Continuing the Drive to Become a Service Creation Business Group—A Year of New Services Blossoming through Collaboration and Innovation

Noritaka Uji,
NTT Representative Director and Senior Executive Vice President

Overview

In 2010, the construction of a fixed/mobile full-IP (Internet protocol) network infrastructure and the rollout of genuine services using that network will begin in earnest. For our opening interview of 2010, we sat down with Noritaka Uji, NTT Representative Director and Senior Executive Vice President in charge of NTT Group's technical strategy and asked him about this year's strategic plans.

Reaping the results of seeding at the halfway point of the medium-term management strategy

—The "Road to a Service Creation Business Group" is an impressive message of NTT Group's medium-term management strategy. What has been accomplished so far?

This year marks the halfway point in the NTT Group's current medium-term management strategy that runs from 2008 to 2012. In a way, it feels like the loopback point in a marathon race. Up until now, we've been focused on planting the seeds of service creation, but from here on, we will be actively engaged in the steady development of an infrastructure toward a full-IP (Internet protocol) broadband network and mobile system having the world's lowest costs and highest speeds. The plan is to extend the Next Generation Network (NGN) to existing optical-access areas by the end of fiscal year 2011 and to launch—at long last—Long Term Evolution (LTE) services by the end of 2010.

But creating services that can make the most of this new, enhanced network is also important. Two key trends that are now sweeping the globe are *service convergence* and *paradigm shift*. These trends are being accompanied by the appearance of new services in various forms. Here, collaboration is becoming increasingly important to create services that customers really need. This year is taking on great importance as a period for cultivating the seeds that we have so far planted so that new services can blossom.

Accelerating service convergence to create new services

—Could you tell us about this year's specific strategies?

This year, our activities will be centered on the three key areas of *service creation, global expansion, and the environment.* In service creation the emphasis

is on services that are possible only by virtue of a network connection. Our focus for this year is the creation of video services, Home ICT (information and communications technology), and cloud computing. At the top of the list of services that exploit the amazing features of a broadband network we can put video. When thinking about video services, the first thing that comes to mind is probably IPTV (Internet protocol television), but a few keywords like digital signage, medical care, education, entertainment, and telepresence remind us how these services can take various forms. The broadband network can be used in diverse ways, such as to watch a missed TV program, to receive cooking lessons from a celebrity chef, to check up on one's grandparents living in the countryside, and to get medically diagnosed from a remote location. And from a business perspective, services that support videoconferencing and teleworking are coming to be provided. Optical-fiber-based video services like IPTV have become a viable business with a customer base approaching one million subscribers, but achieving further expansion in this area will require improvements in user convenience as well as the development of new services by linking with mobile devices. There are still many things that need to be done here. As for digital signage, we have received the results of field tests examining the business and technical feasibility of this kind of video service, and we are making preparations for developing business.

—The seeds that you have planted have finally started to bud in the form of actual services! This must be quite gratifying.

Yes, indeed. And there's more. This year, we will also be focusing our energies on Home ICT. The idea behind Home ICT is to interconnect the numerous devices in the modern home in the form of a network to make the customer's life more pleasant, secure, and convenient. This can happen in various ways, such as by enabling the user to lock doors remotely from a mobile device, visualize electricity usage, and control energy-saving measures. The secure broadband environment that can now be easily and safely used allows us to move forward with such new services.

Devices in the home use various types of communication protocols, and to enable them to interact, we have developed a service gateway using a standard established by the OSGi Alliance (formerly the Open Services Gateway initiative), an international standardization body. In November 2009, we began trials using this gateway in collaboration with leading electrical appliance makers and other companies. This Home ICT platform will enable devices and appliances of various makers to be interconnected, thereby giving birth to new services. In addition to remote support services like personal computer troubleshooting that are already being provided, we plan to launch other new services throughout the course of this year.

—What strategy do you have in mind toward a genuine expansion of cloud computing?

A paradigm shift from *having* to *using* is taking place as one major trend in ICT, and the field that is riding this wave is cloud computing. We can look upon cloud computing as a service that came to life once it became possible to connect to the network in a stress-free way without encountering communication bottlenecks.

NTT activities in this regard are based on the concept of a *safe and secure cloud*. Making use of the reliability, quality, and security of the NGN, we plan to expand our cloud to cover areas that demand a high level of service. It is important that users can use this cloud in a stress-free way as a new social infrastructure that can be applied to all kinds of services, from straightforward ones like email to more critical ones in government, business administration, medical care, and education.

Our aim is to become a leading player in this field by interacting with the various companies making up the NTT Group while also collaborating with outside enterprises in a way that combines our fields of expertise with theirs. In software as a service (SaaS)

products, we have already linked up with more than 60 companies to provide services, and we are now ready to develop this business in earnest.

Business expansion from a global perspective

—Please tell us about the second key area: global expansion.

