Toyota's Mobility Initiatives and Partnership with SoftBank

Toyota Motor Corporation Executive Vice President
Shigeki Tomoyama
Build the Mobility Services Platform (MSPF) for use with vehicles that will all be connected*
* For passenger vehicles sold in Japan, the U.S., and Canada by 2020

Accelerate business innovation within Toyota by promoting the utilization of big data while also benefiting the customer and society

Create new mobility services via tie-ups with various companies

Toyota's Connected Strategy
Three arrows for creating appealing new vehicle features and value.
### Status of Toyota's Connected Strategy

#### 1. Introduction of connected technologies
- DCM as standard equipment and operation of MSPF in:
  - Japan: From Lexus & New gen Crown and Corolla Sport
- Start sales of connected products for fleets (SKB, TransLog)

#### 2. Business innovation
- Begin provision of e-Care Services based on vehicle data and sale of telematics (driving data)-based car insurance
- Begin utilization of big data in internal Toyota design work, quality management, etc.

#### 3. Mobility services
- Roll out car sharing services using SKB:
  - Getaround (U.S.) ; Servco (Hawaii-Toyota U.S. Distributor)
- Provide telematics (driving data)-based car insurance tracking, and maintenance services to Grab (South-East Asia)
- Car sharing trial w/Park24 (Japan) equipped with TransLog
- Develop AI-based dispatch service w/Japanese taxi providers & start field trials of on-demand commuter shuttle service
Position of Connected Technologies in Group Strategy

Strengthen Toyota group ties, share big data, and update software

Mobility Services Platform (MSPF)

DENSO TEN

DENSO  TOYOTA  FUJITSU

Connected System product development

Integrated ECU software development joint-venture

DENSO  AISIN  ADVICS  JTEKT

Development and installation of automated driving systems

DENSO  AISIN  ADVICS  JTEKT

Vehicle

TOYOTA
Connected Technologies and Continuous Improvements *(Kaizen)* through TPS

Establish facility for kaizen of connected technologies, provide training for dealers nationwide, and support work-level *kaizen*.

Provide 24-hour support for customers and vehicles.
### Initiatives for MaaS (Arrow 3)

Collaborate with various companies as a Mobility Services Platform provider.

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Collaboration with Carsharing

Carsharing business model using a smart key box (SKB) to lock and unlock the vehicle doors and start the engine via a smart phone app.
Collaboration with Grab

Provision of telematics (driving data)-based car insurance, tracking services, vehicle maintenance services, and the like.
Transformation into Mobility Company
Unveiling of the e-Palette Concept at CES 2018
Collaboration with Uber
We are jointly developing dedicated automated MaaS vehicles for introduction in Uber's ridesharing service network from 2021.

**UBER**
UTI/ATG
Ridesharing platform and autonomous driving technology

**TOYOTA**
TMC/TRI/TRI-AD
Vehicle and automated driving technology

Vehicle control interface
Vehicle control system

Collect and analyze data

Software updates
Data/dispatch

Software updates
Data
Collaboration with Japanese Taxi Providers

We are developing an AI-based taxi-dispatch system that predicts customer demand, and testing an on-demand commuter shuttle service.

**Mobility Services Platform (MSPF)**

**AI-based taxi dispatch**
- Demand prediction
- Driving routes that make taxis easier to find for customers

**On-demand commuter shuttles**
- Demand-based door-to-door transportation
Importance of Third-Party Business Collaborations

Toward the popularization of Autono-MaaS business

Automakers

- Planning of next-generation MaaS vehicle services
- Sales
- Vehicle leasing
- Third-party operation

Service providers
Establish MONET Technologies

Automakers

Planning of next-generation MaaS vehicle services
Sales
Vehicle leasing
Third-party operation

Service providers