

## Highlight <Special Feature 8 Stories>

### Connecting Feelings, Connecting Happy Smiling Faces

 <p>▶ <b>KAIZEN</b></p> <p>Quality Improvement Never Ends</p>	 <p>▶ <b>Diversity</b></p> <p>I had the chance to expand my range of activity in an environment conducive to the participation of women</p>	 <p>▶ <b>Growth</b></p> <p>Acting as a bridge between venture companies and big business with support as the first step</p>
 <p>▶ <b>Technology</b></p> <p>Using cutting-edge sound technology to study the behavior of endangered species that are difficult</p>	 <p>▶ <b>Hope</b></p> <p>Cultivating a sense of togetherness rather than simply giving</p>	 <p>▶ <b>Support</b></p> <p>Becoming able to develop a truly sympathetic view of resident by living together</p>
 <p>▶ <b>Person</b></p> <p>Focusing on personal qualities to broaden the possibilities for all people with disabilities</p>	 <p>▶ <b>Security</b></p> <p>Motivated to see customers smile, and devoted to the mission of providing continuous communications even in emergencies</p>	

## Highlight1 KAIZEN



In November 2012, KDDI began providing its 4G LTE service via an 800MHz platinum frequency band. As of March 14, 2014 the actual population coverage rate of 4G LTE in the 800MHz band had reached 99%, meaning that the LTE service area had increased 1.5 fold over the previous year. The driving force behind this achievement was the Office of Area Quality Improvement, which was established in August 2013. In this article, Masatomi Kinoshita, Director of the Office of Area Quality Improvement, talks about what led to that achievement as well as a variety of initiatives designed to improve area quality.

### Making improvements even outside coverage areas

“In this day and age with its proliferation of smart phones and mobile data, customers have begun to take it for granted that they will be able to get a signal. I realized that showing these customers KDDI’s area quality could best be achieved using numbers and this led to the actual population coverage target of 99% for our 800MHz band 4G LTE.”

The actual population coverage ratio is the ratio determined by breaking Japan into 500-square-meter blocks, and calculating the ratio of the total population in those blocks to the population that is within KDDI’s service areas. The story behind the story of how we raised the coverage ratio from 96% in March 2013 to 99% just a year later tells of many hardships, including erecting a base station in the middle of a blizzard.

However, KDDI’s challenges did not end with the achievement of 99% coverage. The actual population coverage only includes areas where people live; it does not include highway service areas or tourism destinations such as mountains or the seaside.

“It doesn’t matter to customers whether an area is a coverage area or not. In order to avoid disappointing customers who take it for granted that they will be able to get a signal no matter where they go, we would have to include in our coverage areas all the places where people go.”

It was then that the company began to simultaneously develop coverage in places considered “thoroughfares of human activity” such as local roads, airports, and tourism destinations. As part of the process of developing these areas, the company carefully determined whether each and every area was worthy of development based on information provided by local employees. Among the areas selected for development were, for example, the Jomon Sugi (cedar) Area on the island of Yakushima and Tomioka Silk Mill, which at the time was expected to become a draw for tourists once its scheduled designation as a World Heritage Site was approved.

## Stressing unity with customers by supporting events

“KDDI was one of the first companies to offer support at events where people gather for short time periods. Even so, at first there were objections from those who doubted the necessity of setting up vehicle-mounted base stations only for the one or two days a particular event was held. However, those one or two days are the very times when customers want to use their mobile phones and our efforts were greatly praised particularly by those who attended the events. As we continued supporting these events while emphasizing customer needs, we began receiving backing from our technology, PR, and other departments. Now, in addition to setting up vehicle-mounted base stations, we have come up with ideas that can create unity among customers, such as deploying “human Wi-Fis” in comic markets. These “human Wi-Fis” are employees dressed up to serve as human Wi-Fi access points.”

## Aiming to always be one step ahead in quality

Mr. Kinoshita stresses that eliminating areas where signals are interrupted is an essential part of getting customers to experience how easy it is to get a signal in the areas where there is 99% coverage.

“For example, we have made marked improvements over the last few years in the ability to easily get a signal in a moving bullet train. Previous studies showed that on the Tokyo-Osaka line the signal dropped to 3G once on average. Currently, however, this has been improved to once in only one of every five mobile phones, which represents an improvement in quality that approaches a zero failure rate (as of the end of April 2014).”

The company is aware that there are still locations in urban areas, such as underground shopping complexes and railway tunnels, where it is difficult to get a signal and work is underway to improve coverage in these locations. One important element of this effort



The line status measurement tool “Made by Employees! au area”

has been the input of employees who reflect the users’ point of view.

“We received a great deal of valuable information obtainable only from the customer’s unique point of view, such as the fact that in commuter train carriages signals are interrupted in the center of the carriage even though they are stable near the windows. The paramount advantage that employees have is the fact that it is easy for us to make requests of them such as ‘Measure the signal again’ and ‘Give me more details on the circumstances.’ Our task is to use this advantage that employees have to the fullest extent as we continue in our efforts to make improvements.”

