



CUSTOMER CASE

From the Racetrack to the Road: Defining the Future of Connected Megacars

Developing the world's finest megacars takes a lot more than providing tremendous acceleration, record-setting top-speeds and eye-catching looks. Today, performance-car manufacturers need high-tech functionality and connectivity options just as much as they need horsepower, and one of the most advanced in this field is Sweden's Koenigsegg. Learn more about the cutting-edge automaker and what makes Koenigsegg exceptional.



Background

Koenigsegg Automotive AB is a manufacturer of high-performance megacars, based in Ängelholm, Sweden. The company was founded by Christian von Koenigsegg in 1994. From its inception, the company's mission has been developing industry leading mega cars.

After many years of development and testing, the company launched its first commercially available car - the CC8S - in 2002. Since then, Koenigsegg has produced a variety of models and grown to employ around 550 people who handcraft every vehicle in highly desired, limited runs.

Koenigsegg is known for breaking barriers. Over the years, the automaker has produced several record-setting vehicles, including the Agera RS, the fastest commercially produced car in the world, which can hit an average top speed of 277,9 mph.

Koenigsegg manufactures its vehicles in a former flight hangar, previously used by one of Sweden's oldest flight squadrons. In the past, pilots often took off and landed in the dark, earning them the nickname the "ghosts". The squadron consequently marked their planes with a ghost symbol. In their honor, Koenigsegg has since attached the ghost symbol on every car as a mark of respect. The community of customers, staff and fans have also since been nicknamed the Ghost Squadron.

While each Koenigsegg looks striking, innovation is a cornerstone of every Koenigsegg vehicle. Koenigsegg focuses every aspect of the development process on performance, from raw materials, people and facilities to software, tools, systems, and maintenance.

This obsession with details doesn't end once the keys are handed over to the owner. The company aims to constantly refine their vehicles performance to deliver the best driving experience possible. Koenigsegg use IoT and connectivity to further enhance performance, even after a vehicle has been sold.





Challenges

Nowadays, more and more of a car's functions are run by electronics and software. IoT and over-the-air software updates are being used in tandem to provide engine performance upgrades, telematic feedback, and vehicle diagnostics, as well as updates to navigational and entertainment functions.

Using IoT and over-the-air software updates, discerning electric vehicle owners expect to get more power, greater range efficiency and feedback on battery performance. Similarly, owners of cars with combustion engines expect to be able to improve performance, or at least get access to information about their cars performance.

Koenigsegg's target market are unlike regular car owners. They are global customers who want the best-of-the-best. This means they require access to the latest technology and that their cars are updated regularly after delivery to continually optimize their driving experience and maximize performance.

Solution

Using managed connectivity provided by Telenor Connexion, Koenigsegg can connect to each vehicle from anywhere in the world so that their customers gain access to cloud services, a web interface and an app for smartphones and tablets, including other services.

“Our target market is global customers who want the best-of-the-best,” says Koenigsegg CEO and founder, Christian von Koenigsegg. “Telenor Connexion was the obvious choice for connecting our cars, with their broad and extensive experience in connected automotive solutions. Also, their technical expertise and ability to troubleshoot is industry-leading.”

These services enable owners to remotely track their car, its fuel level, the battery status as well as access the latest software. Koenigsegg is also able to access the cars

remotely, allowing them to optimize settings, install new software and monitor vehicle health from the Koenigsegg headquarters in Ängelholm, Sweden.

Thanks to connectivity provided by Telenor, Koenigsegg cars are constantly connected to the cloud. Diagnostic data is continuously received so Koenigsegg can stay on top of the cars condition and react pre-emptively to potential problems.

The cloud platform serves four main purposes:

1. Remote diagnosis and health monitoring of customers' cars.
2. The cloud is used to deliver software updates over-the-air, which means Koenigsegg can provide new features and software improvements to their customers more effectively and quicker than ever before.
3. Statistical performance data from the cloud is used to drive incremental improvements as part of Koenigsegg's software development process.
4. The cloud is a gateway between the cars and Koenigsegg's customer mobile app. The mobile app helps customers quickly locate their car on a map, access the owner's manual and view other useful information such as fuel level and battery charge level.



Results

A defining quality of having a responsive cloud platform is Koenigsegg's ability to proactively manage customer cars, to a highly personalized level. Koenigsegg rely on Telenor's global cellular network to keep the cars connected to the cloud, regardless of location.

No matter where the car is in the world, Koenigsegg can receive immediate notifications of any issues so they can act on it to reduce handling time and maintain high customer satisfaction.

The efficiency of Koenigsegg's over-the-air updates is prevalent when resolving problems, ensuring a tighter feedback loop and minimizing miscommunications. This connectivity also gives Koenigsegg a lot of flexibility when experimenting with new features, which is crucial for a fast-paced, innovative company such as Koenigsegg.



TELENOR CONNEXION

Telenor IoT is the portfolio of IoT solutions from Telenor Group, one of the world's major mobile operators. With more than 20 years' experience of providing global IoT connectivity, cloud services and expert support to companies of all sizes, Telenor is one of the world's most advanced IoT solution providers. Telenor IoT manages international IoT deployments for global customers in some 200 countries and today operates more than 17 million connected devices to enterprises such as Volvo, Scania, Hitachi, Verisure Securitas Direct and Husqvarna. The IoT solutions are offered to national customers in the Nordics through the local Telenor operations in each country, and on a global level through Telenor Connexion, Telenor's specialized unit that provides IoT solutions for large, international enterprises who need a customized offer with advanced support.

 iot.telenor.com

 sales@telenorconnexion.com