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Smart Mobility, Empowering Cities

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Enhancing MaaS as a key foundation for the better utilization of automated vehicles

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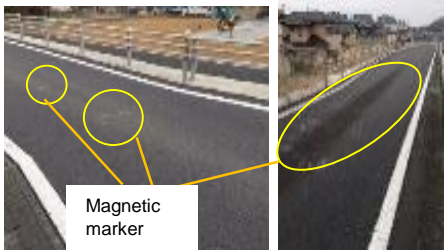
METI has conducted automated driving demonstration since 2017 towards the governmental policy target, i.e. realizing the mobility service with unmanned automated vehicles (AVs) by 2020

Demonstration projects underway in various regions:
Hitachi-shi, Ibaraki; Eiheizi-cho, Fukui; Chatan-cho, Okinawa



Public demonstration with no human inside the vehicle (Eiheiji-Cho)

Demonstration of vehicle **technologies**



Automated driving bus demonstration on a BRT line currently under operation (Hitachi-shi)

Validation of business **feasibility** and **business model**

AVs-friendly business environment, including the system and the infrastructure, must be developed for early realization of the mobility service with unmanned (level 4) automated vehicles

Future vision of level 4 service (fixed route)



(Example) Automated driving system demonstrations at Hitachi BRT



(Example) Small cart demonstration in Eiheiiji-cho, Fukui

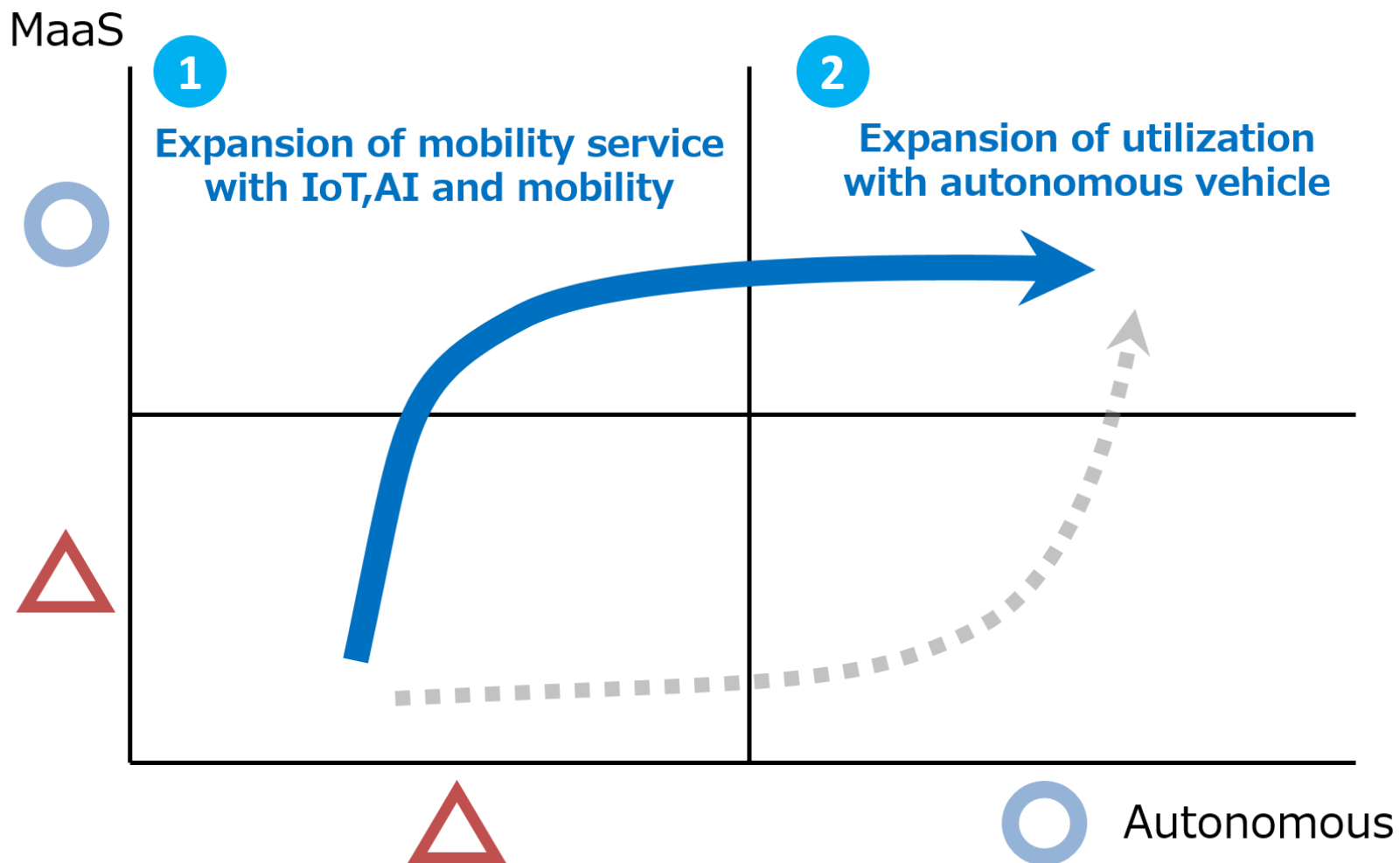
Enlarged driving route
(environmental development)