Mr. Kinoshita stresses that an important part of making sure customers are able to use the company’s products and services in comfort is making sure they are not dissatisfied, and he has identified this as the mission of his office.

“As far as customers are concerned, the current level of quality is the norm, so there is demand for even higher quality. In order to meet the expectations of these customers, we have to improve quality over and above current levels. That’s why it’s important to continually work to improve quality.”



- ▶ [High-Speed Communication with LTE-Advanced \(CA\) and WiMAX 2+ Technologies](#)
- ▶ [Network reconstruction and swift restoration of service](#)

## Highlight2 Diversity



In 2014, KDDI was selected for the second year in a row as a “Nadeshiko Brand.” This program, run jointly by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange (TSE), selects companies listed on the TSE that are actively working to promote the increased participation of women at the workplace. The promotion of women’s participation at the workplace is one of the issues taken up in KDDI’s management strategy. In this environment, what kinds of activities are women participating in at the workplace? We discussed this issue with Masako Yano, Director of the Public Relations Department at the Communications Headquarters talks.

### Taking the position of executive assistant was the turning point

In October 2013, a KDDI/au commercial was ranked first for the month in CMDATA BANK’s monthly “CM Likability Ranking.” It was the first time in seven years that KDDI/au achieved top ranking. The person in charge of that commercial was Masako Yano.

Shortly after being hired by KDDI, Ms. Yano built a career in the consumer field. After creating a proposal for a rates policy, she entered management as a group leader, a position equivalent to section chief. Her turning point had come in the fall of 2011.

The position of executive assistant had been recently established at KDDI. The ratio of men and women in this position was roughly half and half. Each one was assigned to a company director of at least the level of a managing director for one year during which they learned the duties of that director’s position on their own. Ms. Yano was among those selected for the first round of this program.

“That was a time when I was having problems with the difficulty of a management position,” said Ms. Yano. “At this same time the fact that I didn’t have a clear idea of what my career goals should be was also making me anxious.”

Another of the goals of the executive assistant program was training candidates for future service as executives. When Ms. Yano heard about this she was overcome with anxiety caused by her doubt as to whether she was competent to handle that role. However, she worked hard to convince herself that it would be a good chance for further personal growth and this led her to



TV commercial “au Smart Value, Stage version”

resolve herself to meeting the challenges of management head on.

The executive assistant program has two missions. One is to support the director he or she is working under by vetting proposals before they are implemented and monitoring their progress. The other is gaining experience and knowledge. Executive assistants attend the same meetings directors do so that they can learn how to discuss issues with management and how decisions are made.

“While working as an executive assistant,” said Ms. Yano, “I learned a lot. I am particularly thankful for having had the chance to see for myself the mind and point of view of top management by observing President Tanaka. By observing President Tanaka’s powerful ideas with which and the high vantage point from which he runs the company I came to understand how management should be conducted and I could imagine myself in those situations. I also understood that many of the things I considered matters-of-course were not necessarily so from President Tanaka’s overarching vantage point. From that point I always tried to see things from the perspective of the entire company.”

### The promotion of women’s participation at the workplace is likely to gain even more strength

After completing the executive assistant program, Ms. Yano became the Director of the Public Relations Department, a field she had no experience in.

“In this age in which there is almost no difference between the price plans and mobile units offered by the various companies, the most important way we can get customers to choose us is to make sure they have goodwill toward au. To ensure this, President Tanaka had the idea that we need to improve communication even further. Understanding the expectations and ideas of top management based on his or her own experience is useful to the executive assistant in making decisions as a line chief.” [1]

Ms. Yano used what she learned during her time as executive assistant to aim for new heights. In fiscal 2013, the number of women in managerial positions throughout all of KDDI was 140. This was three times the number in fiscal 2007, but the percentage of women in managerial positions vis-à-vis the total number of managers was a mere 3.6%. Ms. Yano talks about her reaction to these figures.

“The fact that there were so few role models,” said Ms. Yano, “was one important reason why women don’t become enthusiastic about seeking managerial positions. But now that there is not only a system in place that allows women to work longer but there are also chances for women to be promoted to upper managerial positions means that the number of women in management will definitely go up. If there are more role models, the number of women with an image of the kind of manager they want to become will also naturally rise, and this will contribute greatly to increased motivation among those employees who are aiming for managerial positions.”



[1] A leader in the organization; a manager with the right to evaluate employees

Note: as of April 2014, there was one female executive (a director).

#### ▶ Cultivating and Promoting Female Leaders

## Highlight3 Growth



8 stories

Acting as a bridge  
between venture  
companies and big  
business with  
support as the first  
step

Tomohiro Ebata  
Head of the Strategy Promotion Division  
New Business Promotion Headquarters

Engulfed in the “age of the smartphone,” there was a feeling at KDDI that active communication with the outside was essential to further development. The awareness of this problem was what led to the initiative to support venture companies. The name given to this initiative is “KDDI ∞ Labo (Mugen Labo).” Under the slogan “Towards unlimited development that exceeds our imagination through cooperation with the unlimited potential of young people,” we are working toward making the innovations that occur within into developments that exceed our imagination.

