ADVANCED CORPORATE CAR-SHARING SOLUTION

INTRO

Corporate car-sharing combined with the latest technologies can benefit most businesses around the world. This is a globally expanding segment of the overall car-sharing market and its popularity grows tremendously. But it has its own challenges too. To assist companies to overcome the likely hurdles, Teltonika Telematics is ready to make a problem-solving.

CHALLENGE

Since car-sharing was first introduced in Germany in the year 2008, it is rapidly growing in every continent from that day forward. According to the 'Global Car Sharing Market 2020-2024' report, this market is poised to grow by $7.65 billion during 2020-2024 progressing at a CAGR of 16 per cent during the forecast period. Even more, in the car-sharing segment, the number of users is expected to amount to 58.3 million users by 2025.

No surprises though, because the benefits of car sharing for societies and cities worldwide are notable - less traffic and congestion, lower wear for roads, less air pollution and noise, more fleets of newer and safer vehicles, better acceptance of mobility as a service. And, of course, the new technologies are adopted faster including vehicle GPS tracking and virtual car keys, allowing to unlock/lock it with a smartphone and dedicated mobile app.

But there a few key challenges to be considered - most corporate car parking facilities and pick up/drop off rental stations are built either in the basement of a building or beneath a street in a vast majority of cities pretty much in every country around the world. And that creates a major technical difficulty – some frequency radio signals often are not available indoors, in underground locations or narrow streets as they diminish and scatter by surrounding structures - roofs, concrete floors and solid walls.

That means the mobile phones and vehicle tracking devices mounted in ride-sharing cars have no 100% reliable connectivity there. Another likely concern - poor radio signal reception or none of it in remote areas and far away sites from any centre of the population (mountains, large parks, forests, single farms, deserts, etc.). So, is there any way to overcome these obstacles and offer a solution that works everywhere and all the time? Yes, it is...

SOLUTION

It has been achieved by making car-sharing routine effortless, guided and user-friendly using modern technologies - sophisticated smartphone app, dedicated pool car management software, Bluetooth, and Teltonika vehicle trackers. Let's demonstrate that with the keyless entry solution example.

It is the most modern, secure, convenient and flexible approach swiftly replacing a conventional physical set of car keys. Not to mention, it removes the driver's need to physically get them at a company branch or a dedicated desk or home. It reduces touch points, so the hygiene concerns too.

A virtual car key (aka smart key, remote keyless system, keyless entry, smart entry system) is designed for electronically accessing a corresponding car-sharing vehicle. Because all Teltonika trackers support **Bluetooth** Low Energy 4.X (or BLE) connectivity and has a **dedicated communication protocol**, we can successfully utilise it to communicate with the GPS devices mounted in cars, even if there are no other radio signals available. For the sake of example, we use the Teltonika FMM130 model.

How does this work? Even if there is no cellular network reception or internet connectivity available in a particular spot, a microchip integrated into a smartphone can communicate via Bluetooth radio waves with a Teltonika tracker. Because of dedicated BLE protocols available for the clients, the GPS device recognises the mobile phone of the driver as securely as if it was a fingerprint. So, the phone works as a short-range radio transmitter within 5 to 20 meters of the car sending a coded signal via BLE to the receiver unit - FMM130 model which unlocks/locks doors through Teltonika CAN-CONTROL adaptor.
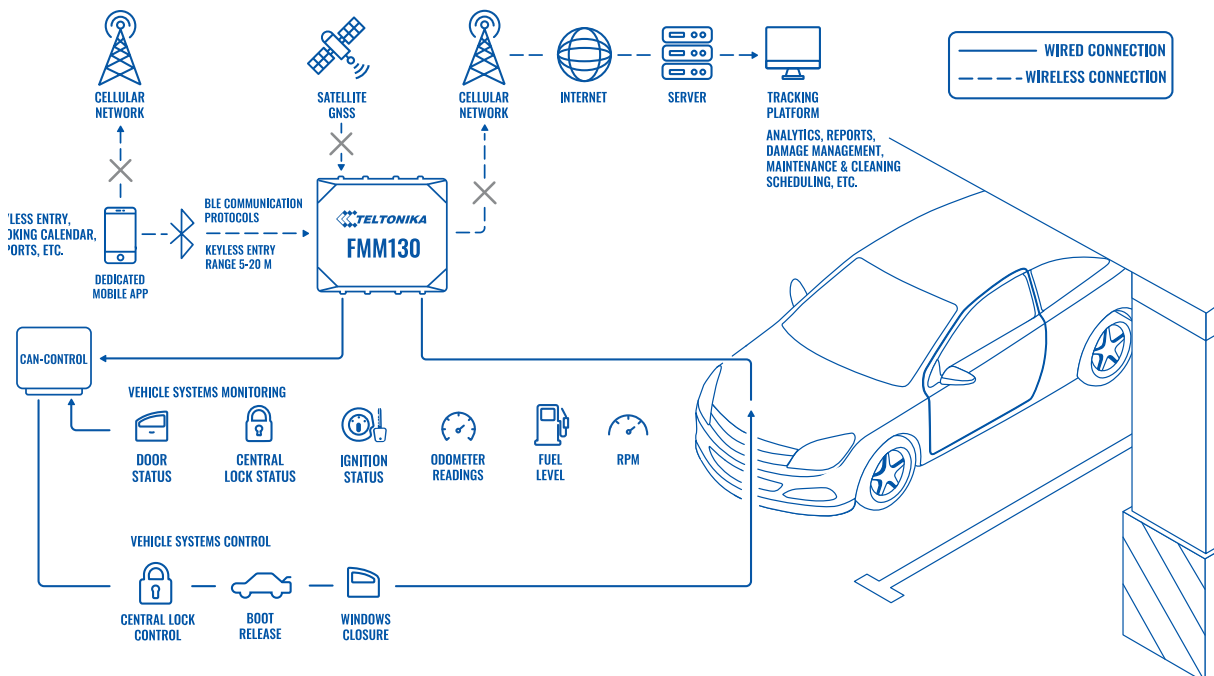
Depending on mobile app functionality, the adaptor may allow a driver to control vehicle central lock, windows closure, switching on/off turn signals (aka blinkers), and boot release. You can read more about it at our CAR SHARING SOLUTION use case.

