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View from the Top

Atsuko Oka, Executive Vice President, Head of Research and Development Planning, NTT Corporation



▼Abstract

NTT laboratories are engaged in research and development (R&D) of new technologies to solve social issues in collaboration with NTT Group companies and other partners in various fields. We interviewed Atsuko Oka, executive vice president and head of R&D Planning, NTT Corporation, about her approach to R&D and attitude as a top executive striving to create a “smart world” in which people can enjoy the benefits of technology effortlessly.

Feature Articles

Efforts to Implement Digital Twin Computing for Creation of New Value

Latest Developments Concerning Grand Challenges to Implement the Digital Twin Computing Concept

▼Abstract

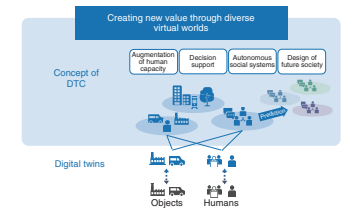
One of the major pillars of the Innovative Optical and Wireless Network (IOWN) being promoted by NTT is the concept known as Digital Twin Computing (DTC), which aims to enable future predictions and optimization by combining the real and digital worlds, and NTT has set *grand challenges* as ambitious research and development goals to implement DTC. In this article, our efforts toward the common use of digital twins and our recent activities to achieve these grand challenges are introduced.

DTC: A computational paradigm that creates new value by synthesizing digital twins of humans, objects, etc. in a manner that constructs a diverse virtual society.

• Digital twins can be freely multiplied. A common means for diverse digital twins to interact is provided.

• Large-scale, highly accurate, complex future forecasting. In addition to understanding the past and present, multiple composite visions of the future are presented.

• Human digital twin that reproduces diversity. Digitization of people's inner self and individuality and calculation of interactions on the basis of the diversity of human society.



Feature Articles

Platform Technologies Supporting Data Governance

Data Governance for Achieving Data Sharing in the IOWN Era

▼Abstract

There is a move around the world to tighten the handling of data, but there is also a move to establish technologies and rules for processing data safely to accelerate data sharing. After surveying global trends that are having an impact on data sharing, this article describes the concept behind data governance for controlling data so that data owners can safely share their data with others and describes the requirements for data governance in the IOWN (Innovative Optical and Wireless Network) era.

