

NTT DATA

 Trusted Global Innovator

Mission Statement

**NTT DATA uses information technology to create new paradigms and values, which help contribute to a more affluent and harmonious society.**

The NTT DATA Group leverages its mainstay domain, information technology, to create the frameworks of the future and generate new value for clients and society.

Rather than just pursuing our own profits, we aim to contribute to the growth and sustainability of society as a whole.

We view these aims as the

NTT DATA Group's social mission and raison d'être.

Group Vision

**Trusted Global Innovator**

Values

**Clients First**

**Foresight**

**Teamwork**

With the intention of becoming a partner that utilizes technology to realize future business innovations, the NTT DATA Group announced its new Group Vision of becoming a Trusted Global Innovator. We aim to contribute to client business growth and the resolution of social issues around the world, becoming a presence giving rise to social innovations by creating new markets utilizing digital technologies, providing high-quality services, and proactively engaging in technological innovation.

# Foresight

## Future Prospects for Technology NTT DATA Technology Foresight

The technologies driving innovation are the mechanisms that drive society into the future and existing business models toward a new stage. At present, the advance of digitization is the next departure point for social innovation, thus it is important to make optimal management decisions, perceive future changes, and clearly understand the path to follow. At NTT DATA, we are studying the advanced technologies and social trends that will have a major impact in the next three to 10 years and publish the future predictions derived from these results every year as NTT DATA Technology Foresight. Based on this trend information, we deepen communication with clients focused on the future.



We will pioneer the future alongside clients and business partners—this is our intention. NTT DATA will share in the future indicated by NTT DATA Technology Foresight, combining know-how and resources to create innovation.

## Creating Value with Clients

Through its open innovation forum, "From the Port of Toyosu," NTT DATA provides opportunities to create innovative businesses that create win-win-win relationships. We aim to multiply the cutting-edge technologies and ideas of global venture capital firms, with those of NTT DATA clients in various industries (including leading corporations and financial and public institutions) and the NTT DATA technologies and business solutions that support global communications infrastructure.

### Co-Creation Initiatives



Global open innovation contest



Open innovation forum  
"From the Port of Toyosu"



SDGs global startup program  
(Joint operation with JIN)

# Collaboration

# Toward a Connected Future

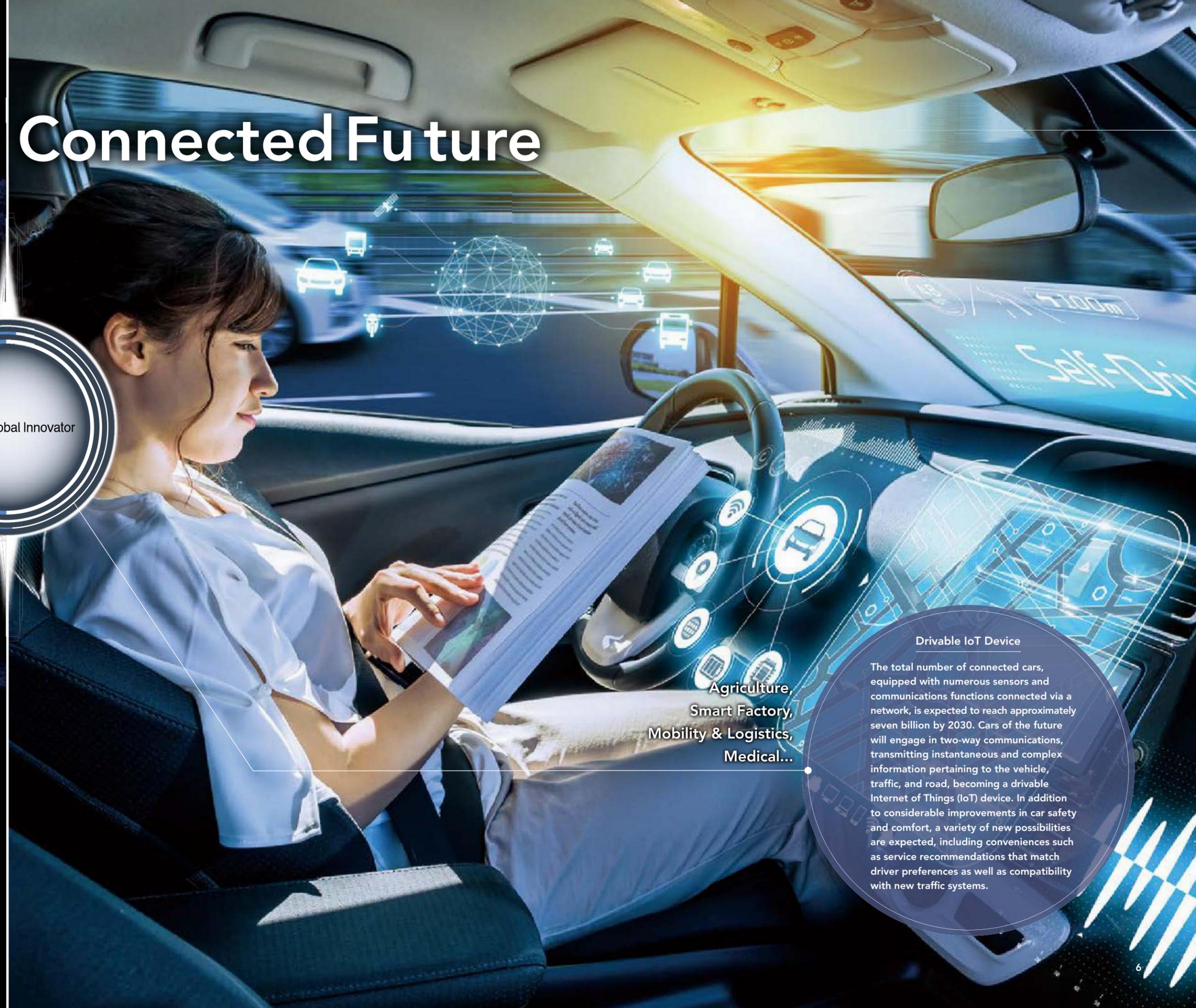
NTT DATA

Internet of Things  
Cybersecurity  
Intelligent Automation

Trusted Global Innovator

## Case.1 AI / IoT

NTT DATA promotes initiatives aimed at realizing a fully connected society through the knowledge gained by constructing numerous large-scale corporate backbone systems and alliances with the NTT Group. One example of this is the testing of self-driving city buses in collaboration with industry-government-academia, aimed at establishing and providing new public transportation services to resolve labor shortages and other issues surrounding public transportation. We work with clients to create new businesses and services as a connected innovation partner combining multiple technologies, including telecommunications technologies, data processing, artificial intelligence (AI), and security.



