

Connected Car

NISSAN INTELLIGENT **M**OBILITY

Nissan Intelligent Mobility transforms your car into a more exciting partner by redefining how your car is driven, powered and integrated into society.



**Intelligent
Driving**

**More
Confident**

**Intelligent
Power**

**More
Excited**

**Intelligent
Integration**

**More
Connected**

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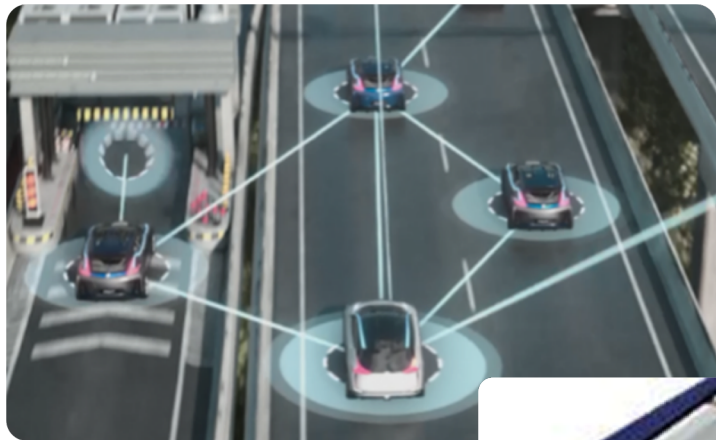
**Intelligent
Integration**

**More
Connected**

Wide scope of Connected Car benefits

- Key areas where Connected Car will contribute the most value

Autonomous Drive & EV



 Alliance Intelligent Cloud



ALLIANCE
INFOTAINMENT
SYSTEM



ALLIANCE
CONNECTIVITY
MODULE

Personal services

NissanConnect
CONNECTED CAR. CONNECTED FAMILY.



 amazon alexa

New Mobility



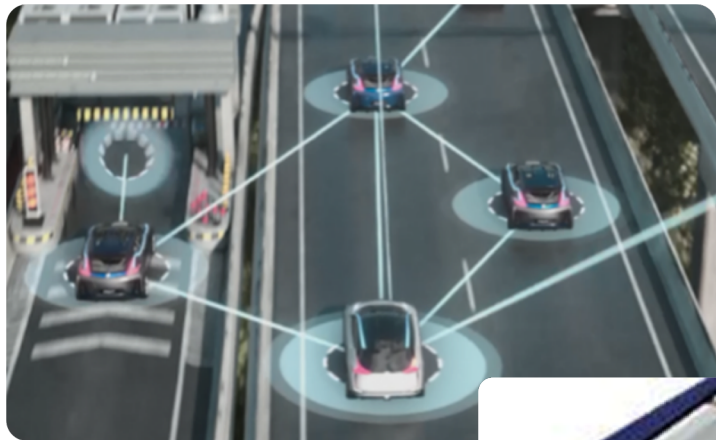
Data business



Wide scope of Connected Car benefits

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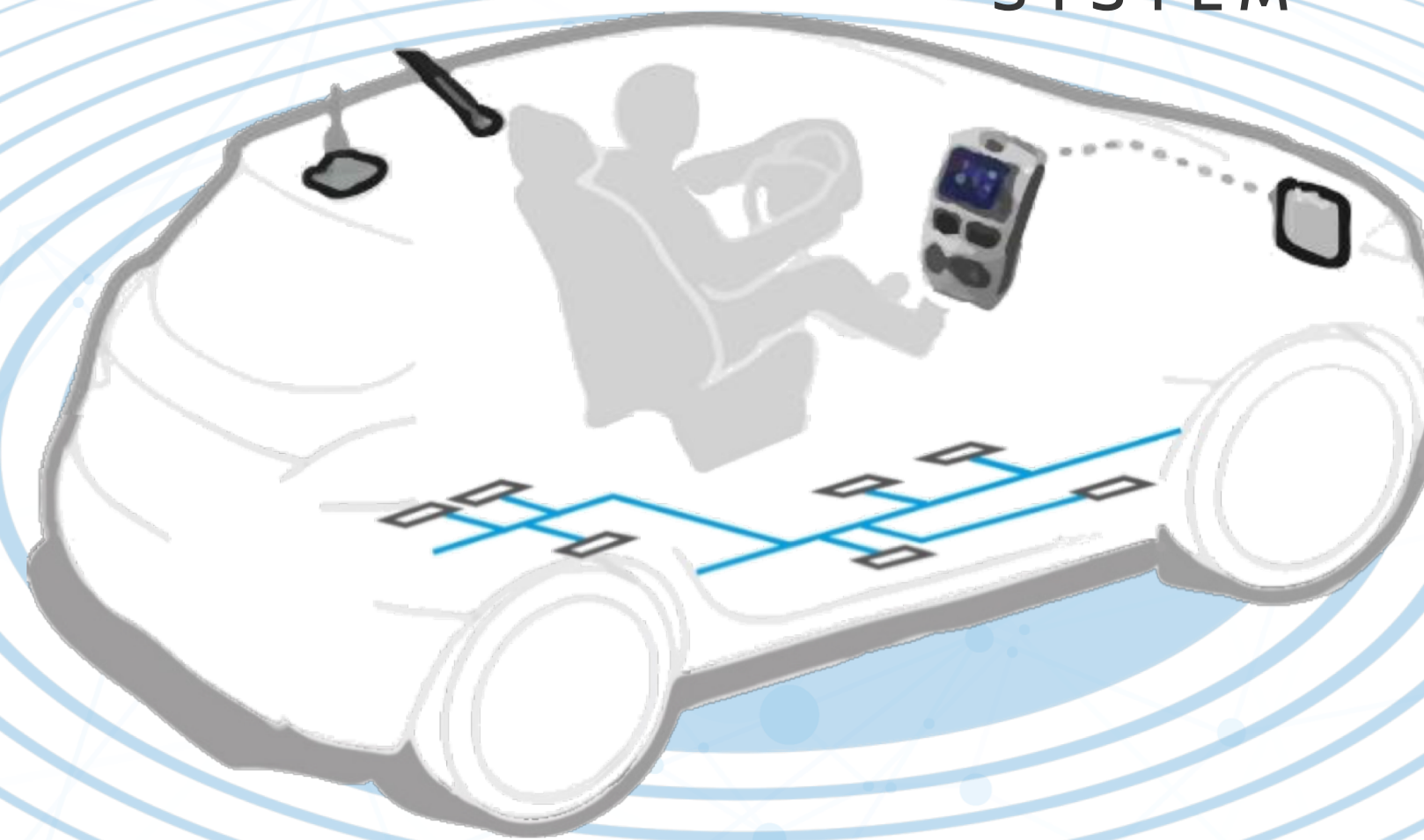
Autonomous Drive & EV



