Ongoing Pursuit to Becoming a Company That Is Useful to Society and Close to Our Customers



Riaki Hoshino Senior Executive Vice President, NTT EAST

Abstract

NTT EAST strives to connect with the communities in which it operates and to build circular communities that can develop sustainably. This initiative has been accompanied by efforts for further strengthening the resilience of telecommunication networks to counter new threats such as escalating natural disasters and increasingly sophisticated cyber-attacks, and improving its crisis-management and mobility capabilities to provide a high-quality and stable telecommunication infrastructure. We asked Riaki Hoshino, senior executive vice president of NTT EAST, about the company's initiatives and his beliefs as a top executive.

Keywords: circular communities, digital transformation, regional revitalization

NTT EAST: A social innovation company supporting the future of regional communities

-It has been almost a year since you were appointed senior executive vice president. What has the year been like?

It's been a year in which I'm convinced that we still have much to do, and it has renewed my determination to channel the passion of our employees into energy for action and challenge ourselves to meet the needs of our customers.

Since the reorganization of Nippon Telegraph and Telephone Corporation in 1999, I have been with NTT EAST with the exception of a brief stint at the holding company, NTT Corporation. As a senior executive vice president of NTT EAST, I have taken a fresh look at the ability of the company, its technological capabilities, and the passion of its employees for contributing to society, and realized that the ability of the company and the range of expectations that our customers put on us are far greater than I had imagined.

NTT EAST's service area includes both the Tokyo metropolitan area and the surrounding rural areas. Each region faces unique challenges-for example, the Tokyo metropolitan area is dealing with a large number of residents, while in contrast, the surrounding rural areas are faced with declining populations. Against this background, NTT EAST has launched initiatives designed to improve the telecommunication infrastructure and implement disaster countermeasures, and we've also been exploring new possibilities in the fields of culture and agriculture. As a result of these initiatives, we have received numerous comments and inquiries from customers, such as "We want our employees to fully understand the significance of digital transformation (DX), and we want to use DX to solve problems. Could you help us do that?" Over the past year, as I have listened to the



needs of our customers, I have become convinced that our mission, which was initially to connect telecommunications, should further expand to connect people and to play a role in connecting and developing communities for the next generation.

—So you want to connect people and communities. Would you tell us specifically what direction NTT EAST is aiming for?

Generally speaking, the main managerial objective



of a company has been to maximize profits; however, recently, companies are also expected to make further contributions to society. NTT EAST aims to become a "social innovation company that supports the future of regional communities" in a manner that creates sustainable new value and solves problems. With that aim in mind, we are striving to "rediscover value in communities" and "build circular communities" by "implementing empathetic DX consulting" and "strengthening our field-engineering capabilities."

Unlike the conventional approach, namely, analyzing customer's problems, making proposals to address the problems, and implementing the proposals, empathetic DX consulting involves coming faceto-face with customers in a community, getting closer to the community, and pondering solutions to problems together in an empathetic manner. We then try to solve problems by implementing a solution with them through trial and error. In this manner, we can refine a management style that is unique to NTT EAST as a community-based company.

Regarding strengthening our field-engineering capabilities, we intend to expand and strengthen our comprehensive engineering capabilities on the basis of our technical capabilities cultivated in the information and telecommunication field to create real value in the actual field. This is essential when it comes to fostering industries, passing on culture to the next generation, and creating the eco-friendly towns that are necessary for creating value in communities.

Aiming to accelerate regional revitalization, we



will create new value by making use of local assets and attractions such as culture, cuisine, and nature. In January 2023, with the aim of creating a society in which regional communities can develop sustainably and feel dreams and hopes, we established the Regional Circular Future Lab, which is engaged in



creating value and building a circular society in communities. If I had to describe these initiatives in a few words, I would say we are "getting closer to our customers."

Creating a decentralized network society with IOWN and the REIWA project

-You will be able to apply the knowledge you have cultivated in addressing local issues, such as the expansion of optical broadband services and digital solutions, right?

When I envision the future of Japan, I think we should take advantage of our strengths in telecommunication networks. For example, I want us to not only emphasize efficiency by concentrating the population in urban areas but also achieve both diversity and efficiency by dispersing it to different regions. The Innovative Optical and Wireless Network (IOWN) being advocated by the NTT Group and the REIWA project promoted by NTT EAST will be keys to achieving this goal.

IOWN uses photonics-based technology to address issues such as the significant increase in data volume, power consumption, and communication delays due to the expansion of the Internet of Things (IoT) and the diversification of services. As a key element of IOWN, we are conducting various research and development activities to implement the All-Photonics Network (APN). Compared to conventional



electronics-based communication networks, the APN will have a 125-times-higher transmission capacity, 1/200 end-to-end delay, and 100-times-higher power efficiency. In March 2023, we launched APN IOWN1.0 as our first APN service. APN IOWN1.0 can be used in scenarios that require ultralow latency, such as remote ensembles, remote lessons, e-sports, remote production, remote operation of equipment such as experimental measurement equipment, and close coordination between datacenters. We are constantly working with customers to create new usage scenarios.

