

# Cerence Car Life

## Smarter cars require an approach that's... Smart.

At Cerence, we want people to fall in love with their cars. As with any long-term relationship, this begins with a deep understanding and appreciation for what's possible in a car–from the driver's first time behind the wheel throughout the life of the vehicle.

#### Innovative, intelligent SaaS portfolio

- Rapid onboarding
- Smart approach to car health
- Easily available digital manuals
- Always current and connected

#### Deep technology insights

- Automatic Q&A
- FAQs
- Contextual answers
- Proactive information

The Car Life product suite can help create a tighter bond between people and their cars, just like they become attached to their other hard-to-live-without electronics, such as their smartphones. These new software-as-a-service (SaaS) offerings enhance the car ownership experience and will ultimately help car makers grow their customers into clients by delivering knowledge and insight that allow them to better support their users and drive brand loyalty.

#### Informed drivers are the best drivers

As cars have become more complex, navigating the many features, notifications, and warning lights in vehicles has become increasingly difficult for drivers. Cerence Car Life provides drivers with the best answers and information—all of which are tailored to each individual car, its configuration, and the continuously learned preferences of the driver—via a companion application, voice output from the automotive assistant, and imagery displayed on the car's infotainment system.

Al-enabled interaction, management, and knowledge

"How do I turn on the seat ventilation?"

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### AI-enabled interaction, management, and knowledge

Part of the Cerence Drive portfolio, Car Life is a suite of AI-powered products that allows drivers to better communicate with and manage their cars. These new software-as-a-service (SaaS) offerings enrich the car ownership experience, from learning about the car to using a smart, AI-powered car manual, to scheduling service appointments through integration with Dealer Management Systems (DMS).

It does all this by using a combination of voice and the car's touchscreen. It can also integrate and operate with other global voice assistants, including Google, Amazon, Baidu, Alibaba, Yandex —just to name a few.

**Rapid onboarding** We can help give new drivers a fresh perspective and quickly introduce a new car to them upon entering it for the first time (or even before then). This includes a primer on its intelligent assistant and the key features that are available using a companion smartphone or tablet application.

**Smart approach to car health** Contextual, smart car knowledge helps drivers understand their car's status and overall health. This includes information about warning lights or error messages and how to deal with them based on real-time information from the car's sensors. It can also schedule dealer appointments for service and updates based on the alerts and diagnostics generated by the car itself.

**Easily available digital manuals** With industry-first voice-powered smart car manuals, Cerence eliminates the need for bulky, printed manuals and lets people directly ask their car about its features, potential issues, warnings lights, and more— all using their voice. This also includes learning modules about the vehicle—think podcasts—that a driver can listen to while driving to learn about the car.

Always current and connected Cerence Car Life also proactively shares information to ensure that drivers know about the features deeply hidden within the car's complex menus, including those that appear through over-the-air updates to the system.

#### Deep technology insights drive Car Life options

Cerence uses advanced AI technologies, like neural networks, to answer questions from text, often gleaned from an owner's manual. We provide OEMs a seamless way to upload their owner's manual, and our framework automatically extracts key information. Once a product is on the road, Cerence uses production data and user questions to retrain our models and improve accuracy continuously.

The data we receive about the car contains information in the owner's manuals FAQs by drivers, facts about cars (e.g. tire pressure settings, etc.), and other sources. Together, all these make for a incredibly flexible set of product offerings and capabilities.

Automatic Q&A This module parses owner's manuals and identifies text passages that answer user questions. It supports concise, grammatically correct questions—those that typically beginning with "Wh" (What, Where, Why, etc.), with the full flexibility to ask questions freely (i.e. a paraphrased question).

**Frequently asked questions (FAQs)** Cerence's FAQ Module covers questions that are not in the owner's manual, but are those that drivers will most will mostly ask based on an OEM's experience. We develop this by using a question-and-answer list provided by OEMs. We can also mine OEM-specific questions from the web.

**Contextual answers** This module aims to answer contextual questions (e.g. "What is my current tire pressure?") in real time. To do this, we use the sensor data provided by OEMs from the car itself.

**Proactive information** The Proactive Module alerts customers to unused features, such as "Do you want me to tell you how to change winter tires?". It also proactively alerts users if there is a problem with the vehicle based on the data received from the vehicle's sensors.

