# Creating the ultimate connected car infotainment system

Renault Samsung Motors and mobile operator SK Telecom partner on integrated car tablet solution that is also portable



### **Business Issue**

Many auto buyers want car infotainment technology to mirror the devices they use every day—and they expect the system to work with dashboard and steering wheel controls. The challenge: Built-in car infotainment systems can be difficult to use and inconvenient to upgrade. Portable consumer devices do better on both counts, but typically lack the durability and system integration available with genuine car accessories.

### **Solution**

Renault's South Korean unit Renault Samsung Motors worked with mobile carrier SK Telecom to offer buyers of the QM3 compact urban crossover model a Tablet to Car (T2C) infotainment option built on the ruggedized Samsung Galaxy Tab Active tablet. Tailored with Samsung KNOX Customization tools and services, the system offers all the convenience of a consumer device, including real-time data streaming and portability, and adds seamless connectivity to car controls.

### **Results**

Auto buyers responded positively. More than 30 percent of QM3 buyers have added the T2C system option, according to Renault Samsung Motors. These customers name portability and an enhanced entertainment value as key reasons for purchase. Renault Samsung Motors targets younger customers who demand a better experience and parents who want to keep their children occupied during car trips.

Customized device controls deliver a context-aware experience for users, whether the device is docked in the car or detached.

### **Solution**

Working with Samsung Electronics, Renault Samsung Motors and SK Telecom identified Galaxy Tab Active as the best device and tailored it to fit the car environment. Galaxy Tab Active is Samsung's first ruggedized B2B tablet and offers the durability required to withstand heavy use both in and outside a car.

SK Telecom developers used Samsung KNOX Customization tools and services to customize device controls and deliver a context-aware experience for users. When the device docks to the car, for example, the T2C app plays automatically and key features turn on, including the GPS and landscape screen mode. The system also disables the Multi Window feature and turns off incoming and outgoing phone calls from the tablet. (Bluetooth-connected calls paired with external smart devices remain available.) When the device is detached from the car, the device works as a personal tablet: The T2C app force closes and phone calls are once more enabled. KNOX Customization also protects the configurations by preventing factory reset and uninstallation of the T2C app.

SK Telecom customers can use existing data plans without a new subscription surcharge and do not pay for data when using the SK Telecom T-Map navigation software. Drivers using other carriers can sign up for a tablet-only 1 GB data plan.

The T2C system is easier to maintain than typical in-car infotainment systems, since customers can carry the tablet into the service center for any repairs. Customers also can update the T2C apps from the SK Telecom online app store.

### Samsung KNOX Customization

KNOX Customization is a comprehensive set of tools and services that can transform Samsung devices into purpose-built appliances.

**Context-aware auto configuration** enables features and functionality to change based on whether the device is docked in the car or detached.

**Safeguards prevent accidental changes** and secure a seamless driving experience by disabling factory reset and uninstallation of the T2C app.

In the near future, the auto maker plans to use KNOX Customization to add enhanced features, including the ability to control network settings, enable power-saving mode, control the volume, and lock down devices to the app.

### Samsung Galaxy Tab Active

The ruggedized B2B tablet works well both in the car and outside.

Water and dust resistance with IP67 certification protects against spills.

**Protective coating and anti-shock protective cover** are included to help the device withstand drops of up to 4 feet (1.2 meters).

**1280 x 800 display** offers a brilliant viewing experience for drivers and passengers.



### **Customer Challenge**

Renault Samsung Motors and SK Telecom wanted to create an infotainment experience that offers auto customers:

- Portability and a consumer-device experience tightly integrated with on-car controls.
- · Real-time data streaming.
- An easy path to update and upgrade.
- The same level of durability as a standard auto OEM accessory.

"With Renault Samsung Motors and Samsung Electronics, SK Telecom is able to offer an entirely new form of a car infotainment solution built on a smart device. With SK Telecom technology, service know-how and strategic collaboration with leading companies, we can deliver a more innovative and optimized connected car solution for customers."

Song Kwon
Group Leader of Enterprise Solution Group
SK Telecom

"We've been developing mobile telematics with SK Telecom since early 2000 and built the country's first car infotainment platforms. The new T2C tablet solution, which is set up to work differently inside and outside the vehicle with Samsung KNOX Customization services, offers a new way of thinking about the connected car."

Kyungwook Ahn
Operation Chief of After Sales
Renault Samsung Motors

Auto buyers get the durability of a built-in OEM navigation system without the challenges of keeping it up to date.

### **Benefits**

The T2C system, tailored with Samsung KNOX Customization, offers auto buyers an affordable path to a connected car, with data-streaming capabilities and a context-aware user experience.

### Consumer friendly system in a tough package

Auto buyers gain a familiar, easy-to-use device with the durability of a builtin OEM navigation system. The T2C tablet can withstand shocks and rough handling in the car and survive accidental coffee and tea spills. When docked, the tablet works seamlessly with built-in car controls, including the rearview camera. The system includes an SK Telecom navigation app and music streaming service that can be used by SK Telecom customers as part of their data subscription or are available to non-customers with a new low-cost 1 GB plan. When in docked mode, the system focuses on driver needs: It turns on GPS and shuts off the Multi Window feature and incoming and outgoing calls. The T2C app auto plays, ready for the driver's command.

### Portability and features beyond navigation and music

When an auto maker outfits a car with a great tablet, it makes sense to expect that buyers will want to use it outside the car. Customers can detach the T2C system from the dashboard to entertain children in the back seat or find directions after they park. The T2C system resets its controls when detached to personal device mode. Samsung KNOX Customization tools and services also safeguard the changes and prevent users from uninstalling key apps or conducting a factory-reset of the system.

### Easy to update and upgrade

Consumers who want to stay connected typically expect to easily update navigation apps and even replace their mobile devices before they upgrade their cars. The T2C system makes both actions manageable. Updates are easy with a connected system and the service center no longer needs to examine the car—only the tablet.





### **RENAULT SAMSUNG MOTORS**

### About Renault Samsung Motors Co.

Renault Samsung Motors Co., Ltd. manufactures and sells automobiles and automobile parts in South Korea. The company was founded in 2000 and is headquartered in Seoul, South Korea. Renault Samsung Motors Co., Ltd. is a subsidiary of Renault Group BV.



### **About SK Telecom**

SK Telecom, established in 1984, is Korea's largest telecommunications company with more than 28 million mobile subscribers, accounting for over 50 percent of the market. The company reached KRW17.164 trillion in revenue in 2014. For more information, please visit www.sktelecom.com.

# Legal and additional information

### About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies that redefine the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems, and semiconductor and LED solutions. We are also leading in the Internet of Things space with the open platform SmartThings, our broad range of smart devices, and through proactive cross-industry collaboration. We employ 319,000 people across 84 countries with annual sales of US \$196 billion.

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