Agriculture,  
Smart Factory,  
Mobility & Logistics,  
Medical...

### Drivable IoT Device

The total number of connected cars, equipped with numerous sensors and communications functions connected via a network, is expected to reach approximately seven billion by 2030. Cars of the future will engage in two-way communications, transmitting instantaneous and complex information pertaining to the vehicle, traffic, and road, becoming a drivable Internet of Things (IoT) device. In addition to considerable improvements in car safety and comfort, a variety of new possibilities are expected, including conveniences such as service recommendations that match driver preferences as well as compatibility with new traffic systems.

# Toward a Shared Society

NTT DATA

Cybersecurity  
Data & Intelligence  
IT Optimization

Trusted Global Innovator

## Case.2 Blockchain

Through collaborations with various corporations in Japan and overseas, NTT DATA is engaged in testing aimed at practical applications for the blockchain. We also actively participate in consortiums including the Hyperledger Project combining global IT vendors, settlement institutions, and financial infrastructure-related members. While accumulating knowledge related to technology and business models in global markets, we will explore the possibilities for blockchain technology, combining such technologies as IoT, big data, and security.



Food distribution,  
Financial transactions,  
Certification...

### From Ownership to Shared

Distributed ledger technology enables the exchange of important data requiring a high degree of reliability on an open network. At the core of this technology is the blockchain. By sharing and coordinating ledger information in systems rather than owning it, without going through third-party institutions this technology reduces costs and makes spoofing and falsification difficult. More than a virtual currency, the blockchain is expected to have a revolutionary business impact on financial and real estate transactions, public records, food traceability, and all kinds of industries.

# Toward a Borderless World

NTT DATA

Customer Experience  
Data & Intelligence

Trusted Global Innovator

## Case.3 VR / AR

NTT DATA is taking on the challenge of creating breathtaking user experiences through the introduction of virtual reality (VR) and augmented reality (AR). The Open Championship AR app, which realizes a new way to enjoy watching golf, is just one example. We also provide VR-enabled sports training systems to professional sports teams. Going beyond the use of VR / AR for sports, we continue to lead the "interface revolution," contributing to the creation of new business models for customers through the use of VR / AR in a wide range of sectors, including tourism, sales, education, advertising, and product development.



Tourism,  
Medical,  
Marketing,  
Sports...

### Potential to Expand Beyond Physical Laws

VR is a technology that takes people into a space unbound by the physical laws of reality. Through the rapid spread of head-mounted displays (HMDs), this revolutionary interface uses VR and AR, which are technologies that manipulate the human senses, increasingly applied in a variety of areas, including video games, sports, and other entertainment. These technological advances realizing the ability to reproduce human senses and detect behaviors is expected to herald the arrival of a world in which the interface becomes second-nature.

# Our Businesses

NTT DATA Group

## Continually Expanding Business Domains

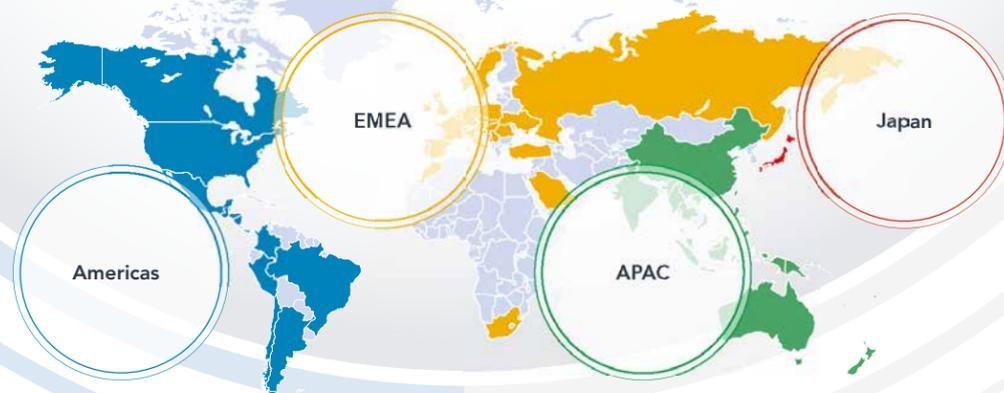
Expanding business domains on the basis of client relationships and technology

 <p><b>Public Sector</b> Big data and cloud computing to support local communities</p>	 <p><b>Manufacturing</b> Greater efficiency for manufacturing process systems</p>	 <p><b>Healthcare and Life Sciences</b> Activating databases for improved healthcare services</p>
 <p><b>Automotive</b> Technologies and systems driving the automotive industry</p>	 <p><b>Banking and Financial Services</b> Reliable and advanced systems are the foundation of client trust</p>	 <p><b>Electronics and High Tech</b> Optimizing technical development, manufacturing, and management operations</p>
 <p><b>Insurance</b> Expertise and creativity for leading insurance management systems</p>	 <p><b>Transportation and Logistics</b> Improving organizations and processes to take transportation and logistics forward</p>	 <p><b>Telecommunications</b> Communications to create new opportunities and client connections</p>
 <p><b>Media and Entertainment</b> IT solutions for new media business creation</p>	 <p><b>Wholesale and Distribution</b> Services to support wholesale business evolution</p>	 <p><b>Retail</b> Improving efficiency and stimulating online sales</p>
 <p><b>Education</b> Technology for new learning environments</p>	 <p><b>Service Providers</b> Capturing opportunities in the rapidly changing service industry</p>	 <p><b>Energy and Utilities</b> Generating dynamic environments while maintaining competitive advantage</p>
 <p><b>Fundamental Technologies</b> Cloud computing to transform data into a powerful business resource</p>	 <p><b>Natural Resources</b> Supply chain expertise to conquer new challenges</p>	 <p><b>Consumer Products</b> Online and mobile innovations for product development</p>

## Expanding Geographical Coverage

The NTT DATA Group is expanding geographical coverage with the establishment of a structure consisting of more than 100,000 employees in over 200 cities across more than 50 countries and regions throughout the world.

