

Special Feature

DOCOMO's Response to the COVID-19 Pandemic

DOCOMO is taking action with top priority on the health and safety of customers and employees while also pursuing initiatives that anticipate a structural shift emphasizing remote social interaction.

COVID-19 has ravaged the world since the start of 2020 and continues to spread with no end in sight. As a telecommunications carrier and designated public body, DOCOMO has sought to fulfill its responsibility to society in the face of the pandemic by pursuing the safe, reliable operation of the systems required by its services in order to ensure the continuous operation and maintenance of communication network facilities.

We will also respond to the structural shift toward remote social interactions and meet diverse needs by deploying our corporate assets to generate new value and address social issues.

With top priority on the health and safety of our customers and employees, we take due care to prevent infections while continuously providing stable connectivity and engaging in initiatives that benefit our stakeholders.



Initiatives for Supporting Customers

1 For Customers 25 Years Old and Younger

We provided a secure communication environment for customers who are 25 years old and younger to participate in remote classes and online learning.

Period: April through August 2020
Content: Charges*1 for "Speed Mode" and "Additional 1GB Option" were waived.*2, 3

*1 1,000 yen/1 GB (tax excluded)

*2 Subject to subscribers of designated billing plans

*3 Up to 50 GB

2 For Customers Facing Difficulty Paying Their Bills

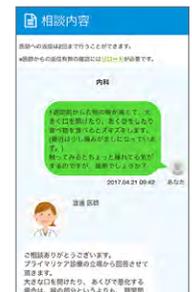
At the customer's request, we extended the payment due dates for mobile phone bills that fell between February 29 and June 30, 2020, to July 31, 2020.

3 Reissuing Expired d POINTs

Given that the stay-at-home period due to the COVID-19 pandemic made it difficult to use d POINTs, we reissued d POINTs that had expired between March and May 2020, effectively extending their period of validity.

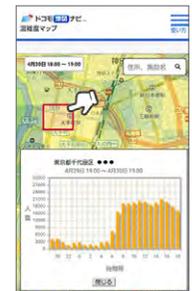
4 Free Online Consultation Service via d healthcare

From April through June 2020, we offered a free, 24-hour online chat service that enabled d account users to consult doctors about COVID-19 and other health concerns. The service contributed to alleviating the risk of infection and burden on healthcare institutions and relieving customer anxiety.



5 docomo Map Navi "Congestion Map" Offered Free of Charge

In May 2020, we began providing the docomo Map Navi "Congestion Map" which enables users to see the level of congestion in any given area in Japan, free of charge.



*DOCOMO aggregates and processes data based on docomo Map Navi's statistical information, which is produced by collecting location information for mobile phones with permission from users of the automatic GPS (latitude/longitude information) function. Location information consist of GPS data measured at a minimum interval of five minutes and does not include personal information.



Governments and Companies

1 Providing Population Dynamics Analysis Based on Mobile Spatial Statistics

We continuously provided statistical information on demographic changes in principal areas before and after the declaration of Japan's state of emergency. (For more information, please see the next page.)

2 Realizing Telework and Remote Education

To address the expansion of telework and remote education, we offered the following services as methods of communication, free of charge for a limited period of time, and received applications from over 600 companies.

(1) Services for Telework and Working from Home

• Business Plus (until July 31, 2020)

Business Chat WowTalk for Business Plus

Business Chat LINE WORKS Free Plan

Mobile Device Management CLOMO MDM for Business Plus

Document Sharing Handbook Standard Plan

Web Conference sMeeting Standard

• Voice Conferencing Service (until August 31, 2020)

Voice Meeting/Office Link

(2) Education-Related Services and Content during School Closures

• English 4Skills (until April 30, 2020)



Employees

1 Promoting and Bolstering Working from Home

During Japan's state of emergency, employees in principle worked from home, unless their job required their presence at the office.

In addition, to promote work styles centered on remote work, the NTT Group is developing the necessary systems and working environments by providing remote work system, a remote work allowance, paying actual commuting expenses instead of the cost of a commuter pass, and offering a super flex-time system starting in October 2020. These support efforts are combined with operational adjustments and staggered commuting to prevent the spread of infection.

Target Ratio of Employees in the Office Compared to Before the State of Emergency



2 Response to Infections among Employees

When an employee is confirmed to have been infected, the emergency response headquarters collaborates with the relevant public health center to disinfect the premises and suspend operations.



Supply Chain

Wide-Ranging Response at docomo Shops

During the state of emergency, we asked customers to make reservations before visiting shops, limited operations, and guided customers through online procedures. We also adjusted staff working hours and implemented measures to prevent infection among customers visiting the shops. We remain committed to protecting the lives and well-being of our staff and customers.

