







# Special Feature 1

# Expanding Our Membership Base and Businesses of Our Partners by Leveraging Digital Marketing

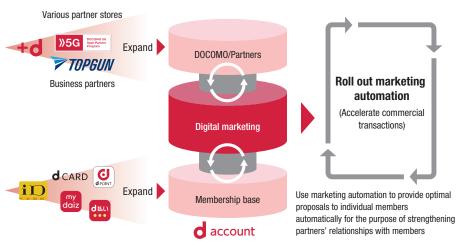
#### Leveraging Digital Marketing to Make Optimal Proposals to Each Customer

By transforming to a business foundation centered on our membership base, DOCOMO seeks to increase the number of members to 78 million and that of corporate partners to 5,000 in FY2021. The number of members, in particular, has been growing steadily on the back of our wealth of assets, including "d POINTs," and has already exceeded 70 million as of the end of April 2019.

Going ahead, we will increase customers who earn and use points on a daily basis, and at the same time, will leverage digital marketing to continuously approach each customer in a manner tailored to each and create new revenue opportunities.

#### **Promotion of Digital Marketing**

#### Expand Business Jointly with Partners by Leveraging DOCOMO's Membership Base

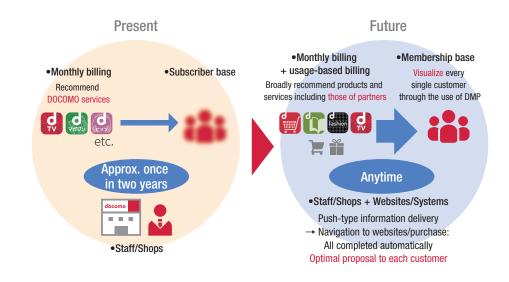


DOCOMO announced its medium-term management strategy in October 2018 and took a new direction focusing on a transformation to a business foundation centered on our membership base. Under the strategy, we will increase members and partners by utilizing our abundant assets and link the two through digital marketing in order to establish a lasting relationship with customers and providing new value to them.

For example, we will analyze the mobile phone usage of each customer and propose a billing plan best suited to each. We will also compile readily usable data on customers' reactions to our proposals in real time and increase the accuracy of these proposals.

Moreover, as an effort to provide better, more enjoyable services and content to customers, we will identify members matched to each service or content and deliver information beneficial to them through websites, SNS and various other means in addition to e-mail.

#### Further Accelerate Digital Marketing by Leveraging Our Reinforced Membership Base











# Special Feature 1 Expanding Our Membership Base and Businesses of Our Partners by Leveraging Digital Marketing

#### Collaborating with Partners to Create a New Revenue Model

In collaboration with our partners, we are also proactively engaging in efforts to create a new revenue model designed to provide solutions to third parties.

Examples include the "Restaurant Data Cloud," a service we rolled out jointly with Toreta, Inc. in July 2019. This service combines Toreta's data on use of eateries and DOCOMO's anonymized statistical data and provides the resulting marketing solutions to third parties, such as eateries as well as food and beverage manufacturers.

As another example, we are undertaking marketing support activities, in which artificial intelligence (AI) constantly picks out, from the past payment and points-related data, members who are potential customers of each partner store to identify a target of a particular sales promotion campaign. The outcome of our marketing support activities for several partners, including collaboration with the J.League (Japan Professional Football League), has already been highly recognized.

In terms of partner stores and other places where members can earn and use "d POINTs," the number has grown to 1.11 million as of the end of June 2019. In the future, we will proactively work to develop more opportunities for members to use our new payment service "d Payment," in order to create new value by utilizing diverse stores and services of our partners and expand a new revenue model directly linked to the daily lives of member customers.

Additionally, in handling customers' personal data, we believe it is our important mission to give due consideration to them and protect their privacy. With a view to exercising optimal privacy protection on an ongoing basis and providing secure services for customers, we have formulated and announced the NTT DOCOMO Personal Data Charter. We will continue to meet customers' trust by ensuring the appropriate handling of personal data and constantly offer new value to customers and society.

#### Always Staying Close Beside Our Customers - Cycle of Experience Created with Partners





# Becoming More Closely and Deeply Connected to Spread "Happiness"

Kikuko Shirakawa Senior Vice President General Manager of Digital & Marketing Department

Mobile devices have now become a tool that spends the longest hours with people. As such, in utilizing the Big Data thus collected, we believe it essential to integrate digital technology with human elements. Al is good at finding a particular piece of information best matched to each customer from a vast quantity of past data; however this alone does not bring a new excitement. What we aspire is to create new excitement and valuable and joyful moments for customers. Toward this goal, we will fully draw on both digital technology and human emotion and sensibility, and then continue to strengthen our ties with customers.

The key to further expanding our membership base and promoting a business ecosystem will be to facilitate digital transformation (DX). Our three major DX promotion efforts are: encouraging the use of data in actual operations; increasing our customer analysis capability; and reinforcing system infrastructure. Under the first effort, along with activities undertaken at offices throughout Japan to acquire members, we will build and promote the use of a data visualization platform that supports a business plan-do-check-act (PDCA) cycle. The second effort aims to deepen our understanding of customers by leveraging Big Data, Al and other technologies now widely in use. As part of the third effort, we will work to establish a marketing automation platform that underpins DX promotion in the workplace (first effort) and provision of proposals tailored to individual customers based on our better understanding of customers (second effort).

Through these efforts, we will pursue proposals matching to every single customer jointly with our partners and intend to build a business ecosystem that brings "happiness" to customers, partners and DOCOMO.











# Becoming the Market Leader Offering Visible Benefits and Convenience

# Finance/Payment Businesses Based on d POINTs

Reinforcing Our Membership Base by Expanding Ecosystem Centered on Finance/Payment Businesses

#### d Payment, a New, Simple and Convenient Payment Service Also Available in Actual Stores

DOCOMO has been providing a carrier billing service for online shopping since 1999 when we started providing the "i-mode" service. To make this billing service also available in actual stores, we launched d Payment, a new smartphone payment service, in April 2018.

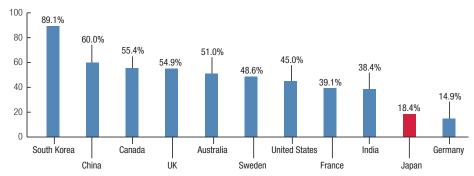
In the same month, Japan's Ministry of Economy, Trade and Industry (METI) announced its vision to nearly double the current ratio of consumers using cashless settlement in Japan to 40% by 2025 because Japan's cashless settlement ratio is only 18.4% as of 2015, which is low in comparison with around the world.

Our d Payment service is an easy and highly convenient payment service for both online and location shopping. At locations, including restaurants, customers just need to pay by showing a barcode displayed on

#### Ratio of Cashless Settlement in Japan

METI announced a vision to nearly double the current ratio of consumers using cashless settlement to 40% by 2025 in April 2018.