(As of March 31, 2018)



## Response to the SDGs

At the United Nations Sustainable Development Summit in September 2015, the Sustainable Development Goals (SDGs) were adopted by unanimous decision of the 193 member nations. The SDGs is a set of 17 goals and 169 targets to be resolved on a global scale by 2030. Governments around the world are in agreement on these goals. Companies in all industries are positioned as important partners in attaining the SDGs and are being called on to engage in proactive activities to address the SDGs.

The IT services the NTT DATA Group provides, along with its CSR activities, are connected with many of the 17 goals outlined in the SDGs. Through our activities, we are contributing to the achievement of the SDGs.



## Relationship between Our Material CSR Challenges and the SDGs

At the NTT DATA Group, we practice Our Way, the guiding principles of our CSR activities, by pursuing our Material CSR Challenges of developing paradigms for social and regional communities, people at work, and the global environment. Along with undertaking Material CSR Issues, we strive to create an infrastructure for CSR management, such as corporate governance, to meet the expectations of the global community.

In addition, we provide a variety of IT services and solutions and pursue CSR activities related to the SDGs. In particular, we contribute to the attainment of the SDGs by conducting business activities in accordance with our three Material CSR Challenges and Material CSR Issues.

Material CSR Challenges	Principal SDGs
<b>Paradigms for society and regional communities</b> <ul style="list-style-type: none"> <li>Contributing to society at large through highly reliable, easy-to-use systems and solutions</li> <li>Contributing to solving the problems that face the regions and countries in which the NTT DATA Group operates</li> </ul>	  
<b>Paradigms for people at work</b> <ul style="list-style-type: none"> <li>Promoting work style innovations for the IT industry as a whole</li> <li>Striving to cultivate next-generation personnel, while respecting the diversity of human resources</li> </ul>	  
<b>Paradigms for the global environment</b> <ul style="list-style-type: none"> <li>Contributing to the greening of customers and society as a whole through IT</li> <li>Contributing to solving environmental problems, including in the NTT DATA Group's activities</li> </ul>	  
<b>CSR Infrastructure</b> <ul style="list-style-type: none"> <li>Ensuring ethical behavior by adhering strictly to all statutory and regulatory requirements</li> <li>Continuing to build a robust foundation for CSR management that responds to the expectations of the global community</li> </ul>	  



*Yo Honma*

**Yo Honma**  
Representative Director,  
President and  
Chief Executive Officer

## Message from the President

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NTT DATA strives to share and practice the three values of “Clients First,” “Foresight,” and “Teamwork” embodied in our mission statement: “NTT DATA uses information technology to create new paradigms and values, which help contribute to a more affluent and harmonious society.” “Long-Term Relationships” with clients built upon this unwavering attitude and a deep understanding of client businesses comprise the foundation of value provided by NTT DATA.

In 2005, we announced the “Global IT Innovator” Group Vision, since which time we have promoted the creation of a global business structure. As a result, we have become a Company with over 110,000 diverse employees working in more than 50 countries and regions throughout the world.

In May 2018, we announced “Trusted Global Innovator” as our new Group Vision. Amid the rise of new services in a variety of areas using digital technologies such as AI, IoT, big data, VR, and robotics, we aim to realize business innovations connecting various ideas and new technologies with clients around the world as a trustworthy partner to our clients.

Throughout the world, there are food and water problems caused by population growth and urbanization, transportation, education, healthcare, disaster prevention, and other social infrastructure challenges, energy and environmental problems, and a variety of other issues that threaten the sustainability of our societies and lifestyles. IT and other advanced technologies are expected to resolve all these issues. NTT DATA is playing a greater role than ever to enable the achievement of the various objectives set forth in the Sustainable Development Goals (SDGs). We will work with clients to spur innovations that lead to the creation of an affluent and smart society as a Trusted Global Innovator that contributes to clients and society.



Information regarding CSR, R&D, and corporate governance, along with detailed financial data of the NTT DATA Group, is available on the following websites:

▶ **CSR (Corporate Social Responsibility)**  
<https://www.nttdata.com/global/en/sustainability/>

▶ **NTT DATA Technology Foresight**  
<https://www.nttdata.com/global/en/foresight/>

▶ **Investor Relations**  
<https://www.nttdata.com/global/en/investors/>

## NTT DATA Corporation

Toyosu Center Bldg., 3-3, Toyosu 3-chome,  
Koto-ku, Tokyo 135-6033, Japan  
Telephone: +81-3-5546-8202  
URL: <https://www.nttdata.com/>



## Company Information (As of March 31, 2018)

**Company Name**  
NTT DATA Corporation

**Common Stock**  
¥142,520 million

**Head Office**  
Toyosu Center Bldg., 3-3,  
Toyosu 3-chome,  
Koto-ku, Tokyo 135-6033, Japan  
Telephone: +81-3-5546-8202