 Alliance Intelligent Cloud



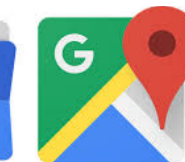
ALLIANCE
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New Mobility



Data business



Seamlessly connected personal services

- Compelling services seamlessly connect your experiences before departure and while driving, to after arrival



Creating a compelling user experience

- By integrating services with HMI, Nissan provides a uniquely seamless and compelling user experience



Compelling user experience

Personal services for
convenience and
confidence

HMI is easy to
operate with confident

R&D structure strengthens
competitive advantage

- Leveraging Alliance resources
- Collaboration with partners
- In-house software development

Personal services for convenience and confidence

- By integrating services with HMI (Human-machine interface, Nissan provides a uniquely seamless and compelling user experience

Compelling user experience

**Personal services
for convenience
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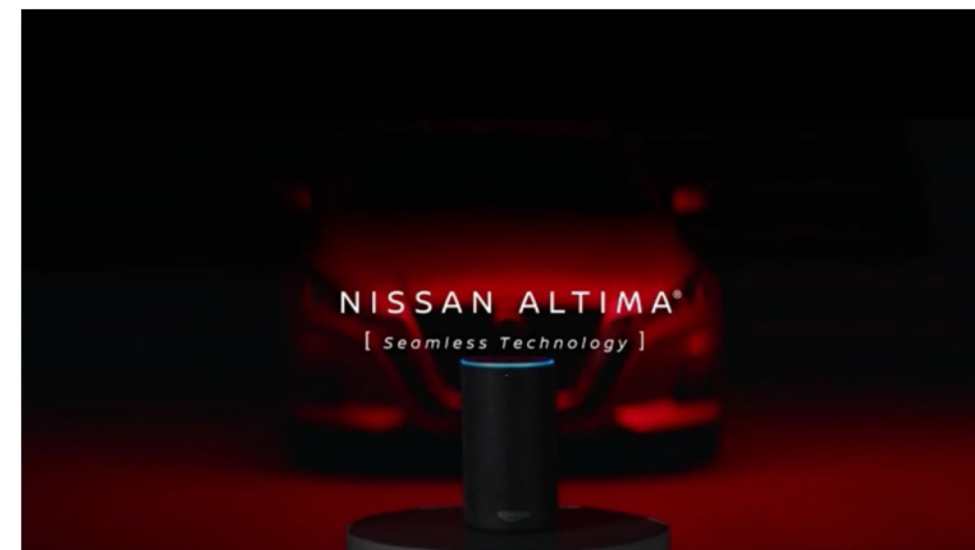
Personal service examples

Seamless personal service evolution



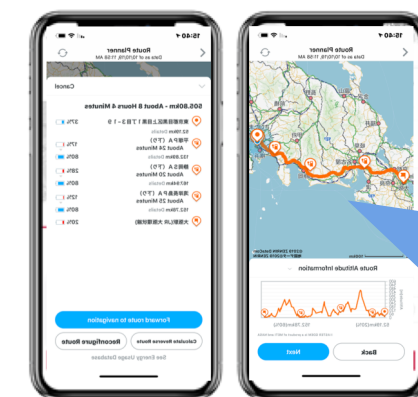
Existing services

- Remote engine start
- Remote air conditioning setting



Upcoming services

Confidence enhancing service for EV owners Smart route planner



- Set destination on smartphone
- Routes vehicle through charging spots depending on battery level
- Can reserve charging spots