### Communicating with the outside world by supporting entrepreneurs

KDDI ∞ Labo, hereinafter referred to as “Mugen Labo”, is a program that supports the development of global internet services. It targets venture business owners and engineers, including students, who have recently set up their companies. Tomohiro Ebata, in charge of its promotion, talks about the story behind the creation of Mugen Labo, a program keenly focused on the outside world.

“As the age of the smartphone advanced, young people found themselves in an environment in which it was easy to start up a business. Still, there were cases in which service and venture companies that managed to get off the ground later disappeared because their founders did not have the wherewithal to keep them going. One of KDDI’s philosophies is “Look outside yourself to know yourself.” Taking a cue from this, I thought I’d like to try and communicate with the world outside KDDI by supporting young entrepreneurs. I thought that this communication would in turn fuel the kind of innovation and development I wanted to achieve.”



KDDI∞Labo Space

Company president Takashi Tanaka offered strong support to the realization of this idea. President Tanaka dreamt of starting a company while he was an exchange student at Stanford University in the US, but in those days the development and support environments of today did not exist.

“As someone in a position to offer support,” says President Tanaka, “I would like to be of help to young people today who have the same dream I had when I was young.”

With the backing of President Tanaka’s new dream, Mugen Labo kicked off in 2011.

### Discovering business hints leads to greater employee motivation

This support, however, is not financial assistance. Rather, it is support that is designed to create an environment that is conducive to development and commercialization. Teams selected from a pool of applicants are provided with mentors (people who offer advice and guidance) chosen from all departments of the company and outside advisors (young venture company executives, business administration consultants, lawyers, researchers) who offer advice on commercialization and business management. The participating teams have the goal of releasing a beta version (test version) of their idea in three months. Applicants number one hundred or more each round. Mr. Ebata talks about how difficult it is to narrow this field down to approximately five teams.

“No matter how interesting an idea is, simply being new and original does not mean that it will succeed as a business. The important factor is whether the idea is able to solve a problem that exists in the world. For example, Giftee, one of the teams in the very first round, is an internet service that developed “micro-gifts,” which are small gifts that can be sent via email. But in Japan there is no custom of giving gifts worth just a few hundred yen each. The fact is, however, that there are countless times when people want to express a little appreciation. We were impressed by the novelty of that perception.”

Currently Giftee is making great progress, while at the same time KDDI is also benefiting through Mugen Labo. Though we expected to get business hints from concepts that are outside the normal business operations of a telecommunications company, the fact that these could be effective in employee training was unforeseen.

Contact with the participating teams produced changes in the young employees in their 20s and 30s who acted as their mentors. Observing entrepreneurs of the same age who were staking their very lives on the challenges they had to meet in the program led them to wonder whether they themselves were capable of doing more, and this led to increased motivation.



“giftee”, a team in the first round of KDDI ∞ Labo Program

### Moving toward the second step in acting as a bridge between venture companies and big business

As the program continued into its fourth and fifth rounds, observes Mr. Ebata, problems with Mugen Labo began to arise.

“The primary problem,” says Mr. Ebata, “was how to create a good relationship with teams that have graduated. The way we solved this was by aiming to build a strong partnership from the very beginning, and as of the sixth round we changed the program so that it was focused on teams that were starting from scratch. We emphasized building relationships with the graduating teams and established a program called the “Engineer Pool.” Orders sent to graduating teams whose business operations were related to KDDI services began to increase. The idea was to create business link-ups with them as we continued to offer support.”

Recently an increasing number of major companies have inquired about contacting venture companies. Mr. Ebata believes that what lies behind this increase in interest is the fact that large companies in Japan surprisingly do not have much interaction with venture companies as well as

the fact that Mugen Labo's perseverance has created the impression that KDDI's venture company initiative is at the forefront of this field.

"We have designated our second stage of development as the stage in which we make KDDI an enabler.[1] We would like to actively work to support venture companies in cooperation with other major corporations. I believe that this is something that KDDI is uniquely positioned to achieve since we already have the advantage of established interaction with venture companies."

Not satisfied with offering only support, Mugen Labo is moving toward acting as a go-between for venture companies and big business, an endeavor that promises a wealth of business opportunities.



[1] Someone who helps make things possible

▶ ["KDDI Mugen Labo"](#)

□ [KDDI Mugen Labo \(Japanese\)](#)

## Highlight4 Technology



Many people would be hard-pressed to find the connection between KDDI and biodiversity protection, but the key resides in underwater acoustic technology. We spoke with Junichi Kojima, who serves as Project Leader at KDDI R&D Laboratories, about his efforts in a long-term project to study the behavior of endangered species.

