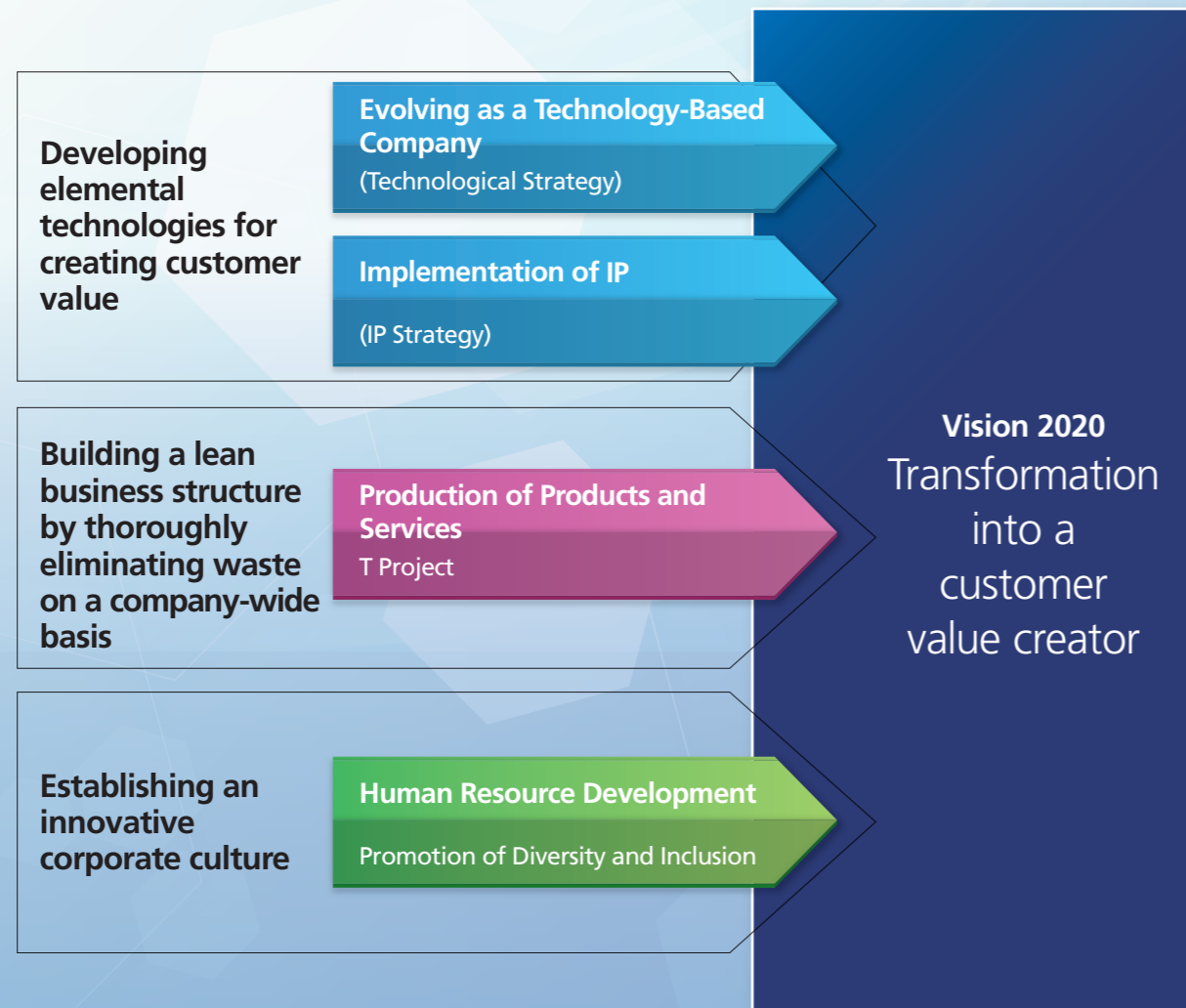


Strengthening Our Foundations to Achieve Growth

Promoting efforts toward strengthening our foundations to support and accelerate growth in each sector.



The JVCKENWOOD Group is promoting various efforts toward strengthening the foundations to support and accelerate the growth strategy set forth in our Vision 2020 for each sector.