The outcome? Even if there is no cellular connectivity, a driver can unlock/lock a car via Bluetooth short-range radio signal. Even more, for corporate car-sharing accountability purposes, the credit system can be introduced (e.g., one unlock/lock action - 1 credit or suchlike).

This advanced corporate car-sharing solution allows corporations to quickly put their existing fleet to **more productive use** and offers their employees the option to use the vehicles for and business needs, and privately. Depending on the company's internal rules and a dedicated corporate car-sharing smartphone app functionality, the user-driver can search for an available vehicle to be driven, its exact location and the shortest route to it shown on a virtual map. It allows an individual to arrange a car of interest booking in advance for a specific time slot (aka vehicle booking calendar).

That ensures noticeable **financial savings** to run and maintain the fleet, lower insurance fees, user-friendly experience and 100% drivers' accountability, reduction in air pollution, carbon footprint, option to monetise personal vehicles and optimised matching of supply and demand.

TOPOLOGY

BENEFITS

• **Virtual car key functionality and access 24/7 anytime, anywhere** - Bluetooth short-range radio feature available in smartphones and Teltonika trackers BLE connectivity combo ensure the keyless entry availability around the clock all over the world. It reduces touch points, so the hygiene concerns.

• **Improved driver's experience** - most people appreciate innovative, technologically advanced vehicles and their smart handling. This solution can make drivers' experience behind the wheel safer, more convenient, and improve customer loyalty.

• **CAN Bus data readings** - access to the many parameters related to ride-sharing cars status and timely usage analysis, i.e., the data that is essential for superior service delivery, competitiveness, and profitability.

• **Smooth business operations and outstanding efficiency** - 100% accountability of everything important to the car-sharing business - fleet vehicles and drivers' actions are being timely tracked, monitored, and intervened if necessary. Optimised vehicle supply and demand.

• **More benefits for employees** - the average car-sharer may save a tangible sum a year through journey sharing. Corporate car-sharing can act as a pay-rise option that an employer may otherwise not be able to offer.

WHY TELTONIKA?

Thanks to the Teltonika FMB platform, Bluetooth connectivity support by all our vehicle GPS trackers, dedicated protocols, and CAN-CONTOL device functionality, we can offer a highly sophisticated solution for any corporate fleet car management helping to overcome the most common challenges and greatly improve its efficiency.

Teltonika is the right place to get all you need to succeed - an impressive variety of certified GPS trackers, accessories, and solutions for any use case imaginable in vehicle telematics. Our over 23 years of expertise and innovative approach, extensive global market knowledge, top-notch product quality, state-of-the-art production facilities with automated robotic assembly lines and customer support meeting your expectations give us a competitive edge and make Teltonika Telematics a business partner of choice.

FEATURED PRODUCT

FMM130

RECOMMENDED PRODUCTS

FMC130, FMC640, FMM125, FMM640, FMU125, FMU126, FMB110, FMB120, FMB130, FMB640, FMB122, FMB125

RECOMMENDED ACCESSORIES

CAN-CONTROL