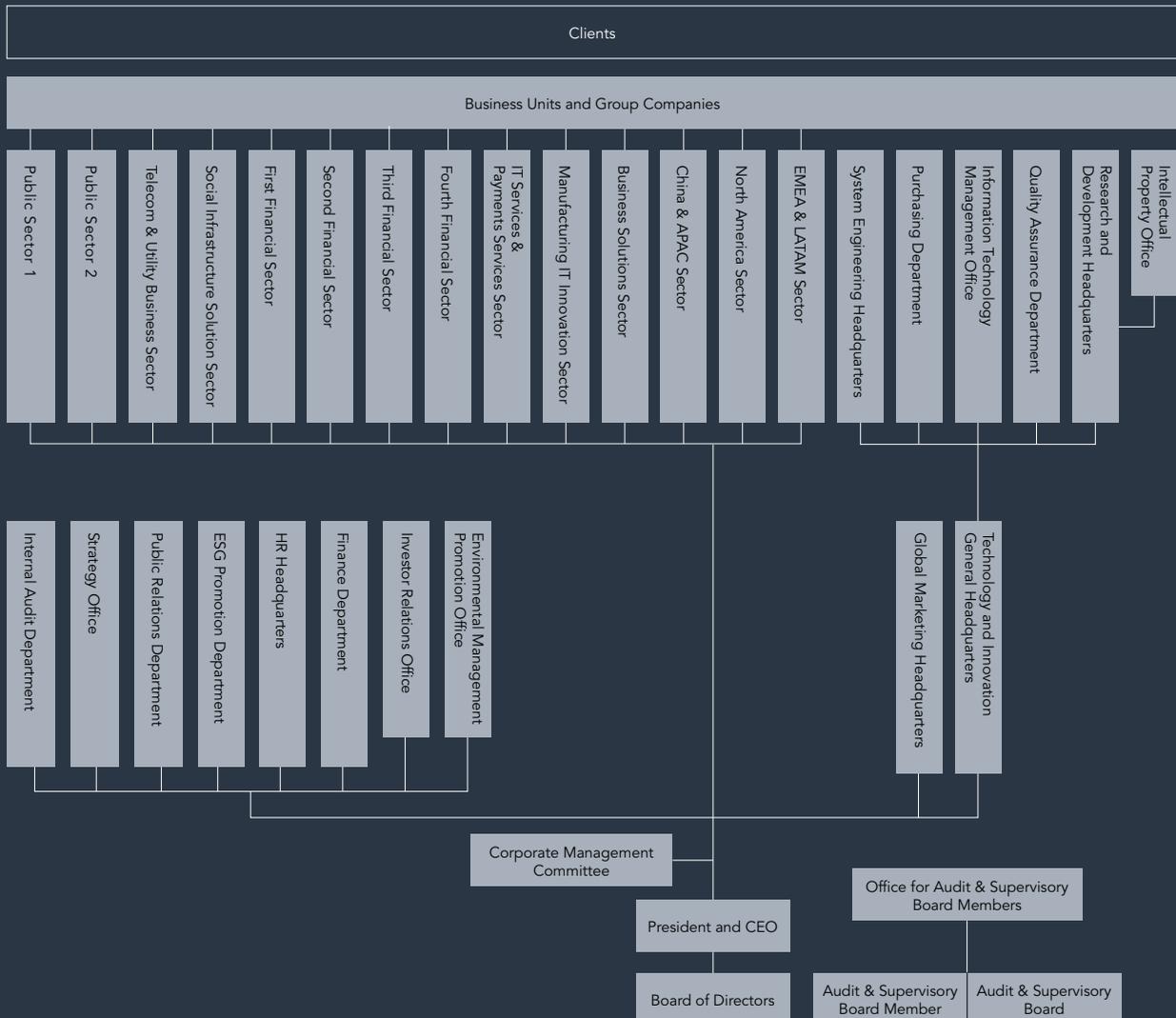
**Net Sales**  
¥2,117,167 million

**Employees**  
118,006

**Date of Establishment**  
May 23, 1988



## Organizational Structure (As of July 1, 2018)



## Officers (As of July 1, 2018)

### Directors

Representative Director,  
President and  
Chief Executive Officer  
**Yo Honma**

Representative Director and  
Senior Executive Vice President  
**Keiichiro Yanagi**

Head of HR Headquarters  
Responsible for Corporate Strategy,  
Human Resource Management,  
Finance (CFO), Investor Relations,  
Risk Management (CRO), Public Relations

Representative Director and  
Senior Executive Vice President  
**Shigeki Yamaguchi**

Responsible for Public & Social Infrastructure  
Segment, Enterprise & Solutions Segment,  
China & APAC Segment

Representative Director and  
Senior Executive Vice President  
**Toshi Fujiwara**

Responsible for Financial Segment,  
Americas & Europe Segment,  
Global Marketing

Director and Executive  
Vice President  
**Tsuyoshi Kitani**

Head of Technology and  
Innovation General Headquarters  
Responsible for Technology Strategy (CTO)  
and Information Security (CISO)

Director and Executive  
Vice President  
**Shunichi Takeuchi**

Deputy responsible for  
Public & Social Infrastructure Segment

Director and Executive  
Vice President  
**Koji Ito**

Head of North America Sector and  
EMEA & LATAM Sector  
Deputy responsible for Americas &  
Europe Segment

Director  
**Yukio Okamoto**

Outside Director\*<sup>1</sup>  
Independent Director\*<sup>3</sup>

Director  
**Eiji Hirano**

Outside Director\*<sup>1</sup>  
Independent Director\*<sup>3</sup>

Director  
**Takashi Ebihara**

Director  
**John McCain**

### Executive Vice Presidents

**Sachihiko Okimura**  
Head of Third Financial Sector

**Hisashi Matsunaga**  
Head of First Financial Sector

### Senior Vice Presidents

**Tadashi Uhira**  
Head of China & APAC Sector  
Chair of the Board,  
NTT DATA (CHINA) Co., Ltd.  
Chair of the Board,  
NTT DATA (CHINA) INVESTMENT Co., Ltd.  
Chair of the Board,  
NTT DATA Asia Pacific Pte. Ltd.

**Shinichiro Miyake**  
Head of Fourth Financial Sector

**Takashi Nakamura**  
Head of Finance Department

**Tetsu Sato**  
President and Chief Executive Office of  
NTT DATA Asia Pacific Pte. Ltd.

**Yutaka Sasaki**  
Head of Manufacturing  
IT Innovation Sector

**Masanori Suzuki**  
Head of Second Financial Sector

**Ken Tsuchihashi**  
Chair of the Board,  
NTT DATA EMEA Ltd.

**Hidenori Chihara**  
Head of Public Sector 2

**Isao Arima**  
Head of IT Services &  
Payments Services Sector

**Miwako Akahane**  
Head of ESG Promotion Department

**Yoshiharu Kouno**  
Head of Telecom &  
Utility Business Sector

**Tomoaki Kitamura**  
Head of Business Solutions Sector

**Tomofumi Murayama**  
Head of Public Sector 1

**Naoyuki Mori**  
Head of Strategy Office

**Benito Vázquez**  
Deputy Head of EMEA & LATAM Sector  
President and Chief Executive Officer,  
NTT DATA EMEA Ltd.

### Audit & Supervisory Board Members

Standing Audit & Supervisory  
Board Member  
**Tetsuro Yamaguchi**  
Outside Audit & Supervisory  
Board Member\*<sup>2</sup>

Standing Audit & Supervisory  
Board Member  
**Tetsuya Obata**  
Outside Audit & Supervisory  
Board Member\*<sup>2</sup>

Standing Audit & Supervisory  
Board Member  
**Katsura Sakurada**  
Outside Audit &  
Supervisory Board Member\*<sup>2</sup>  
Independent Director\*<sup>3</sup>

Audit & Supervisory  
Board Member  
**Rieko Sato**  
Outside Audit &  
Supervisory Board Member\*<sup>2</sup>  
Independent Director\*<sup>3</sup>

\*1 Yukio Okamoto and Eiji Hirano are outside directors pursuant to Article 2, Paragraph 15 of the Companies Act.