With the aim of “transforming into a customer value creator,” the R&D Department is redeveloping a technological development roadmap that adds elemental technologies essential for future society, such as AI, 5G/IoT, VR/AR, robotics and security, to our core audio, visual, and communications systems technologies. We are also strengthening our IP (Intellectual Property) strategies to make these advanced technologies competitive.

Each sector is promoting cooperation and collaboration with other sectors or industries to enhance customer value by providing not only products but also solutions, and the basis lies in solid manufacturing activities that achieve high quality while thoroughly eliminating waste. Therefore, we are promoting the T Project to improve our manufacturing and its processes on a company-wide basis.

In addition, we consider it important to enhance creativity for creating customer value as well as such technological development and manufacturing, and we have developed a variety of measures to promote diversity and inclusion. We will strive to create an innovative corporate culture to pave the way to the future by utilizing the personnel diversity unique to the Group, which promotes a wide variety of businesses, including BtoB and BtoC, by integrating a wide range of technologies and sensitivity.



Creating innovation that paves the way for a new era with our technological strategy and IP strategy.

Yoshio Sonoda

Director of the Board, Executive Officer,
Chief Technology Officer (CTO)

For us, to be “technology-based” means to ensure all management decisions result in the implementation of initiatives that offer certainty. Within this scope, my mission is to create a plan for the Group based on our technological strategy and IP strategy that will shape the future of our Group, and to implement each initiative under those plans.

Our technological strategy revolves around our core competence technologies of audio, visual, and communications systems cultivated by the two operating companies, JVC and KENWOOD. The strategy encompasses the combined efforts of the head office R&D Department with all Group company technology departments to improve technology and product development. We are currently in the process of creating a roadmap for the future of this strategy with a focus on methods of collecting, accumulating, and utilizing future elemental technologies on the premise of today’s rapid technological advancements.

Where the future elemental technologies highlighted in the new roadmap are concerned, we are devising an IP strategy with the head office IP Department at the center and promoting a variety of initiatives to help secure a competitive edge and stable profits. Additionally, we are planning to promote the effective application of future elemental technologies and intellectual property to new non-competitive areas that transcend the framework of existing business sectors.

Technological Strategy

Forming an Elemental Technology Platform Indispensable to Future Society

As we approach the final year of Vision 2020, we are thinking hard about what the ideal R&D system would be to drive our next mid-term business plan in the course of formulating our technological strategy.

In the past, the head office R&D Department has conducted advanced developments in each business sector with a focus on the next few years to come, and the technology departments of each business sector have been in charge of product development one to two years later. Moreover, in terms of advanced developments, we have greatly enhanced our overall technology and skill level as we strived to deepen our knowledge and expertise so as to further enhance our core competencies of audio, visual, and communications systems. This method of technology and product development is quite reasonable and we will continue to employ it to a certain extent in future. However, given the rapid rate of current technological innovation, the head office R&D Department needs to be more deliberate with efforts to boost the elemental technology platform shared across all business sectors to support solutions, such as AI, 5G/IoT, VR/AR, robotics, and security, which will help solve future social issues.

Keeping this in mind, and with consideration for the formulation of our next mid-term business plan, we are revising the technology development roadmap that was devised through backcasting based on scenarios of over 10 years into the future including indispensable future elemental technologies and prior art in existing business sectors.

Creating an Environment that Encourages Continued Innovation

To fuel the expansion of existing and new business areas, supplementary to the revision of this roadmap, it is essential that we implement internal systems that encourage employees to speak up if they have an innovative idea. To achieve this, the Group is promoting a number of activities to increase motivation and knowledge, and foster new business opportunities. Now, we are preparing to take on the challenge for the next generation with three major elements as our base: the reinforcement of technological proficiency, expansion of creativity, and discovery of non-competitive areas.

▶ Innovation Acts

Since FY2016, we have been piloting Innovation Acts, activities to encourage employees to express their ideas, so that we can create a culture that inspires and facilitates innovation creation. Our Innovation Acts are primarily focused on the following two programs.

• Technology Idea Contest

The contest for technological ideas is held to broadly raise new ideas for technologies and products from engineers and other employees who possess technical skills. For outstanding ideas, we give support to develop prototypes.

• Activities for New Business Creation

In FY2017, we held an internal business idea audition through which particularly excellent business proposals underwent examination for business application and received support toward commercialization. In FY2018, we implemented our Co-Creation Challenge Program, a business creation program that collaborates with the startups, and are currently conducting demonstration experiments aimed at commercialization.