Future vision of level 4 service (fixed area)

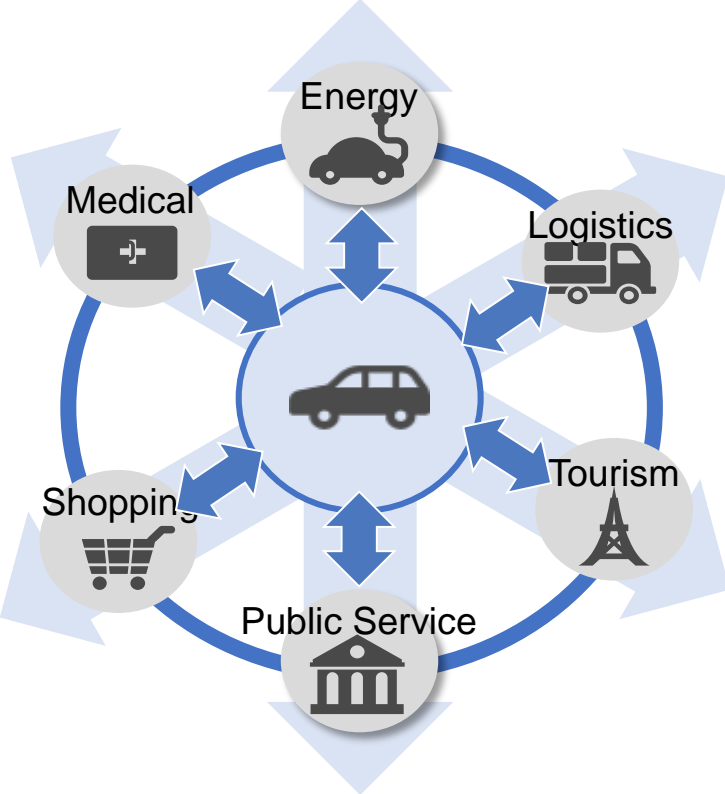


(Example) "Easy Ride" (Nissan & DeNA) Demonstration testing
Source: "Easy Ride" HP

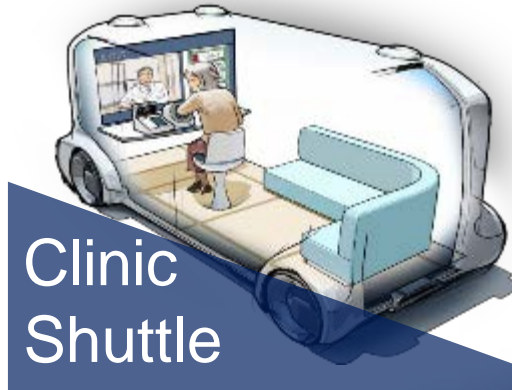
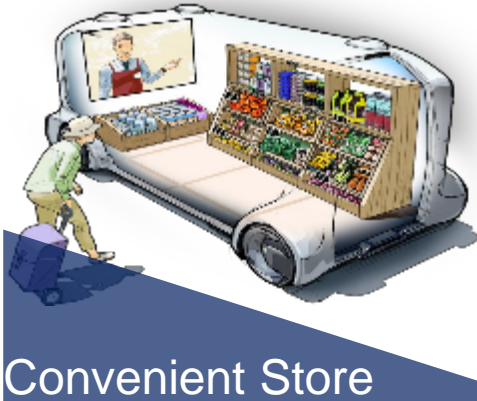
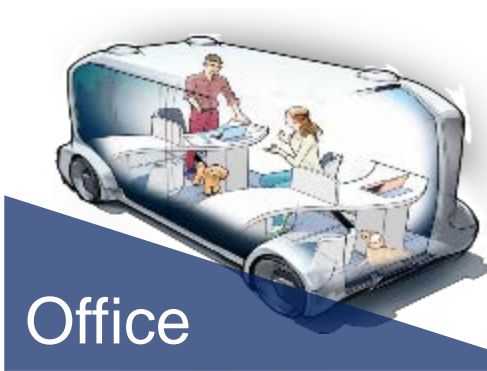
“MaaS” can create a better business environment and provide a key foundation for the better utilization of AVs



Linking new mobility services with various regional economic activities (e.g. tourism) can create new value on mobility and contribute to the regional economic development.