Ratio of cashless settlement by country (2015)



Source: Calculated based on the annual non-cash payments amounts taken from data on household final consumption expenditure (the World Bank, 2015) and Red Book statistics (the Bank for International Settlements, 2015). (For China, the figure was taken from a report of the Better Than Cash Alliance as a reference.)





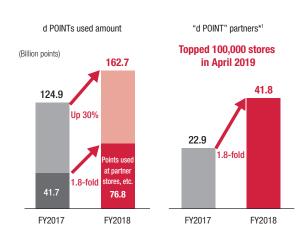


the d Payment app on their smartphones.

In July 2019, users of the service increased drastically in just over one year since its launch, and the number of downloads of the d Payment app exceeded 7 million. The number of d POINTs used also grew 30% in one year from FY2017, with the annual total amount of points used reaching some 160 billion points. Additionally, the number of d POINT partners showed a sharp increase, 1.8 times the number just a year ago in 2017, and the number of partner stores topped 100,000 in April 2019.

Customers actively use their earned points at partner stores of d POINTs and d Payment, thus the service provides significant benefits to stores implementing these systems. We are further promoting the use of points at these stores by referring customers through the dedicated app and e-mail newsletters.

#### Data on "d POINTs" (a Benefit of "d Payment")







<sup>\*2</sup> Period: From the launch of the service in 2018 to March 31, 2019









Becoming the Market Leader Offering Visible Benefits and Convenience

# Finance/Payment Businesses Based on d POINTs

Our d Payment service provides customers with an easy, convenient and best deal buying environment. For partner stores, it will serve to increase customers and sales, and through its simple payment procedures, increase the productivity of the store itself. In this way, our d Payment service offers benefits to both customers and partner stores and adds convenience to all aspects of a shopping experience.

# From Employees

# d Payment to Provide Greater Convenience to Daily Lives

The number of d POINT partners and the total amount of d POINTs used have been growing each year. An increase in the number of partner stores, where customers can collect and use points in their daily shopping, has led to an increase in the amount of points in circulation and a further expansion of the "d Payment" service. One strength point of the service is that it is easy to

> subscribe to. If customers choose to settle payments with their monthly phone bill, they do not have to register their credit cards or bank accounts. All they need to provide is a four-digit password. The service's another major strength is that it provides benefits to both customers and partner stores: a simple and best deal shopping experience for customers and increased customers and sales for partners and partner stores. In the future, we will work to create a service that offers convenience throughout customers' daily lives

by combining various payment services.

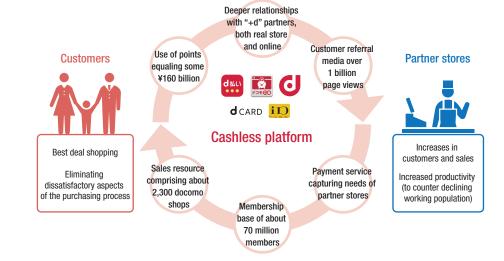
Savo Yoshihara Wallet Business Office Platform Business Department

What we seek is a cashless

platform, not just a simple

payment means.

#### Cashless Platform Offering Benefits to Both Customers and Partner Stores

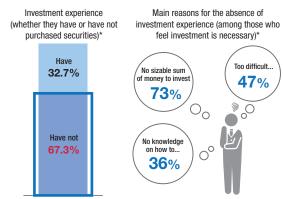


#### Eliminating an Entry Barrier of Actual Asset Investment through the "Point Investment" Service Experience

Household assets in Japan are mostly made up of cash, deposits, insurance and other relatively "safe" assets,

and putting money into investment is still not common. Among Japanese citizens, approximetely 67% have no investment experience mainly because they have "no sizable sum of money to invest" and "no knowledge on how to" and feel investment is "too difficult" for them. Against this backdrop, DOCOMO is offering the "Point Investment" service that allows customers to experience investment using d POINTs as an effort to capture latent customers who have not invested in assets but are interested in doing and ultimately solicit them to the actual asset management service.

#### **Background of the Investment Service**



<sup>\*</sup> Based on the Flow of Funds Accounts Statistics (Bank of Japan) and the results of the Questionnaire on the Use of NISA among Japanese Citizens (Financial Service Agency, February 2016)

NTT DOCOMO

Integrated Report 2019











Value and excitement to our customers

Becoming the Market Leader Offering Visible Benefits and Convenience

# Finance/Payment Businesses Based on d POINTs

Our "Point Investment" service using d POINTs is a fun and easy way that enables those persons with no investment experience. Customers invest d POINTs that fluctuate daily in line with the price movements of investment funds and exchange-traded funds (ETF) and receive d POINTs as investment returns. They can gain a better understanding of as well as know-how and tips on investment through the service, and based on this experience, will move on to the actual asset building stage. The aim of the service is to lower a barrier of entry into the asset management field and change ways of asset management in Japan. In recognition of this aim, the service was awarded a Nikkei Superior Products and Services Award in 2018. As of May 2019, the number of users of the service grew to more than 500,000, largely exceeding our target.

#### Smartphone Screen of the "Point Investment" Service



Customers can invest their points in fields they prefer, categorized by individual themes such as health care.

In a questionnaire survey conducted by DOCOMO in October 2018, 42% of the customers who have used the "Point Investment" service said that "they want to start investment," with 66% of whom comment the reason "because the service made investment more familiar" to them. Through the "Point Investment" service, we intend to make more customers feel familiar with investment, encourage a shift from savings to asset building and help to resolve relevant social issues toward the creation of a society in which individuals build assets in a stable manner.

# From Employees

# Hoping to Provide an Easy Way for Everyone to Start Asset Management

In expectation of an age of 100-year life, we launched two services with an aspiration to provide an opportunity for customers to start asset management. One is the "Point Investment" service to offer easy investment experience for d POINT CLUB members, and the other is the "THEO + docomo\*" service that enables novice investors to engage in professional-level asset management. The "Point Investment" service has been used by many more customers than anticipated, and we have received comments that the service provided the opportunity to start asset investment. In the future as well, we will continue to remain close by our customers and work to provide better services to them.













# Becoming the Market Leader Offering Visible Benefits and Convenience

# Co-Creation with Partners

# Deploying Digital Marketing That Leverages the Mutual Strengths of J.League and DOCOMO

#### Contributing to Increased Sales by Identifying Potential Customers

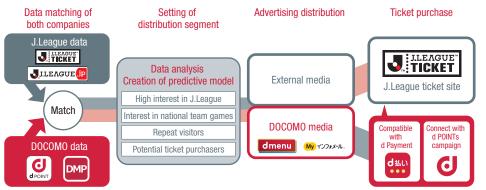
Based on our mission to co-create with our various partners, DOCOMO is taking actions to expand and identify mutual business by making use of d POINTs, our finance/payment services and customers' marketing data.