### Using sound technology to save endangered species

Since joining KDDI, Kojima has been involved in the development of underwater robots used in the installation and maintenance of undersea cables. “Underwater communication generally relies on sound alone,” says Kojima. “Sound waves are used to communicate with underwater robots that were developed to inspect undersea cables. This was the original purpose of our acoustic technology.”

The underwater acoustic technology developed by KDDI R&D Laboratories has been constantly advancing and improving through practical experience. The technology was first put to use in the observation of animal behavior 15 years ago, with a study on the behavior of whales.

“Researchers from the University of Tokyo who were developing underwater robots approached me with a proposition to use underwater acoustic technology to study the behavior of whales. At the time, I felt that the project would be a worthy challenge to see what role my underwater robots could play in another field.”



AE2000 underwater robot equipped with hydrophone array on wings

Kojima’s team worked with the University of Tokyo to jointly develop a whale-tracking system, which was then incorporated into underwater robots used for inspecting undersea cables. They initially tested the technology in a study of humpback whales around Zamami, Okinawa in 2000. In 2004, they started using the underwater robots to study sperm whales around the Ogasawara Islands.

In the course of studying whales, the behavior of the endangered Ganges river dolphin surfaced as a new topic of study.

### Using sound to observe the movements of animals that are difficult to view

“Due to water quality deterioration and bycatch in fishing nets, India’s Ganges river dolphin population had dwindled to about 2,000, making it an endangered species,” says Kojima. “The government of India implemented measures to protect the dolphins, but the murky water made visual observation difficult, so there were many things about the dolphins that we did not understand. For this reason, it became crucial for us to understand their behavior in order to prevent their extinction.”

River dolphins emit ultrasonic waves that humans cannot hear. These sound waves bounce off objects and return to the dolphins, enabling them to understand their immediate environment. The use of underwater acoustic technology makes it possible to capture these ultrasonic clicking sounds, enabling researchers to perform observation with greater reliability and without affecting the behavior of the subject, unlike the use of microchips attached to the body.

With expectations high in India, the project became a joint effort between a Japanese team mainly from KDDI R&D Laboratories and the Institute of Industrial Science at the University of Tokyo, and an Indian team with members from WWF India and the Indian Institute of Technology (IIT).

“However, things did not go smoothly,” says Kojima. “The river bank where we planned to conduct the study (Karnavas region) is regarded as a sacred place by the local people who come to the Ganges to bathe, so it was not easy to get permission.”

Initially, the research team successfully studied river dolphins in another area (Chilika Lake), and drew attention to those achievements in order to bolster support. Following their success, they started studying the Ganges river dolphins at Karnavas in 2008. However, they had to fight an uphill battle against a multitude of problems that hindered the study, including a powerful storm that blew away their tent, as well as the intense heat and humidity, which seriously affected the health of the staff one by one. Despite the great difficulties, however, the team achieved great results in this study as well.

Kojima’s team developed a new observation apparatus for studying the behavior of the Ganges river dolphin. The apparatus incorporates position measurement technology used in underwater robots, and it features six hydrophones (underwater microphones) that are configured to perform triangulation. The simple system operates by measuring the differences in arrival time of sound at each microphone, enabling the researchers to accurately determine the position of the river dolphins in three dimensions.



Placing underwater microphones

“If we understand the position of the river dolphins, we can understand their movements, which brings their habits into view,” says Kojima. “Our research up to this point has, for example, improved our understanding of how river dolphins raise their young. First we learned that adult river dolphins produce different clicking sounds than those of the young, and recently we came to understand that the young are kept together in a group at one location, and the adults go back and forth to care for them.”

## Aiming to expand activities around the world

---

Sound waves received by the device are analyzed in real-time using a computer, and the data is transferred over the Internet via a mobile phone modem and stored in a server located in Japan. Furthermore, this data can be shared in real-time with researchers around the world if a special graphical user interface (GUI) is installed.

In addition to research, efforts to make this type of data open can also help to save animals. Three years ago, Kojima was contacted directly by a professor at Mulawarman University in Indonesia, who expressed a desire to work together to study critically endangered Irrawaddy dolphins in the Mahakam River in Borneo. The researchers began using acoustic technology to study the Irrawaddy dolphins in 2013.

Meanwhile, Kojima intends to continue studying the Ganges river dolphin. "There is still a lot that we do not understand about river dolphins," he says. "We plan to continue our long-term study, but since we cannot stay in the area permanently, we are attempting to develop equipment that the local staff can use by themselves."

With a combination of existing communications technology, new cutting-edge technology, and creativity, these efforts to protect biodiversity have produced results that have spread outward like ripples from a stone thrown in water, and the extent of their influence is starting to become evident.



### ▶ Biodiversity

## Highlight5 Hope



The development of information and communications technology (ICT) has led to the emergence of the digital divide, which refers to the economic, social, and employment inequality gaps that arise between people based on their ability to use or access technology. KDDI pursues a variety of activities in developing countries to bridge the digital divide, including a project to construct schools. This project, which broadens our global perspective as a member of international society while remaining independent from information communications technology, is receiving much attention both in Japan and overseas.

