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History is Created from the Future: NTT Com Celebrates Its Tenth Anniversary as a Company Ahead of the Times

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Overview

While he was with NTT DATA, Shinobu Umino, Senior Executive Vice President of NTT Communications (NTT Com), supported many facets of Japanese business from production systems to corporate planning and information strategy. We asked him about the enterprise business of NTT Com, which will celebrate its tenth anniversary this year, and a novel technology called RedTacton.

Bridging as the social mission of NTT Com

—*Mr. Umino, this year will mark the tenth anniversary of NTT Communications. How has the business of the company changed over the last ten years?*

The main line of business of NTT Communications (NTT Com) at the time of its founding was establishing an environment for long-distance communications such as inter-prefecture telephone calls. However, the technologies developed by NTT are continuously evolving, and we have come to pursue more convenient and accessible services for our customers. Furthermore, through services that exploit information and communications technology (ICT), we have been extensively engaged in providing communications for corporate business and even large firms doing work throughout the country. Therefore, the business that NTT Com tackles has changed during these ten years.

Charles Darwin observed that "It is not the strongest of the species that survive, but the ones most responsive to change." That is certainly how it is! Rather than being satisfied with one's past successes, a company should read the times, ascertain the current needs, and establish a flexible system.

With this in mind, NTT Com has established seven core values as an engine for company growth and has been revamping its business structure. These core values are solutions, network management, security, global, ubiquitous, portal engines, and managed quality operations (high-reliability maintenance). Among these, I am serving as the *value president* of network management, ubiquitous, and managed quality operations while also serving as the director of the Enterprise Business Division.

—*What do you consider to be your personal mission?*

Quite simply, to make the network environment a better place. For example, I feel that we should be able to use the network in the subway, at our travel destination, or in any environment in the same way that we use it at the office or at home. I also think that,

if the ICT network in a certain region should crash and cannot be immediately restored, there should be another network to cover for it.

This way of thinking can be summed up by the word *bridge*, which NTT Com has taken to be its keyword. We are already a company that connects the world through its technology and gains customer trust through products, but to create an even stronger connection with our customers, we must endeavor to enhance our *people power* and *field power* in addition to our technical expertise.

A keen sense of actual conditions based on extensive experience in the field: *people power = enterprise power*

—*Mr. Umino, you have a distinguished history of service in public works and leading companies. What is the source of your ideas?*

The services that should be provided to customers and plans for realizing those services are hidden in the realities expressed by customers' concerns and the conversations we have with them. It's not that we are doing anything special by listening to our customers and gaining some understanding as a result. For example, when listening to NTT Com customers, it's easy to sense how bad the world's financial situation is becoming. This time, it took no more than a week for the crisis in the United States to reach and affect Japan. On the other hand, there are those that think that the financial situation may regain its footing fairly fast, although this sentiment can be attributed to the fact that during past world crises communications technology actually progressed.

Under such circumstances, we might consider what is beneficial to the customer. To begin with, a company can get into the black by either reducing expenses or increasing revenues. In times like these, however, even customers would readily agree that cutting back on expenses is a better idea than attempting to increase revenue. This is because making a cut in expenses is more tangible than pursuing profit by increasing revenues, which cannot be readily observed.

At the same time, good services cannot be provided without developing *enterprise power*. Managers must take on the role of motivating the people under them so that they perform their work autonomously. Actually, I explain this *managerial image* to everyone from time to time. In particular, I ask employees to consider how an ideal manager would go about help-

ing a subordinate who is having some kind of problem with work. The simplest approach might be to simply help that person with that work, but that would hardly cultivate an autonomous frame of mind. Of course, the manager should not just scold and refuse to offer a helping hand. What is important here is to create an environment in which subordinates can accomplish things on their own and develop an understanding of their work.

Enterprise power is much like a tug of war. You cannot win unless you pull the rope with the same timing and purpose as your teammates. In other words, if the vectors representing each person's efforts are not completely aligned, the team will not be able to demonstrate its full power. In a company, daily communication is essential in order to align everyone's vectors!

The first time I came to realize the importance of communication was about ten years ago. As the director of the Business Solutions Sector in NTT DATA, I interacted with anywhere from 200 to 300 colleagues. Of course, for the company, customer satisfaction was important, but even more important was employee satisfaction. To manifest company power, a company must establish an environment in which each and every employee can work in an autonomous and enjoyable manner. This, as a result, will invariably lead to customer satisfaction. Though you may hear that putting employee satisfaction before customer satisfaction is just a current trend, I am acutely aware of its effectiveness from my experience of being in the position of having to organize people under me (laughs).

