Thinking and Trying while Running; Heading toward the Inter-service Era as a Value Partner

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Overview

Mitsuyoshi Kobayashi, Senior Vice President and Director of the Technology Planning Department of NTT, says that we need to adopt a new corporate mindset that places importance on the new *inter-service* era and the challenges that this market brings. We asked him about NTT's Medium-Term Management Strategy and how he is preparing to work in a telecommunications industry that demands speed and new value creation.

Keywords: telecom, strategy, resilient network

The smartphone and cloud as the lead players of this era—new business opportunities in the market

—Mr. Kobayashi, how would you describe the current conditions in the telecommunications industry?

The speed at which technology is advancing is simply amazing, and foremost among this phenomenon is the rapid expansion of the smartphone market. Far from being a gradual development, the increase in smartphone sales seems to have occurred all at once. The smartphone, so to speak, is a mobile computer. Up to recently, the mobile phone had just been a tool for making calls, but it is now evolving into a solutions terminal that can resolve problems in accordance with customer desires and needs.

Last fiscal year, sales of NTT DOCOMO terminals reached approximately 24 million units, with more than half of that being smartphones. This trend is only getting stronger, and sales are expected to increase by nearly 70% this fiscal year.

The lead player in the telecommunications industry is changing completely from fixed to mobile communications. According to an information-communications white paper published this year, the number of fixed broadband subscribers in Japan, which can be counted among the world's top broadband countries, is somewhat static at approximately 35 million, including optical and other types of broadband services. However, mobile broadband in Japan is increasing at an annual rate of more than 10 million contacts centered around mobile phones.

The number of mobile broadband subscribers at the end of the last fiscal year was around 140 million, which is more than the population of Japan*1 and thereby greater than the rate of one phone per person. It can therefore be considered that mobile broadband subscribers are entering a saturated state, but new ways of using mobile broadband are nevertheless being thought up. For example, if automobiles are equipped with communication functions, we can envision that the number of mobile broadband subscribers will increase by several tens of millions, and a wide variety of related services will be created. Consequently, we can expect mobile services to expand even further in the years to come.

We must also note the growth of the cloud. It's not simply that corporate customers are coming to use the cloud in increasing numbers, but also that many of the services that you and I use on a daily basis are utilizing the cloud.

Up to now, it appears that carriers like us have mainly been concerned with thinking about and providing services, but over-the-top (OTT) operators have recently entered the market to provide services that combine cloud technology and smartphones. For example, applications that provide free voice calls such as LINE are now appearing, with the result that voice calls are simply becoming an "added bonus." This is a devastating development for telecommunication carriers like NTT, for which revenues from phone services have been a major foundation of their business.

Another development is that traffic is increasing annually owing to the advances made in fixed and mobile broadband services. Traffic from mobile communications in particular is doubling every year. We can attribute this increase in traffic to growth in video-related services. The NTT Group provides video services such as FLET'S TV, Hikari TV, and dVideo, and the total number of subscribers for video services as of the end of July 2013 was approximately 10 million, which is twice that of 2012.

This means that network capacity must expand by that amount, but under the present system of flat-rate subscribers, NTT and other telecommunication carriers cannot expect to increase their earnings in proportion to the amount of communications traffic. In other words, we are faced with a situation in which an increase in traffic is not reflected in revenues.

*1 127.3 million as of October 2013 by Statistics Bureau, Ministry of Internal Affaires and Communications

Medium-Term Management Strategy "Towards the Next Stage"

—It's natural for a business enterprise to think about revenue. How do you plan to deal with this issue?

Our business model and service format must change rapidly to keep up with the times. The NTT Group adopted a new system last fall and formulated a Medium-Term Management Strategy called "Towards the Next Stage."

Although it's still in the planning stage, a key element of this strategy is the concept of "inter-service," which I will believe will become our guidepost going forward. It's been nearly 20 years since the birth of the modern Internet (considered to be 1995) and the first time that the Internet Explorer browser was installed as standard in personal computers (PCs). Since then, the Internet has spread explosively and brought about major changes in our daily lives and corporate business models. When I think about what the Internet could become in the future, I can see that there is still lots of room for improvement.

One area for improvement is ease of use. At present, various types of operating systems (OSs) exist for mobile terminals and PCs, which forces service providers to prepare services that match each OS and device type. To get many customers to use a service, it must be developed and maintained for each OS. In addition, a number of telecommunication carriers exist, and NTT customers, for example, can only use services connected to the NTT network. The types of terminals on which a service can be used are also limited. For customers who would like to enjoy a variety of services, this situation can hardly be called convenient.

In the beginning, the meaning of the Internet was to

"connect" or "join together" disparate networks. Now, from the customer's point of view, the prefix "inter" will come to mean more than just the physical connection of networks—it will also mean the open and seamless connection of services on those networks and the OS-free and device-free use of those services. This is the inter-service concept.

However, if the NTT Group were to take up this kind of business, the result would be similar to a Ptolemaic (geocentric) system. Beyond our corporate customers are general customers, and if we were to attempt to provide new services in this field, it would require an around-the-clock effort. Going forward, we should aim to expand in business areas in which we assist our corporate customers as a value partner in creating new services, and at the same time, to search out the best match between different services. It often happens that companies and general customers are ignorant of just what types of services exist, so we can play a role here as an intermediary providing a "connection" function, that is, in finding an optimal service or even multiple services that satisfy a customer's needs and provide greater value all around. This is the type of inter-service world that I would like to create.

Making service-to-service and customer-to-customer connections

In terms of concrete actions, we are beginning by exploring various ideas, for example, "online to offline." In this effort, we aim to provide new added value by linking the network world with the real world.