\*2 Tetsuro Yamaguchi, Tetsuya Obata, Katsura Sakurada, and Rieko Sato are outside Audit & Supervisory Board members pursuant to Article 2, Paragraph 16 of the Companies Act.

\*3 NTT DATA has designated Yukio Okamoto, Eiji Hirano, Katsura Sakurada, and Rieko Sato as independent directors in accordance with the listing regulations of the Tokyo Stock Exchange and notified it.

## Public & Social Infrastructure Segment

Providing high-value-added IT services that play an important role in social infrastructure, such as government, healthcare, communication, and utility systems, as well as in community revitalization



### WinActor RPA Solution

#### Contributing to the Automation and Rationalization of All Types of Customer Deskwork

Robotic process automation (RPA), which resolves such issues as labor force retention, workstyle reform, and deskwork automation and rationalization, is garnering attention. NTT DATA believes that RPA can be a vital resource for solving customer management problems, and has been providing the RPA solution WinActor since 2014.

WinActor is a domestic RPA solution created at NTT R&D laboratories that boasts the advantage of being able to learn and automate operational procedures of all software

operated on a Windows computer, including Excel, Internet browsers, and individual work systems.

NTT DATA provides WinActor to multiple corporate users, including (in alphabetical order) AGC Inc., Cedyne Financial Corporation, JTB Corporation, The Hyakugo Bank, Ltd., and Mitsubishi Corporation. Our dedicated RPA Promotion Team provides total support, from consulting related to the introduction of RPA to the creation of scenarios and the provision of robotic outsourcing.



Compatible with any software that can be operated on a Windows terminal



Comparatively low cost



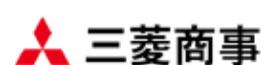
Total support for Japanese language



Can even be operated using only one computer



No programming language required



## AW3D® Global Digital 3D Map Services

### Contributing to a Wide Range of Sectors Worldwide with 3D Maps Utilizing Satellite Imagery

NTT DATA's AW3D® is the world's first digital 3D map rendering all of the Earth's undulating landscape in detailed, five-meter resolution. Developed and marketed in collaboration with RESTEC, this service utilizes approximately three million satellite images photographed leveraging JAXA's advanced land observation satellite "DAICHI."

For sectors such as urban planning, satellite images from DigitalGlobe (U.S.) are used to realize even more detailed resolutions of 0.5–2 meters. This enables the rendering of detailed topography at the structural level mainly in urban areas.

Compared to conventional methods using aerial photography, 3D maps utilizing satellite imagery are less than a quarter of the cost and can be obtained within a short period of time, approximately one week. In addition, the detail of 3D maps has been significantly enhanced, and as a result they are becoming more widely used. In fact, until now 3D maps only had

resolution of 30–90 meters, but with today's enhanced detail they are used by more than 100 countries worldwide, mainly developing nations. Moving forward, we will utilize this technology to keep contributing to improved efficiency and accuracy of disaster prevention, resource and urban planning, and electric power and telecommunication services in Japan and overseas.

#### Awards in Japan and Overseas

- Mar. 2016 : Prime Minister's Award in the Second Space Development and Application Award
- Jan. 2017 : Nikkei Business Daily Awards for Superiority at the 2016 Nikkei Superior Products and Services Awards
- Aug. 2017 : Asia Geospatial Excellence Award, hosted by Geospatial Media and Communications  
Asia Geospatial Technology Innovation Awards 2017
- June 2018 : Sponsored by the Japan Information Technology Services Industry Association (JISA)  
Winner of the Grand Prize at JISA Awards 2018

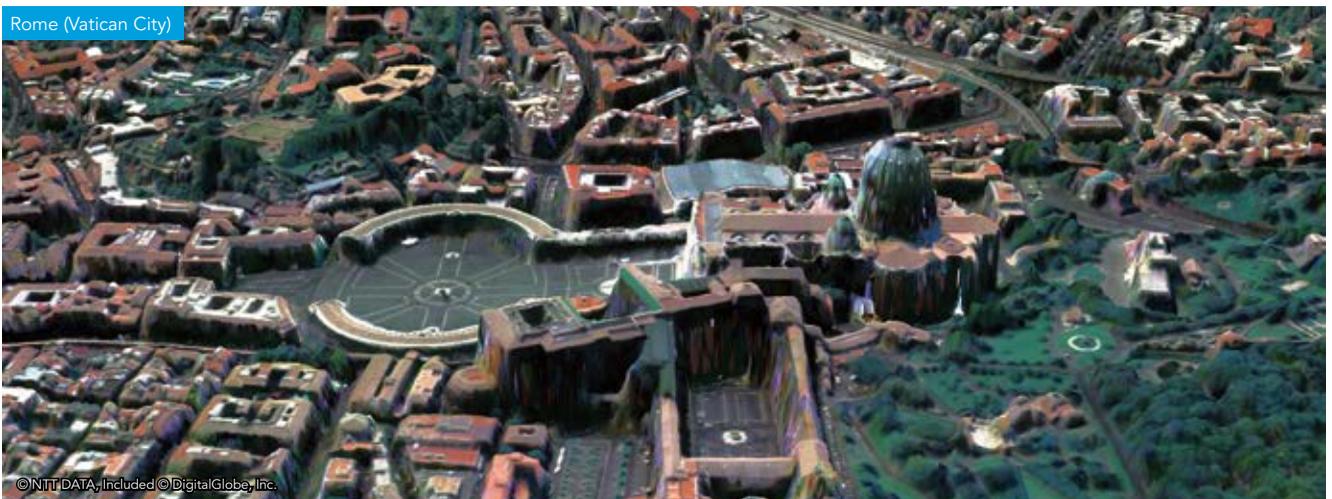
\* Japan Aerospace Exploration Agency (JAXA), Remote Sensing Technology Center of Japan (RESTEC)



Weak Signal strength Strong



Rome (Vatican City)



## Financial Segment

Providing high-value-added IT services to help financial institutions improve operating efficiency and offer services



### Blockchain Technology Utilization

#### Initiatives toward the Application of Blockchain Technology in Trading Operations

With the aim of making documentation procedures and trade officials' business procedures, which involve many people, more efficient and convenient, NTT DATA has made use of blockchain technology, one of the core technologies behind FinTech, in two types of testing: letter of credit transactions (Phase 1) and insurance policies (Phase 2).