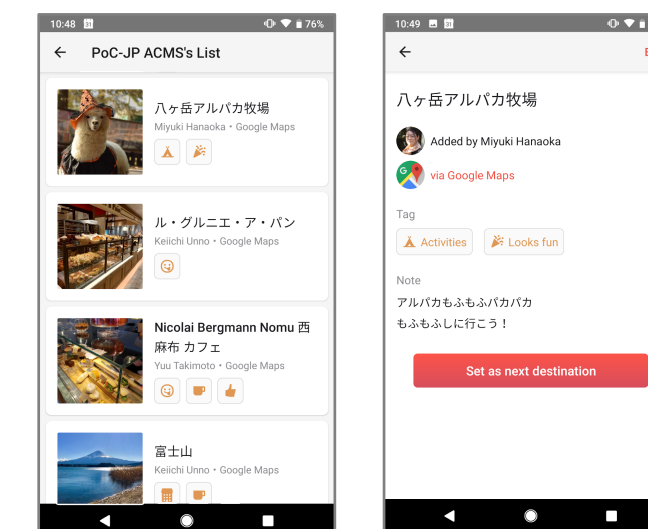
In-car payment



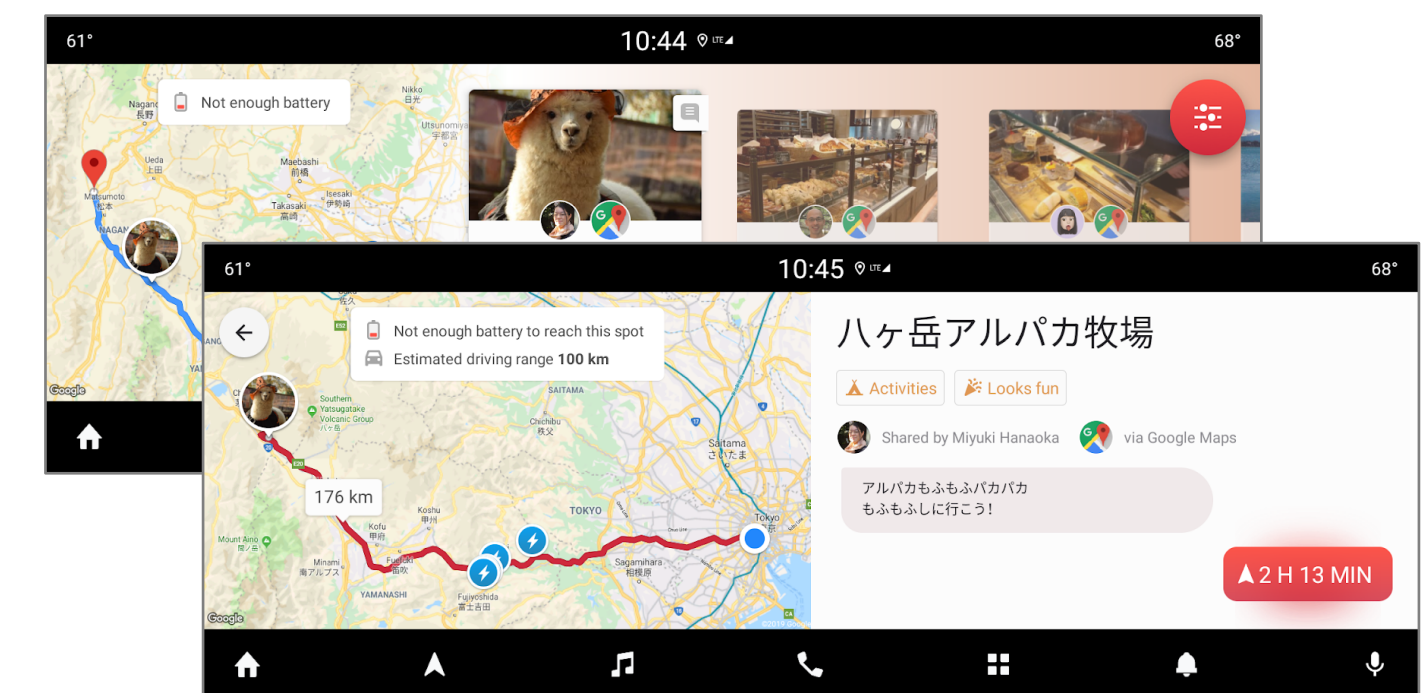
Automated payment from within vehicle

New user experience Connected app concept

Today's demo



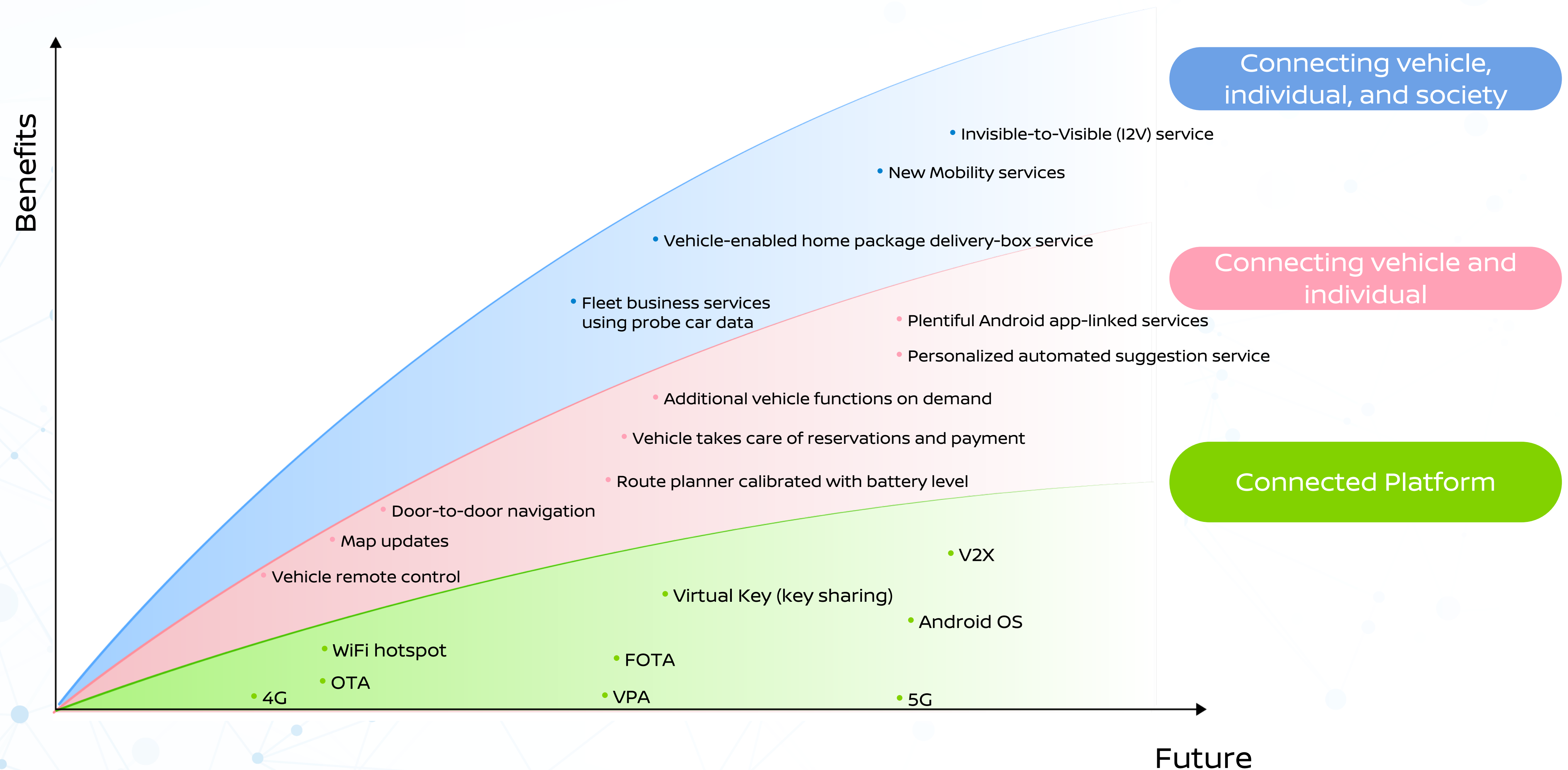
Smartphone application



In-car infotainment system

Evolution of services

- Seamless service coverage expands to include vehicles, individuals and society



HMI is easy to operate with confident

- By integrating services with HMI, Nissan provides a uniquely seamless and compelling user experience

Compelling user experience

Personal services for
convenience and
confidence

**HMI is easy to
operate with confident**

R&D structure strengthens
competitive advantage

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HMI roadmap

- The human-centric HMI inspires confidence and is easy to use; it provides information as needed at the appropriate place and time

Clean design and intuitive operation

Easy to operate with confidence



Seamless integrated display



Semi mixed-reality display



Invisible-to-Visible (I2V)



Information is displayed as needed at the appropriate place and optimum time

HMI demonstration

Seamless integrated display

Shows speed and other vehicle information integrated with GPS and other service information



Today's demo

Invisible-to-Visible (I2V)