As part of this initiative, we entered into a top partnership agreement with Japan Professional Football League (J.League) in June 2017 in the digital field by leveraging the respective strengths of both companies.

It is now possible to identify, and analyze from different angles, customer attributes and usage patterns by combining the data of customers who visit J.League's official website with DOCOMO's unique database, location information and information from our d POINTs program, which is accessed through a d account. Visualizing an overall picture of customers who visit the J.League site, a picture that was only partially visible previously leads to the identification of potential customers, thereby contributing to increased sales.

Deploying digital marketing that integrates the data of both companies enables the effective targeted pursuit of ticket sales while the number of new subscriptions to the "J.League ID"\* is on the rise as well. Coupled with the introduction of d Payment and the implementation of a d POINT campaign, ticket sales have been growing year upon year, with the overall number and ratio of people purchasing tickets via d Payment also increasing.

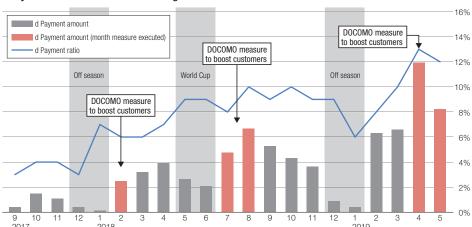
#### System for Promoting J.League Ticket Sales



Now roughly one in every eight ticket purchasers choose d Payment, an extremely high figure that exceeds even that of the general d Payment ratio.

\* This refers to a member ID service for J.League, which comprises a total of 55 clubs from J1 to J3. Ticket purchases and other services provided by J.League can be accessed using the same ID.

#### d Payment Amount and Ratio in J.League Ticket Sales



J.League and DOCOMO are seeking to further strengthen collaboration for d POINTs services through the official "Club J.LEAGUE" app released in February 2019 that allows use of the J.League ID. Enhancing the circulation of d POINTs through such means as providing points as gifts is expected to increase ticket purchases and lead to greater use of DOCOMO services. DOCOMO will continue reinforcing initiatives for its customers.

In terms of co-creation with the sports industry, a major aim in addition to the aforementioned digital marketing support is in the field of new visual experience over 5G communications, including high-presence public viewing, virtual reality (VR) and the sharing experience as social viewing. DOCOMO intends to develop services offering new value for media as well as fans, supporters and many more people.









# Style Innovation for a Richer Future for All

# **R&D** and Innovation

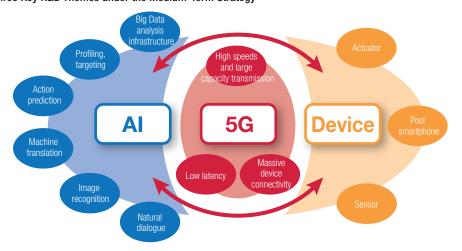
# Aiming for Social and Industrial Development by Providing New Value

#### **R&D Medium-Term Strategy**

Innovation in industry and technology, known as the fourth industrial revolution, continues apace around the world, particularly in the realms of the Internet of Things (IoT), Big Data, artificial intelligence (Al) and robotics, leading to the generation of new economic value.

DOCOMO has been delivering innovation to society since commencing sales. In addition to the area of mobile telecommunications central to our business, such as devices and networks, we have created a variety of services that enhance customer convenience and industrial efficiency. To realize our Medium-Term Strategy 2020 "Declaration beyond," we are pursuing R&D in three key areas: the 5th generation mobile communications system (5G); Al, which is gaining in prominence for use as a personal agent; and the next new device to smartphones. Also, we are pushing ahead with open innovation together with external corporate partners and working to create new value by connecting all people, things, customers and partner companies. Through these activities, we aim to realize social and industrial development through information and communication technology (ICT) while providing valued services for customers and our partner companies.

#### Three Kev R&D Themes under the Medium-Term Strategy

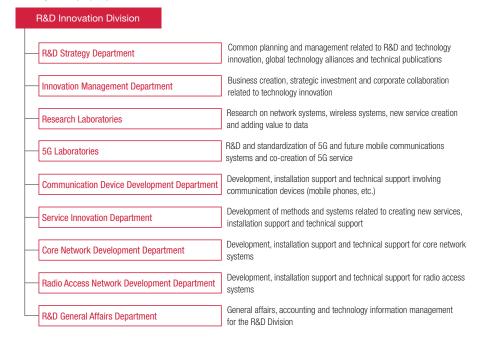


#### Proactive Approach to R&D Worldwide

DOCOMO conducts R&D on mobile communications systems and diverse products and services primarily at the Yokosuka Research Park (Yokosuka City, Kanagawa Prefecture). The R&D Strategy Department is in charge of overall oversight. As part of our ongoing R&D efforts, each R&D division collaborates with product development staff in other DOCOMO divisions with the aim of enhancing the Group's devices, networks and services.

In response to global technological innovations, we established DOCOMO Innovations, Inc. in the United States, DOCOMO Communications Laboratories Europe GmbH in Germany and DOCOMO Beijing Communications Laboratories Co., Ltd. in China as our R&D bases around the world. These R&D bases promote programs that contribute to international standardization of 5G and virtual network technology in collaboration with the R&D Division at the DOCOMO head office.

#### R&D System (Japan)













Style Innovation for a Richer Future for All

# **R&D** and Innovation

#### DOCOMO Open House 2018: 5G Innovation and Collaboration

In December 2018, we held DOCOMO Open House 2018 at the Tokyo International Exhibition Center (Tokyo Big Sight) to publicize the co-creation initiatives being undertaken in conjunction with diverse partners.

The Open House was visited by roughly 14,000 people, where we had 239 exhibits and lectures on the latest technology and business solutions based on this technology. Specifically, our exhibits included the smooth remote operation of the humanoid robot "T-HR3®\*1" using 5G technology, "Mobile SCOT®\*2" technology enabling advanced, safe medical treatment anytime, anywhere, and a glass antenna, which realizes the world's first "conversion of a window into a base station" that can be installed without interfering with the view.

Going forward, DOCOMO will continue pursuing co-creation to create new value for the 5G era with others through open innovation.

- \*1 T-HR3 is a registered trademark of Toyota Motor Corporation.
- \*2 SCOT (Smart Cyber Operating Theater) is a registered trademark of Tokyo Women's Medical University (TWMU).



Venue at Tokyo Big Sight



Exhibition Booth for Mobile SCOT® Remote Advanced Medical Treatment Using 5G

\* This medical technology, created from joint research between DOCOMO and Tokyo Women's Medical University (TWMU), enables advanced medical treatment anytime, anywhere via communication with an experienced specialist physician in a remote location by transmission of high-resolution images in real-time. This is only possible due to the high-speeds, low-latency capability of 5G.

