

# 2017 NAIAS - Toyota Entune 3.0

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Good Afternoon, and thanks for joining us today.

This is an exciting time to be in the auto industry. Those that follow the business know that the amount of technology in cars has been growing exponentially.

Toyota's global vision is to use that technology to create a future where individuals, cars and communities operate together to enrich lives and move people safely and responsibly from place to place.

That's a big challenge, and we're well on our way.

The recent safety technology evolution is now becoming a revolution of the automobile as we embark on

autonomy.

The vehicle as we know it is transforming into a means of getting around that futurists have dreamed about for a long time.

To realize that future, cars must become connected, and Toyota is on the leading edge of this revolution.

Toyota is a pioneer in connected cars. We introduced our first practical application of an embedded Data Communication Module, or DCM, in 2000.

By 2005, they were installed on Lexus models as a standard feature.

In 2011, we set the foundation of our connected car initiative through a strategic partnership with Microsoft. Together, we built the Toyota Smart Center or TSC, a global cloud-based platform for Toyota's next-generation telematics services.

This powerful, secure and private computing system connects with vehicles from around the globe allowing us to provide customers with personalized services that really make their lives easier.

This past year has been a transformative time for Toyota as we move the needle even further.

We launched a new company called Toyota Connected.

TC is a standalone entity with the charter for data management, data analytics and service development. TC expands our capabilities for managing data transmitted by our vehicles and forwards our objectives to use data to make better cars and to create better experiences for our customers.

And in case you're wondering, we believe the vehicle data belongs to the vehicle's owner, so we don't do any of this without our customer's express permission.

This year, we've also forged a partnership with the KDDI Corporation to establish a broad-reaching, robust communications platform that supports car connectivity on a global scale.

This global communications platform, or GCP, will allow us to simplify how carriers interact with our systems. It also allows us to monitor network traffic to improve performance and to ensure the security of the links to our vehicles. With KDDI's relationship to more than 600 telecoms around the world, we hope to popularize the GCP and make it available to other companies who may be interested in this service.

This partnership and technology lays the foundation for a grander plan.

By 2020, we plan to make embedded DCMs standard equipment in nearly every new vehicle we sell Japan and the U.S. Our plan is to connect all our vehicles and provide customers with services that truly enrich their lives and bond them to our brands.

Exciting...but still a few years off.

Let's talk a bit about today...

We've reached the next step on our connected journey.

That's the launch of our third-generation Entune telematics platform.

You may have seen that we rolled out Entune 3.0 last week at the Consumer Electronics Show. And we announced yesterday that it will debut on the all-new 2018 Toyota Camry.

The development team for our new telematics system focused on the guiding principles of Simple, Seamless and Synchronized.

We've simplified the overall design of the platform to be much more user friendly and intuitive. The applications and services provide a more seamless user experience which can be synchronized across devices, applications and vehicles.

We are now offering more features, more functions and greater connectivity than has ever been available on a Toyota brand product. In fact, there are several "firsts" that we are sharing today.

For the first time in a Toyota product, navigation is standard across the Camry model lineup.

On the entry level trims, navigation is enabled through Telenav's Scout GPS Link which is downloaded onto the users' mobile device.

We partnered with Telenav to co-develop Scout GPS Link in accordance to our strict data privacy standards as well as NHTSA's driver distraction guidelines.

When Scout GPS Link is activated, it displays directions and full moving maps on the vehicle's head unit. The currently available turn-by-turn function remains for drivers who want to use this minimized mode.

For higher grade Camrys with premium embedded navigation systems, we're excited to introduce a feature we call Dynamic Navigation.

We think this is a game-changer for how vehicles deliver on-board maps and navigation going forward.

Here's how it works...

Currently, all map and navigation information is stored in the vehicle on either a hard drive, DVD or SD card.

However, roads are always under construction, with new on-ramps, off-ramps, thoroughfares and intersections being added. Not to mention all the new businesses popping up in developing areas.

To update the embedded map, today customers rely on replacement data, provided at a dealership. The problem is, few customers know these updates are available, and less than 10% ever update their embedded map.

Entune 3.0 has changed that. The 2018 Camry models that have DCMs are ALWAYS connected to the Toyota Smart Center. Dynamic NAV communicates with the TSC to ensure the most up-to-date map and route is available.

Let's say that you're driving in an area experiencing a construction boom. The local municipality has been putting in new roads to support the growth. Kind of like where I live in Dallas.

For properly equipped 2018 Camrys, Dynamic NAV will have the Toyota Smart Center analyze a four square mile grid around the vehicle. Any roads, or points of interest that are on the database in the Smart Center, but not in the onboard map will automatically be displayed on the head unit.