New HMI uses AR (augmented reality) to link virtual and real worlds

Demo@GRANDRIVE



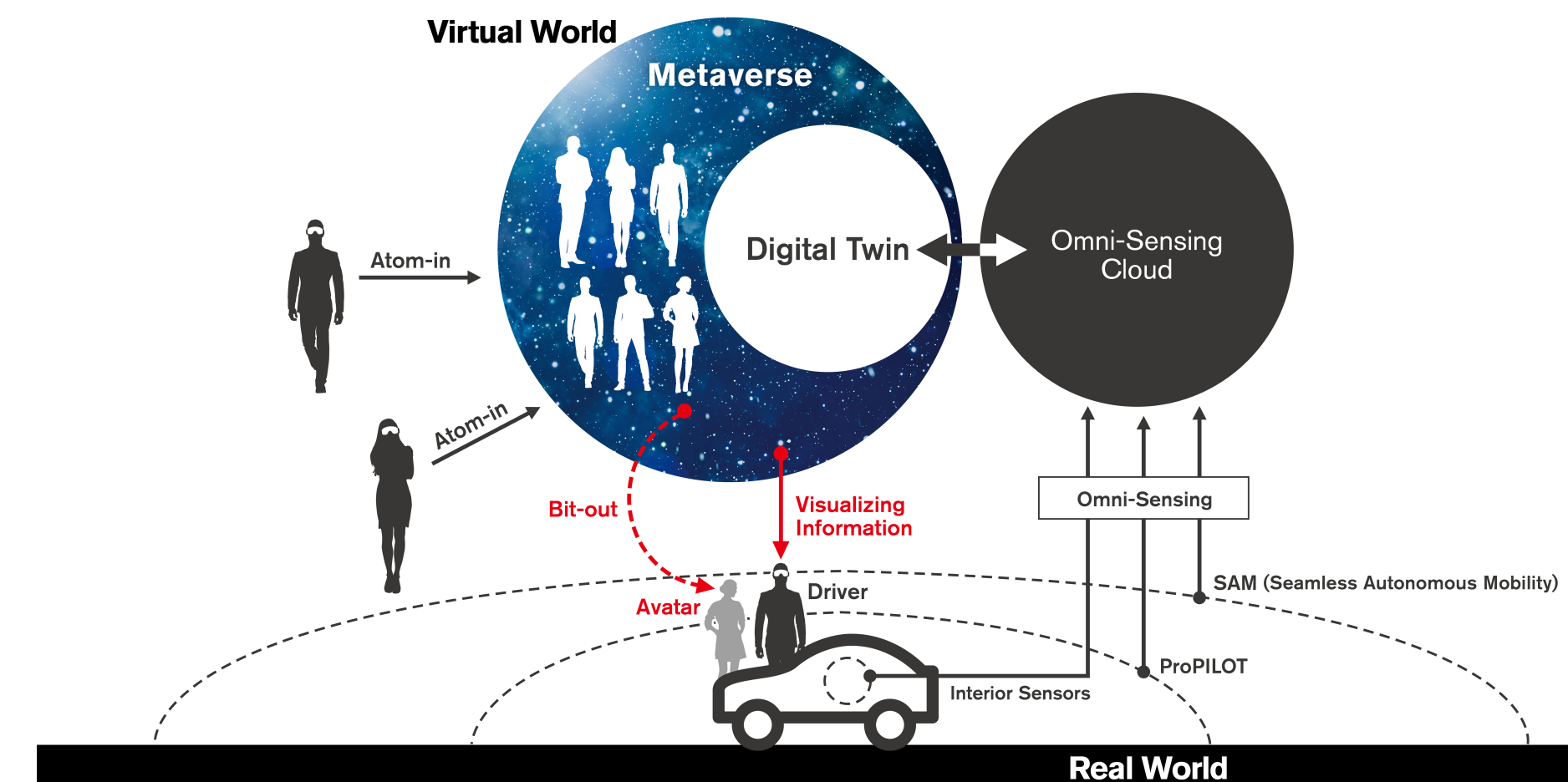
Semi mixed-reality display

Well-timed display of scenario-dependent information linking cockpit to outside world



Today's demo

Invisible-to-Visible



R&D structure strengthens competitive advantage

- By integrating services with HMI, Nissan provides a uniquely seamless and compelling user experience

