Contributing to Social Innovation through Services that Create Customer Value

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Hitachi's Social Innovation Business draws on its many years of experience in social infrastructure and its information and telecommunication technologies. The business includes initiatives that create value together with customers by seeking to overcome societal challenges, and these in turn demand an approach based on service creation that is unlike the product-focused business activities of the past. Hitachi intends to redirect both its organization and its attitude toward service creation, and to contribute both to sustainable growth and to overcoming the challenges of global society by expanding its Social Innovation Business as a provider of services.

Three Secrets of Services

Shiotsuka: Hitachi's Social Innovation Business supplies safe and secure social infrastructure throughout the world that is enhanced by information technology (IT). The meaning of "enhanced by IT" goes beyond traditional IT solutions that involve using IT to resolve clearly-identified customer issues. The Social Innovation Business works together with customers through all steps from identifying challenges to creating value for the customer, with IT playing a vital role in making this possible.

The concept of "service-dominant logic," which means treating all economic activity as a service, has attracted interest in recent years. Our Social Innovation Business can be described as being based on this logic because, rather than the products themselves, what we are selling is a process in which Hitachi and its customers work synergistically to create value.

The Systems & Services Business of Information & Telecommunication Systems Company, Hitachi, Ltd. was established from such a background, with an explicit focus on supplying IT services that support social innovation. Our purpose today is to get advice from Professor Mitchitaka Kosaka, a leader in service research, about the keys to succeeding at this service business.

Kosaka: The way we interpret the word "service" has changed over time. First-generation services are those for which we typically use the word. These include services like accommodation, transportation, education, and maintenance with products that are intangible. Second-generation services are those that emerged in the 1990s and that apply to IT and other information businesses, examples include IT web services and outsourcing services. Then there are the ways of

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Joined Hitachi, Ltd. in 1977 after completing a master's degree in applied mathematics at the Graduate School of Engineering of Kyoto University. After positions managing the Systems Development Laboratory and ID Solutions Division, he took up his current appointment in 2008. Dr. Kosaka's specialties include research and development management, system engineering, and service innovation. Major publications include authoring "Progressive Trends in Knowledge and System-Based Science for Service Innovation" (published by IGI Global).

creating value for customers you referred to earlier. These are third-generation services. While service-dominant logic treats goods as one form of service, the services we are talking about today involve an all-encompassing consideration of such questions as what value can be provided to customers (including in the form of goods), how can those customers be satisfied, and how can income be generated?

Shiotsuka: The difficulty with third-generation services for a manufacturer is that, while we understand the concept, we still face the question of how to incorporate it into our current framework in order to increase earnings.

Kosaka: During my research into service science at the Japan Advanced Institute of Science and Technology (JAIST), I worked with the famous Kagaya Ryokan (inn) at the Wakura hot springs in Ishikawa Prefecture, which led to former chairman Sadahiko Oda telling me about the three secrets of services.

The first secret is to take a rigorous approach to being among the best. Technology or other services will never be accepted by customers if they are inferior to the competition. Accordingly, hotel staff whose job is to provide hospitality are given the opportunity to experience world-leading service as part of their training. The second secret is to satisfy customers. Achieving this involves collecting feedback from customers that can provide the basis for improvement. The third secret is to ensure that you are paid appropriately. These three points represent the basics of service.

Shiotsuka: Maintain service quality and set a price that reflects the satisfaction delivered. That turns into a virtuous circle. Although very basic, I can see that what you have said is actually quite profound.

Kosaka: Yes. The Kagaya Ryokan makes a great effort to work through these basics. As a result, they attract a particular class of customer, with the aim of satisfying

them with top-class service so that they will come back again and again.

In a manufacturing context, this means having top-level products, technologies, and systems engineering (SE) staff for dealing with customers, and delivering customer satisfaction, meaning customer value, so as to be able to charge prices that reflect this. It also means maintaining a long-term relationship where possible with customers who recognize the quality of your technologies, services, and other strengths. This results in a virtuous circle whereby new challenges are identified through your work, enabling new value to be delivered. This is something I believe Hitachi's business has put into practice.

Shiotsuka: That's right. However, rather than system integration (SI) services of the sort that have been supplied in the past, which are based on problem-solving, what is needed now are services that involve the ongoing delivery of added value in some form. This approach should produce solutions that facilitate the creation of customer value by analyzing data from business activities to extract knowledge, with examples of this including working with customers at financial institutions to help improve convenience for end users. To achieve this, Hitachi has consolidated the products and services on which the provision of such solutions is based under the banner, "Intelligent Operations." We provide services for a wide variety of industries, extending from system implementation to operations, and come bundled with early-stage consulting and IT platform services, covering such fields as healthcare, community, agriculture, machinery, mining, manufacturing, distribution, logistics, transportation, and energy. Through these services, we are seeking to build customer value in the form of greater business efficiency and higher service levels.

Keiichi Shiotsuka

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Joined Hitachi, Ltd. in 1977. His appointments include General Manager of the No. 5 Financial Systems Department of the Financial Systems Business Unit in 2001, Deputy Manager of the Financial Solutions Business Unit in 2003, Manager of the Financial Systems Business Unit of the Information & Telecommunication Systems Company in 2010, and COO of the System Solution Division of the Information & Telecommunication Systems Company in 2012. He took up his current position in April 2013.

