

<https://www.ntt-review.jp/archive/2022/202212.html>



View from the Top

- ▶ Naoki Shibutani, President, NTT EAST

Front-line Researchers

- ▶ Tessei Kobayashi, Senior Distinguished Researcher, NTT Communication Science Laboratories

Rising Researchers

- ▶ Tomoyasu Horikawa, Distinguished Researcher, NTT Communication Science Laboratories

Feature Articles

Space Integrated Computing Network

- ▶ Overview of Space Integrated Computing Network
- ▶ An Event-driven Inference Approach for Space Computing
- ▶ Studies toward Practical Application of HAPS in the Space RAN
- ▶ Satellite Sensing Platform

NTT Technology Report for Smart World

- ▶ Release of NTT Technology Report for Smart World 2022

Global Standardization Activities

- ▶ New ITU-T Study Group 5 Structure and Deliberations

Practical Field Information about Telecommunication Technologies

- ▶ The Occurrence of Mold in Telecommunication Equipment and Facilities and Its Impacts on Material Degradation

View from the Top

Naoki Shibutani, President, NTT EAST

▼Abstract

Accompanying the daily evolution of information and communication technology, artificial intelligence and other digital technologies, the rise of diverse business models and the expansion of remote work fast-tracked by the COVID-19 pandemic has changed society dramatically. Under these circumstances, birthrates are declining and populations are aging at higher rates, social infrastructure is deteriorating, and countermeasures against global warming are becoming ever more urgent. To address such social issues facing Japan, NTT EAST is promoting empathetic digital transformation (DX) in conjunction with traditional problem solving. We asked President Naoki Shibutani about how empathetic DX is important to drive social innovation as well as the secret of "management from the heart" that he is pursuing.



Front-line Researchers

Tessei Kobayashi, Senior Distinguished Researcher, NTT Communication Science Laboratories

▼Abstract

In Japan, the Act on Promotion of Children's Reading was enacted in 2001. With the rapid increase in the number of middle- and high-school students owning smartphones and the launch of the government's GIGA School program for creating an environment in which every student has one device connected to the Internet, the impact of reading habits during infancy on the academic performance of children is attracting attention. We interviewed Tessei Kobayashi, a senior distinguished researcher at NTT Communication Science Laboratories, about the progress of his research activities to elucidate the mechanisms of children's language development and using these mechanisms to support education.



Feature Articles

Space Integrated Computing Network

Overview of Space Integrated Computing Network

▼Abstract

There is an urgent need to ensure the sustainability of social activity. This makes it all the more important to use space for information and communication technology (ICT) infrastructures. This involves creating ICT infrastructures that support a number of fields, including energy, environment, and disaster prevention. To this end, NTT and SKY Perfect JSAT have established a joint venture company, Space Compass Corporation, that will launch a novel space ICT infrastructure, the Space Integrated Computing Network. This article gives an overview, business outline, and future prospects of this network.