Under the REIWA project, we have begun offering a cloud service called "Regional Edge Cloud," which utilizes about 1,000 telecommunication central offices (of the approximately 3,000 located in the 17 prefectures in NTT EAST's service area) as datacenters and uses them as regional edge-computing points with the aim of creating new value. We are building a cloud-based information and communication technology (ICT) infrastructure by leveraging all of our assets to connect regional edge-computing points over a wide area via a network, and we are providing various functions in a shared service model through a video-analysis artificial intelligence platform, IoT platform, "Regional Revitalization Cloud," and data lake.

With the aim of making this ICT infrastructure more widely available, we have set up "Smart Innovation Labs" in Tokyo, Hokkaido, and Miyagi as test environments, in which people from industry, academia, and the government are working together to create new services and businesses.

In this way, we hope to support society through

initiatives that circulate energy and human resources by utilizing our telecommunication technology, assets, and expertise for the benefit of regional communities.

—I have heard that NTT EAST is undertaking various other changes and challenges.

We are refining our existing businesses and taking on the challenge of creating new business. Examples of specific initiatives include (i) efforts to promote efficiency while improving facilities and service quality in the telecommunications field and (ii) the launch of a software business. To meet the social demand for more convenient and stable services, we are steadily migrating the public switched telephone network (PSTN) to Internet protocol (IP) networks, and upgrading network functions and renewing facilities to connect with IOWN while obtaining third-party assessment. We are proactively using DX technology in network construction and operations, thus reducing labor for work coordination and achieving automation of operations. These efforts have not only significantly curtailed work hours but also contributed greatly to improving reliability by reducing human involvement to eliminate human errors. We are also promoting customer self-service by using web technology and implementing operations utilizing remote environments, and these efforts are improving customer satisfaction and efficiency while strengthening our emergency-response capabilities in the event of natural disasters by securing different means of operations.

The purpose of the launch of our software business

is to develop new business in the non-telecommunications field. By undertaking system development in-house, we aim to accumulate our own softwaredevelopment technology and nurture DX-related human resources by promoting DX. Naturally, we also aim to reduce system-development costs. During these efforts, we have focused on low-code development, which does not require advanced or specialized skills, and launched the In-house Software Development Promotion Project in April 2022. We also implemented offshore low-code development. At present, we have already achieved promising results concerning the renewal of internal business systems and the development of new ones, and we are preparing for future business development. We have also set up a private cloud that uses virtualization and a hybrid environment with a public cloud as an infrastructure to be used for software development inside and outside the company.

If we keep challenges within the limits of what we can do, our growth will remain within those limits

—What is important to you in your work?

The two main things are the attitude to challenge myself and the desire to achieve goals. Simply dealing with what is in front of me will not lead to the next step. I ask myself what I want to gain from this job and how I can make the most of it. I ask the same questions of our employees and learn from their stories. Hearing the passion of our employees gives me so much energy. I then try to convey that passion to others. I believe it is my responsibility as senior executive vice president to keep that positive energy circulating.

Ever since I first joined the company and was engaged in the maintenance of telecommunication equipment in the field, I have experienced the passion of the field in many different workplace environments. During the recovery efforts after the Great East Japan Earthquake, I realized the importance of giving instructions to employees who were desperately working hard, even though the future was uncertain, so that they could better see what lies ahead. Through these many experiences, I have realized the importance of setting goals for things that should be done rather than things that can be done, clearly communicating what must be done and why changes are necessary, and clarifying the goals to be achieved.

Taking on challenges can sometimes be scary. Even so, if we keep challenges within the limits of what we can do, our growth will remain within those limits. If the challenge involves risk, I believe it is possible to bring out the latent ability of our employees by showing them the risk and leading them to change. It is important as top management to set higher goals that will motivate employees to take on challenges.

-It gives us hope that we will be able to demonstrate abilities that we never thought we had. Finally, please say a few words to researchers, engineers, customers, and partners.

Sometimes the workload we give our employees is heavier—or lighter—than we thought it would be. The influence of the employee's personality and their surrounding environment may be unpredictable when the work is allocated. For example, an employee may behave in unexpected ways when the workload is too heavy, or when there is (or is not) adequate support available. The situation inevitably varies depending on the individual. Accordingly, I believe that instead of just handing over the work and being done with it, the job of the top management is to monitor people's situations and improve their work environment as necessary. As with any other endeavor, it is important to pursue work persistently and not to neglect the adjustment to the environment.

When we take on challenges as a social innovation company, there are certain issues that cannot be handled with our current technology. I therefore want to bring together the strengths of our research laboratories and group companies to create a sustainable society. We are committed to being a company that is useful to society and close to our customers, and we're counting on those at our laboratories and group companies for their help with this endeavor.

We serve a wide variety of customers, including users of our services, wholesale network providers, and Internet service providers. We will respond to customer's requests with sincerity, and if we are not able to provide requested services at the time, we will improve quality and introduce new technologies so that we can create appropriate services while keeping costs in mind. Our aim is to become a company that listens carefully to the voices of our customers. We look forward to your cooperation in achieving this aim.

Interviewee profile

Career highlights

Riaki Hoshino joined Nippon Telegraph and Telephone Corporation in 1990 and became a member of the Board of Directors of NTT EAST Corporation in 2018, president and representative director of NTT-ME Corporation in 2020, and senior executive manager of NTT EAST Network Business Headquarters and president and representative director of NTT e-Drone Technology in 2022. He assumed his current position in June 2022.