

DIGITAL TRANSFORMATION AND THE CONNECTED CAR

EXTRACT FROM THE
ERICSSON MOBILITY REPORT

DIGITAL TRANSFORMATION AND THE CONNECTED CAR

Connected cars have been available for a number of years, but mainly as new cars in the premium segment. Now, Swedish telecom operator Telia aims to connect cars up to 15 years old with a cloud-based solution. This exemplifies the opportunity for an operator to expand from data connectivity to offering smart data to an ecosystem of partners – creating innovative service offerings for car owners

Telia's ambition is to transform into a new generation telco, where applications and customer solutions have an important complementary role to traditional network services. Their connected car offering, Telia Sense, is central to this solution. According to Telia's research, simplifying ownership is a main concern for car owners, and connectivity can deliver on this requirement. However, the value of owning a connected car goes beyond connectivity, as it can be linked to an ecosystem of services relevant to car ownership.

Telia Sense

Telia Sense is an end-to-end, cloud-based solution that enables owners of both old and new cars to connect to the internet and access smart services. It consists of a telematics unit with a SIM-card that is plugged into the car's OBD-II port (on-board-diagnostics).

The unit communicates with a cloud-based platform over LTE and connects to an app in the car owner's smartphone. It also contains GPS, accelerometer, gyroscope, Wi-Fi hot spot and Bluetooth. Third party service providers can connect their services via an API and receive data from the car, if approved by its owner, enabling them to develop new service offerings.

The solution has been developed in cooperation with partners from the automotive and insurance industries, offering a combination of car-control functionalities, Wi-Fi connectivity and value added services like tailored car insurance.

Factors driving consumer interest in connected cars

A survey revealed that enhancing the car ownership experience is the main reason cited for owning a connected car, with cost reduction, increased control and safety, and greater convenience also cited as major factors. Car owners interact with their car in many different ways, which presents opportunities to offer a variety of services at different points in time.

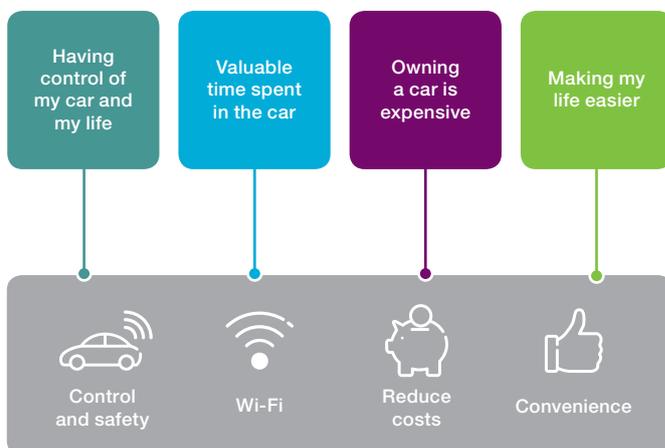
Consumers also want more value from their cars. Another survey of car owners indicated that interest can be divided into three areas: connectivity, car control and offerings from service partners.



This article was made in cooperation with Telia Company Global IoT Solutions: a global unit in the Telia Company group, responsible for business-critical IoT solutions and applications.

Telia Company provides network access and telecommunication services in the Nordic and Baltic countries, parts of Eurasia and in Spain.

Main factors driving consumer interest in connected cars



Source: Telia, in-depth-interviews with car owners (2015)

