

---

## From the Editor

---

The social environment is approaching a turning point. The aging of social infrastructure is driving up maintenance costs in developed economies, which also face challenges such as the aging of people with advanced skills and know-how. Emerging economies, meanwhile, are experiencing a skills shortage in engineering along with rising investment in response to unprecedented growth in demand. Although their circumstances differ, both face the difficult challenge of maintaining and developing high-quality societal systems at low cost. Additionally, in the industrial sector, there is growing activity in such areas as optimizing decision making all along the value chain and creating new services, one example being the Industrie 4.0 national initiative in Germany.

Technologies for utilizing information are essential to achieving all of this. As expressed in such concepts as the Internet of things (IoT) and big data, it involves collecting diverse forms of information from the field both to obtain an accurate situation assessment and to predict with a high degree of accuracy what is likely to happen next, and formulating and implementing business plans that achieve the optimal allocation of resources (people, goods, and money). New value will be created through business innovations that utilize these information technologies (IT). In other words, the role of IT is changing from a tool for improving productivity to an enabler that creates value.

Hitachi is working to create value in a variety of different fields, having chosen the banner of Intelligent Operations for its suite of initiatives like those described above that utilize information for business innovations. This issue of *Hitachi Review* describes a number of these initiatives that create value in the workplace.

This issue's Expert Insights carries an article about the use of information and communication technology (ICT) in the restructuring of social systems contributed by Professor Osamu Sudo of the Graduate School of Interdisciplinary Information Studies at The University of Tokyo, someone with deep knowledge in social innovation. In *Technotalk*, Professor Michitaka Kosaka of the Japan Advanced Institute of Science and Technology, a leader in the field of service research, and Keiichi Shiotsuka, a Vice President and Executive Officer of Hitachi, Ltd. (CEO of Systems & Services Business, Information & Telecommunication Systems Company), discuss the creation of customer value. Other articles describe work in fields as diverse as healthcare, equipment maintenance, mining, energy, transportation, retail, and agriculture.

I hope this issue will help you learn more about the work being done at Hitachi and open up opportunities to work together on creating new value in your businesses and other parts of society.

Editorial Coordinator, "Intelligent Operations Solutions for Utilizing Information to Accelerate Social Innovation Business" Issue.



**Masaharu Akatsu, Ph.D.**

Senior Director, Smart Business Strategy Planning  
Smart Information Systems Division  
Services Division Group  
Information & Telecommunication Systems Company  
Hitachi, Ltd.