#### Mirai Translator: Realizing High-Precision Translation through Al Technology

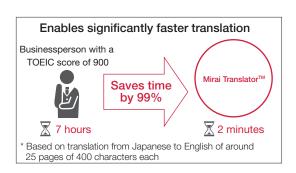
Mirai Translate, Inc. is a machine translation company established by DOCOMO in October 2014 based on expectations that more tourists will visit Japan and a larger number of Japanese companies will expand their business overseas. We are currently providing machine translation solutions, leveraging ongoing tuning by professional engineers, and our handsets development capabilities and sales network, as well as a large volume of translation corpus in which NTT DOCOMO, NTT Communications Corporation, Panasonic Corporation and Honyaku Center Inc. all maintain strengths. In addition, joint research with the National Research and Development Agency's National Institute of Information and Communications Technology (NICT) focuses on the development and improvement of translation engines.

Mirai Translator™ is a web browser-based cloud machine translation service equipped with the Neural Machine Translation (NMT) engine\* developed by Mirai Translate. This engine is capable of translating from Japanese to English at a professional level, translating from English to Japanese at the same level as a person with a TOEIC score of 960 and translating between Japanese and Chinese at a level equivalent to manual translation (as of April 2019). Further growth is expected in this area in FY2019 on the back of sales of Mirai Translator, the machine translation engine, and audio translation solutions, as well as the provision of a machine translation platform service and related consulting services.

These innovations also allow translation in a shorter period time while maintaining the original layout of Microsoft Office files and PDF files in such formats as PowerPoint, Word and Excel in addition to text translation simply by dragging and dropping the target data. This is helpful in realizing stress-free communication between different languages in various business settings, including daily conversations and documents with many technical terms, such as agreements and internal documents.

Going forward, we will continue promoting our machine translation platform service, which is safe and scalable and can be customized for the business domains of our customers, thereby helping to globalize Japan.

\* Machine translation technology using a neural network, which refers to a machine learning technique inspired by the information processing mechanism of biological neural networks













# Style Innovation for a Richer Future for All

# Lifestyle Innovation

"Mieru Denwa" Service Displaying Spoken Words as Text in Real Time

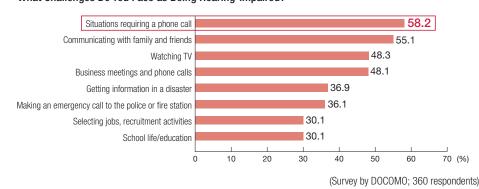
#### Making a Call without the Anxiety of "Not Catching the Other's Words"

For hearing-impaired persons, communicating over a phone without being able to see the other party or his or her facial expression poses a significant challenge. In our questionnaire survey asking respondents what challenges they face as being hearing-impaired, the top answer was "situations requiring a phone call." Such situations include "having no one around or being unable to reach anyone to ask to make a phone call," "making an inquiry when losing something or facing a problem" and "making a doctor's appointment or contacting shops or companies offering no website or e-mail contact points." These situations, where a means of communication is almost limited to a phone, need an immediate solution.

Our "Mieru Denwa" service has been developed to respond to this need. It is an innovative service that displays words spoken over a phone in real time as text on a smartphone screen and can be conveniently used by those who have difficulty catching what the other party says. With another feature to deliver to the other party synthesized speech converted from text, the service provides convenience to deaf and hearing-impaired users as well as elderly users around the clock.

#### Questionnaire for Persons with Hearing Impairment

-"What Challenges Do You Face as Being Hearing-Impaired?"

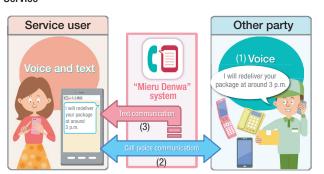






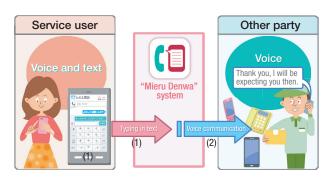
#### Basic Features of "Mieru Denwa" Service

Along with delivering spoken words, the service displays a real-time text transcription on a smartphone screen.



- (1) The other party talks.
- (2) Spoken words are exchanged as is between the user and the other party.
- (3) Words spoken by the other party are also displayed as text on the user's screen.

The service also converts text typed from the keyboard into synthesized speech and delivers it to the other party.



- (1) The user types in text.
- (2) The text is converted into synthesized speech and delivered to the other party.











Style Innovation for a Richer Future for All

# Lifestyle Innovation

NTT DOCOMO

Our "Mieru Denwa" service has originated from an idea of an employee with a hearing impairment. After the two and a half years of a trial period, we started a commercial service in March 2019 with the cooperation and support from many parties, including hearing-impaired persons as well as related organizations and companies assumed to be in frequent communication with them.

The "Mieru Denwa" service would not be possible without the understanding and cooperation from the other party of a call. In order to increase recognition of the service among these parties and gain public understanding more broadly, we will continue to undertake various awareness-raising activities, improve the speech recognition accuracy and add even greater convenience to the service.

#### Voice of "Mieru Denwa" Users

Female, 30s	"Mieru Denwa" is my dream-come-true phone I've waited for so long. It would be very helpful if you could increase the speech recognition accuracy.	
Male, 40s	I think this service makes a huge difference in the lives of hearing-impaired persons and how we communicate. I still use e-mail because not all people and companies use "Mieru Denwa," but if it becomes recognized more broadly as a common service, persons with hearing impairment can use the service feeling more secure.	
Female, 20s	I felt that the service is particularly useful in an emergency. I didn't have a habit of using a phone because I can't use it, but the service helps me do more things on my own, and that will increase my self-confidence. I believe having such self-confidence should be a natural right in the future. I'm looking forward to seeing future developments of the service.	
Male, 60s	My hearing is heavily impaired. A phone call is a big challenge for me, and I'm desperate for any help. I know it is very difficult to improve the speech recognition accuracy. I still want to use "Mieru Denwa" even if there is some problem with the accuracy.	
Male, 50s	Not having to worry about available hours of the service is a great help. Its feature to convert spoken words of the other party into text is also great. I think the speech recognition accuracy is at a moderate level of usability.	

# From Employees

# Idea Generated from Being Hearing-Impaired A Service to Provide More Options in Daily Life

I was born with impaired hearing. As such, a phone call has been a challenge since I was a small child, and I have always felt a bit lonely seeing my other friends chatting over the phone when I was in school. Especially after entering university, I had to make a phone call on many occasions, for example, to my part-time job employer or to a real estate agent, and experienced inconveniences each time.

Hoping to create services based on my own experience, I chose to work in a department engaging in the planning and development of services for persons with disabilities after joining DOCOMO.

"Mieru Denwa" represents my aspiration to "display text just like movie subtitles." Even though the use of e-mail and websites is spreading, people still use a phone on many occasions in their daily lives such as when someone has lost their credit card or wants to ask about small things.



comments from customers. Some persons used a phone for the first time in more than a decade. Others regarded the service as just what they needed, with some saying it became a source of self-confidence that they are fine on their own. I, as a developer of the service and being one of them, was thrilled by these comments. Going forward, I would like to work toward the development of smartphone apps and the improvement of services so as to bring more options to the daily lives of persons with disabilities.