Inside Japan, NTT has constructed a high-speed, low-cost, high-quality optical network infrastructure based on world-class expertise and technology. Spreading this technology overseas is what we would normally regard as global expansion, but at the same time, I believe that system and technology development and service development within Japan should also be carried out from a global perspective with full recognition that worldwide competition exists.

To be more specific, we are providing ICT solutions and data-center and data-communication services in Asia, the USA, Europe, and elsewhere to customers whose companies are expanding globally. At the same time, we are expanding overseas using the technology and business know-how that we have accumulated here in Japan. A good example of the latter is TATA DOCOMO [1], which we launched just over a year ago in collaboration with the Tata Group in India, and its comic-delivery services for mobile devices.

Endeavors like these cannot succeed if driven by NTT alone: creating partnerships is extremely important. Up to now, we have been forming alliances with overseas carriers and vendors, and to respond to the need of emerging nations for skilled engineers, we have been accepting trainees and holding technology seminars.

We have also been involved in international standardization activities. For services like the NGN and IPTV where Japan has taken the lead, our aim is to connect technologies that we have developed to international standards via forums such as ITU-T (International Telecommunication Union, Telecommunication Standardization Sector). In addition, we are targeting for overseas expansion some amazing technologies born in NTT Laboratories such as the video codec used in IPTV and small-diameter, low-friction indoor optical cables. To this end and to accelerate the global expansion of technologies and services developed in Japan, we plan to pursue collaborations with even more companies this year.

Active approach to environmental protection: Green of ICT, Green by ICT, Green with Team NTT

—It appears that environmental consciousness at NTT is high, as demonstrated by the commercials featuring Ichiro Suzuki.

That's right! Environmental activities are very important. To achieve a low-carbon society, we are working to reduce CO_2 emissions on the basis of the slogan "Connect. That's Eco." For example, we are looking to reduce CO_2 emissions caused by NTT Group business activities by decreasing the power lost in converting from alternating current (AC) to direct current (DC) in high-voltage DC power supplies and by implementing energy-saving measures such as making data-center air conditioning more efficient. We call these efforts *Green of ICT*, which means measures for reducing the amount of CO_2 emitted by the ICT provider itself.

Green by ICT, on the other hand, means contributing to the reduction of society's CO_2 emissions through the proactive use of ICT. For example, teleworking and videoconferencing help reduce CO_2 by cutting down on the movement of people. Similarly, we can expect online shopping and the downloading of video and music to help reduce the number of physical articles and make distribution more efficient, thereby reducing CO_2 emissions. These activities help make life more convenient while also contributing to efforts aimed at achieving a low-carbon society.

It seems that the expression *smart grid* can be heard more often nowadays. Energy and ICT have much in

common, and a link must be established between them to create a new society. By exploiting the secure and bidirectional features of ICT, the NTT Group will help form this link through the visualization of electricity usage, the control of energy-saving measures, and other services.

In addition to the above, NTT Group employees participate in *Green with Team* NTT activities to reduce CO_2 emissions in their communities and homes. These include forest-conservation activities and the promotion of *green roofs*.

R&D with an impact: The source of growth potential and competitive power in the NTT Group

—Last year's project subsidy cuts and the financial crisis have caused many companies to reduce their R&D budget and probably to rethink their approach to R&D. What are your feelings on this?

Research and development (R&D) toward next-generation technologies evolves on a day-to-day basis—it is not something that can be accomplished overnight. Since there is much world-renowned research in Japan such as that on induced pluripotent stem cells, it is important that we, as Japanese people, focus our attention and energy on developing those technologies. In NTT's case, R&D is the source of growth and competitiveness for the NTT Group. A simple measure like reducing the R&D budget could lead to lost business in the future. I believe this is a very important issue in terms of management strategy.

In addition to R&D for service creation in the near future, it is imperative that we determine those research fields that will drive the NTT Group to success in the medium and long terms. They include large-capacity optical transmission technology and optical packet routers for the future network five and ten years from now, world-leading fields like nanodevice technologies, and engines for processing and analyzing huge amounts of information for use in a personal concierge service. Here, the researchers who will be involved in these fields should have a marketing and innovative frame of mind and a strong desire to create compelling products and services that appeal to users.

From here on, I would like to focus our efforts on R&D that promotes the use of ICT in diverse fields such as government, medicine, and education and on R&D towards ICT that will foster innovation in society and help solve social problems.

Reference

[1] TATA DOCOMO. http://www.tatadocomo.com/

Interviewee profile

■ Career highlights

Noritaka Uji joined Nippon Telegraph and Telephone Public Corporation (now NTT) in 1973. He handled tasks related to NTT privatization and startup business development. In 1988, he moved to NTT DATA, where he was initially in charge of planning and developing information systems for private enterprises. He then served in various managerial roles including Director of the Next-Generation Information Services Sector, Senior Vice President and Director of Business Planning, and Senior Vice President and Director of Enterprise-related Sectors. Building on these experiences, he assumed the post of Senior Executive Vice President in 2005. He began serving in his present position in 2007.