### Motivated by the innocent delight of children

With over half a century of involvement in international contribution activities, the KDDI Group has accepted approximately 5,700 trainees from 144 countries and made numerous other achievements. KDDI Foundation currently plays a key role in the KDDI Group's international contribution activities in five areas: (1) overseas human resource development, (2) dispatch of experts, (3) projects to bridge the digital divide, (4) overseas consulting, and (5) educational support. As one of the educational support activities, KDDI Foundation donates schools to Cambodia.

According to Yuki Umezawa, who heads the school construction project in his role as Senior Manager of the International Cooperation Department, the motivation for the project began in 2004, after a representative from the World Assistance for Cambodia NGO (referred to below as the "NGO"), which conducts support activities in Cambodia, came to give a speech. The shock at the lack of schools in Cambodia spurred the project into action. Since then, KDDI Foundation has sponsored a charity classical concert every year, and the proceeds and contributions are donated toward the construction of KDDI Schools (elementary and junior high schools), which are built at a rate of one per year in various parts of Cambodia with the cooperation of the NGO.



Children in the KDDI School

“Since the first school was constructed, we questioned whether it was sufficient to just provide the school buildings,” says Riyoko Kojima, who is involved in the KDDI School construction project. “As we wrestled with these doubts and held meetings with the NGO, we started to discuss how we might be able to develop human resources that can lead Cambodia into the future, if we could teach them IT skills and English. In particular, due to KDDI’s unique potential to offer support as a telecommunications company, we decided to use KDDI Foundation’s financial resources to support IT and English education. With that, a new objective for KDDI Foundation was born.”

Prior to opening the school, an Internet environment was established and educators were hired to teach the IT and English classes. In November 2005, the project’s first facility, named Phom O KEC School, was completed in the village of Phom O, located in a forest area approximately 200 kilometers north of the capital city of Phnom Penh.

“I went to the school opening ceremony and was surprised,” says Kojima. “I had heard that the village was in a remote area with no electricity, but it was beyond what I expected. The roads were accessible only by motorcycle, so I had to ride in on the back seat of one. It was a struggle, but I finally arrived.”

When she arrived at Phom O Elementary School, children and adults from the village had gathered there. For everyone in the village, it was their first time to see a personal computer or digital camera. When the adults were shown a video, they recoiled in astonishment. “However, the children had stars in their eyes, and they quickly learned how to use the devices,” she says. “After witnessing the innocent delight of the children and seeing the poor state of education with our own eyes, it was our natural inclination to want to do the same thing again the following year.”

#### Support that bolsters the future of the local people

It was not the original plan to continue the project for ten years, but it has carried on simply because it has provided so many benefits, and no reasons have emerged for stopping it.

“As we continued the project, some issues arose, particularly in terms of operating costs,” says Kojima. “If you increase the number of schools, expenses such as salaries for IT and English instructors and the costs of computer maintenance start accumulating until they pose a significant burden. However, we couldn’t just stop constructing schools. The reality is that no matter how many we build, it isn’t enough.”

Ten years after the project began, the members have been able to look back on their experience and assess the issues that they have encountered along the way. They have reaffirmed their commitment to the original purpose of the project, which was to construct school buildings and provide places to learn, and they have vowed to continue, no matter what it takes. However, they have shifted course with respect to support for IT and English education, and they plan to continue offering it as an extra program in areas where the proper environment can be sustained.

“In addition to our own issues, we also encountered an issue facing Cambodia, which is that there are no music or physical education classes in their elementary and junior high schools,” says Kojima.

Kojima recalls that just when they started considering the possibility of developing education enrichment programs, they discovered traditional Cambodian shadow puppetry, known as Sbek Thom. At the time, the project members discussed the idea of trying to



Sbek Thom performance at the donated special theater

establish an after-school program similar to the kabuki appreciation classes offered at schools in Japan.

“Even though Sbek Thom is a traditional art, there aren’t many young people interested in carrying on the tradition,” she says. “Instead of inviting children to see it once and stopping there, we considered support that would enable theatrical groups to continue, and donated special theaters with practice rooms.”

It is not enough to provide temporary, short-term support. The KDDI Group aims to provide support that benefits the long-term future of the local people. To that end, it is important to view the local people, with their unique way of life and culture, as colleagues who coexist in the same era. The KDDI Group, which has been engaged in international contribution activities for many years, has embraced this perspective and stance at a fundamental level.

### Bringing smiles to children in the Federated States of Micronesia

KDDI’s efforts to bridge the digital divide have expanded to Micronesia. Computers that were previously used at KDDI offices are donated to the Federated States of Micronesia, and five telecom centers have been set up to support the local telecommunications operators in the states of Chuuk, Pohnpei, and Kosrae, which comprise three of the nation’s four states. In Yap, the fourth state, a project to introduce Internet service is being implemented this fiscal year. In the Woleai Atoll in Yap, which is about ten days by boat from Pohnpei Island where the nation’s capital is located, project members are configuring hardware and providing training. In addition, KDDI is conducting joint efforts with Micronesia’s Department of Transportation, Communications & Infrastructure to construct a social system that the local people can operate for a long time to come.