▶ Technology Symposium

An annual conference for engineers to exchange information and share technology-related information with other employees. We also use this as an opportunity to motivate and encourage our engineers by presenting awards and the like.

Formulation of a Skill Map to Boost Prompt Product Development

Furthermore, we have been implementing a personnel portfolio strategy where, every year, individual skills are evaluated according to a company-wide uniform standard and incorporated into a skill map. In this way, we are reinforcing the connection between the engineer’s skillset, which has improved greatly through the above efforts, and timely product development. We are currently looking at extending these efforts out to other group employees in future through the concept of talent management.

▶ Key advanced development themes of FY2018

- Enhancement of in-vehicle optical solutions and products such as dashcams and in-vehicle cameras tailored to vehicle electrification, autonomous cars and connected society.
- Enhancement related to total solutions, including IP wireless, to allow for broadband application to professional wireless infrastructure
- Enhancement of technology for medical imaging and the information solutions business

IP Strategy

Applying an Offensive and Defensive Approach to the Promotion of IP Activities Through Three Pillars

The fundamental concept of our IP strategy employs two courses of action. The first is an offensive approach, covering activities of intellectual property as a business, which facilitate the development of products and services that maximize the company's intellectual property, in addition to selling intellectual property for income. The other is a more defensive approach, covering activities of intellectual property that protect business, which safeguard patents and other exclusive rights, giving us an advantage over competing companies. We are promoting these IP activities, which contribute to businesses and management, in line with the following three pillars.

(1) As open and closed IP strategies, we generate income by standardization, patent pooling and selling patent rights, and promote the development of barriers to prevent entry into our new business and priority business fields.

(2) We develop IP strategies linked to our business and technological strategies, and create portfolios of areas that need to be strengthened.

(3) As mixed IP strategies, we promote the creation of new corporate value by the comprehensive protection and utilization of patents, designs, and trademarks.

Through activities based on these three strategies, the Group is encouraging the establishment of wall-like patents that protect business, progressive patents for future creation, and standard patents that contribute to profits. Moreover, going forward, we intend to link the marketability of intellectual property with numerous indicators from the perspective of the IP landscape while promoting the application of new intellectual property. We have dedicated ourselves to the development of technologies and products that are distinctive in the fields of audio, visual, and communications systems, and thus the majority of all owned patents are protected. We are also consciously making an effort to minimize the incidence of disused patents as intellectual property is a major driving force in ensuring the efficiency of business activities. However, as the recent increase in the buying of

licensed patents related to AI, IoT and 5G is expected to continue, we are concentrating on initiatives to sell patents that encourage the utilization of cross-licensing and the application of our IP in business domains different from the past such as medical, food and clothing.

IP Structure

Our IP structure includes not only the Intellectual Property Department at head office, which creates cutting-edge IP to support the future of our company, but also patent development groups assigned to each business sector. We are also strengthening our efforts by placing persons responsible for IP (IP Manager), as well as persons responsible for promoting IP (IP Promotion Officer), in the technological groups of each business department, thereby enhancing the entire company's awareness toward IP.



Promotion of Various Initiatives from Raising Awareness to Implementation

To execute our IP strategy, it is imperative that every employee have a deep understanding and awareness of intellectual property so that they can take the necessary actions. To support this, the Group has continued to conduct the following activities.

▶ IP Symposium

Every year, an IP Symposium is held to bring together all company engineers as well as the management and technology department executives during which there are lectures by external speakers, and presentations of case examples and IP awards.

▶ IP skill improvement training

We provide new employees, newly appointed senior officers, engineers and designers the opportunity to undertake training to enhance our intellectual property.

▶ Patent idea conference

In parallel with activities aimed at inventive discoveries for the protection of existing businesses, patent idea conferences are held for the protection of new businesses roughly 300 times a year in total across the patent development groups of each base. These aid in the creation of future patent portfolios.

▶ Establishment and publication of management regulations

We have established basic IP rules, compensational IP rules, and risk management IP rules, which have been published on the intranet, to ensure all employees are aware of our IP activities.

▶ IP monthly report / IP newspaper / IP annual report

In addition to an IP monthly report recapping the status of IP activities, we also publish an IP newspaper on the intranet to disseminate know-how, and an annual IP report for management.