Compelling user experience

Personal services for convenience and confidence

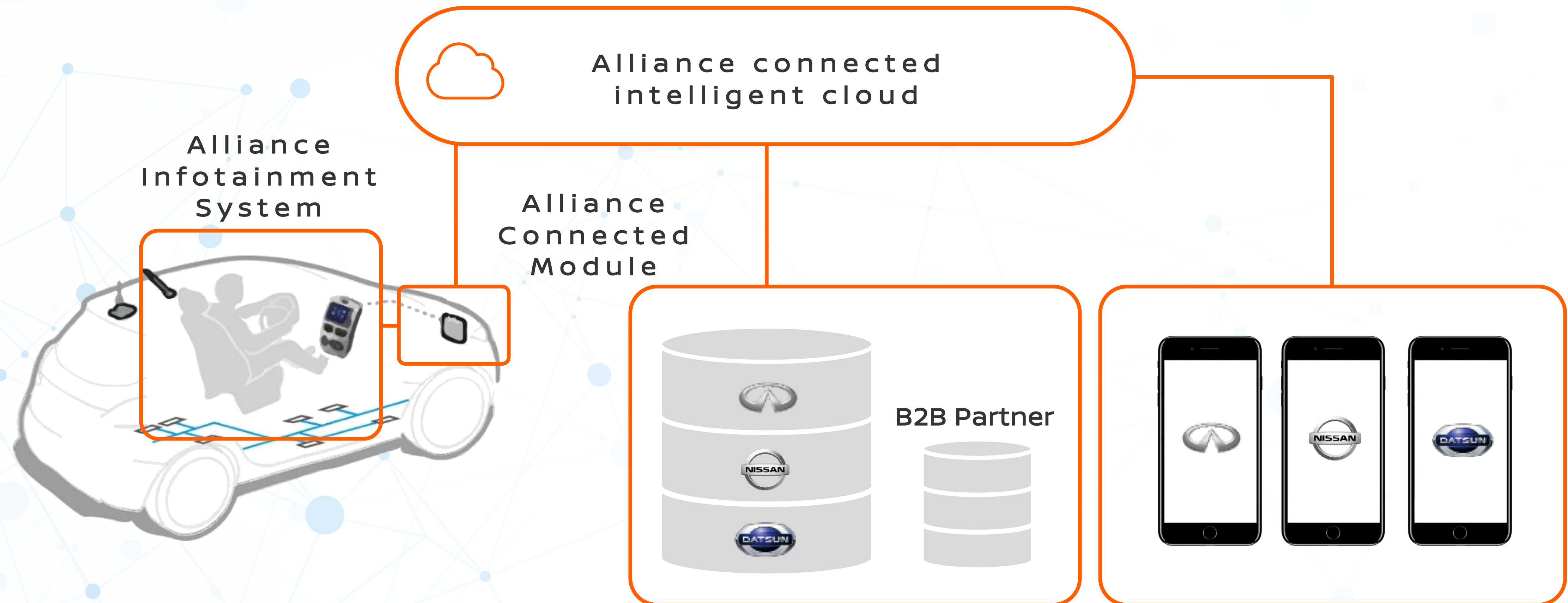
HMI that is easy to operate with confidence

R&D structure strengthens competitive advantage

- **Leveraging Alliance resources**
- **Collaboration with partners**
- **In-house software development**

Efficient development, leveraging Alliance resources

- Efficient development of Cloud services, on-board devices, and smartphone apps



Collaboration with partners

- Leveraging industry-leading partner technology for quicker development and quality assurance

