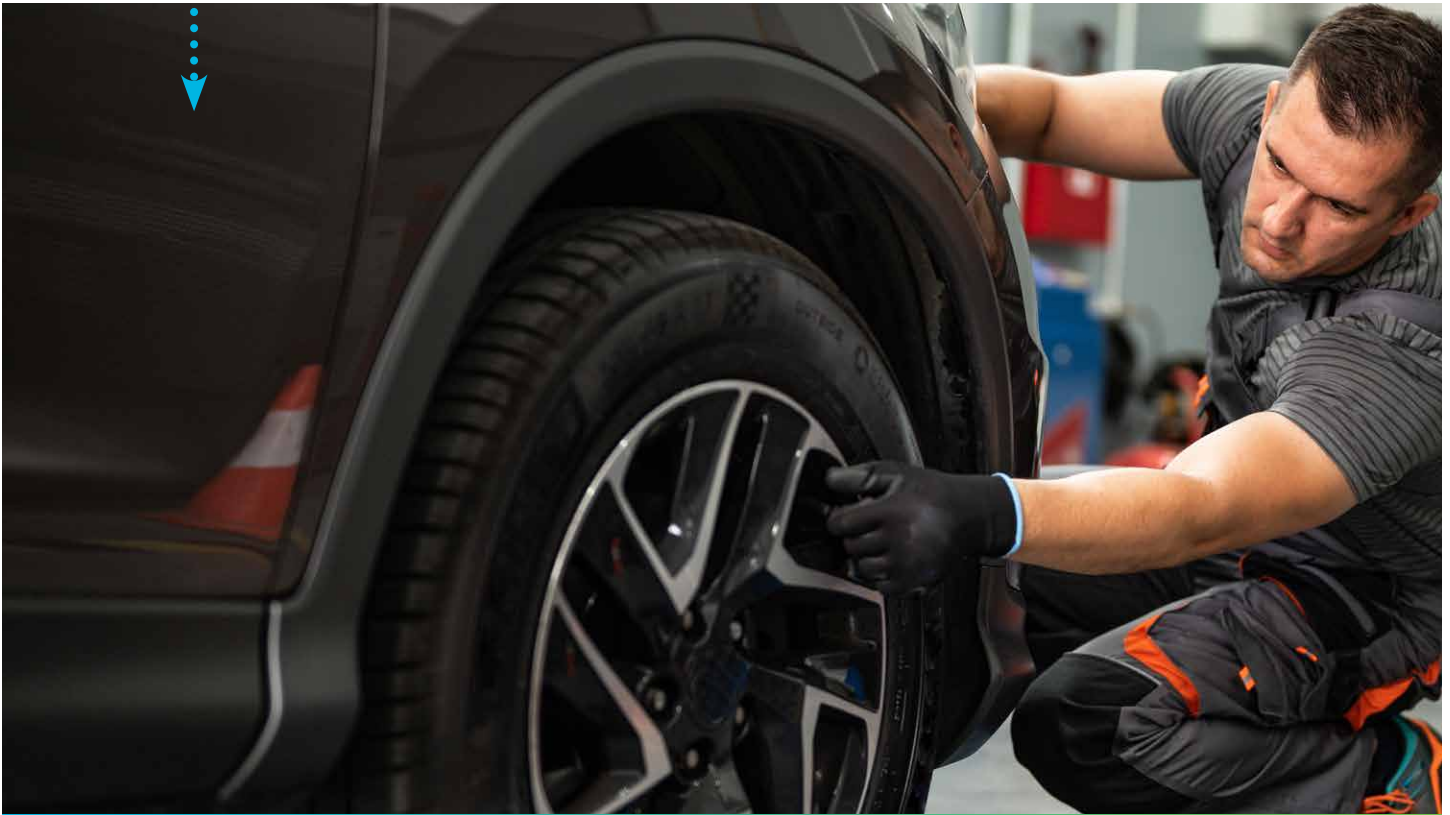
REAL-TIME DATA, LONG-TERM LEARNING



Today, these learnings and processes are standard procedure – perhaps even repetitive for the fleet manager.