Mixture between mobility methods and various services



METI together with MLIT launched “Smart Mobility Challenge” project in April 2019 to enhance further collaboration between regional stakeholders and private companies who can provide their expertise in MaaS and AVs.

Council for Promoting the “Smart Mobility Challenge” Project (established in April 2019)

Support according to needs ↓ ↑ Field provision, data sharing, Results briefing

Information provision ↓ ↑ Information provision to council Participation in making proposals

Support for FS and making business plan by METI

Support for development system by MLIT



Private companies



Local government

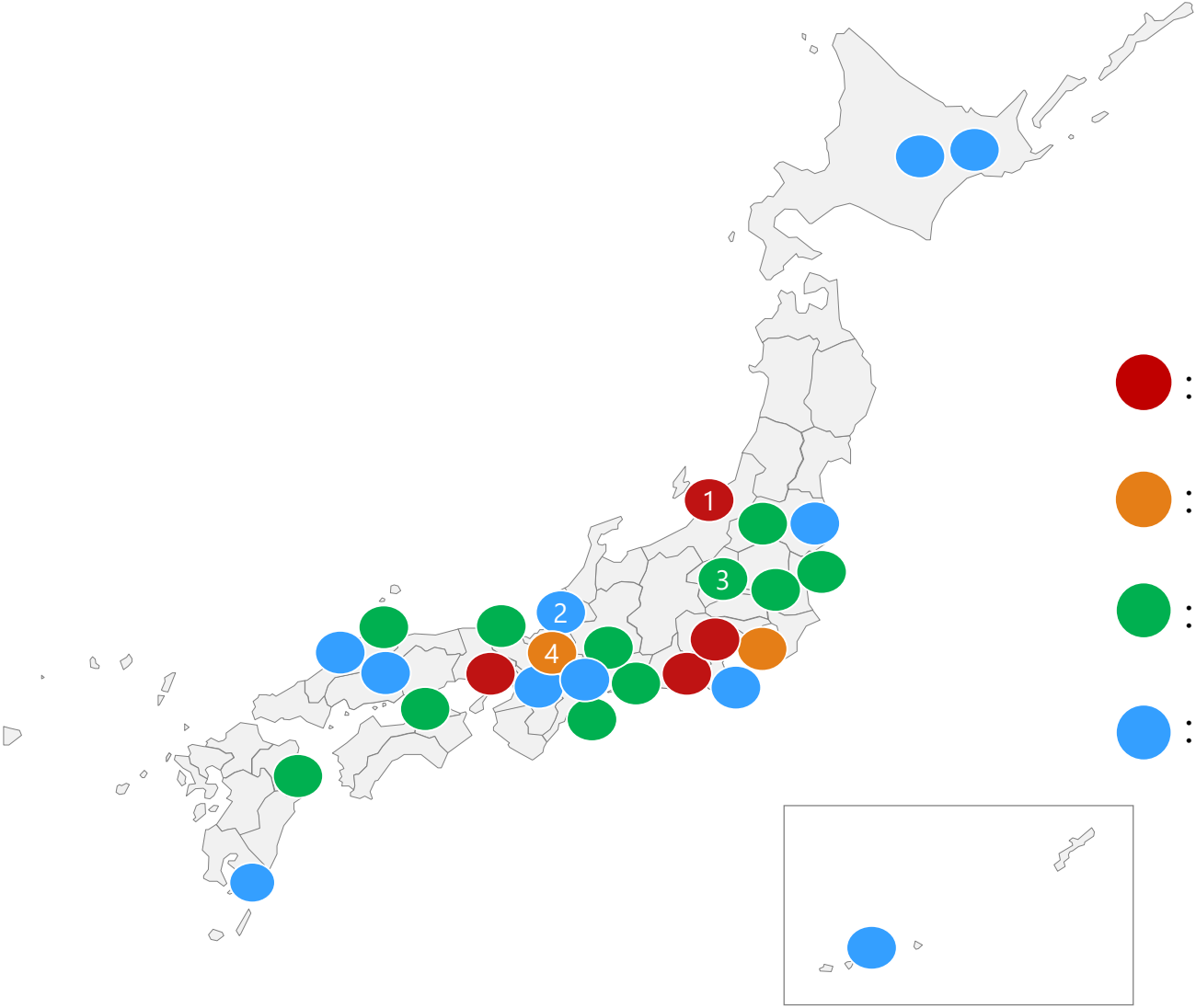


Universities/
Research institutes

Support for selected regions

Council members

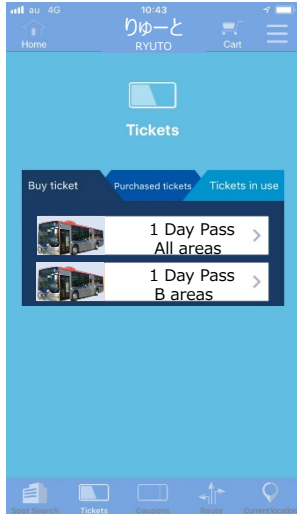
28 regions selected for “Smart Mobility Challenge ” 1st round trial