Major Responses under the State of Emergency

docomo Shops

- Shortened business hours (reservations required in principle, open for business from 10 a.m. to 4 p.m.)
- Limited scope of operations (necessary operations to maintain telecommunication services)
- Reduced the frequency of commuting by rotating team assignments
- Distributed non-contact thermometers at all shops for customers to voluntarily take their temperature upon entering
- Ensured thorough disinfection, took action to prevent droplet infection, and encouraged staff health management
- Distributed masks and goggles for staff and placed alcohol-based hand sanitizer and other items in shops

Website

- Guided customers around the clock through online procedures
- Launched an online version of the docomo Smartphone classes using videos to show how to use and enjoy smartphones



DOCOMO's Solution for a "New Normal" Society

Mobile Spatial Statistics®

As part of preventing the spread of the COVID-19 pandemic, the Cabinet Office, Ministry of Health, Labour and Welfare and Ministry of Internal Affairs and Communications requested that we analyze demographic changes in principal areas compared to the average of the same month last year based on mobile spatial statistics. We have been providing this data to national and local governments as well as to the media. This demographic information can be applied to broad areas, including urban planning, disaster prevention planning, and marketing.

About Mobile Spatial Statistics

The hourly movement of Japan's entire population can be grasped 24-hours a day, all year round, based on demographic data obtained by using the mechanism of DOCOMO's mobile phone network. Estimates are made by periodically monitoring the mobile phones located within the areas covered by each base station and adding the diffusion rate of DOCOMO phones.

We can analyze the data by gender, age, residence, country or region, and other factors and continuously monitor changes at different times of day to determine certain characteristics of an area and people's movements. However, data obtained from mobile spatial statistics only shows the number of people in a group and cannot identify individuals.

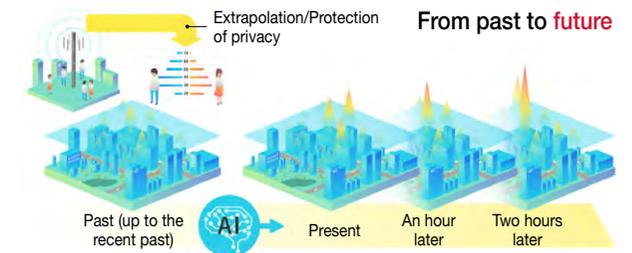


Map displaying population trends by area

Meeting the Needs of a "New Normal" Society with Advanced Technologies

Today, and in the society of the future, people are and will be required to maintain distance and avoid closed spaces, crowded places, and close contact. Under these circumstances, and as part of our contribution to society, we are cooperating with DOCOMO InsightMarketing, Inc. to make available free of charge from May 2020 to March 2021 the Mobile Spatial Statistics Population Map, which shows the nationwide distribution of people, as current as up to one hour ago. Anyone can use the site to observe human movement in their area of residence or destination and plan their own actions accordingly. Data can also be used by local governments and companies for various measures for reviving local economies. In addition, we are seeking to apply a real-time version of the national population distribution statistics to provide AI traffic jam prediction that can be used in combination with AI and big data for mitigating congestion and understanding various demands.

We intend to continue addressing social issues by further expanding and improving the functions of Mobile Spatial Statistics.



It will become possible to predict the population of an area of 250 square meters.

Applications of Mobile Spatial Statistics

- Trading area analysis based on population flow (such as planning for new shop openings and promoting sales of existing shops)
- Event analysis (measuring the impact of an event and considering content according to gender and age)
- Tourist analysis (grasping the state of tourism at destinations of foreign visitors)
- Urban planning (utilizing basic data for establishing transportation systems and urban development)
- Formulation of disaster prevention plans (estimating stranded populations and planning for storage location and quantities of drinking water and other supplies)

Note: Mobile Spatial Statistics is a registered trademark of NTT DOCOMO, Inc.

Special Feature

DOCOMO's 5G Strategy

DOCOMO rolled out its commercial 5G (5th generation mobile communication system) services in March 2020. Through 5G, the Company endeavors to create new value and solve social issues. And it is undertaking a variety of initiatives to change the world with 5G.

New value creation

We will introduce new services across a broad range of areas including sports, music, and tourism to generate unprecedented value.

