Building new business models using vehicle data: Support for Development of Connected Services

With the rapid progress of connected cars, new business opportunities have emerged. Hence, we need to position ourselves and build an ecosystem from a broad perspective.

■ By 2025, more than 70% of new cars will be connected, and there will be wide range of applications of the collected data

The declining costs of IT such as sensing, communications, and data storage, increasing importance of software in automobiles, and need for their maintenance is driving the development of connected vehicles. As a result, more than 70% of the global automotive market (in terms of sales volume) will be connected by 2025 and a large volume of vehicle data will be collected.

The progress of connected cars will not be limited to areas related to manufacturing (such as autonomous driving and software updates) but will also affect automotive after-sales services (such as automobile insurance and maintenance services) and other non-automotive areas (such as real estate and retail).

■ A wide variety of capabilities are required, which increases the need to collaborate with other companies

Stakeholders in the field of connected cars range from automobile manufacturers involved in the manufacture and sale of vehicles that generate data, to parts suppliers, telecommunications carriers, insurance and maintenance companies that use them.

From the standpoint of automobile and parts manufacturers, the obstacles to commercialization are cloud data analysis and lack of in-depth knowledge of industries (after-sales) where the generated data will be used. On the other hand, it will become imperative for telecommunications carriers and after-sales service providers to be involved in the automotive industry, which is unfamiliar to them.
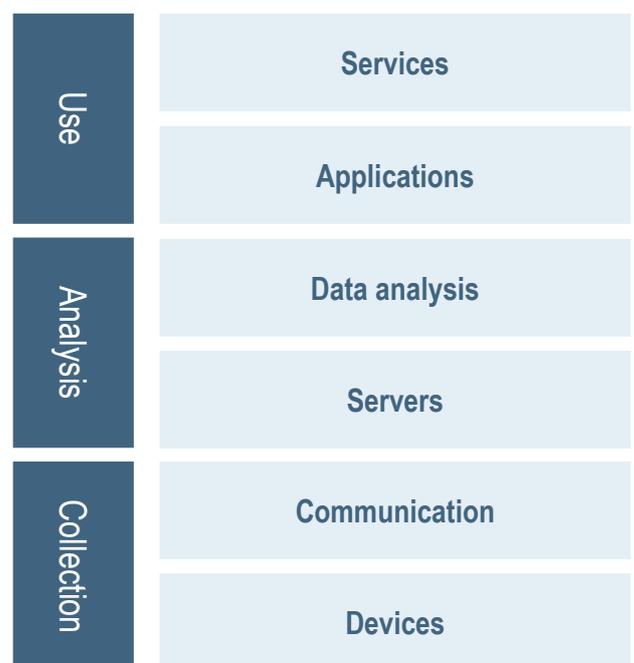
In such a case, collaborating with players who have the relevant capabilities and knowledge that we do not have will become indispensable.

■ Scope of consideration of connected services

Target industries for connected services
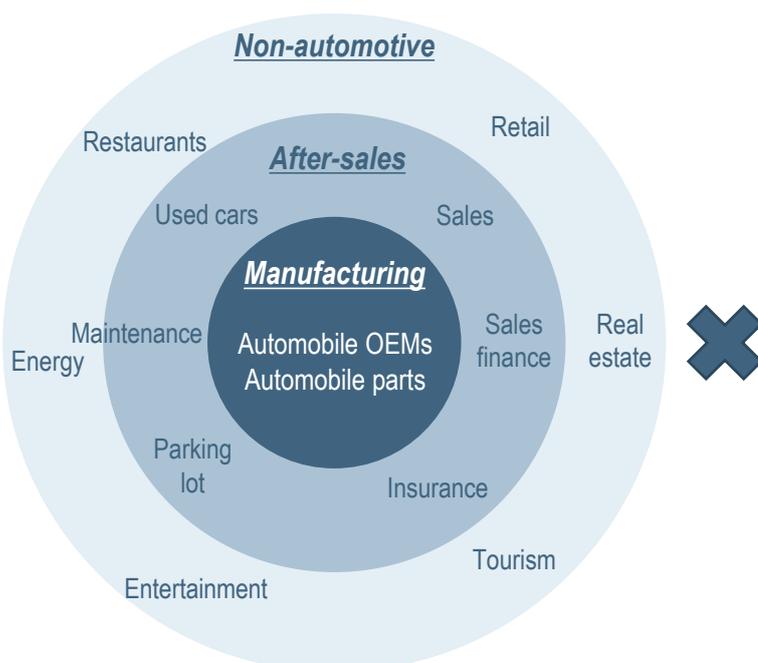
Functions required to realize services

NRI can provide end-to-end support in the field of connected services, from initial planning to service implementation, collaborative negotiations with the related players, and PoC implementation

■ Experts from various industries provide end-to-end support from planning to PoC* leveraging system capabilities

There are many patchy use cases related to the connected sector because of large number of stakeholders and the great deal of attention that it has recently drawn. Furthermore, there are many nascent use cases; hence, it is often necessary to decide on commercialization based on a more detailed feasibility study (FS) using PoC* in addition to a desktop FS.

For this, we (1) conduct a detailed desktop examination of numerous use cases to narrow down and define the business scope, and (2) conduct a PoC-based detailed verification involving other companies as necessary.

Regarding (1), our consultants have expertise in their respective industries, i.e., automotive (particularly the connected domain) as well as after-sales (such as insurance and retail) and work together to support the clients. With regards to (2), we provide integrated support with a team specialized in systems and analytics, from PoC design to execution.

*PoC: Proof of Concept

■ Case: End-to-end support from development of entry strategy for the connected domain to ecosystem construction

NRI provided complete support to the Japanese automobile company A, from its initial plan to enter the connected sector, to the implementation of services and collaboration with partners.

In the initial planning and service implementation phases, NRI identified and narrowed down the areas of entry based on its database of use cases. In doing so, we assigned consultants who are well versed in the relevant industries to conduct detailed feasibility studies and build business models based on the knowledge of the after-sales industry.

In the collaboration support phase with partner companies, we provided the necessary support to deepen the collaborative relationship, including listing up of capabilities of both companies, specification of services to be deployed, and facilitation of review workshops.

■ Intensive support for development of connected services

Initial plan	Construction of service concretization system	PoC
Examples of support provided		
• Identifying use cases • Identifying promising areas for entry	• Building an ecosystem for service implementation • Collaborating with other companies (as required)	• Designing PoC • Providing various kinds of support for PoC implementation (prototype creation, etc.)

Structure of NRI

Automobile expert (consultant)   Insurance   Retail
Consultants specializing in after-sales

Strategy & system consultants   Engineer

Source: NRI