The Story of Collaborative Value Creation with Stakeholders

The Hitachi Group is like a continually evolving tree that gathers diverse capabilities. By nurturing this tree together with our stakeholders, we have brought about solutions that contribute to the resolution of social issues. Moving forward, we will continue to engage in new collaborative value creation with our stakeholders by aiming for transformations with the times and continuing to take on new challenges.

**Episode 1**
The Optimise Prime Project, UK
Towards a carbon-free society

**Episode 2**
Development of Microservices Solutions, ASEAN
Supporting digital transformations of financial industry and beyond

**Episode 3**
Hitachi Digital Solution for Retail/Logistics
Transformations centered around the distribution industry
The United Kingdom has set the target of reducing CO₂ emissions to effectively zero by 2050. To reach this target, the decarbonization of the electric power sector has to be almost completed by 2030 and 60% of new automobiles have to be EVs in the UK. If Optimise Prime is implemented across the UK, it is estimated that a reduction of 2.7 Mt of CO₂ is possible by 2030, which is an effect corresponding to saving a total of 207 million pounds.

The Optimise Prime project, launched in January 2019, is an initiative to realize a carbon-free society by keeping down power prices while increasing the spread of EVs and making efficient use of existing power distribution networks. Hitachi is in charge of designing the solutions architecture and implementing the IoT platform at the project’s core. We started gathering data on EVs in 2019 and have already implemented demonstration experiments with up to 3,000 vehicles over 12 months. We plan to submit the final report in 2023, so that the data can be used by organizations, research institutions, and government agencies that want to shift to zero emissions through EVs.

Application development that applies adaptable and flexible microservices, as well as DevOps that links system development and operation, thus realizing agile development that is flexible and speedy, is in great demand for the acceleration of DX. DX is proceeding rapidly in the financial industry, especially in the fast-growing ASEAN region. Hitachi will establish microservices solutions and secure a core of digital talent for its development, to realize the transformation of client systems to a more flexible architecture, for which an open banking architecture and shorter time-to-market are increasingly needed.

In order to expand Lumada business globally, Hitachi will make fast-growing ASEAN its starting point, and will develop common functions needed for the development of microservices by utilizing its know-how in application development for financial institutions. The development of this solution was enabled by knowing and incorporating functions required by financial institutions, which were collected through the co-creation with a major bank in ASEAN. Moreover, we engage in activities that aim to develop digital talent and guidelines that support microservices development and are now aiming to establish a managed service that includes a cloud environment and DevOps development infrastructure. Going forward, we will aim to further enhance our delivery capabilities by establishing a dedicated development team for microservices (resource pooling), and scale out these solutions globally to clients in non-financial fields, whose needs for financial functions are increasingly growing.
Against a background of diversifying consumer needs, manpower shortages from a shrinking working age population, food loss issues, and so forth in the logistics industry, there is a growing need for high-efficiency store management that utilizes advanced digital technologies and that can instantly respond to changes in demand. Moreover, we are seeing issues with driver shortages and long working hours in the delivery operations due to the spread of e-commerce and diversifying delivery needs.

Hitachi is using digital technologies to resolve these challenges in the distribution industry. We are contributing to more efficient, safer, and more secure operations by automating order placements based on demand prediction, automatic delivery planning, and ensuring safe driving management of drivers. Moreover, we are optimizing storage in the food industry to counter food loss as well.

Order placement, storage management, and delivery planning have normally required some time to perform based on the experience and know-how of expert workers. The Hitachi Digital Solution for Retail/AI Demand Forecast Auto Replenishment Service makes advanced demand predictions for individual stores and products by using AI and original algorithms, thereby making suggestions for recommended order volumes and facilitating automation of order placements. Hitachi Digital Solution for Logistics/Delivery Optimization Service realized automated suggestions for highly efficient delivery plans by generating data on all key conditions for delivery planning tasks and performing analyses that also incorporate the experience of expert workers. SSCV*1-Safety on Hitachi Digital Solution for Logistics*2 contributes to operation management, better driver safety, and workstyle reform through AI analysis of the biometric and driving data of logistics drivers. Hitachi is combining these solutions to provide value to all stakeholders throughout the supply chains, including suppliers, wholesalers, logistics operators, stores, and consumers, in the distribution industry.

*1 SSCV: Smart & Safety Connected Vehicle
*2 Business developed through collaborative efforts between Hitachi Transport System, Ltd., and Mitsubishi HC Capital Inc.