Changing the World with 5G

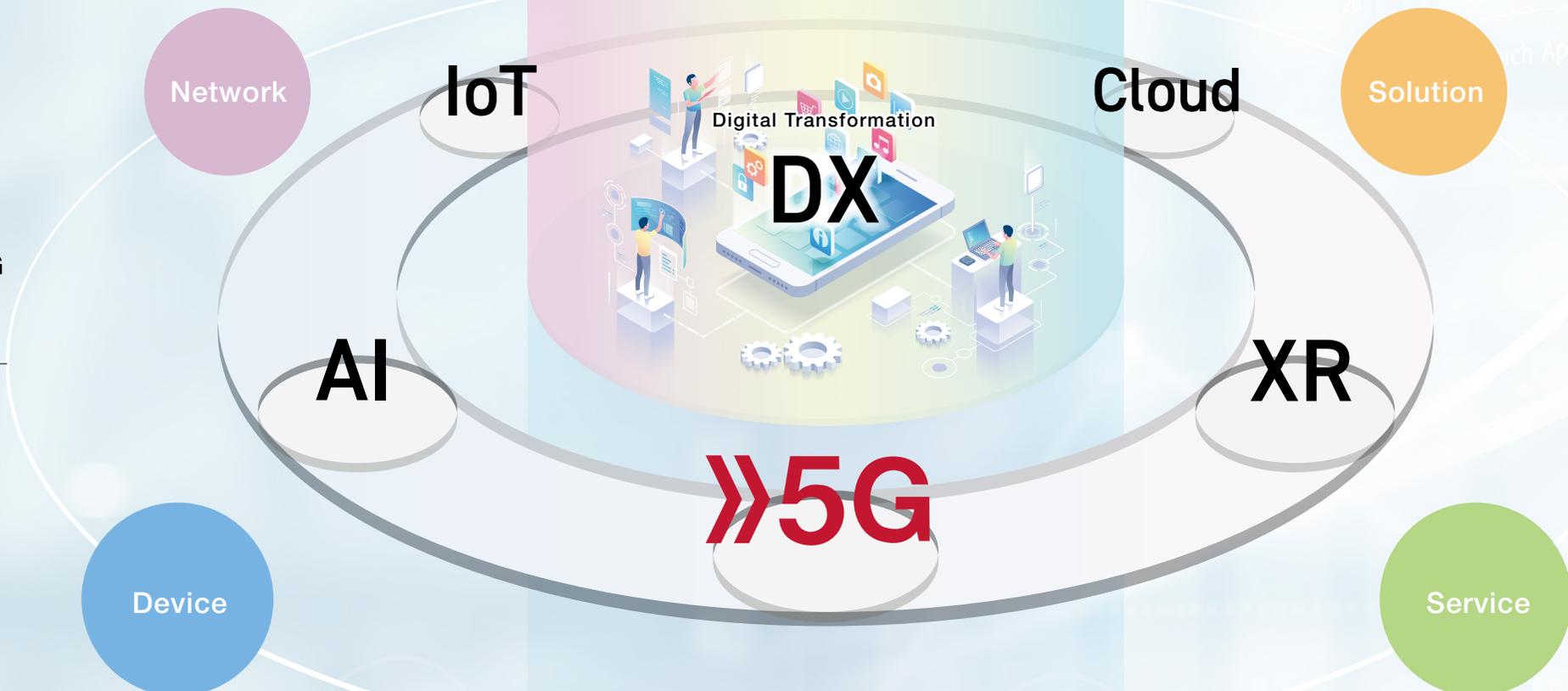
Solutions for Social Issues

We will apply 5G to overcome the many challenges faced by Japanese society, including the declining birth rate and aging population, regional vitalization, and shrinking workforce.

Effects of 5G

- Drastic UI/UX improvement
- Creation of innovative services
- Productivity enhancement

Initiatives for Popularizing 5G



Changing the World with 5G

Technological Features

1. High speed and large capacity



Sending and receiving larger volumes of data at faster speeds is achieved with 5G. Moreover, users can enjoy dynamic, high-quality video and services, including 360° image capture that makes possible viewing a scene from multiple perspectives, and immersive 3D imaging such as VR.

Maximum transmission speeds

20 Gbps (20 times faster than LTE)

2. Low latency



Delays in communication will be shorter, enabling users to interact in near real time across long distances. This will contribute to factory automation based on remotely monitoring and controlling machinery as well as popularizing esports.

Network delay

1 ms (= 0.001 second) (one-tenth of LTE)

3. Massive device connectivity



With 5G, simultaneous network access is achieved across a full range of devices, including smartphones, digital home appliances, and sensors. This makes it possible to build Smart Homes and use information from dispensers and measuring devices useful in daily life.

Number of connected device

1 million units/km² (10 times more than LTE)

*Figures are theoretical values.

Changing the World with 5G

Initiatives for Popularizing 5G

Network

We will quickly expand areas covered by 5G throughout Japan and contribute solutions to social issues with high-speed, large-capacity communication.

