Category Overview

# Sharing Challenges with Customers and Working together on Solutions
## —Global Center for Social Innovation—

## ROLE OF GLOBAL CENTER FOR SOCIAL INNOVATION

THE Global Center for Social Innovation forms a global research and development organization established for the purpose of working together to look at challenges from the customer's perspective and to supply solutions.

This article will begin by looking at the activities of the Global Center for Social Innovation. The first step in collaborative creation is to use proprietary service design methods and NEXPERIENCE / Ethnography to work with customers to identify the challenges they face, and then to proceed with steps such as formulating a vision or investigating ways of overcoming those challenges. The second step is to generate new concepts that can provide a high level of value to the customer and to implement them in the form of a prototype or demonstration. Based on the results of this work, the third step is the proof of concept at the customer site and to develop it into a solution. In addition, the intention is to deploy the same solution for other customers within the same industry and in different industries. Prototype development and proof of concept involves the supply of solutions that are proprietary to Hitachi, utilizing the portfolio of technologies built up through its past activities (see Fig. 1).

Because the markets that Hitachi is targeting with its Social Innovation Business extend throughout the world, the Global Center for Social Innovation has adopted a four-hub structure based on the objective of expanding collaborative creation by locating researchers close to customers. This is comprised of the Global Center for Social Innovation – Tokyo serving Japan and the Asia-Pacific (APAC) region, the Global Center for Social Innovation – North America serving the Americas, the Global Center for Social Innovation – China serving China, and the Global Center for Social Innovation – Europe serving Europe, the Middle East, and Africa (EMEA), with approximately 500 staff providing global coverage. As its name suggests, it is a global research organization that aims to contribute to the customer-oriented Social Innovation Business.

## OPERATIONAL PLANS FOR EACH CENTER

While engaging in collaborative creation with customers

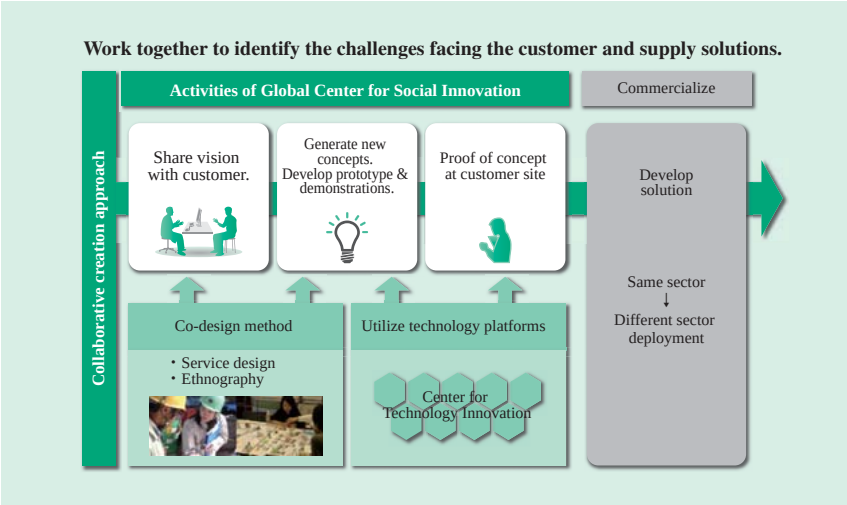


*Fig. 1—Role of Global Center for Social Innovation.*
*The centers handle all collaborative creation processes from sharing vision with the customer to proof of concept at their site.*