- : Large cities
- : Mid sized cities
(Less than 50% modal share of private cars)
- : Mid sized cities
(More than 50% modal share of private cars)
- : Rural communities

Some examples of “Smart Mobility Challenge ” trial

Niigata City (Niigata Prefecture) Large city



- Developing app to combine payment and MaaS functions.
- Distribution of coupons in cooperation with commercial facilities through the app.
- Carrying out a demonstration of on-demand transport (micro-transit) with start-up company.

Source NIIGATA KOTSU co.,ltd. / Nihon Unisys, Ltd. Nihon Unisys, Ltd. "Provides its products and services in Japan only."

Eiheiji Town (Fukui Prefecture) Rural community



- Development of a regional transportation platform using self-driving vehicles.
- Transportation of both goods and people by ridesharing service managed by local communities.
- Postal transport and product delivery by autonomous delivery robots and self-driving cars.

Source Eiheiji city

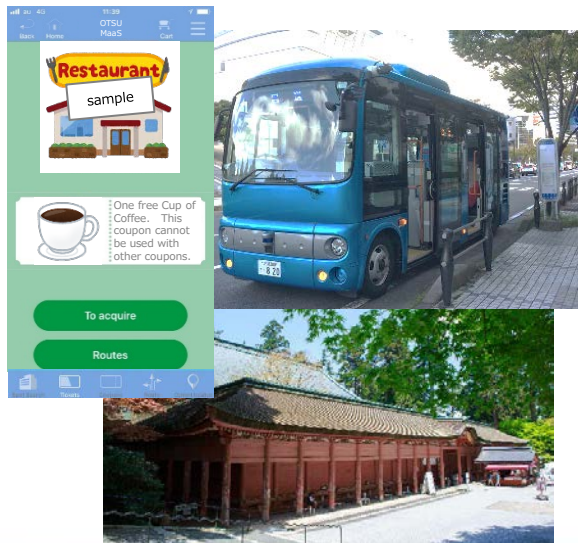
Maebashi City (Gunma Prefecture) Midsize city (depending on private cars)



Source Maebashi city

- Connecting self-driving bus, on-demand transport (micro-transit) and ridesharing service managed by local communities through the app.
- Collaboration with local commercial facilities, distributing coupons through the app, attracting customers to shopping street in the downtown.

Otsu City (Shiga Prefecture) Midsize city (rich public transportation)

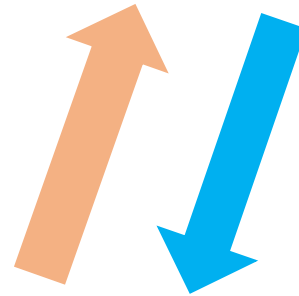


- Realizing seamless transportation services for tourists through the app.
- Collaboration with local commercial facilities, distributing coupons through the app.
- Utilizing self-driving bus in the main street from the central station to various accommodations.

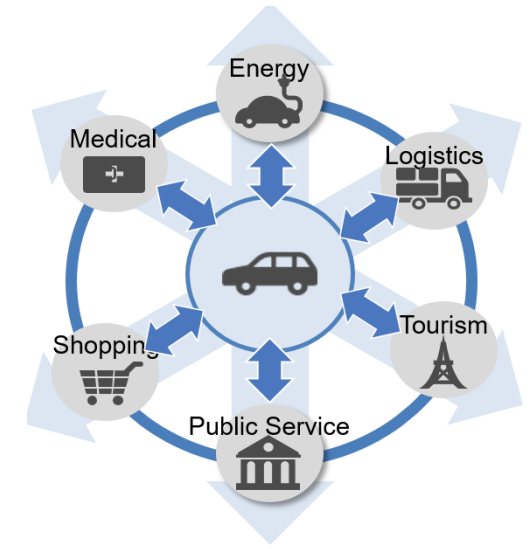
There are growing business opportunities in the global market including Southeast Asia. Sharing Japan's experience and newly-developed business models with other countries could be mutually beneficial.



Japan's experience and new business models



Growing opportunities both for policy and business



The background features three stylized trees with canopies that resemble complex network graphs. The trees are rendered in a light red color against a darker red background. The central text is white and bold.

Smart Mobility, Empowering Cities