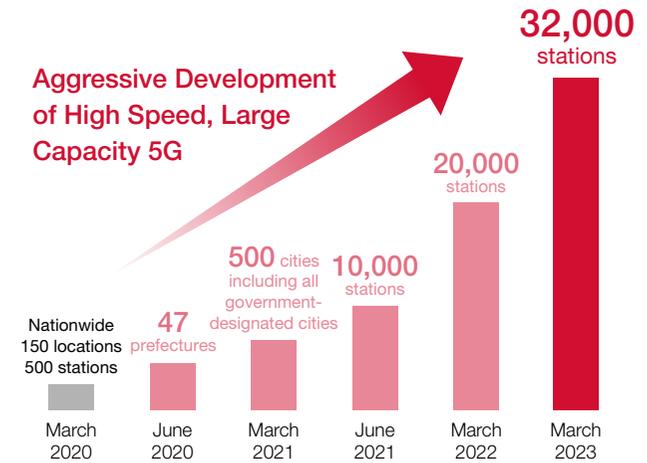


Starting with the first generation (1G), based on analog transmission in the 1980s, each decade has brought a new generation of mobile communication systems. Over the years, transmission speeds and network capacity have increased exponentially, providing greater convenience in the daily lives of customers and boosting productivity and delivering added value to industries.

We will realize high-speed, large-capacity networks by making use of three new frequency bands to draw out the maximum potential of 5G.

Along with expanded area coverage and faster transmission speeds, we plan to raise the 5G infrastructure development rate for parent base stations to 97.0% in fiscal 2023.

Aggressive Development of High Speed, Large Capacity 5G



5G Deployment Plan

Start of 5G Rollout	By End of Fiscal 2020	Target for End of Fiscal 2023
<ul style="list-style-type: none"> ▶ Areas and Base Stations 150 locations nationwide About 500 stations ▶ Transmission speeds Maximum downlink speed: 3.4 Gbps Maximum uplink speed: 182 Mbps 	<ul style="list-style-type: none"> ▶ Areas and base stations 500 cities including all government-designated cities ▶ Transmission speeds Maximum downlink speed: 4.2 Gbps Maximum uplink speed: 480 Mbps 	<ul style="list-style-type: none"> ▶ 5G infrastructure development rate 97% ▶ Investment in 5G infrastructure 1 trillion yen(aggregate total for FY2019 to FY2023)

Carry 5G™

Carry 5G™ is a portable 5G base station that delivers 5G access wherever the user wants it. The technology addresses situations that require setting up temporary 5G service, such as presenting demonstrations at event venues, providing remote support for construction sites, and conducting verification tests under a company's in-house environment. Furthermore, it reduces installation costs and shortens the time needed to set up a 5G access point. We plan to deploy 35 units around Japan by the end of fiscal 2020.



Changing the World with 5G
Initiatives for Popularizing 5G

Device

We are developing 5G-compatible devices to deliver advanced user experiences including innovative entertainment and new communication methods.



We offer a lineup of 12 smartphone models and one router as 5G compatible devices that connect customers with the world of 5G. And we will continue to launch attractive models toward gaining 20 million subscriptions by the end of fiscal 2023.

In addition to smartphones, we will expand peripherals to promote the MY NETWORK™ concept to solve social issues and provide innovative entertainment experiences.

Lineup of 5G-compatible Models (2020–2021 Winter/Spring Models)

Standard models



High-specification models



We will offer opportunities for experiencing 5G in arenas and stadiums to provide a multi-angle and other new styles of sports viewing unique to 5G.

Sports Facilities Adopting 5G Environments

- ▶ September 2020: Kashima Soccer Stadium, Ibaraki Prefecture
- ▶ June 2021: Ariake Arena, Tokyo

MY NETWORK™ Concept

MY NETWORK™ is intended to provide new sensory experiences not only via a single smartphone but also by coordinating a diverse array of peripheral devices such as wearable and XR devices with services and solutions for the 5G era to construct a customized network for each user. Under this initiative, DOCOMO entered into a capital and operational alliance with Magic Leap Inc. and began selling the Magic Leap 1 wearable headset in June 2020.



Changing the World with 5G

Initiatives for Popularizing 5G

Service

In addition to providing new experiences in various domains, we will create services compatible with the “new normal” lifestyle associated with the COVID-19 pandemic.



Also in terms of services, we are focusing on enabling customers to create completely new experiences. Primarily in the areas of music and live performances, gaming, video, and sports where the features of 5G are likely to be directly reflected, we will provide distinct experiences, combining functions enabled by 5G, including 8KVR (virtual reality videos made by combining video images taken by multiple 8K cameras) and multi-angle viewing. These include the Shintaikan Live CONNECT™ video streaming service and dgame Play Ticket cloud-based gaming service.