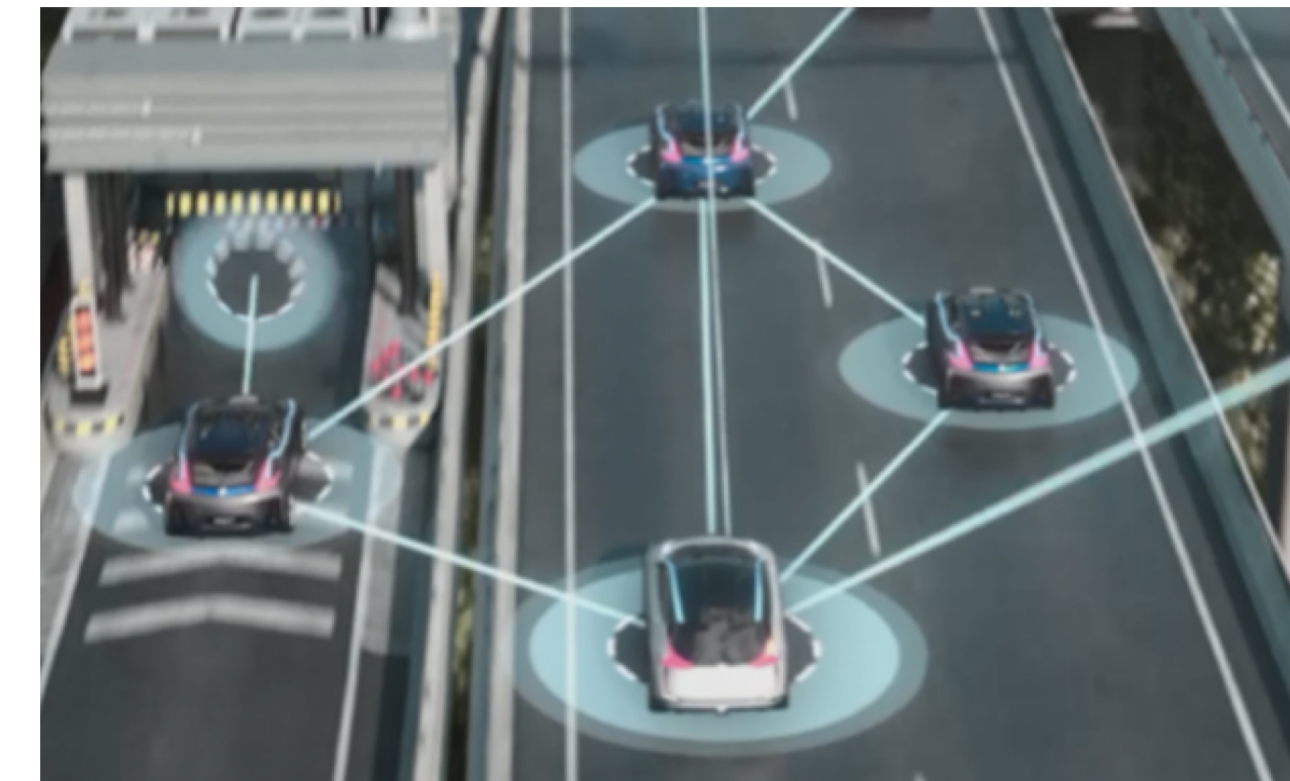
Server technology development

Collaborating with Microsoft for development of Alliance Intelligent Cloud



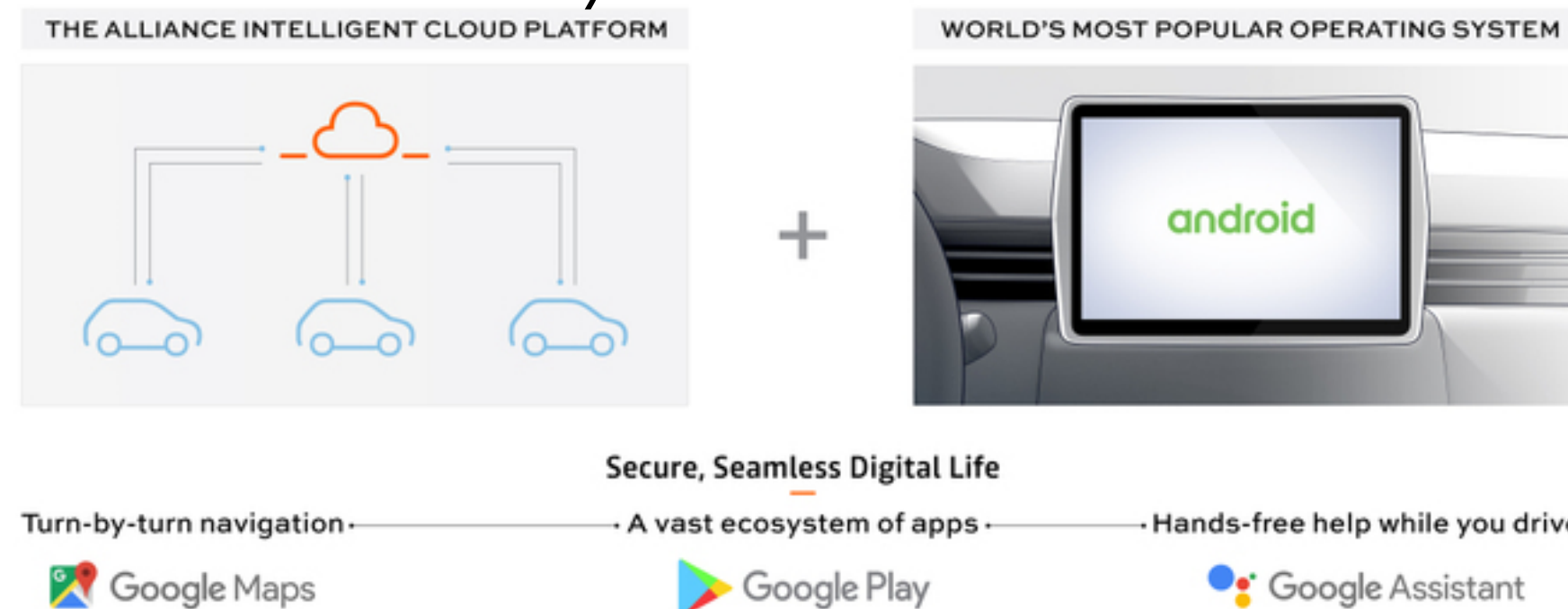
Connected technology development

C-V2X with Continental, Ericsson, NTT docomo, OKI, Qualcomm

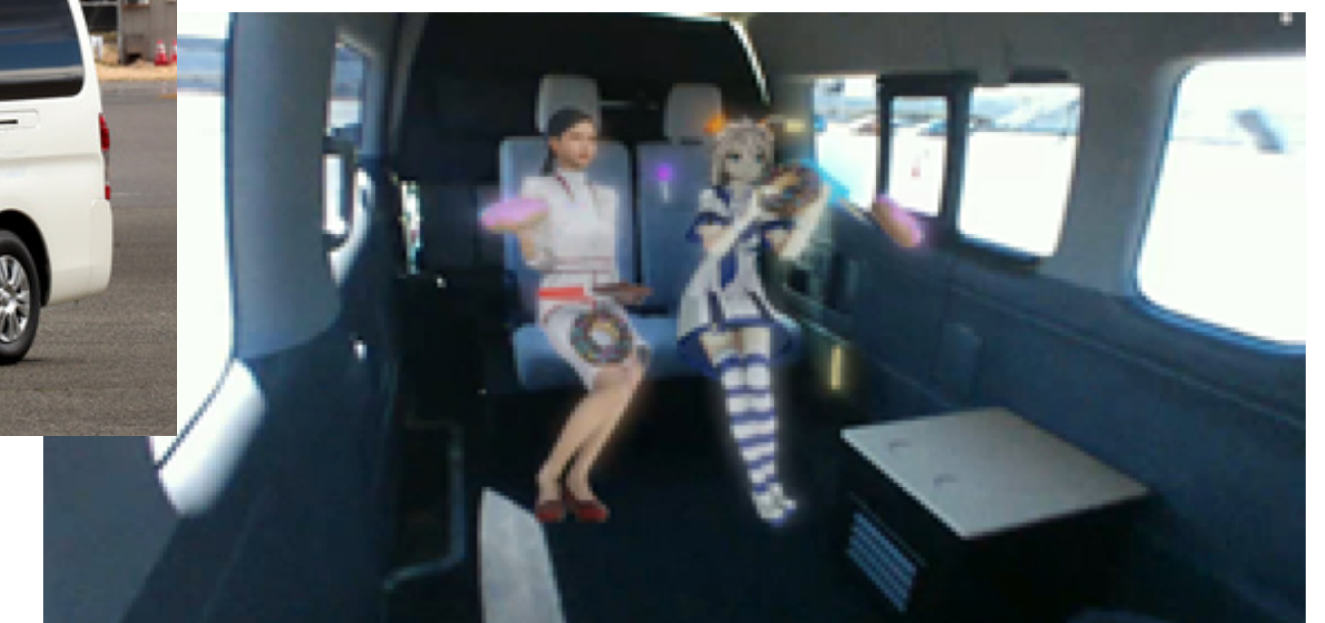


Development of on-board technology

Integrating Google services in next-gen infotainment system



5G & AR HMI with NTT docomo

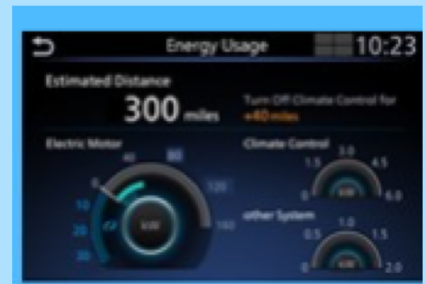


In-house software development for enhanced service development capability

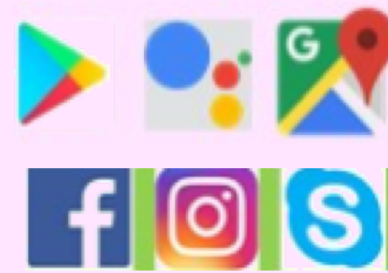
- Advanced technology and new services developed rapidly with high quality
- In-house development of HMI and smartphone apps help facilitate nimble updates and assure a consistent user experience

Software architecture is designed for effective use of in-house software and partner software to secure user

