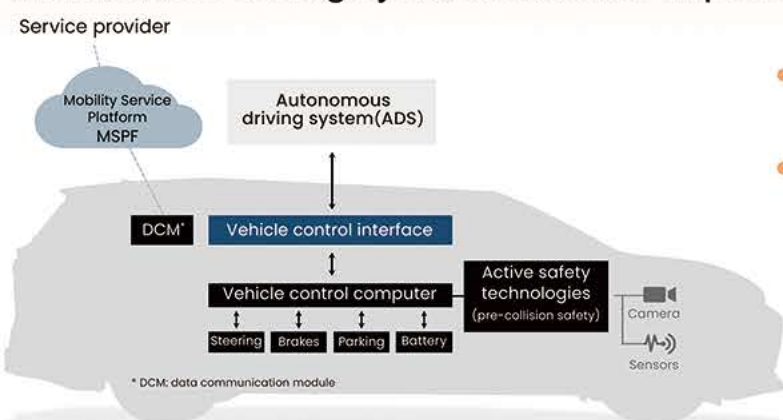# Initiatives to Realize an Autono-MaaS Society

Toyota is working to implement versatile mobility services that capitalize on autonomous driving (Autono-MaaS*) to achieve its goal of *"Mobility for All"* (freedom of motion for all people). Our efforts to help realize an Autono-MaaS-oriented society center on two key elements.

* A Toyota neologism created by combining "autonomous vehicle" and "mobility-as-a-service (MaaS)" to designate mobility services that rely on autonomous vehicle.

1. Autono-MaaS Vehicles

Toyota developed a vehicle control interface that enables easy integration of various partners' autonomous driving systems and also implemented redundancy in the major vehicle systems.

Service provider
Mobility Service Platform MSPF
Autonomous driving system(ADS)
DCM*
Vehicle control interface
Vehicle control computer
Steering | Brakes | Parking | Battery
Active safety technologies (pre-collision safety)
Camera
Sensors
* DCM: data communication module

- Ensuring secure communication with Toyota's vehicle control system.
- Implementing redundancy for the electronic systems of braking, steering, parking, and the power supply for their operation.

Autono-MaaS vehicle lineup for various applications

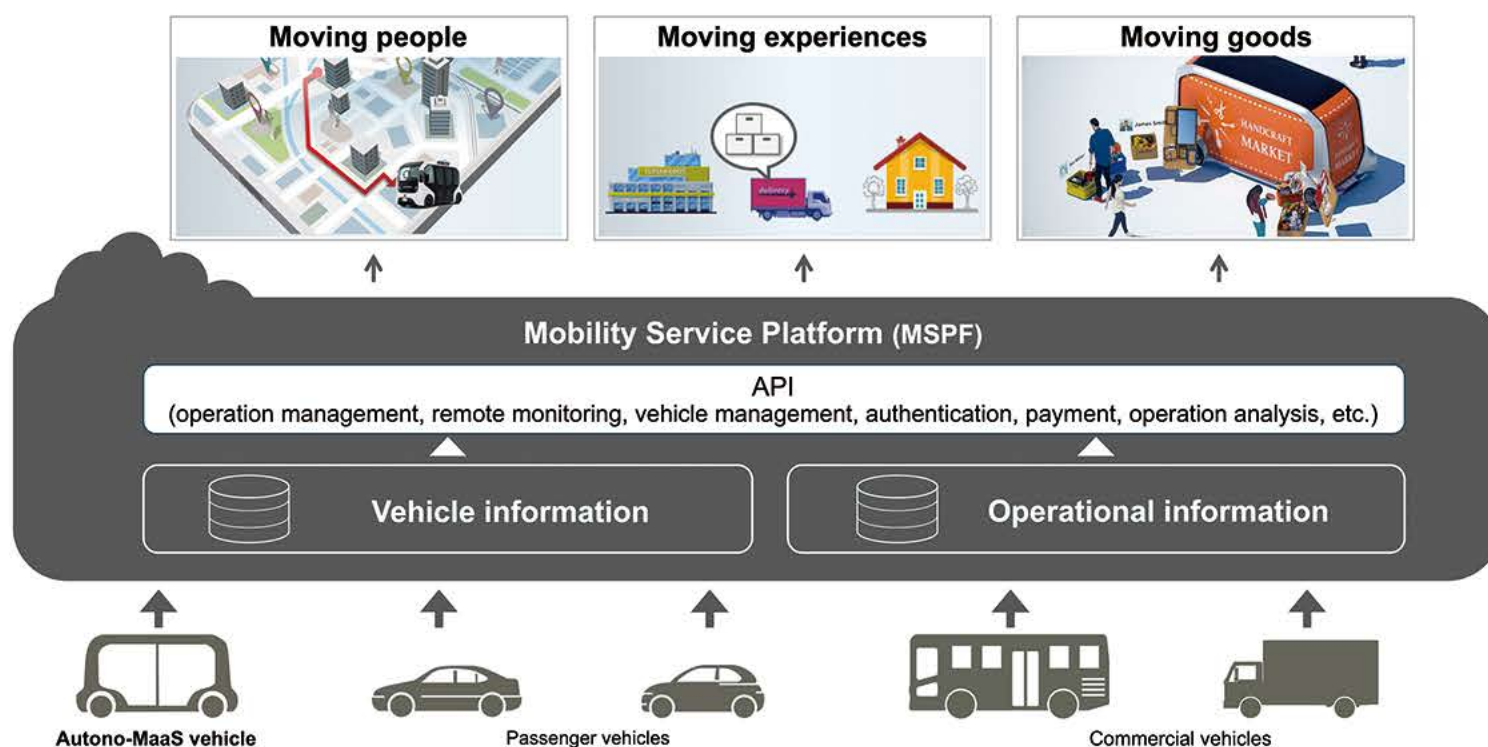| e-Palette	Sienna Autono-MaaS	bZ4X Autono-MaaS
BEV adapted for various uses such as carrying people, moving goods, or shopping.	HEV based on the Sienna	BEV based on the bZ4X

2. Mobility Services Platform (MSPF)

Provide an API* for the group of functionalities required to offer various mobility services, including Autono-MaaS vehicles, and make it available to operators and partners. Move people, goods, and experiences more freely and easily.

*API is short for application programming interface, a mechanism that enables interaction between software, programs, and web services.

Moving people | Moving experiences | Moving goods

Mobility Service Platform (MSPF)
API
(operation management, remote monitoring, vehicle management, authentication, payment, operation analysis, etc.)
Vehicle information | Operational information

Autono-MaaS vehicle | Passenger vehicles | Commercial vehicles

- Providing systems and technology that make operation and management of Autono-MaaS vehicles safe and efficient.
- Utilizing the large amount of data obtained from vehicles and operations enables us to offer better services.

TOYOTA