Offering New Experiences in Four Areas

Music and Live Performances



Gaming



Video



Sports



Shintaikan Live CONNECT™

This video streaming service allows users to enjoy various videos of live music events and stage performances using 8KVR and multi-angle viewing on their smartphones and other devices. Its name expresses the connection forged between artists and their fans as well as between fans. By making use of cutting-edge video technology for the 5G era, we will bring artists and fans closer and provide opportunities for everyone to enjoy new live experiences, wherever they happen to be.

8KVR Live Through high-resolution (8K) VR video captured with 360-degree cameras set up in a live venue, users can enjoy a virtual front-row experience in real time, as if they were right there at the event.

Multi-angle Live Users can view a live event from their preferred angles, taken by multiple cameras. They can freely switch from one angle to another while viewing the livestream.

AR Figures A miniature 3D figure of the artist appears when the smartphone is held over AR markers printed on the artist's merchandise.

Changing the World with 5G

Initiatives for Popularizing 5G

Solution

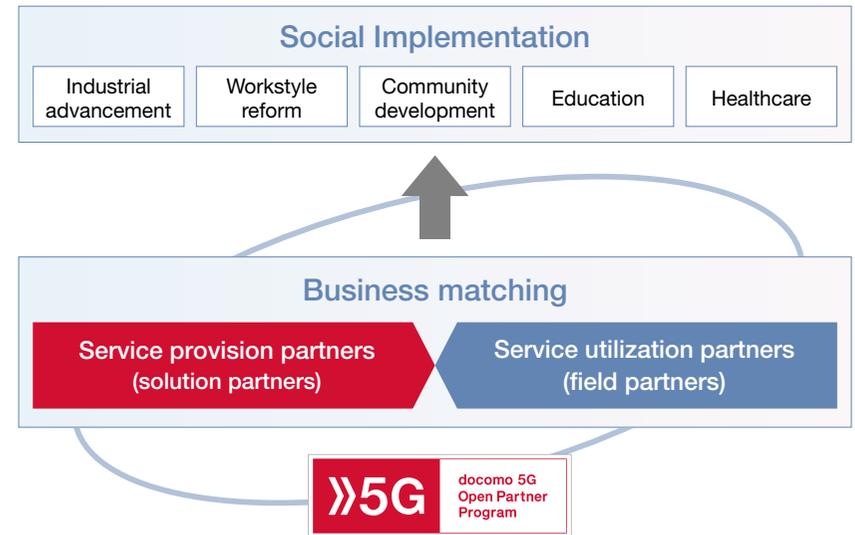
We will contribute solutions to address social issues by adding DOCOMO's assets to the strengths of a broad range of partners to generate new value.



In developing solutions for the 5G era, DOCOMO emphasizes co-creation with a broad range of partners such as companies, local governments, and universities. The DOCOMO 5G Open Partnership Program (), launched in February 2018 with around 600 partners, has expanded to include 3,500 organizations as of September 2020, and we plan to increase participation to 5,000 organizations by March 2022.

We will expand the number of solution partners that provide services and will provide optimal solutions to field partners who use the services to promote business between partners while expanding the circle of partners for co-creation to solve social issues.

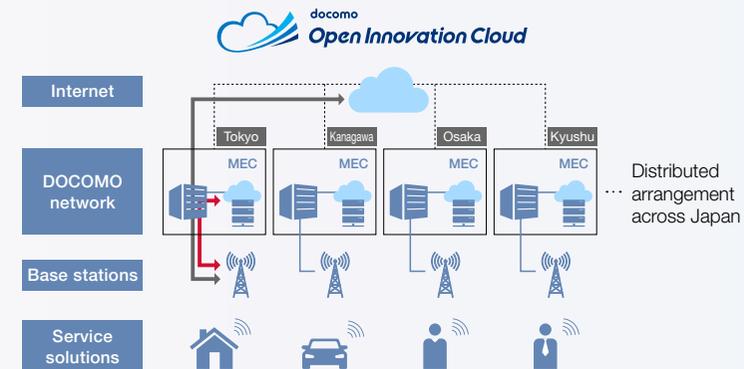
Creating Solutions for the 5G Era



DOCOMO Open Innovation Cloud®

The DOCOMO Open Innovation Cloud® () is a service that features multi-access edge computing (MEC)*1, including the low latency and high security required in the 5G era. We made this service possible by building a cloud infrastructure in DOCOMO's network. The service provides virtual machine instances and virtual networks and is equipped with DOCOMO's technological assets as well as video transmission, VR, and AR solutions provided by DOCOMO's partners.

*1 A system for which servers and storage equipment are installed at places closer to customers on a mobile telecommunications network.
 *2 Part of the face recognition technology is composed of the NTT Group's AI corevo®.