# Style Innovation for a Richer Future for All

# Innovation for Customer Experiences

Offering a Whole New Video Experience by Strengthening the Video Distribution Business

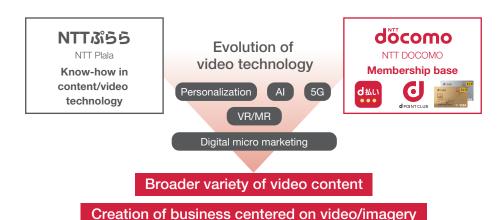
#### Making NTT Plala Inc. into a Subsidiary

Anticipating the era of 5G, there are growing expectations not just for superior image quality but also for greater value added to content through virtual reality (VR) and augmented reality (AR)\*1 technologies and for more diverse viewing styles. DOCOMO has been working to strengthen its video distribution business in order to offer a more attractive video experience to customers. As part of this effort, we announced the acquisition of NTT Plala Inc. in February 2019.

By combining DOCOMO's strong membership base with NTT Plala's large-scale video distribution platform, abilities to purchase and produce content and technological capabilities, we intend to enhance our video distribution services, lineup of content and content itself and seek to create new businesses centered on videos, such as video-related intellectual property rights business and advertising business.

\*1 Technology to superimpose electronic information on real world imagery as if they really exist

#### Creation of Businesses by NTT Plala Centered on Video/Imagery



#### Launching New Live Performance Experience Service "Shintaikan Live"

As an initiative in the content/lifestyle\*2 area of the smart life business, DOCOMO rolled out "Shintaikan Live," a new live performance experience service, in January 2019.

"Shintaikan Live" is a service to enable customers to view music live at anytime and anywhere from their smartphones and personal computers. It offers a new sensory experience of advanced digital content through various features, including "Multi-Angle Live" to view music live from preferred angles; "AR Figure" in which customers hold their smartphones over AR goods to see miniature, 3D computer graphics (CG) of artists pop up and to view their CG imagery and music performance on the screen of a dedicated smartphone app from every angle covering 360 degrees. The service also integrates touch-based interactive video technology (TIG), which enables customers to intuitively access desired information just by touching an object in a video.

Through these new styles of viewing music live, DOCOMO will propose a whole new way of enjoying videos, and together with customers, create value with new live experience. In the future as well, we will continue to leverage 5G and other advanced technologies and deliver new entertainment experiences to customers.

\*2 One of the main priority areas of DOCOMO's smart life business. DOCOMO reorganized its smart life business in FY2019 and integrated the existing "contents/commerce" and "lifestyle" categories into "contents/lifestyle."

#### Key Features of "Shintaikan Live"



Multi-angle live
Selectable views from preferred angles



AR figure
Programs featuring miniature CG artists



**TIG**Touch-based interactive video technology

- Live feeds of music performances can only be viewed in real time.
- · Features provided vary from artist to artist.
- Content can be purchased individually for each live event performed by each artist.
- Some content is available only as single-angle live distributions.
- TIG is a technology developed by PARONYM Inc. used for promotional videos of content.











# Peace of Mind and Comfort Support Always by Our Customers' Side

# Provision of Network Service

# To Bring about a High-Quality Telecommunications Environment

#### A Telecommunications Environment That Can Be Easily Utilized Anytime, Anywhere and with Peace of Mind

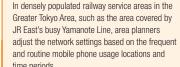
DOCOMO is constantly striving to offer a better network, which in turn will bring about a telecommunications environment that can be easily utilized anytime, anywhere and with peace of mind. We maintain our network 24 hours a day, seven days a week, and with the provision of large-zone base stations and the introduction of virtual technology, we achieve reliability and stability that allow customers to connect "anytime," not only under normal conditions, but also when special events or disasters lead to heavy mobile phone usage. By setting up more base stations, we also seek to expand our service area so that customers can truly connect "anywhere," in cities, on subway trains and inside buildings. Through such a strong network that gives customers the ability to connect anytime, anywhere, we offer a continuous sense of security. We also rolled out a process to enhance area quality through area planners\* in April 2018. Across Japan, area planners are conducting detailed network investigations and improvements based on customers' mobile phone usage patterns in an effort to provide a stress-free network environment both on land and at sea.

#### **Activity Examples of Area Planners**



Area planners work to improve and refine their assigned areas according local characteristics and provide a high-quality network both on land and at sea.

#### On land



They ensure connections on land e.g., inside trains).

In the Seto Inland Sea and other sea areas crowded with ships, area planners monitor the connectivity and adjust the network settings.

They ensure more uninterrupted connections at sea.

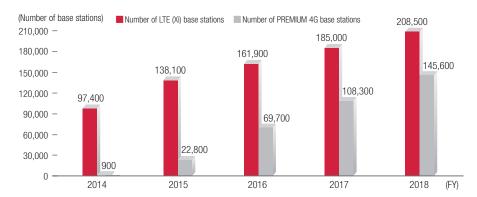


<sup>\*</sup> An area planner refers to an expert who is tasked with designing an area (town or district) that he or she has been assigned and is very familiar with in order to maintain a comfortable telecommunications environment at all times. This includes responding quickly to changes in the townscape and to customers' mobile phone usage patterns. The expert employs a diverse array of techniques to improve and refine the area.

#### **Expansion of Service Area**

We are proactively building base stations to further enhance voice communication and data transmission as well as to expand our service area. The number of base stations has been increasing every year, with a total of 145,600 PREMIUM 4G base stations and 208,500 LTE base stations in operation at the end of FY2018.

#### Number of LTE/PREMIUM 4G Base Stations



#### Achievement of Reliability and Stability

Since its founding, DOCOMO has been continuously working to secure telecommunications during disasters in accordance with its Three Principles of Disaster Preparedness: enhance system reliability, ensure essential telecommunications and rapidly restore telecommunications services.



DOCOMO's disaster preparedness (in Japanese only) https://www.nttdocomo.co.jp/corporate/csr/disaster/

#### **Network Investigations and Improvement**

We solicit customer feedback on connectivity as part of our efforts to maintain telecommunications quality and expand our service area. At customers' requests, we propose ways to optimize their connectivity (Number of door-to-door surveys in FY2018: Approximately 18,000)



Service Area (in Japanese only)

https://www.nttdocomo.co.jp/support/area/feedback/









海外オプション



Value and excitement to our customers

Peace of Mind and Comfort Support Always by Our Customers' Side

# Provision of Network Service

#### Realizing "Conversion of a Window into a Base Station"

We have been making various efforts to prepare ourselves for a surge in telecommunications traffic, which exceeds the processing capacity of our base stations and causes an interruption of connectivity.