Based on these results, we were able to confirm the efficacy and pinpoint issues of blockchain technology when applied to trade operations as a whole. In response to this conclusion, NTT DATA launched a consortium to develop a trade data sharing platform using blockchain technology in the role of secretariat with representatives from various sectors of the trade business, including banking, insurance, importing and exporting, and integrated logistics (Phase 3). This consortium will accelerate examinations between the participating companies into identifying issues and implementing a trade information collaboration platform for practical application.

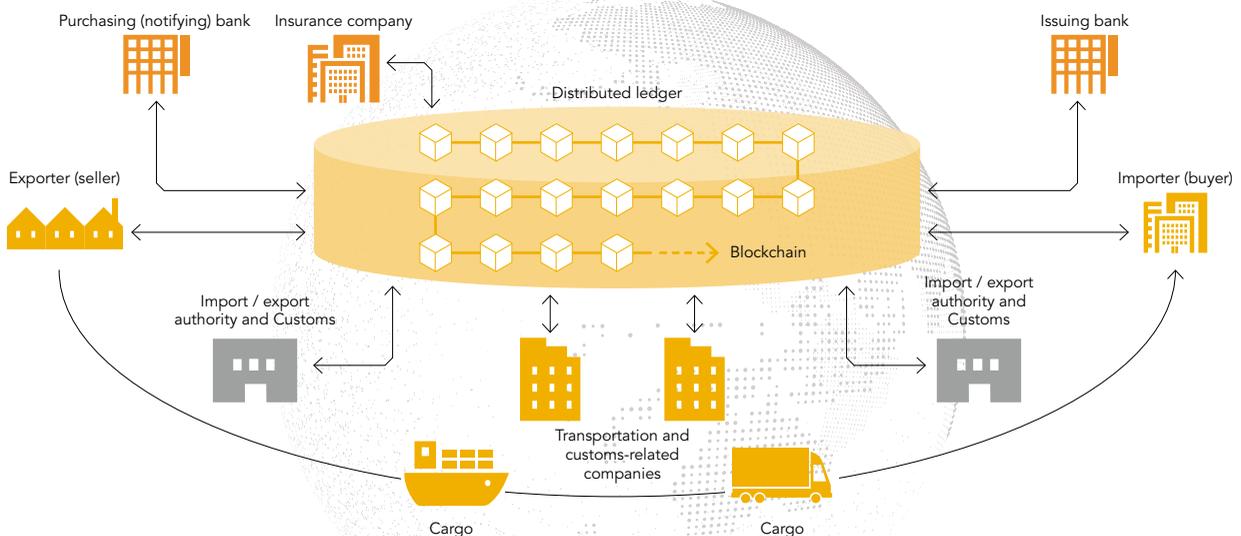
Consortium Member Companies (in alphabetical order)

Kawasaki Kisen Kaisha, Ltd. ("K" LINE), Marubeni Corporation, Mitsui O.S.K. Lines, Ltd. (MOL), Mitsui Sumitomo Insurance Company, Limited, Mizuho Financial Group, Inc. / Mizuho Bank, Ltd., MUFG Bank, Ltd., Nippon Express Co., Ltd., NYK Line, Sojitz Corporation, Sompo Japan Nipponkoa Insurance Inc., Sumitomo Corporation, Sumitomo Mitsui Banking Corporation, Tokio Marine & Nichido Fire Insurance Co., Ltd., and Toyota Tsusho Corporation

#### Providing an Experimental Blockchain Verification Environment for the Insurance Industry

NTT DATA has put forth and provided an experimental blockchain verification environment for information sharing among multiple companies and agencies in the insurance industry. Through this initiative, we will utilize the knowledge and technical capabilities of the blockchain that we have acquired up to this point to support the practical application of blockchain technology of insurance companies and others.

#### Blockchain Trading Information Linked Platform



## BeSTA FinTech Lab®

### Open Innovation Lab Established to Create New Financial Services

In recent years, the utilization of open innovation aimed at cultivating new businesses combined with proprietary advanced technologies and business models used in-house by IT companies and venture companies is on the rise. NTT DATA established the BeSTA FinTech Lab® with the aim of connecting regional banks and venture companies to create unprecedented financial services, and in June 2017 a new office was opened in Otemachi, Tokyo, as a new base for these activities.

BeSTA FinTech Lab® furnishes the information, wide-ranging networks, and innovative human resources essential for open innovation in a space where a diverse range of human resources from financial institutions, centering on regional banks, venture companies, and other industries utilizing BeSTA® (NTT DATA's banking application for regional banks) can freely interact. In addition to these resources, new business launches are being accelerated by way of constant fine-tuning and by incorporating proprietary design thinking

through new business creation methodologies (e.g., the Digital Corporate Accelerate Program, or DCAP) and testing environments to prove theories.



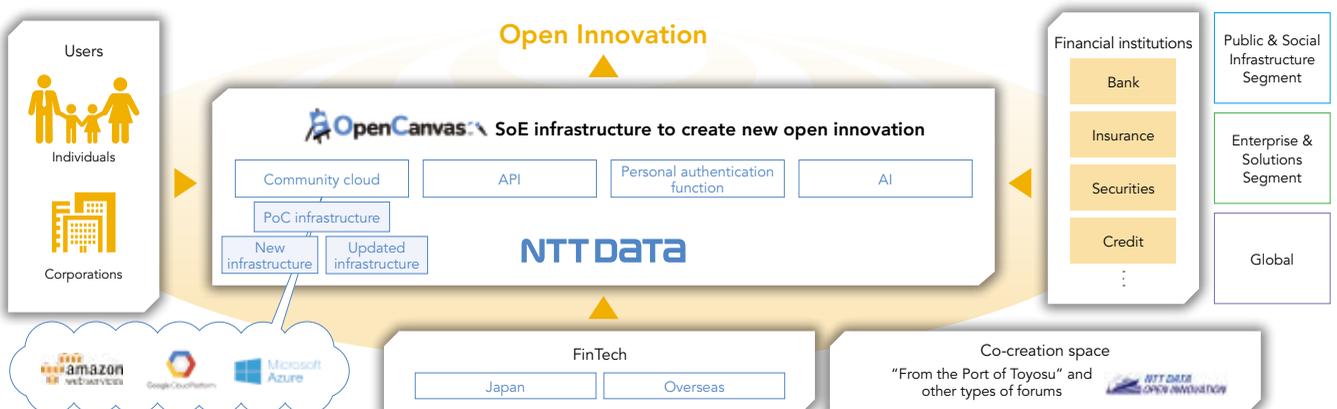
## OpenCanvas™ for Financial Institutions and their Customers