Changing the World with 5G

Initiatives for Popularizing 5G Solution

DOCOMO has been verifying 5G utilization models through co-creation with business partners under the 5G Open Partnership Program. We began by primarily offering solutions for social issues such as industrial advancement, community development, and workstyle reform to coincide with the rollout of commercial 5G services.

In the coming years, we will continue supporting customer businesses while developing solutions for resolving issues and creating value for a remote, distributed social setting across a wide range of fields, including medicine, education, and manufacturing.

One-stop Solutions that Combine Products Made by DOCOMO and Our Partners

▶ Manufacturing equipment simultaneous analysis solution FAAP™

Collects, conducts AI analysis of, and provides feedback in real time for on-site data obtained from equipment at a plant stored on the cloud and improves productivity through failure prediction and automated image inspection.

Brains Technology, Inc.,

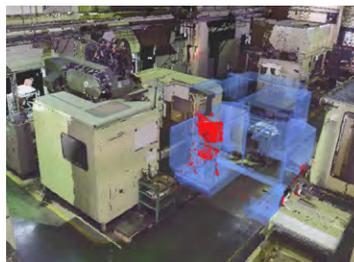
Synapse Innovation Inc.



▶ Field Simulator™ point cloud data use solution

Transfers large volumes of point cloud data obtained by scanning areas at high speeds and creates 3D models. Runs a variety of simulations, such as equipment layouts, consideration of carry-in and carry-out routes, and comparisons between planning models and work results.

Elysium Co. Ltd.



Partner companies

Other 5G Solutions

▶ Zao Cloud View low-latency video streaming cloud service

Provides stable, high-quality live video streaming and conversation service via the cloud.

Soliton Systems K.K.

▶ Smart-telecaster Zao-SH ultra-low latency live streaming device

Live streaming solution featuring glass-to-glass latency of only 35 milliseconds.

Soliton Systems K.K.

▶ SMART FullHD

Provides interactive communication among multiple sites featuring 5G-based high-quality video from various full high-definition video sources, including telemedicine, live streaming of academic conferences, training seminars, and on-site support.

NTT BizLink Inc.

▶ SMART MultiViewing

Produces immersive experiences that are unique to two-way transmission for novel entertainment and events connecting multiple sites, such as public viewings and dance lessons, by projecting dynamic 360-degree video content onto multiple screens via 5G.

NTT BizLink Inc.

Changing the World with 5G

Initiatives for Popularizing 5G Solution

Other 5G Solutions

▶ LiveU

Compact, lightweight 4K-compatible mobile relay solution that is ideal for relaying and covering live TV programs and sports broadcasts.

LiveU Inc.

▶ Streamways

Service that enables anyone to transmit stable 2K and 4K video as well as to switch and distribute videos with ease (also provides rental service for a video transmission package).

NTT TechnoCross Corporation

▶ 8K ROI (region of interest) camera system

Camera system that boosts operational efficiency and saves power by enabling four separate HD videos to be extracted from an 8K image.

Panasonic System Solutions Japan Co., Ltd.

▶ PicoCELA Multi-Hop Wi-Fi

Provides high-speed Wi-Fi environments by combining high-speed, large capacity 5G lines with multi-hop Wi-Fi.

Kyowa Exeo Corporation

▶ Smart Street Lighting

Contributes to creating safe, secure, and vibrant communities using a networked camera system, digital signage, and LED lighting.

NEC Corporation

▶ Anzen Mimamori-kun®

ICT-enabled remote monitoring of on-site workers by obtaining real-time information of their status.

NS Solutions Corporation

▶ AR-based Remote Communication System

Realizes remotely controlled interactive communication using high-resolution computer graphics reproduced in augmented reality (AR) as textbooks to provide new experiences, such as remote classes and the introduction of tourist attractions.

Toppan Printing Co., Ltd.

▶ Free View Point Tube

Uses 3D scanning to create digital reproductions of real human movement. An epoch-making, next-generation video streaming solution that utilizes large-capacity 5G communication to enable free viewpoint viewing.

Crescent, Inc.

▶ newme

Allows users to remotely control avatars from their homes to experience such activities as shopping at department stores, exploring distant museums, and communicating with family members who live far away.

avatarin Inc.

▶ EDGEMATRIX

Platform service for freely deploying AI from the marketplace to Edge AI devices to apply the optimal AI to issues in areas such as crime prevention, manufacturing, and marketing.

EDGEMATRIX Inc.

▶ Fairyview®

Solution providing a bird's-eye view of an entire area during surveillance and other operations by combining multiple camera feeds instead of checking individual feeds from multiple cameras.