In-house software:
HMI and vehicle-linked services

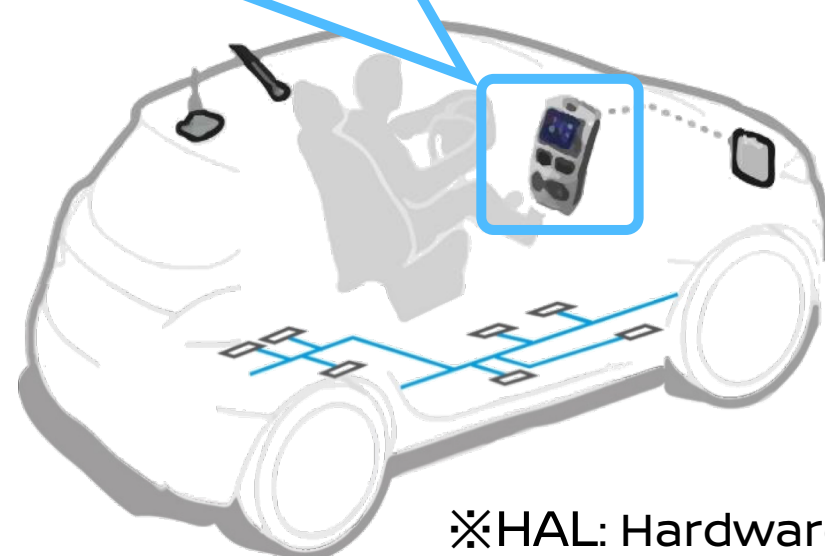


Partner software:
On-board apps



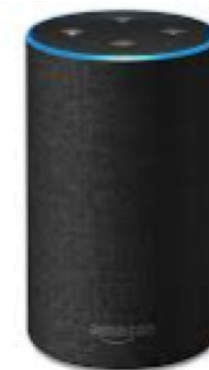
HAL

Generic OS for Vehicle use



※HAL: Hardware Abstraction Layer

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amazon alexa



Software training center established November 2017

Training engineers to have the skill sets needed for both vehicle engineering and software development



The logo features the word "NISSAN" in a black, sans-serif font. To its right is a small icon consisting of three blue curved lines above a solid black rectangle. This is followed by the word "INTELLIGENT" in a black, sans-serif font, and finally the word "MOBILITY" in a larger, bold, black, sans-serif font. The entire text is centered horizontally against a light blue background with a network of dots and lines.

NISSAN  INTELLIGENT **MOBILITY**