To take the case of shopping as an example, the conventional way is to go to a retail shop in person and purchase desired products. These shopping actions are usually done independently from those performed when purchasing products on the Internet. However, by combining these two forms of shopping, we can create new added value. Specifically, we can provide the consumer who is searching for products on the Internet with information on where to go to actually see those products in person, and at the same time, we can provide retailers with information on the fact that such customers exist and on what products they find interesting.

One example we are now working on is a link-up between Tokyo Metro and Seven & I Holdings Co. through an information delivery service using a Wi-Fi platform. Here, we install a Wi-Fi antenna in each 7-Eleven convenience store and provide services unique to each store. For example, we can enable musical content of a popular singer to be downloaded only at a specific store, and we can provide information on that service at a nearby train station. This should have the effect of encouraging customers to visit that store, which should, in turn, promote consumer activity, that is, product purchases, while they are downloading content using the Wi-Fi service.

Since Wi-Fi can be used irrespective of the type of terminal or OS, this service can be provided even to customers who receive their telecommunication service through other carriers. Using such an open and direct, carrier-independent means of access can open up lots of business opportunities. In this way, we are exploring ways of making service-to-service and customer-to-customer connections to uncover more inter-service possibilities.

Building a resilient, flexible, and strong network

—How do you feel about the idea that a business strategy should consist not only of entering new fields but also of fortifying existing capabilities?

I would like to think first about a service-driven network. Here, I don't actually mean thinking about services over the network but rather about creating an easy-to-use network that service-providing companies will want to use.

As for fixed communications services, we cannot expect a huge increase in the number of subscribers.

Nevertheless, video services such as those that provide high-quality TV programs must be able to deliver large amounts of information, and developing optimal optical broadband technology for this purpose is still a very active field.

We must also keep in mind that the mobile network employs a fixed optical fiber network running from base stations to the core network. I believe that this optical fiber network will become increasingly important from here on.

Of course, we can hardly think that customers utilize only the fixed network, so we must think about ways of forming tie-ups with the mobile network.

There are regulations covering the provision by NTT of combined fixed and mobile services, so doing so is unfortunately difficult at present. From the customer's point of view, however, I think that a world in which services could be enjoyed over an optimal network regardless of whether they are fixed or mobile would certainly be desirable.

In the wake of the Great East Japan Earthquake, we must think about a stable, safe, and secure network that is robust to disasters and resilient to sudden jumps in traffic as well as an energy-saving network that is less susceptible to nuclear power plant problems and steep rises in fuel costs.

We must also consider the need for a network that can provide low-rate services. An expensive network will not be used, and value comes out of using a network. We need to continue our efforts in making the NTT network all the more competitive.

The NTT business companies are already taking various measures in this regard, but to enhance our ability to provide a highly competitive network, we must look to NTT research and development (R&D). One way of radically lowering costs is to incorporate virtualization and SDN (software-defined networking) technologies, which are now being studied. I think these technologies will be the focus of even more research activity in the future.

Furthermore, considering that fixed, mobile, and domestic/overseas networks have so far been constructed independently by the various NTT business companies, we again look to R&D to drive the construction of an optimal network that applies technologies to be used by the entire group and that minimizes costs. I am confident that all concerned will show a high level of leadership in this regard.

Learning from the words of Hakuin Zenji: Meditation in the midst of activity is a thousand times superior to meditation in stillness.

—What do you think is an essential element of a business strategy in today's world?

In today's rapidly changing world, it goes without saying that responding to the market with a sense of urgency is an absolute necessity. Those who stop and hesitate and fail to think and come up with answers while they are running will be left behind in no time at all in this era.

A dynamic and quick response is certainly the key. In my case, moving suits my temperament more than thinking. In relation to this, the NTT Group once attempted to develop PC equipment at a time when custom-made PCs were appearing. "Custom-made" was an idea that was not born out of conventional NTT thinking.

By grasping the times and making an actual move, we were able to obtain valuable feedback on our customers' way of thinking and advanced business models. Unfortunately, the result was not that great, but the know-how cultivated from this endeavor is still nourishing the NTT Group and myself as well. Try thinking of a moving *shinkansen* train carrying customers in the current era. When viewed from a fixed point, it is very hard to make out who or what is riding on the train. To do so, you have to run parallel to the train at the same speed or even faster.

I once learned from a certain individual the words of *Hakuin Zenji*[*2], a famous Japanese Zen master:

*2 Hakuin Ekaku (1686–1768) was one of the most influential figures in Japanese Zen Buddhism.

"Meditation in the midst of activity is a thousand times superior to meditation in stillness." Certainly, this means that testing out acquired wisdom while moving enables one to acquire new wisdom and make it a part of oneself. These words express the stance that we need to take in this era.

—Mr. Kobayashi, can you leave us with a few words for everyone in the NTT Group?

At the risk of putting on airs, I live by those words—I feel that it is important to think while running. Even if a variety of constraints are said to exist, going ahead and trying something instead of worrying about those constraints and doing nothing will at least enable you to learn something about those restrictions. In fact, you may find out that those constraints were not such a problem after all. Taking up the challenge of achieving what has previously been inconceivable may actually bring change to the world. This doesn't mean we should have a reckless attitude, but it does mean that we should run in a focused manner in a common direction.

Interviewee profile

■ Career highlights

Mitsuyoshi Kobayashi joined Nippon Telegraph and Telephone Public Corporation in April 1982. He served as Senior Manager of the Personnel Department of NTT WEST beginning in 2002, as General Manager of the Okayama Branch of NTT WEST beginning in 2006, and as a Senior Vice President and General Manager of the Service Management Department of NTT WEST beginning in 2008. He took up his present positions in June 2012.