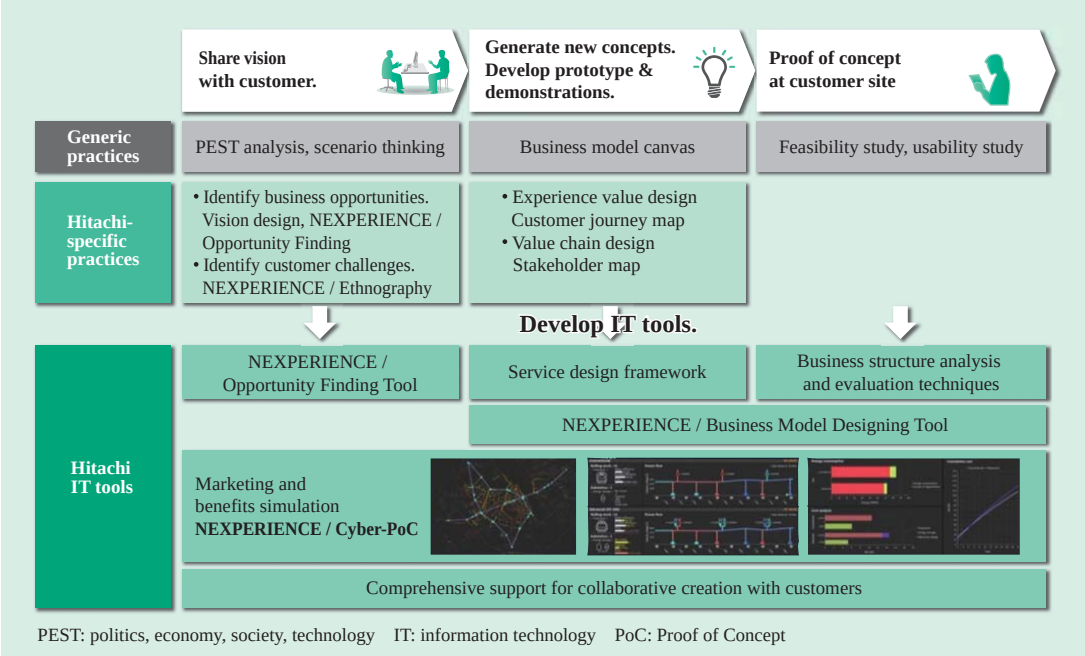


*Fig. 2—IT-based Methods for Collaborative Creation with Customers under Development at Global Center for Social Innovation – Tokyo.*
*Hitachi aims to accelerate each phase of the customer collaborative creation process by implementing both generic and Hitachi-specific practices as IT systems.*

to serve the global market, the centers will also align their operations with their respective region's business environment and strategies. The following sections describe the operational plans for each center.

## Global Center for Social Innovation – Tokyo (APAC, including Singapore and India)

Based primarily in Tokyo, the Global Center for Social Innovation – Tokyo implements customer collaborative creation techniques developed through design and other service research in the form of tools that use information technology (IT), and utilizes them for the collaborative creation of solutions with key accounts in Japan and the Asian region.

The former Design Division and Yokohama Research Laboratory have already developed a variety of customer collaborative creation practices. Examples include the NEXPERIENCE / Opportunity Finding Tool, which collates societal issues and future changes in the perception of value, and the customer journey map, which provides a visual representation of users' ideal experiences[1]. The effectiveness of these methods has already been demonstrated through their use in numerous customer collaborative creation projects. Accordingly, the center is working to implement these practices as IT tools in order to provide a further boost to the pace of customer collaborative creation (see Fig. 2).

Also under development is NEXPERIENCE /Cyber-Proof of Concept (Cyber-PoC), a tool that combines a number of simulators to visualize business value. By using customer data as input, NEXPERIENCE / Cyber- PoC enables Hitachi to work with customers to verify the cost-benefit of social infrastructure projects prior to construction.

Hitachi launched a customer collaborative creation infrastructure that combines these tools in Akasaka, Tokyo in June 2015. The intention is to roll this out to the Global Center for Social Innovation – North America during FY2015 and to the Global Center for Social Innovation – China and Global Center for Social Innovation – Europe in FY2016.

The center also has operations in Singapore and India that will serve as bases for software development in addition to working on customer collaborative creation in Asian markets where ongoing development is anticipated.

## Global Center for Social Innovation – North America (including Brazil)

The operations in North America will establish platforms for big data analytics and use them as a basis for developing applications in fields such as energy, telecommunications, finance, and healthcare. Making these analytics platforms available globally will enable

application development to become more efficient.

Specifically, ongoing development is centered on the Big Data Laboratory that opened in June 2013, utilizing big data analytics to develop network analysis solutions for the telecommunications industry and production optimization solutions for the oil and gas industry[2]. In Brazil, Hitachi is working with universities with the aim of creating solutions such as productivity improvements for agriculture and mining.

### Global Center for Social Innovation – China

The center in China uses collaborative creation with customer to develop solutions based around a core of market-leading products, such as escalators, elevators, and automated teller machines (ATMs). They also collaborate with cities, other companies, and universities on measures for things like new forms of urban development and a low-carbon society.

To enable new forms of urban development, the center is working with the National Development and Reform Commission of the People's Republic of China to create urban and building solutions through collaborative creation with developers and city public institutions. In relation to policies for encouraging use of IT, the center is seeking to create financial solutions that use Hitachi's ATM business infrastructure through collaborative creation with local financial institutions[3], and healthcare solutions that draw on its know-how in hospital administration through collaborative creation with medical institutions.

### Global Center for Social Innovation – Europe

In Europe, the center aims to solve challenges facing leading customers and regions and mature societies, and to deploy these solutions globally. Examples include the collaborative creation of solutions for preventive medicine and improvements in the efficiency of hospital administration in response to the shortage of caregivers, falling number of young people, and rapid rises in healthcare costs that accompany an aging population. It also includes the collaborative creation of solutions for smart energy and railway maintenance systems in response to the fall-off in efficiency resulting from aging infrastructure.

## FUTURE DEVELOPMENTS

Through their customer collaborative creation activities, the Global Center for Social Innovation operates as a customer-focused and global research and development organization that works with customers to identify the challenges they face and to supply innovative solutions. Through its Social Innovation Business, which utilizes the Internet of things (IoT) and big data, Hitachi also intends to improve people's quality of life (QoL) and to help provide local communities with a bright future by helping overcome societal challenges that are becoming more complex throughout the world.

## REFERENCES

(1) H. Kitagawa et al., "Development of Experience-oriented Approach to Information and Telecommunication Systems Business," Hitachi Review **62**, pp. 329–336 (Sep. 2013).
(2) U. Dayal et al., "Expanding Global Big Data Solutions with Innovative Analytics," Hitachi Review **63**, pp. 333–339 (Aug. 2014).
(3) H. Hamada et al., "Smart Cash Stream Solution for More Efficient and Tightly-controlled Cash Management," Hitachi Review **64**, pp. 264–269 (Jun. 2015).

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