### A System of Engagement (SoE) Infrastructure Based in Finance that Fosters Open Innovation and Provides Value to a Variety of Industries and Users

The OpenCanvas™ cloud service platform was launched in September 2017 to promote the creation of new services by financial institutions and FinTech companies and provides highly reliable and secure application programming interfaces (APIs) and API management function services. Through the API provided by OpenCanvas™, financial institutions can link X-Tech services such as FinTech to each financial institution service, enabling efficient and rapid provision. Another benefit for X-Tech businesses is that the API support provided by OpenCanvas™ enables an API link to multiple financial institutions including megabanks that plan to use OpenCanvas™.

Until now, NTT DATA has collaborated with Money Forward, Inc., and free K.K. to launch API-related services for

commercial use in April 2016—the first in Japan—linking FinTech services and Internet banking, making it the most cutting-edge initiative in the industry. In addition, during fiscal 2018, we plan to enable multilevel connections between various types of data, including image, voice, video, and language, and the AI of each company to provide multi-connection AI functions that support the rapid provision of new services. Going forward, we will continue targeting the creation of services originating in Japan through OpenCanvas™ to realize open innovation with financial institutions and FinTech companies throughout the world, providing users with an enriched lifestyle.



## Enterprise & Solutions Segment

Providing high-value-added IT services that support business activities in the manufacturing, logistics and retail, and service industries, as well as credit card and other payment services and platform solutions linked to each industry's IT services



### Digital Commerce

Consumer purchase behavior has been diversifying in recent years, and now that consumers take the initiative to determine the value of services and products it is essential to establish a competitive advantage by providing more convenient and groundbreaking customer experiences through various sales channels. NTT DATA offers Service Design Consulting, consulting services for upstream planning support for consumer services, and the Digital Commerce Suite, a customer point of contact suite for realizing these services, in support of realizing ideal customer experiences.

#### Omni Channel Combines Advanced Technologies with a Long Track Record of EC Support

As a means of responding to changing customer behaviors, an increasing number of companies are considering Omni Channel, an approach integrating the multiple sales channels

possessed by a company. However, in terms of introduction, many companies struggle with establishing objectives, introduction, and implementation methods.

NTT DATA possesses a solid track record in digital commerce, including EC and Omni Channel customers representing leading Japanese companies in the retail, logistics, and service industries. We combine the two strengths below to provide solid support with initiatives aimed at realizing the establishment of goals for customers intending to implement Omni Channel. We contribute to service advances, digitization, and globalization.

- Corporate digital transformation support capabilities through user experience design
- Project management capabilities accumulated through the development of various systems



## SAP Global Operations

### One-Stop Support from SAP Consultants Positioned Across the Globe

NTT DATA has been supplying SAP services for roughly three decades. These services are provided by our roughly 15,000 SAP consultants positioned in approximately 60 countries across the globe and are based on our wealth of expertise pertaining to a diverse range of industries. With frameworks in place to serve customers worldwide, our SAP services have recently earned distinction through such recognition as the receipt of a project award in the SAP AWARD OF EXCELLENCE program.

Our consultants provide one-stop support for a wide variety of services, ranging from implementation of and migration to SAP S/4 HANA to dashboard analytics and hosting services at Group data centers located around the world.

The Company is also engaged in development activities that utilize Leonardo, SAP cloud solutions, AI, IoT, and other technologies while employing cutting-edge solutions to support the digital transformations of customers seeking to enhance their management and operating procedures.



Projects advanced through coordination among roughly **15,000 SAP consultants** in approx. **60 countries**

Receipt of multiple awards in the **SAP AWARD OF EXCELLENCE** program

#### NTT DATA's SAP Initiatives

Industry-Specific Templates	Data Centers & Infrastructure	Cutting-Edge R&D
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## AICYCLE™ AI System Realizing Precise Quality Maintenance

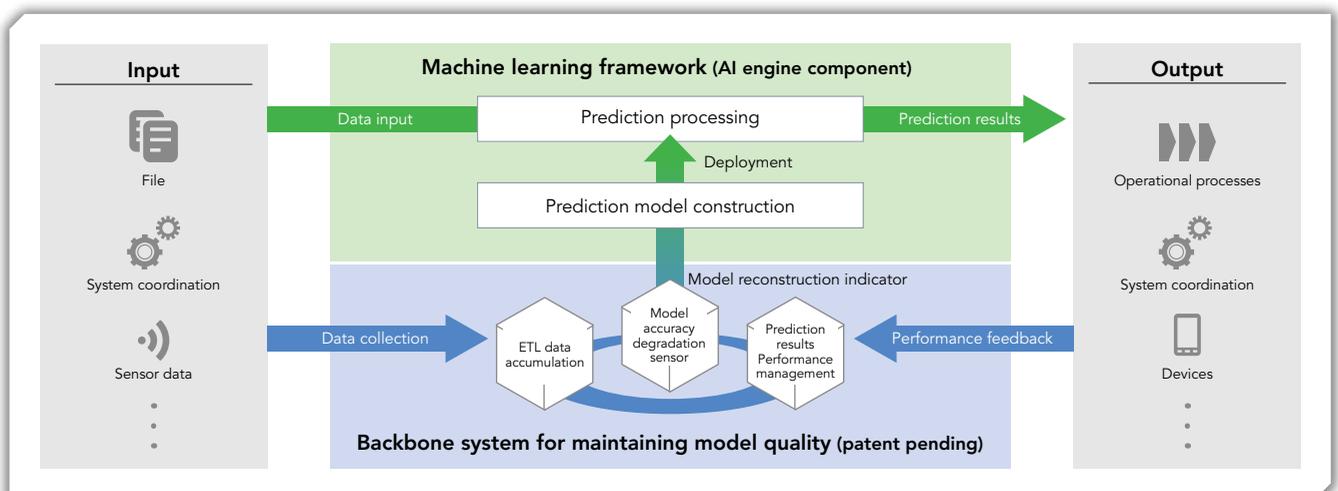
### Development of Automation and Autonomous Technologies Resolving Issues Using AI

To advance business innovation using AI it is necessary to clarify solution measures, select optimal solutions and incorporate them into operations, and select system infrastructure suitable for handling data. Moreover, to continue using AI, in accordance with changes in the surrounding environment we must evaluate and update the prediction models that constitute the judgment logic for AI predictions. However, at present there are few examples of this in full-scale operation.