As part of these efforts, DOCOMO collaborated with AGC Inc. and developed the world's first\*1 glass antenna that can be attached to an existing window from inside and is able to send and receive radio waves through glass.

This antenna combines a transparent conducive material and glass substrates, is unobtrusive and can be installed without impairing the view from the



Glass antenna attached to an existing window

window or interior decor. It also features a newly developed Glass Interface Layer\*2 that reduces attenuation and reflection of radio waves passing through a glass window. These features allow the installation of the glass antenna at locations that had been difficult and enable us to form a small service area outside the window from within a building.

Jointly with AGC, DOCOMO has been installing this glass antenna at its currently mainstay LTE base stations. Looking ahead, the two companies are considering the development of another glass antenna compatible with 5G with a view to building a telecommunications environment with an even greater stability and connectivity.

- \*1 Survey by DOCOMO and AGC
- \*2 A technology to draw on the inherent performance of an antenna by mitigating the effects on performance, which occur when the glass antenna is in close proximity to a glass window

#### Improvement in Telecommunications Speed

Toward the introduction of 5G in 2020, we are striving to further increase the level of sophistication of our network. In enhancing multiple input multiple output (MIMO), we have employed 4x4 MIMO that provides quadruple multiplexing (at a maximum) at the time of data transmission and nearly doubled transmission speed. To enhance quadrature amplitude modulation (QAM), we have employed 256 QAM, which increases the amount of data carried at one time, and raised transmission speed by approximately 1.33 times. By combining carrier aggregation technology, which bundles multiple frequencies together, with 4x4 MIMO and 256 QAM,

DOCOMO has realized telecommunications services boasting Japan's fastest download speed\* of 1,288Mbps. At the same time, we have been installing base stations for our PREMIUM 4G service that utilizes LTE-Advanced technology.

\* As of August 2019. Among mobile phone carriers in Japan (Survey by DOCOMO)

#### **Global Telecommunications Services**

To ensure the stress-free use of DOCOMO's telecommunications services overseas, we provide an international roaming service, in which customers can take their mobile phones and use the same phone number and e-mail address in service areas of our partner overseas telecommunications carriers. This roaming service is currently available in some 210 countries and regions, covering 99.9% of customers' travel destinations. We also provide international telecommunications services to make voice calls or send short messages from Japan, and in this way, support customers' activities globally.

Our "Packet Pack Kaigai Option" is an overseas flat-rate packet service launched in March 2018. Responding to growing overseas data communications needs, the service allows customers to use the data allowance of their "Packet Pack" and other plans in Japan at a flat rate and in a safe and simple manner. The service provides a sense of security to those who are concerned about overseas packet communication fees, as it automatically terminates packet communication at the expiration of the usage time of a particular rate plan, and the use of the service can be resumed easily from the dedicated app. Anticipating diverse needs arising during overseas travel, the service offers different rate plans, including a one-hour plan convenient for short-term use and a multi-day plan that allows customers to start using the service for multiple days with one action. As of August 2019, the number of subscriptions to the service has exceeded 1.25 million, and the service has satisfied 90%\* of the customers who have used it.

Foreign tourists visiting Japan are also enjoying DOCOMO's high-quality network via overseas telecommunications carriers. To make the Olympics and Paralympic Games Tokyo 2020 more stress-free, enjoyable experience, we are working to both improve the basic quality of our network and create and provide new value.

\* Survey by DOCOMO

Financial Strategy

Value Creation Story

Value Creation Action

**ESG** Management

**Data Section** 











Value and excitement to our customers

From Employees

Peace of Mind and Comfort Support Always by Our Customers' Side

# "Packet Pack Kaigai Option," a Service Paying Meticulous Attention to Customer Needs

Our "Packet Pack Kaigai Option" service is linked to services provided in Japan, and that makes it distinguishable from our conventional services. We first thought "standalone" rate plans specifically designed for our international roaming service were sufficient, but to attract more customers to the roaming service, we repeated discussions and came up with plans linked to domestic services customers already use and pay for. However, using the international roaming service requires additional fees to overseas telecommunications carriers, and besides making these new rate plans attractive to customers, we also needed to increase the number of available countries and regions by more than 100. We persistently negotiated with telecommunications carriers in each country and were able to reduce the required costs.

As one feature of the "Packet Pack Kaigai Option" service, customers can smartly combine our various rate plans based on usage scenes to save communication costs. For example, customers who mainly use free Wi-Fi connections at hotels and restaurants can choose a one-hour plan to cover no Wi-Fi situations as necessary, such as when they are traveling within a city, or customers can combine a basic 24-hour plan and a multi-day plan depending on the length of their stay. The availability of the service in multiple countries and regions without additional fees, for example, for touring around Europe, has also been well received by customers. We are entering an era, in which we can unlimitedly use apps and watch videos on our smartphones outside Japan without having to worry about data quantity. Using the "Packet Pack Kaigai Option" service as a springboard, we will focus on improving customer experiences and achieving functional enhancement and intend to create a

world where "Roam like Home" is commonplace.

From when customers start planning an overseas trip to when they actually travel overseas, we always stay close beside them, and while anticipating their diverse needs, are promoting our "Packet Pack Kaigai Option" service in a timely manner and at the optimum customer contact point.

One task we are facing now is that our service is not as wellknown as competing services. Our service has a proven record of repeated use because its convenience is recognizable from the very first use. As such, our major effort will be to make the "Packet Pack Kaigai Option" service known among customers and solicit them to use it by disseminating information through TV commercials and websites, participating in exhibition events and conducting promotion campaigns. We will continue to implement multi-faceted measures so that we can contact customers at various occasions.



International Service Strategy

Zhou Jie International Service Technologies Global Business Division











# Peace of Mind and Comfort Support Always by Our Customers' Side

# **Enhancing Customer Satisfaction**

Top

Commitment

# Aiming to Comprehensively Boost Customer Satisfaction

#### **Initiatives through Customer Points of Contact**

With the evolution in mobile equipment such as smartphones, new services for mobile phones are constantly being generated, which has led to an increase in the number of customers contacting us to confirm or inquire about various aspects of our services as well as to share opinions and requests. In order to meet these needs, at shops, information centers, on the Internet and other sources, DOCOMO has various customer touchpoints. Through these points of contact, we collect information from nearly 5.1 million "Customer's voice" comments and around 60,000 "Perceptive Feedback" entries from DOCOMO staff in the course of the year. DOCOMO employees can check this information at any time, and the information is also transmitted virtually in real time to all employees in the DOCOMO Group. As a result, each and every employee has the opportunity to get an accurate understanding of what our customers are saying. DOCOMO members can use this information to develop and improve the products and services we offer to our customers while improving the way we respond to our customers' needs. Not only do we listen directly to what our customers are saying; DOCOMO delves into issues using quantitative and qualitative data at all times. We aim to maintain and expand the number of mobile phone subscriptions by working to comprehensively enhance customer satisfaction.