Aiming for better explanatory skills to make even difficult things easy to understand

—That was a very clear explanation making it easy to imagine NTT Com technology and the company's social mission.

I'm always talking, but if I should give a convoluted explanation about a difficult thing and fail to make the other person understand, that explanation would have been a waste of time. To get our customers to understand why the systems and products that our company offers are useful, we need easy-to-understand explanations.

This applies equally well to researchers. Recently, in discussions about the relative importance of basic research and applied research, there has been a tendency to place more importance on applied research despite the fact that both are important. Although greater weight should be put on basic research, researchers sometimes lack the ability to explain why it is useful, and I think that this is why basic research is sometimes treated even lightly at times. From here on, I believe that it will be important for researchers as well to tell the world about the importance of their research in their own words.

In addition, motivation can differ greatly between research undertaken because one is told to do it and research performed with personal success in mind. How things will turn out in ten years is a story that one must picture in one's own mind. By starting with an ideal future and working backwards, one can decide what steps to take from the present to achieve that future. Then, even if the result ten years down the road turns out to be different from today's ideal image, an analysis of the difference should reveal

various things.

—If one sets high targets, isn't it easy to become discouraged? Have you experienced discouragement in your work?

Yes, of course. I've suffered setbacks any number of times. To give an example, I was once assigned to the ITU (International Telecommunication Union) headquarters in Geneva, which is in the French-speaking region of Switzerland. At that time, I understood little French, and as I was to give a presentation in English at a meeting held once a week, there was little opportunity for me to speak Japanese. In this environment, I was overwhelmed, perhaps even a bit delusional. However, this period of discouragement was only transitory as I believed a great feeling of accomplishment awaited me if I could overcome this barrier. By making steadfast efforts, I learned to deal with the changes that living in a foreign country brings.

—Please tell us about new technologies born from the accumulated experience of NTT.

Well, one of the latest technologies to come out of NTT is a communications technology called RedTacton that uses an electric field generated on the surface of the human body or of an object. Originally developed by NTT Laboratories, RedTacton enables information to be exchanged instantaneously between two people over the surfaces of their bodies by simply shaking hands as long as they each have a RedTacton card slightly thicker than a credit card in a pocket or elsewhere. Though electrical signals can travel easily through materials like metal and water (conductors), they can also pass through materials that behave like insulators for DC voltage such as glass, walls, and wood (dielectrics) as long as the material is thin enough. RedTacton works even through clothes and shoes.

Let me describe some specific situations in which RedTacton could be very useful. First, to pass through a door in a secure facility, it is sometimes necessary to pull out an ID card. At a construction site, however, people's hands may not always be clean, and removing an ID from one's pocket could easily soil one's clothes. RedTacton, however, would enable an ID check to be performed without the ID card being removed, which would lead to smooth passage through the door. The same effect could also be beneficial for hygiene control in operating rooms and

In these times of fierce technical innovation, various ICTs that were state of the art only a little while ago have already become bygone technologies. Perhaps the same thing will happen to RedTacton in time.

—Mr. Umino, what would you like to say to the researchers who support NTT technology?

I would tell them that they are the ones who build the foundations for new technologies and that they should take great pride in creating novel products and services that people will take for granted in the future. And I would ask ambitious researchers to give careful consideration to time allotment. For example, so-called *creation* time, which includes the idea and prototyping stages, should be thought of as half the total project time. Then, once the halfway point has been reached, a transition should be made to *presentation* time as in an intermediate progress report. In other words, a researcher's time should be divided equally between creation and presentation. I believe that approaching the work of research in this way can help minimize feelings of emptiness and solitude.

other locations in medical facilities. Furthermore, it could help to prevent the erroneous ingestion of medicines, for example. Medicine containers could be embedded with RedTacton transmitters that convey information about product attributes; that is, they could indicate what kind of drugs the container holds. Then, if a patient should grab a container with medicine that he or she should not be taking, a warning signal could be sent to either that patient or a third party like a caregiver. We can also envision the application of this technology to workplaces that must ensure the safety of children like day-care centers and kindergartens and to safety management at construction sites. RedTacton could also be used to create a new approach to publicizing products or services. For example, a RedTacton device embedded in an advertising poster could gather attributes like gender and age group from people standing in front of the poster so that those consumers could be provided with detailed information or information suited to their needs. This same idea could be extended to store products and pamphlets.