

## Category Overview

# Achieving Innovation through Global Collaborative Creation with Customers

## —Global Center for Social Innovation—

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### CSI ACTIVITIES

HITACHI is strengthening its Research & Development Group to accelerate the development of its global Social Innovation Business. Its Global Center for Social Innovation (CSI) was established in April 2015 as an organization to advance customer-driven global research and development (R&D) and deliver solutions. During FY2015, CSI was set up in four regions: Tokyo, North America, China, and Europe. In these regions, this organization has been promoting the activity of “collaborative creation with customers,” which aims at solving fundamental problems, by illustrating an ideal image in the future and identifying underlying needs by working together with customers. As a result, several solutions have been provided to improve customers’ profitability. In 2016, CSI has integrated its operation with the Front Business Units under the new organizational structure of Hitachi Group. So as to accelerate further

innovations, various measures will be taken such as the establishment of CSI APAC (Asia-Pacific) and new laboratories (see Fig. 1).

This article provides an overview of these initiatives and their objectives.

### MEASURES FOR ACCELERATING COLLABORATIVE CREATION WITH CUSTOMERS

#### Development of Innovative Financial Solutions

To develop innovative solutions for financial institutions based on information technology (IT), CSI North America has established the Financial Innovation Laboratory for FinTech R&D in Santa Clara, California in the USA. The laboratory commenced operation in April 2016.

Hitachi has also been strengthening its involvement in the FinTech sector. In December 2015, the Hitachi

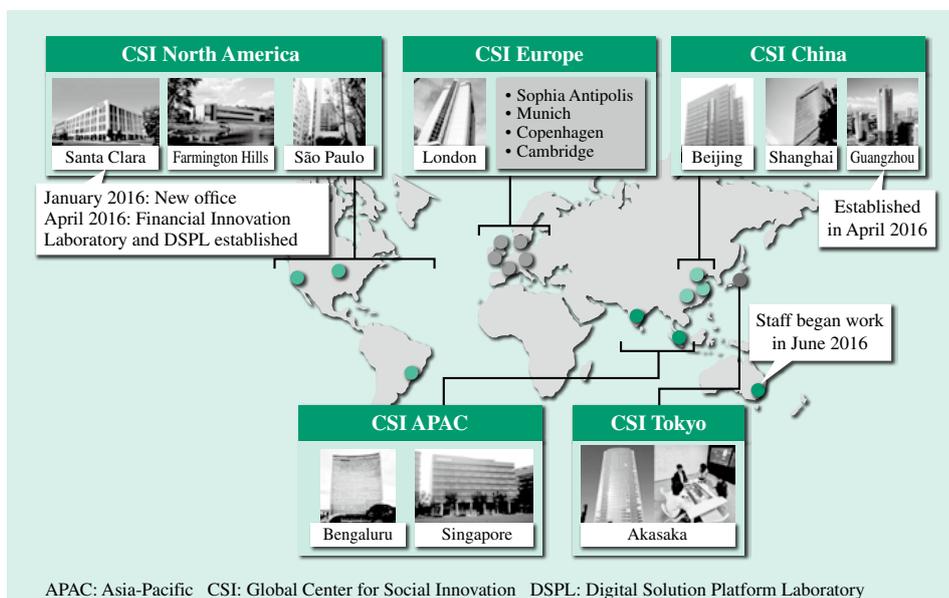


Fig. 1—CSI Locations and Initiatives Aimed at Accelerating Innovation.

Hitachi is advancing its global innovation capabilities by establishing new facilities and laboratories in different parts of the world to boost its collaborative creation activities in the focused fields.

Mobile Cash Card Service, which provides cardless financial transactions using a smartphone, was launched for financial institutions in the Japanese market. Furthermore, in February 2016, Hitachi was appointed as a board member of the “Hyperledger\*<sup>1</sup> Project,” which is an international project for the joint development of blockchain technology. This project was set up by the Linux\*<sup>2</sup> Foundation\*<sup>3</sup>, which is a non-profit organization based in the USA. By establishing the Financial Innovation Laboratory in Silicon Valley where its IT innovations can transform the world, Hitachi is able to carry out collaborative creation and R&D activities relating to advanced technologies such as blockchain to accelerate solution development to help financial institutions redefine their operations.

### Providing Digital Solutions on IoT Platforms

Similarly, CSI North America has also established the Digital Solution Platform Laboratory (DSPL) in Santa Clara, California to boost research into a core Internet of Things (IoT) platform on which customers can achieve rapid innovation using digital technology.

The timely delivery of IT × operational technology (OT) solutions that provide insights into customer operations requires a platform that can satisfy the three requirements of (1) rapid software development, including advanced data analysis, (2) flexible scalability to suit customer operations of different sizes, and (3) open connectivity for integrating a variety of sensors and other equipment. To achieve this, DSPL has established research programs that cover the cloud (enabling the rapid deployment of big data analytics), the next-generation IT platforms on which the cloud is built, and the IoT (including edge processing). Sharing the same site with both the Big Data Laboratory<sup>(2)</sup>, which opened in 2013, and the Hitachi Insight Group, which promotes the Lumada IoT platform business, DSPL is leveraging synergies to accelerate the realization of innovative digital solutions from North America.

### Developing Smart Manufacturing Solutions

In November 2015, Hitachi entered into a collaboration agreement with the China Electronics Chamber of Commerce of the Ministry of Industry and Information Technology on guiding technical innovations in smart manufacturing and green manufacturing, two strategic objectives of the Chinese government’s Made in China 2025 strategy. As part of this collaboration, related

technologies were presented by Hitachi through an information exchange meeting. Other initiatives associated with the Made in China 2025 strategy included the Hitachi Technology Forum, which was held in Beijing, China, in December 2015. Many top management personnel from Chinese firms and experts from universities and research institutes have attended. All of them are not only Hitachi’s customers but also partners.