#### DOCOMO Group System for Collecting Customer's Voice



#### **Enhancing Customer Response**

We are revamping docomo shops to make them places where we can interact with customers wherever they are. We are also installing tablets that have a new customer reception system. These systems are creating new ways to support our customers — right there on the shop floor. By getting rid of shop counters, we are able to eliminate customer wait times in shops. We can provide our customers with a one-stop experience, from the moment they come into the shop to receive information, to get explanations of products and services or to get advice. DOCOMO staff demonstrate our products and services on tablets, making recommendations that suit each customer, in an effort to promote customer understanding.

Further, starting January 2018, we enhanced the "docomo Smartphone classes" organized by docomo shops to dispel customers' anxieties about smartphones and allow them to use the devices more conveniently, enjoyably and fully. In addition to updating the curriculum, we increased the number of classes to make it easier for customers to participate.



docomo shops around Japan serve as customer points of contact (docomo shop Tokyo Station Otemachi)



"docomo Smartphone class" (docomo shop Fuiiidera in Osaka)











#### Peace of Mind and Comfort Support Always by Our Customers' Side

# **Enhancing Customer Satisfaction**

#### 24 Hours a Day, 365 Days of the Year Support with "Otasuke Robot"

DOCOMO provides "Otasuke Robot™," a chatbot that can be consulted about customer problems with smartphones or "docomo Hikari" 24 hours a day, 365 days of the year\*.

The service provides an automated response in chat format with the best solution when a customer is having trouble installing an app, connecting to Wi-Fi or other such problems, and it feels just like talking directly with an operator at a call center. The service is free of charge and the customer only needs to access the dedicated site and select the button corresponding to the pertinent inquiry content or enter a simple question.



"Otasuke Robot" website

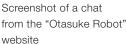
For common inquiries concerning such areas as spam email settings and recovery of backup data for one's contact list, guidance is provided in video format so the solution can be easily understood visually. Illustrations are also used to show how to confirm device name, how to restart the Wi-Fi router and other matters.

The service also provides One-Point Advice and disaster-related information from DOCOMO's corporate website when a customer is temporarily unable to access the Internet using docomo Hikari service due to equipment failure or disaster.



Using "Otasuke Robot" helps to easily solve customer problems when docomo shops or the DOCOMO Information Center are congested or closed. We will continue working to make further improvements to the service.

\* Service may be unavailable due to system maintenance, etc.



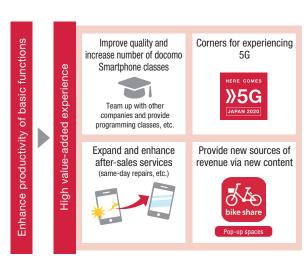
"Otasuke Robot" website (in Japanese only) https://www.otasuke-robot.jp/

#### Further Evolution in Customer Points of Contact through Optimized Use of Resources

DOCOMO is aiming to halve wait and attendance times at docomo shops during FY2019 in order to increase added value to customer experience.

In addition to shortening wait times by expanding the scope of reservations for shop visits, DOCOMO is implementing a number of other measures that include assigning dedicated staff to help with initial smartphone setup and usage, as well as increasing efficiency of inventory management through the introduction of RFID (Radio Frequency Identification) digital tags.

The personnel, time and space resources freed up by reducing wait and attendance times will be channeled into further enhancing customer points of contact. We are currently examining the viability of and actually implementing new initiatives in this regard such as corners where customers can experience 5G and the establishment of pop-up spaces in collaboration with other companies. DOCOMO opened "d garden Gotanda" in April 2019 as a place for these kinds of trial experiments. The idea behind the facility is to provide a fun, friendly and open space that anyone can drop into irrespective of whether they have a DOCOMO mobile subscription or not. During FY2019, DOCOMO plans to open a number of these experimental stores, thereby strengthening our approach to people who may not have ever visited a docomo shop before.















# Peace of Mind and Comfort Support Always by Our Customers' Side

# Customer Enlightenment and Customer Protection

# Bringing Shape to Initiatives for Peace of Mind and Safety

#### **Protecting Customers from Accidents and Other Problems**

Research has found that over half of young people use their smartphone to connect to the Internet\*1. In a pioneering move, DOCOMO has been dispatching instructors to schools and learning centers nationwide since FY2004 to provide Smartphone and Mobile Phone Safety Classes free of charge to ensure safe use of the devices.

Approximately 12.11 million persons had taken the classes on roughly 78,900 occasions as of March 31, 2019. In FY2018, around 1.39 million people took the classes on around 7,600 occasions.

\*1 Source: "Survey on Internet Use Environment among Adolescents in FY2018" issued by the Cabinet Office



To protect users against the dangers and other problems associated with smartphone and mobile phone use, DOCOMO holds Smartphone and Mobile Phone Safety Classes nationwide. The classes are provided free of charge and are mainly for elementary/junior high schools, high schools and special needs schools.

Smartphone-distracted walking has been a growing public concern in recent years. In FY2012, DOCOMO embarked on an initiative though which we established the "smartphone manner mark" and developed a design manual to promote safe, more considerate use of smartphones. We stress this point in advertising materials and shop promotional tools as well as in posters aimed at raising the awareness of customers and employees. In 2013, we began offering a function that prevents smartphone-distracted walking\*<sup>2</sup>.

\*2 "Anshin Filter for docomo" function provided to youth



Using a smartphone while walking is dangerous.

"smartphone manner mark"

#### **Promoting Safe Charging**

A terminal may generate an abnormal amount of heat when the connector on the phone being charged is wet or coated with foreign particles. We are therefore issuing special precautions in the manuals on the DOCOMO website and on labels displayed on mobile phones, warning users to charge their phones properly and safely.

An industry-wide effort led by the Mobile Computing Promotion Consortium is underway to raise consumer awareness and promote proper charging. Additionally, a video and logo have been created to alert customers to the issue.

Do Not Charge Phone When It Is Wet!

#### Measures against Fraud

DOCOMO is taking steps to prevent bank transfer scams, which are becoming increasingly sophisticated every year, in conjunction with relevant authorities and other mobile phone operators to combat a spate of such illegal activities committed using mobile phones.

#### Main Measures to Prevent Remittance Soliciting Fraud

Overview	Details
	Payment methods for usage charges for individual subscriptions are limited to credit card or direct account withdrawal in principle. Applicable credit cards and ATM cards can be confirmed at a docomo shop or other outlets.
Tougher screening upon subscription	Information on customers who fail to confirm their identity when requested by the police, and to whom services are discontinued, is commonly shared among all mobile providers and utilized in screening procedures.
	In order to prevent large volumes of fraudulent subscriptions under the same name, individual subscriber lines under the same name have been limited. In addition, tougher screening measures are being applied to corporate subscribers. Failure to meet the standards results in restricting the maximum number of lines they can use.
Cooperation with the	Information is provided to the police when there is suspicion of fraudulent identification, such as a fake driver's license, after informing the customer in advance.
police	At the request of the police, we cancel the subscription of, or reject for a certain period, any additional subscription requested by a rental operator who is found to have violated the Act for the Prevention of Illegal Mobile Phone Use.
Implementation of "network use restriction"	We use the "network use restriction" system as a means for preventing the criminal use of mobile phones that have been stolen from docomo shops or other retail outlets or obtained through fraud or other criminal behavior; or by forging identification or submitting applications with false information (name, address, birthdate, etc.)