Further to these initiatives, we have established a patent proposal and application standard as well as a patent clearance standard within our corporate technology standard rules. Moreover, by integrating our invention discovery activities and other patent searches into the product development process, we have been able to patent our technology, thus protecting them and allowing us to create products that do not infringe upon the patents of others.



Promotion of T Project

Management reform based on manufacturing reform toward the realization of Vision 2020

In order to achieve ROE of 10% as stated in Vision 2020, and to build a lean management base toward 2021 and thereafter, we have launched the T Project, a company-wide project under the direct control of the CEO, and are promoting management reform from the aspect of manufacturing.
(T: Total/Together/Transformation)

Project Slogan

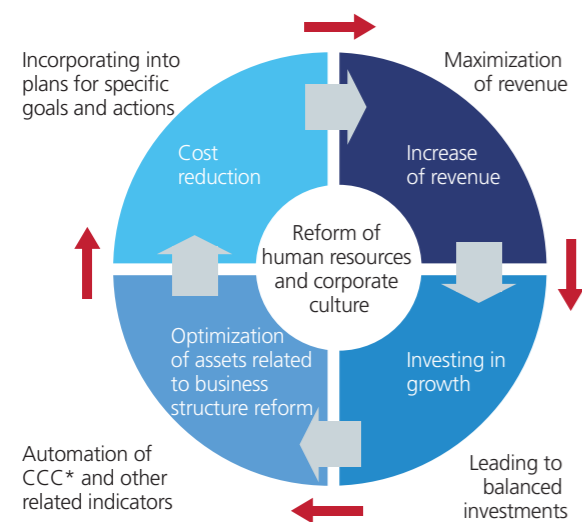
Work for Transformation with Total JVCKENWOOD Team Together!

Philosophy, Main Activities and Systems

Promoting reform working activities from three perspectives

We promote activities through four implementing organizations (vehicles) and three reform working activities supporting their activities. We aim to create synergies and build efficient business processes through the following cycle.

T Project



*Cash conversion cycle

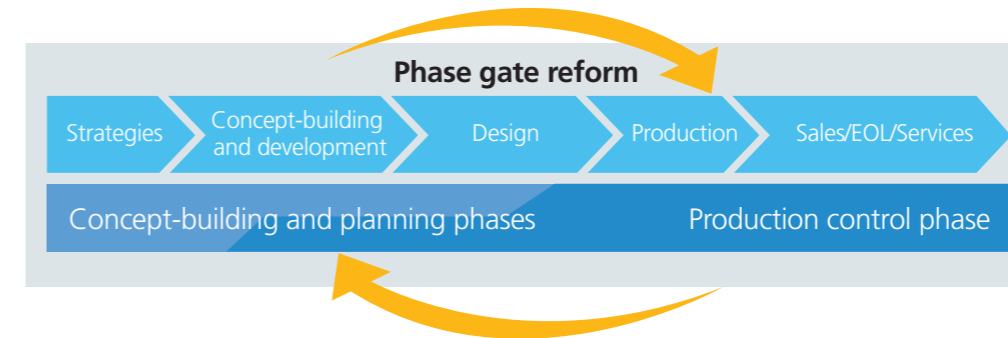
Working activities 1

Phase gate reform

We have established gates (hurdles) for each of the business processes in our business to advance to the next process with higher accuracy in order to minimize losses and opportunity losses in the subsequent processes.

Major initiatives

- Maximize revenue by setting selling prices, total cost and profits appropriately
- Turn reforms into technological innovation and create a positive spiral to improve revenue
- Reduce the number of tasks associated with designers by reforming operations and making effective IT investments
- Establish rules and documents for phase gate reforms to ensure continuity



Working activities 2

Total cost reform

We carry out total cost reform for continued business growth and intend to improve and speed up management accuracy.