Treating Customer Value as Central to Globalization

Shiotsuka: Along with services, the word "global" is also key to the Social Innovation Business. We are actively working on steps that will enable service solutions to be deployed globally, such as the acquisition of local companies and the establishment of big data laboratories, and while general-purpose platforms will be essential to future business expansion, one of the challenges is how to achieve a balance between general applicability and localization. How do you think we should go about overcoming these challenges?

Kosaka: In the sense of platforms, Hitachi's TWX-21* is an excellent example of a cloud service that I believe makes a suitable common platform for services. Providing the Global e-Service of Hitachi Construction Machinery Co., Ltd. on TWX-21 is an excellent initiative. The Hitachi Group includes many businesses outside the IT sector, each of which should be accumulating know-how in its own field. Implementing platforms that combine this know-how with infrastructure like TWX-21, and then supplying it in the form of a service business, should open up new business possibilities. I doubt there are any other companies in the world able to achieve this.

Shiotsuka: It is heartening that you should say so. Starting with Global e-Service on TWX-21, we are inviting other Group companies to participate. TWX-21 was set up more than a decade ago to provide capabilities such as electronic data interchange (EDI) within the Group, and since then has grown into a major portal involving roughly 50,000 companies, increasing the value of participation. Similarly, the joint center service for personal Internet banking, which was established a decade ago, has now grown into a large payment infrastructure handling a monthly turnover in the vicinity of 2 trillion yen. We are committed to making careful use of these platforms and the associated know-how.

Kosaka: Because the platforms that underpin services require features such as reliability and security, the stronger these are the better. For customers, however, the source of value lies not just in the excellence of the platform but in whatever is built on top of it. Because global service solutions also require localization to take account of technological, cultural, and other factors specific to the countries or regions where they are used that have arisen against a background of circumstances specific to those places, collaboration with local companies is also essential. I believe it is important that Hitachi acts as an integrator and builds a framework that integrates with those in a strong position.

Shiotsuka: To achieve this, we are working with

companies from outside Hitachi both in Japan and elsewhere. One example from overseas is our acquisition of Prizm Payment Services Private Ltd., a company that supplies payment services to financial institutions in India. By utilizing the company's customer platform and its payment and cash handling systems for financial institutions, we are expanding their comprehensive service business for automated teller machines (ATMs) in India, while also strengthening our global deployment of service businesses using this as a positive example.

Kosaka: Rather than sticking to the sort of detailed business plans used at product businesses, service businesses progress by taking on challenges and paying attention to the responses from end users and other customers.

In my work at JAIST, we have devised a model of service value creation. This is called the KIKI model, and it draws on the well-known socialization, externalization, combination, and internalization (SECI) model of knowledge creation devised by Professor Ikujiro Nonaka. The initial "K" stands for "knowledge share," meaning the sharing of requirements and other knowledge between providers and customers. The "I" following it stands for "identification," meaning utilizing the shared knowledge to identify which services are needed. The second "K" stands for the "knowledge creation" needed to establish the service, and the consideration of which specific technologies and knowledge this will require. The final "I" is for the "implementation" where the service is provided and assessed. Working through this cycle can create the service value that customers need.

When I set this model against my own experiences of working at Hitachi, and also the past successes and failures of mid-career students, I note there is a common pattern among development failures of omitting the initial "K" and "I" steps. However impressive the functions may be, they are only meaningful if customers recognize their value, and therefore assigning a central role to customer value is essential both in globalization and elsewhere.

Developing Service Professionals and Shifting Attitudes

Shiotsuka: Human resource development is one of the challenges in putting this customer value creation into practice.

Kosaka: In the creation of service value, the people responsible in the past for identifying latent needs through regular interaction with customers and then presenting these in a conceptual form have been what we call "super SEs." Super SEs have a variety of networks within the company and act like a concierge at a hotel, drawing

* TWX-21 is a trademark of Hitachi, Ltd.

on these in-house networks to come up with a solution when inspired by a customer's "keyword." This is truly a case of co-creation.

Shiotsuka: While we are taking steps within the company to train service professionals in order to develop as many people as possible with those capabilities, the truth is that this training takes time.

Kosaka: At JAIST, we have established the Innovation Management of Service and Technology Course with the aim of training people who can deal with the three elements, namely service, science and technology, and value to lead the creation of innovations. Ultimately, people are the key to service businesses, and that makes it important that training and other forms of learning take place at institutions like JAIST and within companies. However, many of the capabilities of these people arise from informal rather than formal knowledge. For this informal knowledge, although it takes time, I believe the best approach is an apprentice system whereby people with the right qualities are able to learn by working alongside highly skilled SEs.

Shiotsuka: In other words, there is no substitute for doing things the right way.

Kosaka: Even with the passage of time, you cannot escape the fundamentals, nor should you try. All Hitachi SEs should have an innate attitude of being customer-oriented and of working alongside customers to create value. Along with being rigorous about enhancing this aspect, it is also important that, across the company, there is a shift in attitudes away from goods and toward services.

Shiotsuka: From budgeting to the attitudes of its staff, the corporate practices of a manufacturer are built on the basis of "monozukuri" manufacturing. While we are taking steps to change this paradigm, such as business reforms in our accounting management systems and elsewhere, a shift in attitudes is also essential. Keeping in mind the three basics you talked about, we aim to contribute to the Social Innovation Business by expanding service businesses that work with customers to create value. Thank you for your time today.