Mitsubishi Electric Corporation

Live EX 8KVR™ High-definition Video Transmission Solution

Delivering “As If You Are There” Real-life Experiences to Remote Locations



Target Social Issues

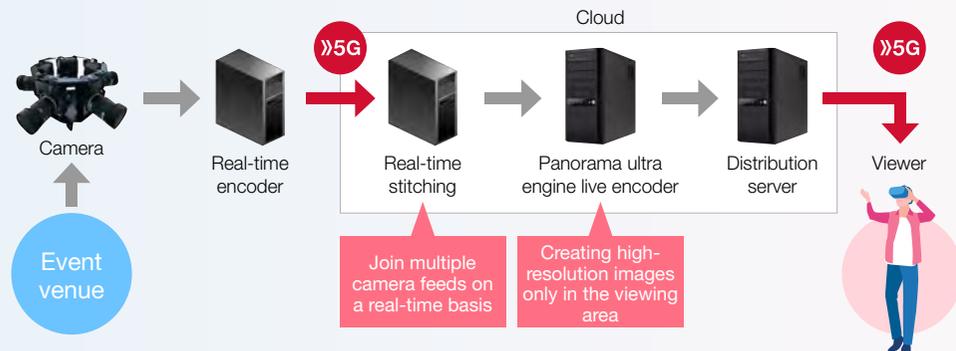
- ▶ Create and invigorate regional communities nationwide to address the population concentration in major urban areas
- ▶ Develop methods for holding large events (concerts, festivals, and sports competitions) in the wake of COVID-19
- ▶ Ensure opportunities to participate in remote events for those who cannot travel due to illness or disability

Benefits Provided by 5G

- ▶ Live streaming of high-quality, 360-degree visual space and 3D soundscape
- ▶ VR video offering real-life, immersive experiences for users in remote locations

Live EX 8KVR

A service in which DOCOMO provides one-stop service from shooting to delivery and supports customers' 8KVR live distribution. We create 8K visual images using 360-degree spherical cameras, combining multiple camera feeds in real time and providing only the viewing area in high resolution. Viewers, even from remote locations, can enjoy an immersive experience as if they were at the venue.



Contributions Offered by this Solution

▶ Deliver dynamic live experiences to anyone, anywhere

Users will be able to participate in festivals and other events for revitalizing local communities through VR videos as a real-life experience without being limited by the venue's capacity. People who are prevented from traveling due to illness or disability can also enjoy the events in the same way.



▶ Distributing completely new content based on multi-angle viewing

Large-capacity communication offered by 5G has rendered large-scale equipment redundant. It is now possible to transmit events from venues that used to require installing equipment. This solution will expand the possibilities of entertainment by contributing to the production and distribution of new content premised on the use of high-quality, multi-angle viewing.



- ▶ Distribution of real-life audiovisual content for news coverage
- ▶ Simulated experience of life-saving actions during evacuation drills and on-site applications in disaster-affected region
- ▶ Efforts for protecting natural and cultural heritage resources
- ▶ Remote work in construction sites

Expected Areas of Application

AceReal[®] for docomo, a remote work support solution using AR glasses

Supporting remote work to hand down technologies and secure the safety of on-site workers



Target Social Issues

- ▶ Maintain and improve productivity amid a shrinking workforce due to a declining birthrate and aging population
- ▶ Hand down the technology of skilled workers, especially at factories and worksites
- ▶ Limit the movement of people in the wake of COVID-19

Benefits Provided by 5G

- ▶ Realizes transmission and the sharing of large-volume data such as video, bringing images into sharper and clearer focus
- ▶ Reduces communication delays and makes possible the provision of remote support closer to real time (compatible with Cloud Direct™)

AceReal for docomo (Partner: SUNCORPORATION)

Service for supporting remote work and providing remote communication using AR glasses and 5G networks. Visual images seen by on-site workers can be shared in real time with skilled advisors in remote locations, enabling advisors to offer assistance. Workers are also able to view the necessary manuals and video through their AR glasses hands-free.



Contributions Offered by this Solution

▶ More efficiently handing down technical skills

Skilled workers will be able to offer guidance without going to the actual worksite, allowing them to efficiently use the time otherwise taken up by travel and assist more workers. Also, accumulated videos of onsite work can be used as educational material.



▶ Improving the employee retention rate

Companies will be able to provide an environment in which employees can work with confidence as skilled workers remotely watch over their progress. This will reduce the concerns of less experienced workers as well as the turnover rate.



▶ Providing assistance without traveling to the site

Experienced employees will not have to go to the worksite, which will lead to avoiding close contact, a required practice in the COVID-19 era. This solution will also reduce travel-related time and cost and therefore improve operational efficiency.