- Increase business income, curb spending, fix operating income targets, and set total cost
- Maximize revenue by appropriately setting selling prices, total cost and profits through the promotion of business reforms

Revenue	Material costs	Total cost (re-recognition of all costs)
	Processing costs	
	Logistics costs	
	Operating expenses	
	Selling, general and administrative expenses	
	Development costs	
	Depreciation and amortization costs	
	Personnel expenses	
	Head office expenses	
	Core operating income	

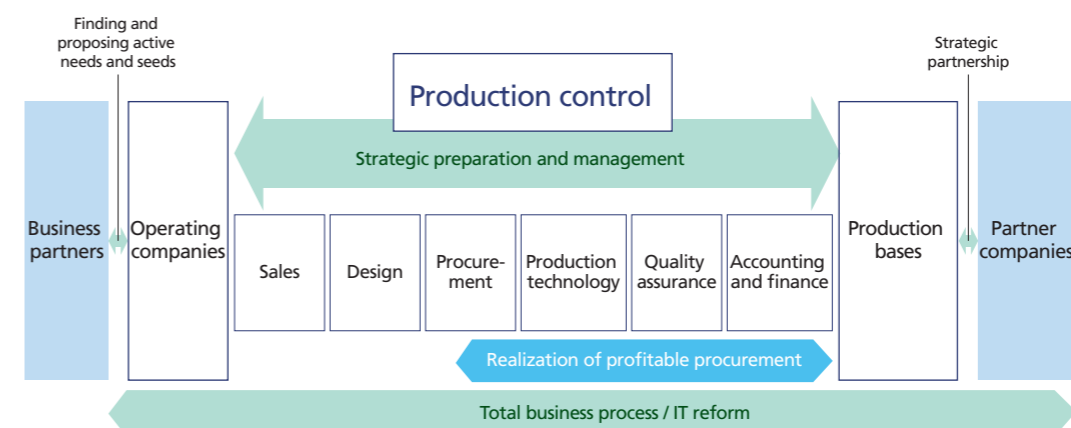
Major initiatives

- Promote reform working activities to establish a common language for the entire company through quantitative visualization of business operations
- Pursue the ideal total cost in anticipation of selling price fluctuations, and set and push down total cost targets
- Construct a total cost management system aimed at visualization of management in order to achieve goals
- Initiatives to achieve cost targets throughout the life cycle

Working activities 3

Business processes and IT reform

While aiming at speedy product supply and sales through direct operations between sales companies and production bases realized by the elimination of intermediate processes, we faced the problem of environmental changes causing various losses and unexpected waste. Therefore, we focused on production control processes, which are the core of business processes. We will streamline key issues such as "Establishment of production control functions" and "Cooperation with development processes" by introducing strategic IT tools.



Implementing organizations

Vehicle 1
Automotive Sector

Vehicle 2
Public Service Sector/
Communications
System Division

Vehicle 3
Media Service Sector/
Media Business
Division

Vehicle 4
Administrative
Divisions

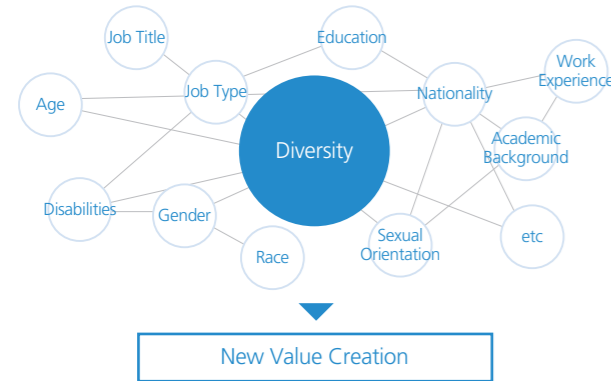
Promotion of Diversity and Inclusion

Basic Approach

Toward a creative corporate culture

The JVCKENWOOD Group is committed to promoting diversity and inclusion, which means respecting diversity and accepting different ideas and opinions. We believe that people with diverse ideas and values can create innovative ideas and meet diverse needs of our customers around the world by respecting and stimulating each other. We are, therefore, conducting in-house awareness-raising activities and the recruitment, development, and promotion of diverse human resources.

Conceptual diagram of diversity



Diversity Logo Mark

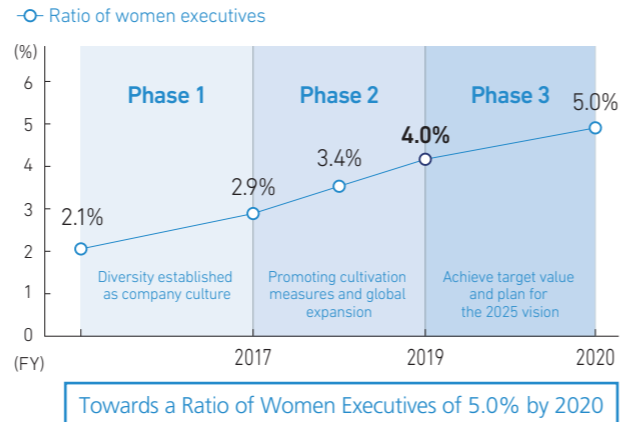
The logo depicts people with a diversity of values joining hands and making way for the future as one. With the image of a fusion of differing races, genders, and values in mind, and we designed the logo using a broad range of colors, including JVCKENWOOD's corporate color of blue.