It's exactly these standard procedures that can now be automated – through cloud-based software and the use of artificial intelligence. Just as fleet managers learn from the data emanating from the vehicle, so can your fleet management software. AI-enabled fleet management systems mean that the continual stream of data garnered from fleet vehicles is analyzed in real-time, and necessary steps are taken, automatically.

AUTOMATION MAKES FLEETS SAFER AND MORE EFFICIENT, WHILE GIVING THE FLEET MANAGER GREATER TIME AND FLEXIBILITY.



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RIDECCELL

FROM ANALYZING DATA TO TAKING ACTION

Brake, oil wear, and liquid fill status can be monitored in real-time, so that vehicle maintenance intervals are scheduled proactively. If through regular wear, or even through an incident, when vehicle parts (or the vehicle itself) reaches a critical maintenance or repair point, AI-enabled fleet management can automate scheduling – whether that’s for the vehicle, or the driver.

Data points processed by the AI go beyond what comes from the OBD port. In-vehicle cameras can monitor the cabins of shared vehicles (such as in carsharing or multi-driver fleets), and schedule cleaning automatically, while a connecting to driver scheduling apps allows the software to choose the best time.



FROM ANALYZING DATA TO TAKING ACTION

For shared or depot-based fleets, automated fleet management systems can reallocate drivers to different vehicles without manual input – such as when the vehicle requires charging, critical maintenance, or is otherwise out of service. Naturally, the software can automatically schedule the service appointment for the correct length of time, update vehicle data across all necessary systems and databases, and reallocate service-calls to a different vehicle and driver.



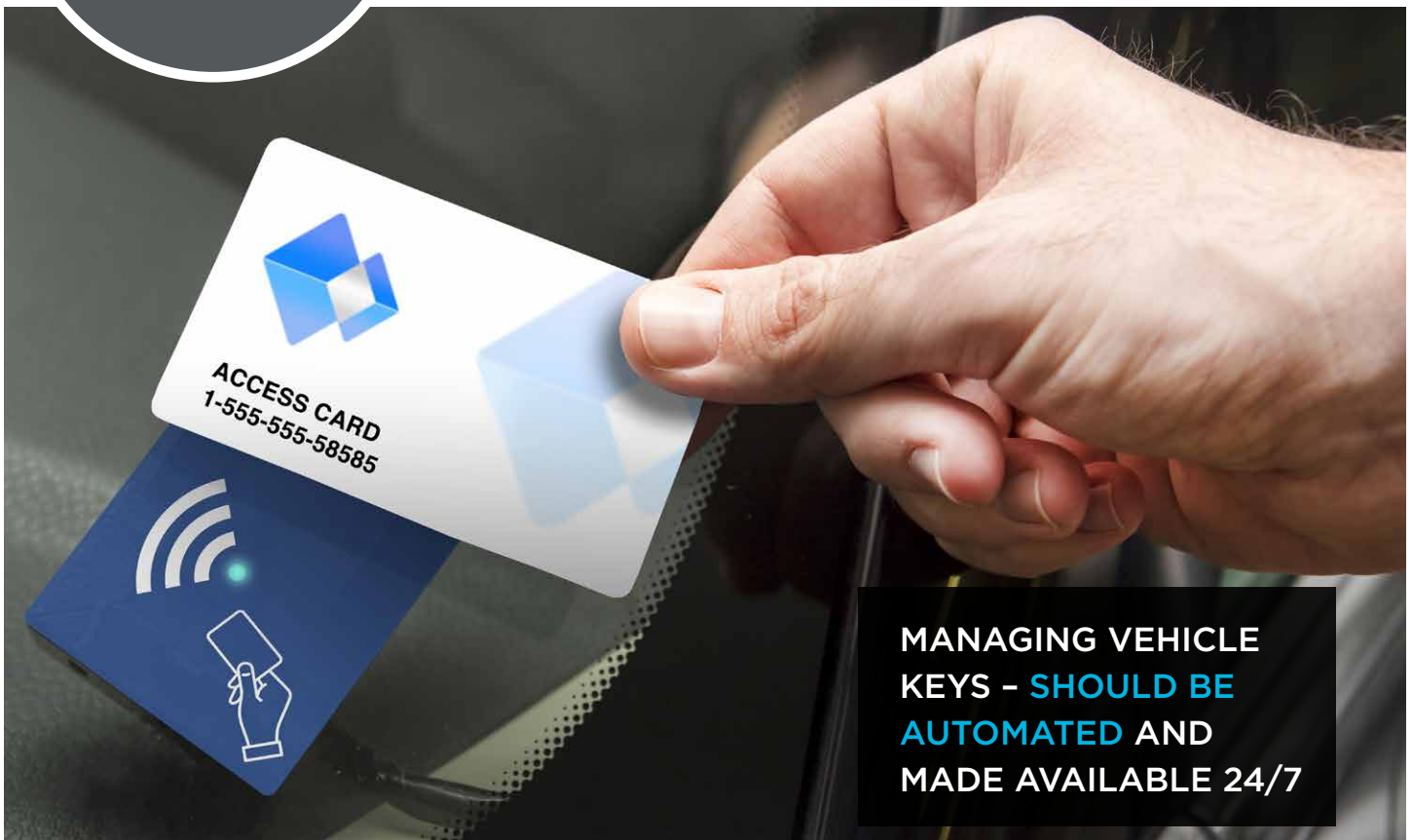
MEANWHILE THE FLEET MANAGER CAN TEND
TO MISSION CRITICAL ITEMS, SUCH DRIVING
BUSINESS SUCCESS.