- ▶ [Charity Concerts and School Construction](#)
- ▶ [Efforts overseas](#)

## Highlight6 Support



Since the Great East Japan Earthquake, many companies have been engaged in supporting reconstruction. KDDI's particular form of support has been to send employees to the stricken municipal governments. This was an unprecedented type of support and as such it was covered by media. How did KDDI come up with this type of support and what kinds of relationships with the stricken areas have been formed through this activity? Hironori Abe, director of the Reconstruction Support Office and person in charge of these activities, talks about these issues.

### Realizing we didn't truly understand the situation in stricken areas was the starting point

Currently, the Reconstruction Support Office, which was established in the city of Sendai in July 2012, has a staff of six including Hironori Abe. However, the five staff members other than Mr. Abe all work at local municipalities, the Reconstruction Agency, and similar organizations.

"At each municipality where we have staff members we are working to understand from the point of view of local people what their needs are," said Mr. Abe, "and are searching for ways in which we can use IT and related technologies for the purpose of reconstruction support. This was not the form our reconstruction efforts took immediately after the disaster. It was rather the result of reflecting on our first year of reconstruction support activities."

In the beginning, KDDI proposed supplying merchandise that it thought was required for reconstruction, but for a while local municipalities ignored the company's offers.

"There were two main reasons for this," explained Mr. Abe. "One was that we didn't truly understand the fact that the municipalities were already overwhelmed with the immediate problems of daily life. The other was the fact that we didn't understand the sort of work that municipalities do."

Once the office understood that the problem was our lack of understanding the local municipalities, they realized that they needed to think about what the municipalities actually wanted. "And that's when we decided that we would send employees to the municipalities," reflected Mr. Abe.

## Variety in the work done at municipalities

Support activities were begun in October 2012 at Kamaishi City Hall, Iwate prefecture. The KDDI employee sent there worked out of the Department of Public Information and Public Relations. This employee worked on creating plans and proposals for ICT used in municipal duties, making plans for an integrated ICT facility, and similar tasks.

Subsequently, employees were sent to other municipalities (one employee per municipality). The employee sent to Kesennuma City Hall, Miyagi prefecture worked on a base for transmitting the city's public relations magazine and tourism information and system maintenance for this base. The employee at



At the assigned Kamaishi City Hall

Higashi Matsushima City Hall worked on promotion of the city as an “Eco-Future City” and surveying the city's energy infrastructure. And the employee at Sendai City Hall worked on a reconstruction project known as the “Eco-Model Town Project.”

“Since each of these activities was suited to the needs of each area,” explained Mr. Abe, “each was unique. But in the end, each plan was as comprehensive as possible, including everything from systems to services and from planning to implementation.”

## Use in community development around the country

As employees increasingly become a part of the communities they work in as residents, they are able to understand more and more.

“In the past there were stories in the media about money allocated for reconstruction being left unused,” said Mr. Abe, “but that did not happen because there was nothing that could be done with the money. What we came to understand from the people in those areas was that the cause behind this was the fact that they had no time for the application process required to receive the money. The employees sent to Kamaishi and Kesennuma lived in temporary housing, so they were far more sympathetic to the concerns of local residents – and especially the victims – because they could speak directly with them.”

There were many things that we came to understand through the experience of living in the stricken areas, and our ability to see things as the local residents helped us create relationships with them. Those relationships, explained Mr. Abe, were the powerful driving force behind our reconstruction support efforts.

“Even though the program of sending employees to stricken areas has ended, our basic position of offering support has not changed,” said Mr. Abe. “Even though our initial goal was to make a contribution to society, our goal now should be to create a system in which local industry could succeed on its own. No matter what course our next step takes, we realize that it will be a new challenge. The problems we see in the Tohoku region, such as the ageing population and population declines, are problems that exist throughout Japan. The fact that KDDI now has a good understanding of the work that municipal governments do will fuel its future efforts. We would like to use the know-how we have gained to support community development around the country.”



- ▶ [Participation in Community-Rebuilding Projects in Disaster-Stricken Areas Suffering Depopulation](#)

## Highlight7 Person



KDDI is actively engaged in efforts to promote employment opportunities for people with disabilities. At the core of these efforts is KDDI Challenged Corporation, a special subsidiary company established by KDDI. We spoke with Administration Manager Kimikazu Ikeuchi on a wide range of topics related to employing people with disabilities, ranging from hiring and education to operations planning.

### Expanding employment opportunities for people with mental disorders

In April 2008, KDDI Challenged was established as a special subsidiary company aimed at creating an environment and opportunities that can challenge both disabled and able-bodied people.