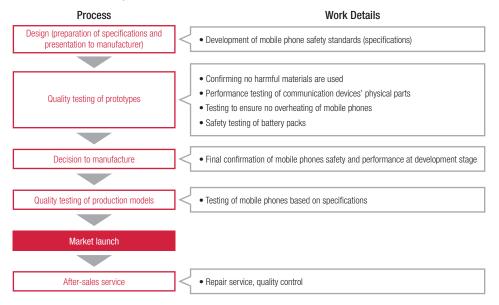
#### Peace of Mind and Comfort Support Always by Our Customers' Side

# Customer Enlightenment and Customer Protection

#### Corporate Responsibility for Products and Services

DOCOMO is dedicated to maintaining the quality of products with due consideration for safety at every stage, from design to after-sales service. We formulate our own standards concerning the safety of mobile phones from the design stage, examine the safety of the products by testing prototypes and make a final decision on the launch of a product only after safety is confirmed. We stand by the quality of our products even after they are purchased by providing after-sales services.

#### **Standard Product Quality Flow**



Moreover, docomo shops have videophones supporting sign language and different languages\* as well as writing boards available for the hearing impaired in an effort to improve service to customers. We carry out activities under the banner DOCOMO Hearty Style based on the universal design concept so that all people, including elderly persons and persons with disabilities, can use our services with peace of mind.

#### **DOCOMO Hearty Style Products and Services Based on Customer Opinions**

DOCOMO conducts activities for universal design from the three standpoints of promoting product and service development, enhancing customer support and disseminating safe and secure use under the banner DOCOMO Hearty Style.

As an example, in promoting product and service development, DOCOMO, with a firm awareness of universal design, is focused on developing products and services that are easy for everyone to use. In light of Japan's aging population, we continue to develop products that respond to customers' diversifying interests, including the Raku-Raku PHONE series and functions on other models, such as easy-to-read enlarged text menus. Going forward, DOCOMO will continue making products and services that are easy to use for all people, enhancing customer support and disseminating safe and secure use.

#### DOCOMO Hearty Style Three Initiatives

Principles	Initiatives
Promote product and service development	Develop and provide products and services that are easy to use for all customers  (1) Develop and provide products incorporating universal design, such as the Raku-Raku PHONE series  (2) Offer Hearty Discounts and other discount services on subscriptions  (3) Issue Braille phone charge statements  (4) Provide apps and services designed for persons with disabilities such as "Mieru Denwa," Simple Flick and Move&Flick
Enhance customer support	Establish customer service desks that are easy to use for all users and enhance response to customers  (1) Make docomo shops barrier-free  (2) Operate docomo Hearty Plaza (Marunouchi)  (3) Install videophones supporting sign language  (4) Conduct training for docomo shop staff
Disseminate safe and secure use	Provide opportunities for all customers to use smartphones and other products with peace of mind and safety  (1) Hold DOCOMO Hearty Class lectures for organizations serving persons with disabilities  (2) Organize nationwide Smartphone and Mobile Phone Safety Classes for special needs schools and other organizations  (3) Participate in events and exhibitions for persons with disabilities

<sup>\*</sup> Service available in English, Portuguese, Chinese and Spanish

Financial Strategy Value Creation Story Value Creation Action ESG Management

Data Section

Q,











Value and excitement to our customers

Peace of Mind and Comfort Support Always by Our Customers' Side

# Customer Enlightenment and Customer Protection

#### **Security Countermeasure Services**

There have been problems occurring in recent years associated with such things as the spread of spam mails, computer viruses, malware and harmful websites. Also, there are countless other scam operations that take advantage of new policies and regulations as well as current social developments, including those that surface after a major natural disaster and request donations or other financial contributions, or those that claim to be about the My Number (social security number) system, the upcoming Tokyo Olympic Games or electronic money. In this way, we have been seeing growing threats to Internet and telephone communications. Since more people are suffering from problems caused by such nuisances, DOCOMO is proactively working to provide countermeasure services to deal with them. These security services include detecting viruses, blocking harmful websites, anti-spam mail, distinguishing suspicious incoming calls and Anshin Security to safeguard smartphones from various threats. In addition, a setting to reject emails sent from a suspicious address such as phishing scams and a setting to delete emails with viruses attached help provide a safe communication environment for our customers.

#### **Anshin Security**



<sup>\*</sup> iPhone and iPad not covered

#### Continuing with Efforts Related to Radio Wave Safety

The health effects of radio waves from mobile devices have been researched for over 50 years in Japan and abroad. As a safety standard, the World Health Organization has published its recommended guidelines, while the Radio-Radiation Protection Guidelines serve as their equivalent in Japan. DOCOMO complies with related laws and regulations and ensures that the level of radio wave emissions from base stations and mobile phones remains below the limits specified in the Radio-Radiation Protection Guidelines.

Furthermore, DOCOMO discloses the Specific Absorption Rate (the rate at which energy emitted by radio waves is absorbed by the human body) for each mobile phone on its corporate website, and it strives to make mobile phones safe for customers to use.

In addition, DOCOMO has conducted experiments in collaboration with KDDI CORPORATION and SoftBank Corp. related to the possible impacts of radio waves on the human body at cellular and genetic levels and released a final report in 2007 stating that the research had identified no impact. DOCOMO supports the surveys and research concerning the safety of mobile phone radio waves being conducted by the Electromagnetic Environment Committee of the Association of Radio Industries and Businesses (ARIB) and is actively involved in these initiatives as a regular member.

Web

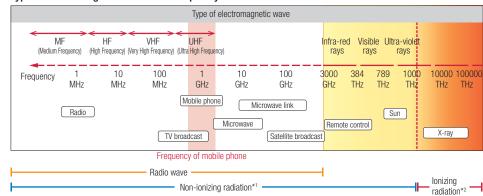
On radio wave safety (in Japanese only)

https://www.nttdocomo.co.jp/corporate/csr/network/radio/index.html

Web

On Specific Absorption Rate (SAR) for mobile phones (in Japanese only) https://www.nttdocomo.co.jp/product/sar/index.html

#### Type of Electromagnetic Wave and Frequency of Mobile Phone



<sup>\*1</sup> Electromagnetic waves with low frequency that do not have ionizing effects

<sup>\*2</sup> Electromagnetic waves with extremely high frequency such as X-ray and gamma ray