▶ Regional development using the know-how of experts and specialists

▶ Early detection and preventive measures for abnormal data on equipment and infrastructure

Expected Areas of Application

EasyPass™ face authentication entrance/exit management solution, powered by SAFR™

Realizing safe and secure entrance/exit management using high-speed, high-precision face authentication technology



Target Social Issues

- ▶ Security risks related to entering facilities, including the loss or shared use of ID cards and spoofing
- ▶ Expanded demand for contactless means for entrance/exit management generated by the impact of COVID-19
- ▶ Rising construction costs for installing and increasing the number of surveillance cameras

Benefits Provided by 5G

- ▶ High-speed, high-precision face recognition for multiple sites
- ▶ Robust management of personal information including facial data

EasyPass, powered by SAFR (partners: Net One Systems Co., Ltd. and RealNetworks, Inc.)

Facilitates entrance/exit management based on facial recognition using AI and deep learning. This solution offers smooth and secure entrance/exit based on the world's most advanced face recognition engine as well as high-speed, high-accuracy authentication and person identification technology.

Person identification by guards stationed at indoor gates

Plant and other buildings



▶▶▶
»5G



High-speed transmission of facial image data



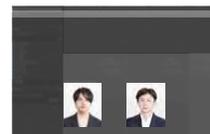
Notification of authentication result

Identification of person based on facial image

Facial recognition (SAFR)



Entrance/exit management (Genetec™)



Contributions Offered by this Solution

▶ High-speed, high-accuracy authentication

Facial recognition takes less than 0.1 seconds, and the level of accuracy is not affected by wearing glasses, hats, or masks. This reduces security risks such as oversights and impersonation.

▶ Application to entrance/exit management at factories and plants

People enter large sites such as factories on a bus or car and go through a time-consuming process of getting off at the entrance gate, signing in, and presenting their ID card. This solution will make entering and leaving a site much more efficient. Also, the solution will ease the congestion in front of the gate in the case of entering and leaving of large number people.

▶ Can also be used to guard against prowlers

In addition to providing basic information on the time or identity of those entering or exiting a premises, the system also displays the faces of those denied entry on a real-time basis and detects persons whose facial data have not been recorded, or users who were denied entry, and automatically sends out notifications.



▶ Keyless entry to houses and condominiums

▶ Ticketless entry to events

▶ Application of entrance/exit data to marketing

▶ Search for lost children at amusement sites and other facilities

Expected Areas of Application

Virtual Design Atelier™ remote co-production solution

Enables co-production of 3D designs between remote locations



Target Social Issues

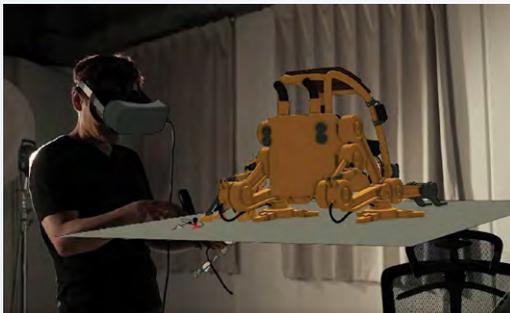
- ▶ Growing sophistication and rising workload associated with information sharing between processes due to the increasing complexity of the production process
- ▶ Method of co-production work under remote environments
- ▶ Increased time and cost of relocating people and extended lead times

Benefits Provided by 5G

- ▶ Sharing rich content and enhanced response across long distances and multiple sites
- ▶ Ability to send and receive highly confidential data, including design information, in a cloud environment

Virtual Design Atelier (partner: Wacom Co., Ltd.)

Productivity enhancement solution that enables simultaneous co-production of 3D designs between multiple remote sites via the cloud. Sharing large-volume 3D content in a VR space lowers latency in collaborative work and contributes to reducing the number of operational processes for designers and production staff, thereby raising productivity.



Contributions Offered by this Solution

▶ Early rollout of new products

Eliminating segments of the operational process makes it unnecessary for all production team members to meet in one place, thereby boosting efficiency and accelerating product development while facilitating the rapid development and rollout of new products that meet social needs.

▶ Lowering the cost of production

Introducing remote operations will cut the time and cost involved in transport, thereby also reducing the cost of product development and production.



▶ Starting point for improving work-life balance and creating new value

Shortened lead time for product development will enable companies to pursue more projects. It will also allow employees to spend quality time off, which in turn may inspire new ideas and designs.

▶ Response to the "new normal"

This solution will help prevent contracting and spreading COVID-19 by making remote work possible for most work processes.

▶ Production of entertainment content including games

▶ Smooth acquisition of 3D design technology

Expected Areas of Application