Up to now, KDDI has actively employed individuals with physical disabilities, but the company has been presented with the obligation to employ people with mental disorders in FY2018. Initially, people with mental disorders are to be employed in the special subsidiary company, and efforts will be made to expand the range of opportunities outside the company. Ikeuchi believes these efforts will lead to greater employment opportunities for people with mental disorders, who continue to face barriers to employment.

The current efforts, which have been developed through trial and error, are to assign people with mental disorders to operations that make use of the unique characteristics of each disability. For example, developmentally-disabled people with extraordinary math skills can be put to work in accounting or purchasing operations, and people with Asperger syndrome who have difficulty communicating with others can be put to work in individual activities such as PC kitting, which requires concentration and precision. By relying on each individual's personal qualities, the range of occupations can be expanded for people with mental disorders. "Our company now employs 23 people with mental disorders," says Ikeuchi with pride.

These expanded operations are attracting attention from many companies across a wide range of industries. There are increasing requests for lectures and observation tours from parties who wish to learn from the achievements and expertise that KDDI Challenged has gained in employing people with mental disorders.

## Diversifying operations while focusing on personal qualities

Initially, KDDI Challenged employed people in relaxation room (acupuncture and massage) operations and mobile phone disassembly and separation operations. The company decided to become involved in the relaxation room activities because other special subsidiary companies were also involved, and because the relaxation services and facility are provided as a wellness benefit to KDDI employees. The company also decided to become involved in mobile phone disassembly and separation operations, because they involve simple activities for the mentally-handicapped that require concentration and manual labor, and they contribute to the material recycling efforts promoted by KDDI.

“In working with employees with disabilities, you shouldn’t simply give up when there is a task that cannot be performed,” says Ikeuchi. “If you consider the body of the employee who is performing the task and reconsider the procedure and instructions for performing it, you can devise a way for them to carry out any operation, instead of thinking that they can’t do it because of their disability.” With this approach, opportunities have been expanded to include accounting and purchasing operations, mobile phone maintenance center operations, PC kitting, support activities for related companies, and business mobile phone recycling operations.

“Recently, mentally-handicapped employees took on the challenge of mail delivery operations for the first time,” says Ikeuchi. “Moving forward, we plan to continue making a variety of efforts. As we expand operations and open up new opportunities for challenge, we will continue to focus on developing more comfortable work environments. We are embracing a variety of challenges in creating environments that take personal qualities into account, such as installing colored and textured floors that facilitate the mobility of the visually-impaired, and creating new seating arrangements and playing background music for employees who have trouble concentrating because they pay too much attention to the people around them.”

## Committed to the mission of providing long-term employment

Meanwhile, KDDI Challenged is engaging in efforts aimed at companies in the KDDI Group, which seek to improve understanding toward people with disabilities.

“This fiscal year, the training sessions for new employees at KDDI and each of the group companies included an opportunity to experience KDDI Challenged operations,” says Ikeuchi. “Activities included communicating with hearing-impaired members and working with mentally-handicapped members to disassemble and separate mobile phones. Eating lunch together and sharing time as co-workers seemed to boost the mindfulness of everyone involved. Participants voiced impressions such as, ‘After working with people with disabilities, I realized that they do not view their disabilities as a way out,’ and ‘I realized the importance of being considerate to others, regardless of whether they are disabled or able-bodied.’ When I hear impressions like these, it gives me a great sense of expectation for the future, because if the KDDI Group is filled with employees who think this way, it will become an even better company.”

Always mindful of the importance of providing long-term employment at KDDI Challenged, Ikeuchi discussed his



New employees observing mobile phone disassembly and separation operations



ambition to keep searching for activities that people with disabilities can accomplish. “If we devoted the necessary attention to the personal qualities of each person one by one, it would not be difficult at all to employ people with mental disorders,” he says. “By encouraging the employment of people with mental disorders, I think we can contribute to broadening the employment possibilities for all people with disabilities.”

▶ [Boosting Employment Opportunities](#)

## Highlight8 Security



A business continuity plan (BCP) is a structure that is put into place under usual conditions, which ensures that important business operations can continue uninterrupted in the event of a disaster. Always striving to develop and implement BCP measures to fulfill its responsibilities as a telecommunications operator, even during large-scale disasters, KDDI established the Disaster Prevention Planning Office in April 2012 and is making efforts to improve the speed and safety of disaster countermeasures. We discussed these efforts and activities with Akira Dobashi, Executive Director of the General Administration & Human Resources Division who served as Director of the Disaster Response Office until March 2014, along with Hiroshi Kisanuki, General Manager of the Disaster Prevention Planning Office, which plays an active role in affected areas.

### Realistic training drills that assume large-scale devastation

Although KDDI has long implemented BCP measures, the experience of the Great East Japan Earthquake motivated the company to rapidly intensify efforts to establish BCP measures that assume a greater level of devastation. Akira Dobashi discussed emergency assembly drills and disaster response drills, which represent the two main types of training exercises.