UNLOCKING 24/7 SERVICE - AUTOMATICALLY

Where a vehicle is relocated, it clearly needs to be **made accessible** – no matter what time or day. In a 24/7 world, even the most menial of fleet management tasks – managing vehicle keys – should be automated and made available 24/7. Keyless vehicle access allows fleet managers to provide access, and drivers to locate, lock, and unlock vehicles directly from their smartphone.

Irrespective of whether a vehicle is equipped with keyless entry as standard equipment by the OEM, a fully digital fleet management system can appropriately allocate and reallocate fleet vehicles – whether that's through a driver's employee badge with NFC, or through an app that enables locking and unlocking the vehicle by Bluetooth.



SAFETY AND RISK MANAGEMENT

Fleet managers have long known the benefits to safety of connected vehicles – from knowing where vehicles and drivers are, to monitoring critical incidents, it's a key criteria for any fleet management system. And a safer vehicle is one that is less expensive to lease, manage, and insure.

Bidirectionally connected vehicles seamlessly provide vehicle, road-user and driving behavior to insurers, enabling pay-per-mile pricing at a granular level, as well as enhanced safety in the case of a crash or vehicle theft. Not only does automated data-transfer give a fleet manager back time on the clock, it also strengthens the relationship between fleet managers and their partners – be it a lessor, a third-party, or even an insurer.

Services all around the vehicle can be digitized and automated, for the sake of road safety and efficiency. The more data is shared, the more efficient the system can operate. Where insurance, leasing, and fleet management systems are integrated and connected, even invoices and payments can be automated and aligned – all without manual input.



BIDIRECTIONALLY
CONNECTED VEHICLES
PROVIDE **ENHANCED
SAFETY** IN THE CASE
OF A CRASH OR
VEHICLE THEFT



AUTOMATING ADDITIONAL SERVICES AROUND FLEET MANAGEMENT

Parking costs, road-tolls, congestion-charging, and even vehicle fueling and charging processes can all be automated – efficiently and securely. Whereas today, license-plate recognition, NFC cards, charging apps and access transponders may still be independent systems, the integrated fleet management system allows for these systems to be connected. Payment processes are expedited, data is updated in the fleet management cloud, and auto-scheduled processes are initiated. Connecting various vendor systems into the fleet management system's cloud removes numerous individual processes – and lots of individual e-mails or phone calls.

From one service to another, and from process to process, the system's AI can continually learn and make recommendations for both the driver and the fleet manager.

**AUTOMATION IN FLEET MANAGEMENT
BRINGS ENORMOUS OPPORTUNITY FOR
THOSE WHO EMBRACE IT.**

SOURCE

¹ Strategy& Digital Auto Report 2022

² SBD Automotive Connected Car Forecast.

³ A new EU Data Act is expected to be in force by 2025 – in time for all new vehicles to be connected.

Although still in discussion, it proposes a framework for the gathering, distribution, storage, and processing of vehicle data between manufacturers, IoT providers, and even insurers.