Digitalization of ecosystem partners

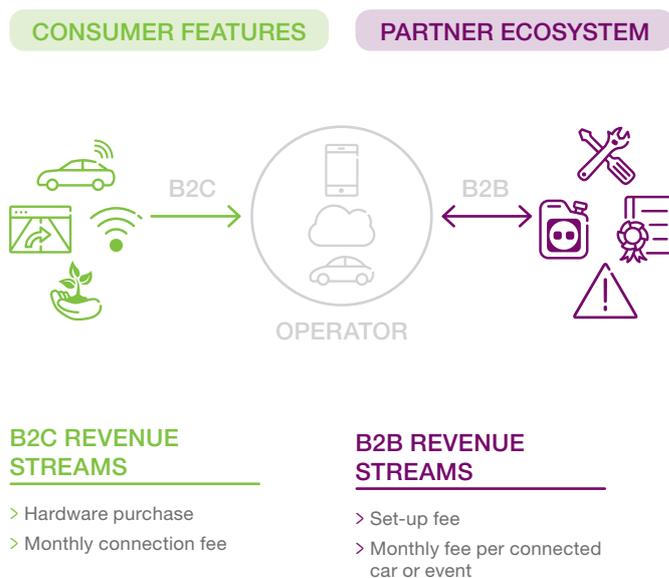
Ecosystem partners can reach drivers and passengers with new services and information, building on customer relationships and increasing their brand value. This is exemplified in the Telia Sense case with the objectives of initial partners, such as Bilprovningen, Bilia and Viking.

Consumers who were very interested/interested in feature

Feature	Percent	Category
Car Wi-Fi*	62%	Wi-Fi hotspot
Tampering alarm	76%	Car control
Find my car and position alarm	65%	Car control
Car info dashboard	57%	Car control
Drivers' journal	50%	Car control
Alerts and warnings	71%	Car control
Vehicle inspection	37%	Service partners
Car service	39%	Service partners

*Including 20 GB/month and data top-up possibilities
Source: Telia
Base: 502 respondents with driving licenses and access to a car, aged 18-65 in Sweden (2016)

Two-sided business model addressing both B2C and B2B revenue streams



Source: Telia (2016)

Pay-how-you-drive offerings

Folksam¹ considers digital transformation to be an important focus area for the company going forward. A usage-based insurance offering is one example of how digitalization can enable new opportunities.

Folksam has created an offering called “Köra Säkert” (Safe Driving) to incentivize customers to drive more safely. This offering is based on a pay-how-you-drive concept, where the customer can influence their car insurance premium.

When signing up for the service, the customer receives a small LED indicator that can be mounted on the car’s dashboard to inform the driver if they are speeding. A red, yellow or green light provides feedback to the driver on whether they are sticking to the speed limit or not. This indicator communicates with the telematics unit, and an app provides feedback that can encourage safer and more environmentally-friendly driving.

The long-term goal is to save lives and reduce the number of traffic accidents; the incentive could also result in a discount of up to 20 percent on drivers’ insurance premiums.

Proactive servicing

Another possibility enabled by digitalization is proactive servicing. Auto inspection company, Bilprovningen, is aiming to enhance the customer relationship through providing proactive services, such as reminders of inspection times, as well as alerts relevant to car owners.

Automotive service company, Bilia, also aims to provide service offerings like car diagnostics and proactive car maintenance, as well as tailored customer offerings and promotions.

¹ Folksam is a customer-owned mutual insurance company in Sweden

Road assistance company, Viking, sees opportunities for a deeper and proactive customer relationship with improved service offerings enabled by digitalization.

Value creation: an evolving two-sided business model

Many mobile operators have already built IoT solutions around their core assets, such as network connectivity and experience of aggregating, analyzing and acting on network and user data. In the Telia Sense case, connectivity is provided by an LTE network, which delivers app coverage for mobile broadband and supports IoT services. Another asset is the platform’s capability to refine data and turn bulk data into smart data, which allows third party service providers to utilize the information.

The business model is twofold: B2C revenue streams are based on a one-time cost for the telematics unit, and a monthly fee for the connectivity and car control service, whereas the B2B revenue streams are from ecosystem partners; including a set-up fee for the service and a monthly fee per connected car or event. The size of the B2B revenue is based on the value of the refined data from the platform, which varies for different businesses. This value is leveraged by two interrelated factors: the local market knowledge of the B2B partners and the continuous refinement of the offerings enabled by analyzing the flow of data.

IoT presents new opportunities for mobile operators to leverage their core assets and move up the value chain, through providing intelligent platforms, facilitating ecosystem collaboration and becoming a transformation partner to other industries.

Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With approximately 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.