“Emergency assembly drills mainly involve department directors, managers, and senior level employees, who walk or ride bicycles from their homes to a designated meeting point,” says Dobashi. “Because we never know when disaster will strike, emergency assembly drills are conducted without advance notice, even in winter or summer, or in poor weather. This adds a greater sense of realism to the exercises. The purpose of emergency assembly drills is to check whether the participants actually gather together, and more than 60% of participants successfully carry out the exercise even though they are conducted without any advance notice.”



Disaster response drill

Disaster response drills, on the other hand, aim to test whether business operations can be recovered according to BCP objectives. For example, in an exercise conducted last year,

participants were presented with a scenario of a major earthquake in the Nankai Trough without advance notice, and asked to respond with the appropriate actions in their departments.

“New lessons are learned each time drills are conducted,” says Dobashi. “Participants also become acutely aware of how important it is to accumulate experience under normal conditions. When events do not occur as anticipated, the participants must consider other procedures that can better prepare them for the future. In this sense, the drills encourage them to pay meticulous attention so that they can always be prepared to respond to unforeseen situations.”

### Accumulating practical expertise in preparing for major disasters

A core component of the KDDI Philosophy is the mission to provide stable services that are available 24 hours a day, 365 days a year. The operations departments are responsible for full-time network monitoring, which is key to fulfilling this mission.

Hiroshi Kisanuki, who serves as General Manager of the Disaster Prevention Planning Office, discussed how his department came to be established. “Previously, the Disaster Response Section played a lesser among the operations departments,” he says. “But after our experience with the Great East Japan Earthquake, there was a sense of crisis that maintaining the status quo would leave us inadequately prepared for a major disaster. As a result, the Disaster Prevention Planning Office was established in April 2012.”

The mission of the Disaster Prevention Planning Office is to ensure that communications can always be provided, even under abnormal circumstances, by coordinating with the operations departments in each region throughout Japan and by studying and making advance preparations from a BCP perspective. In the two years since the Disaster Prevention Planning Office was established, equipment has been expanded significantly through measures such as doubling the number of mobile base stations and power generators. In addition to simply acquiring equipment, efforts have been made to improve expertise by responding to issues that arise at large-scale events.



Disaster recovery drill using a helicopter

“At events such as fireworks displays where the communications environment is not sufficient, we provide more reliable communications by making adjustments based on the activity of the people at the event,” says Kisanuki. “Similarly, unexpected numbers of people gather at places such as evacuation sites during disasters, and the way to ensure communications in the area is a major issue. For this reason, we thought that the expertise gained through responding to large-scale events would be useful.”

In terms of personnel-based measures, a variety of efforts are being pursued in human resource education and training. One such effort is a contest between regional teams in setting up vehicle-mounted base stations.

“The point is to set up the base stations safely and quickly, but it is up to each team to decide how to set them up,” says Kisanuki. “This lets us see the advantages and disadvantages of each procedure. The competition improves our technical capabilities, and it also helps to boost motivation.”

In addition, more than 50 training exercises per year are conducted with local governments. When setting up a vehicle-mounted base station during a disaster, for example, several hours might be lost if the installation site has not been decided. Training exercises can improve understanding on both sides, resulting in a smoother response when a crisis occurs. Each and every training exercise is carried out with this critical importance in mind.

## Always aware of the importance of KDDI's activities

It is also evident that employee awareness of BCP is improving. A prime example of this is a measure to ensure the constant presence of decision-makers. Executives in Tokyo take turns residing near specified buildings so that decision-makers are always available, 24 hours a day, 365 days a year.

Customers who tour the Disaster Response Office facilities are often surprised at the extent of KDDI's preparedness, which raises the question of why KDDI takes such thorough BCP measures.

"Like the KDDI Philosophy, which clearly states our mission to provide stable services 365 days a year, KDDI employees are highly aware that our business activities are closely linked to social infrastructure," says Dobashi. "I think this awareness drives us to pursue aggressive BCP measures."

Kisanuki concurs. "The employees in the operations departments are extremely aware of the importance of protecting the network," he says. "Two hours after the Great East Japan Earthquake struck, employees from all regions across Japan were heading to the stricken area without any instructions to do so."

For Kisanuki, the desire to see customers smile is a source of motivation. "At the time of the earthquake, I was serving as Director of the Kanazawa Technical Center," he says. "Kanazawa was functioning as a logistical base for Tohoku, and I had also previously worked in Sendai, so I quickly rushed off to the area. The customers there welcomed me with smiles. The end goal of our mission is to make the customers smile, and that joy has become my motivation."

Dobashi also recalls how his heart was touched by words of gratitude from customers. "After the earthquake, I received letters from people who thanked me for the peace of mind they got when they could finally talk on the phone with their families, after not hearing from them for days. It was a powerful reminder of the importance of our work. I think that we need to remain committed to our BCP efforts so that we never lose sight of our mission to provide continuous communications."



### ▶ Initiatives in Preparation for Emergencies