Diversity Promotion Action Plan

As shown in the figure on the right, we established an action plan to promote diversity and inclusion. As an important indicator, we set the target of increasing the ratio of female senior officers to 5.0% by FY2020. As a result of developmental training for female employees at each grade and training for senior officers, the ratio of female senior officers rose from 2.1% in FY2015 to 4.0% in April 2019.

Progress toward action plan targets



Initiatives to Foster Diversity Awareness

Provision of diversity training

We are providing e-learning for all employees to foster diversity awareness. In FY2018, 3,990 employees participated in a course on harassment. Group training for senior officers was also provided seven times in total for each senior officer to acquire their own image of leadership and more deeply understand the acceptance of diversity. A total of 146 people attended this training.

Diversity Week

In support of the International Women's Day on March 8, we hold the company-wide event Diversity Week to raise awareness of diversity among employees on a variety of topics, including promotion of active roles for women, collaboration with people with disabilities, and LGBT. Approximately 360 people participated during the entire period.



Panel session on promotion of active roles for women



Networking after the panel session



Live concert by the JVCKENWOOD Group artists



LGBT seminar

Promotion of Active Roles for Women

The highest rating of the Eruboshi certification

We were certified by the Minister of Health, Labour and Welfare as an Eruboshi (L Star) based on the Act on Promotion of Women's Participation and Advancement in the Workplace and awarded the highest rating in March 2018.



Working group for promotion of active roles for women "Prejo-Bu"

We are promoting activities of "Prejo-Bu (Pleasure in the job)," the working group to identify issues from the perspective of each workplace and propose solutions with the aim of creating a company where employees can work energetically. In FY2018, we held a seminar with 71 participants on the topic of "Health management for women to keep working with vitality." In addition, members of the Prejo-Bu conducted interviews at each workplace. Employees from different backgrounds in terms of affiliation or generation participated in the interviews and discussed their view on jobs, issues of their workplace, and improvement measures.

Support for Work-Life Balance (Balancing Work and Childcare /Nursing Care)

We are promoting various initiatives to improve the work-life balance of diverse employees.

Release of the nursing care handbook

A handbook on basic knowledge and systems related to nursing care was prepared and posted on the Company intranet.



Training to support balancing work and childcare/nursing care

We provided *ikubosu** training for senior officers, training for addressing hypothetical subordinates who need to provide nursing care, and training for time management that is also useful for childcare with a total of 97 participants.

*Leaders who strive to create an environment that facilitates balancing work and childcare

Encouraging male employees to take childcare leave

In order to promote diverse working styles, experiences of male employees who have taken childcare leave are posted on the Company website and the Company intranet Live!

Activities for LGBT and Disabilities

We are engaged in various activities to promote understanding of and collaboration with LGBT people and people with disabilities.

1) LGBT measures

The highest rating Gold of the PRIDE Index

In October 2018, we were awarded Gold, the highest rating, of the PRIDE Index, which is an indicator defined by a private organization called "work with Pride" for evaluating companies' or organizations' efforts regarding LGBT and other sexual minorities.



Tokyo Rainbow Pride 2019

We exhibited panels and participated in the parade wearing T-shirts with the logo of JVCKENWOOD LGBT ALLY at the Tokyo Rainbow Pride 2019, one of the largest LGBT events in Japan.



LGBT training

We provide training for our employees to deepen their understanding of LGBT people (96 participants).

2) Initiatives for people with disabilities

Collaboration with people with disabilities

We provide training to deepen understanding of knowledge required to work with employees with disabilities. In FY2018, this training was held at the head office & Yokohama Business Center and two other business centers with a total of 244 participants.



Change to multi-functional toilets

In order to make it easier for various employees to use toilets, we replaced some of the toilets in the head office and business centers with multi-functional toilets.