To boost these initiatives targeting Chinese manufacturing, a new facility was opened in April 2016 in Guangzhou, the major city in the Pearl River Delta, a hub of manufacturing industry. This new facility will be utilized to conduct collaborative creation with customers from manufacturing in order to accelerate solution creation for the Made in China 2025 strategy.

### Establishing CSI APAC

To date, CSI Tokyo has been responsible for collaborative creation with customers in the APAC region. In April 2016, however, Hitachi established CSI APAC, based primarily in India and Singapore, with an independent local team to promote collaborative creation with agility and to develop with regional economic growth. As a result, the Global Center for Social Innovation is now made up of five centers, rather than its previous four centers.

Based on India’s city of Bengaluru, where IT is advancing, IT solutions are being developed for the finance, healthcare, and automobile industries through a utilization of data science, in addition to the development of core technologies for software reliability. Hitachi is also taking advantage of the abundant engineering talent in India to develop system control technologies for the social infrastructure of electric power, energy, and industry. In Singapore, the anticipated technologies for the cities in the future are developed and validated by applying big data analytics and artificial intelligence through the utilization of governments’ R&D programs. These technologies will be scaled to Southeast Asia, and further to the global market. Furthermore, researchers have been assigned to Australia from June 2016 with the aim of exploring the opportunities for new business.

### Advancing NEXPERIENCE for Collaborative Creation with Customers

To accelerate the creation of new services through collaborative creation with customers, CSI Tokyo has developed NEXPERIENCE, which is a methodology for co-creating innovative service businesses with

\*1 Hyperledger is a trademark of The Linux Foundation.

\*2 Linux is a registered trademark of Linus Torvalds.

\*3 Linux Foundation is a registered trademark of The Linux Foundation.

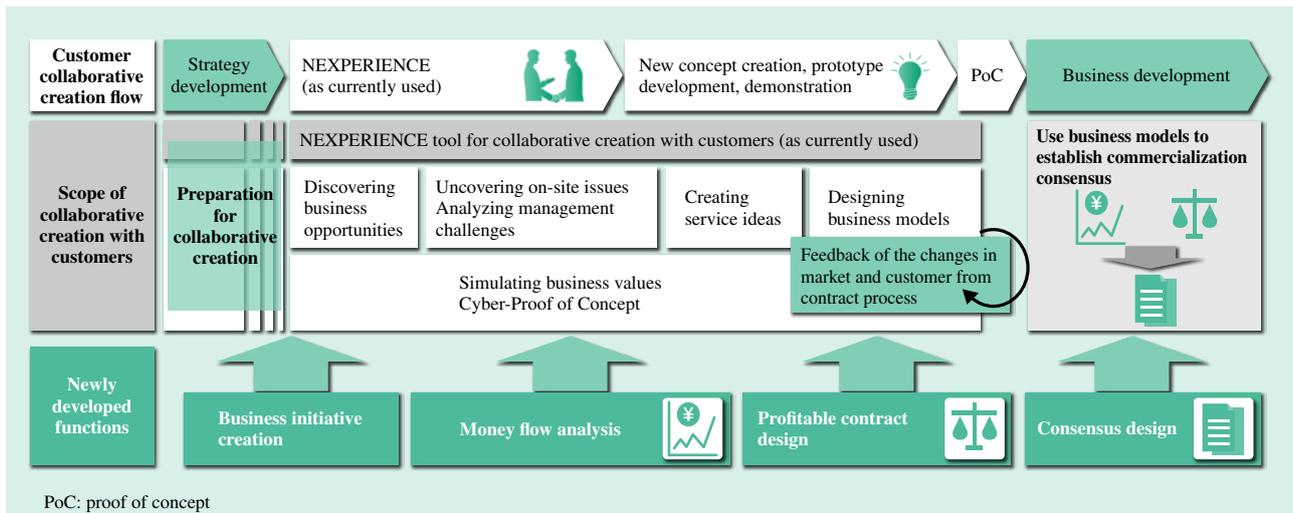


Fig. 2—Overview of NEXPERIENCE.

Hitachi is working with customers on the rapid development of highly profitable businesses by further advancing NEXPERIENCE and by making it available to the frontline staffs who are engaged in collaborative creation with customers.

customers and partners using the approach of design thinking. NEXPERIENCE has been advanced remarkably through the insights and knowledge acquired from the activity of collaborative creation with customers.

NEXPERIENCE consists of multiple approaches and IT tools for service idea creation and business model design and the space for conducting such activities (see Fig. 2). All of these elements are used to illustrate a vision for the future with customers effectively. NEXPERIENCE has already been applied to many customer collaborative creation projects in which the speed of new service creation and its quality improvement have been recognized significantly.

During FY2016, new approaches to NEXPERIENCE will be implemented for creating highly profitable digital solutions through collaborative creation with customers as well as solving societal challenges. The new approaches include discovering business opportunities with visualized money flow, return on investment model design by capturing business risk, and consensus design. These newly developed approaches will be employed by the frontline staffs who are promoting collaborative creation with customers directly in each region. From all these, highly profitable services will be created rapidly.

## FUTURE DEVELOPMENTS

This article has described the new initiatives being undertaken by CSI in FY2016, in the context of both the knowledge acquired in its first year of operation,

and the global changes taking place in markets and societies.

In the future, Hitachi intends to continue contributing to the resolution of global societal challenges amid customer and environmental changes by working with customers to identify challenges and deliver innovative solutions in a timely manner.

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## ABOUT THE AUTHOR



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