Dynamic NAV overlays the new road as you drive. And when you set a destination, the system verifies and updates the roads and POIs at your departure point, at your destination, and along your route so you can be sure to have the most up-to-date directions.

That's a huge benefit to our customers and a differentiator for Toyota.

Another Toyota first is Dynamic Voice Recognition. Using the same approach as Dynamic Navigation, Dynamic VR processes voice commands offboard in the TSC in tandem with the onboard system. This allows us to verify the words spoken in a larger, more powerful database, so we can reduce system misrecognition and provide more accurate responses to voice initiated requests.

The connectivity provided with the next-generation of Entune also gives Toyota customers innovative services and convenience features.

Every DCM equipped Entune system delivers increased peace of mind with Safety Connect. Through this service, help can be dispatched through the push of an SOS button or automatically in the event of a crash with an airbag deployment.

Customers will also have access to a service we call Destination Assist. With the push of a button, the driver is connected through the embedded DCM to a live operator who can provide assistance in finding points of interest or addresses.

Once the destination is found, it is transmitted from the call center to the vehicle's navigation system. The route is calculated all with the driver's eyes on the road and hands on the wheel.

There's also Entune Remote, a mobile device app that allows the vehicle owner to remotely start and stop the engine, lock and unlock the doors and set alert parameters for guest drivers to make sure they're not speeding or driving where you don't want them to. Perfect for me with my newly licensed 16 year old son.

The Entune remote also allows you to monitor the vehicle's status and even gives you alerts on your phone or computer if you left a door or window open.

Another feature, Service Connect, provides regular vehicle health reports and allows for remote diagnostics of vehicle issues. In the event of an issue reports are pushed to the owner as well as to their preferred Toyota dealer. This allows for faster diagnostics, early parts ordering and peace of mind for our owners.

Service Connect strengthens the bond between the customer and their preferred Toyota dealer.

As you can see, we are elevating the connectivity of Toyota vehicles with the world around them to a new level.

We haven't, however, ignored the infotainment side, and we're now making the Entune App Suite a standard feature across all models. Previously, only available at the Premium audio level, everyone will now enjoy Pandora, Slacker, iHeart Radio, Yelp and several other applications on their Entune system.

We're also excited to announce the availability of in-vehicle 4G LTE WiFi on Toyota vehicles, starting with

higher grades of the all-new 2018 Camry. With the ability to connect up to 5 devices, WiFi lets passengers stream content to their connected devices, making those long drives seem a lot shorter.

As you've just heard, the launch of Entune 3.0 on the 2018 Camry is a milestone for Toyota in a number of ways.

But that's just the beginning of our Smart Mobility journey. We are working towards making every car connected.

As I mentioned earlier Toyota Connected will serve as our big data center. Toyota Connected will also provide the underpinnings for our Mobility Services Platform, which will enable the creation of new mobility business opportunities, like ride sharing and car sharing.

Using the mobility services platform, we are beginning to experiment on how to partner with other companies in the mobility space. One example of this is our partnership with Getaround, a company that enables peer-to-peer car-sharing.

We are starting a pilot program with Getaround this year in San Francisco to test the use of Smart Key Box, to simplify the process of car sharing.

In traditional car-sharing services, users share physical keys, which are either, personally handed off, or hidden in the vehicle somewhere. These traditional methods present room for improvement.

Smart Key Box, uses a secure device that's connected to a Controller Area Network. Using Smart Key Box, and a smartphone application, car-sharing users can lock, unlock, and operate the vehicle, without need for transfer of a physical key.

Access is managed by the vehicle's owner, with authentication codes issued by the TSC, between the smart phone, and the vehicle's Smart Key Box. Control is still with the vehicle's owner, but this is a safer, and more secure way of lending and sharing a vehicle.

Toyota has also made a strategic investment in Uber to explore collaboration and the development new services. Our first initiative is to create new leasing options for Uber drivers through our dealers and Toyota Financial Services. The leasing period is flexible and based on a driver's needs. Plus, drivers can easily make lease payments directly from their Uber account.

And lastly, on Japan's subtropical island of Okinawa, we are assessing the viability and benefits of tourism-centered car sharing. Using an ultra-compact electric vehicle with 30 units stationed at hotels and tourist sites, we are exploring a service that enables easy, freedom of movement with less environmental impact.

So, that's where we're headed.

Entune 3.0 is the next stepping stone to get us there and we're showcasing it in our exhibit right over there on the Atrium floor.

I hope you'll come over and take a look.

Thanks for your attention, and I'll be around to answer any questions you may have.