NTT DATA developed the AICYCLE™ technology to maintain prediction accuracy (prediction model quality) by automatically evaluating and updating prediction models. In a test

aimed at the early detection of defects and process improvements within the aircraft engine turbine manufacturing process at Mitsubishi Heavy Industries Aero Engines, Ltd., we confirmed that this technology was effective in reducing the downtime rate (rate of inspections for unexpected abnormalities) by 47% as well as a 25% reduction in manufacturing line stoppage.

In addition, NTT DATA offers comprehensive support, from the AI introduction review phase to testing and operation, promoting the use of AI technologies in all aspects of business to support client business digital transformation.



## Global Segment

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Providing high-value-added IT services globally in overseas regions and on a cross-regional basis



## EMEA

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### LaLiga (Liga de Fútbol Profesional)

#### LaLiga's Ticketing, Access Control and Security System—CÁSTOR

CÁSTOR is designed to optimize football clubs' management of security at stadiums while it offers the clubs new sales and fan relationship solutions. In this way, the investment in security also provides new tools to increase football clubs' revenues as well as attendance. The system will be deployed at 42 stadiums of the 1st and 2nd Division of LaLiga.

Under Spanish regulations, all of the football clubs in the 1st and 2nd Division of LaLiga are required to deploy a security system to facilitate security management at stadiums.

CÁSTOR is a new system developed by LaLiga and everis Aerospace and Defense, which is an everis Group company, to manage not only security but also access control at the 42 stadiums. The system provides such capabilities as venue definition, ticketing, CRM, security, and a command and control center. With this project, LaLiga utilizes its 20 years of experience in managing security at competitions to develop a

system based on its unique management model, placing LaLiga as a world leader in sporting events security.

In addition, everis Aerospace and Defense provides fan management and marketing capabilities in order to gain supporters' loyalty to football clubs and enhance their satisfactions with multichannel ticket sales.



### NTT DATA's Digital Automotive Footprint—Retail Sales Portal

Since 2015, NTT DATA has supported the BMW Group in the implementation of a future sales process with the target of business growth and customer profitability.

We have developed a retail sales portal (RSPplus) for the BMW Group. RSPplus functionality covers all processes for the holistic customer management of the following brands of the Group: BMW, BMWi, MINI, and BMW Motorcycles.

In 2018, the General Data Protection Regulation (GDPR) and the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) were implemented in RSPplus SALES. Both of these legal requirements are binding for all OEMs in member countries of the European Union, and with regard to the GDPR even for all industries.

Customers receive accurate information about emissions from sales staff and take proper decisions. They can decide about the privacy of own data or release it for dealer customer care and BMW will meet in time the adoption of the ruling legislation. The result is a "win-win-win" situation.



## North America

### Bottling Investments Group, The Coca-Cola Company Setting the Pace for Long-Term Success

The Coca-Cola Company moves at a fast pace to meet consumer demand and keep its leading industry position. Every day, people more than 200 countries consume 1.9 billion servings of its products. When desktop issues started to slow efficiency and increase costs, the company engaged NTT DATA. Javier Polit, former CIO the Bottling Investments Group of The Coca-Cola Company, says, "It was difficult to keep all our IT associates in the field up to speed with all the different desktop technologies that continue to change. We needed to develop solutions with more effective processes for maintaining desktops with current technologies. NTT DATA could deliver this."

Today, NTT DATA monitors and manages 25,000 users across The Coca-Cola Company's North America locations. "We've been able to improve the level of service we provide employees," Polit says. "We don't have as many technology issues now, but when we do they're resolved faster. Our employees' IT satisfaction ratings have improved significantly, and the productivity of our business units has also increased. We've also reduced costs and redirected some of those savings into branding and other business areas."

To help mobile sales staff provide more responsive customer support, the company had NTT DATA help design and implement a custom sales force automation platform.

To ensure that it is continuing to shape industry trends rather than following them, The Coca-Cola Company is using the Internet of Things (IoT) to garner new types of consumer insight. "In many ways, we're leading the way from an IoT perspective in our vertical," Polit explains. "Our relationship with NTT DATA provides access to thought leadership. I can have good discussions with engineers and executives to connect the dots across my industry, see what the trends are and plan accordingly." The company is also working with NTT DATA to migrate mainframe-based workloads to the cloud.



### American Red Cross Social Media Expands Disaster Response Capabilities

The American Red Cross uses social media to better target relief and vital information for disaster survivors while mobilizing community support.

Founded in 1881, the American Red Cross is one of but a few nonprofit agencies with a charter from the U.S. Congress. That includes giving relief to and serving as a communication link between members of the nation's armed forces and their families while also providing national and international disaster relief and mitigation.

Today the organization, based in Washington, D.C., has more than 25,000 employees. In the U.S., it operates through a network of nearly 500 local chapters and with the help of more than 340,000 volunteers.

The American Red Cross began using social media in the mid-2000s. After the 2010 earthquake that devastated Haiti, the American Red Cross wanted to expand its social media capabilities to better engage communities day-to-day while responding faster and more effectively to disasters.

After working closely for nearly a year with consultants from the NTT DATA Social Media Services team, the American Red Cross opened its first national Digital Operations Center as a social media command center. Located within its Disaster Operations Center at its Washington, D.C. headquarters, the facility can be in the middle of the action when disasters strike.

Known by staff members as the "DigiDOC," the command center has served as the template for two additional facilities, one in Dallas, Texas, and the other in San Jose, California.

"The relationship between NTT DATA and the Red Cross has been critical in helping the Red Cross use social media to carry out its disaster response mission," says Suzy DeFrancis, chief public affairs officer for the American Red Cross.

The new Digital Operations Center enables more proactive social engagement and response to crisis situations and accelerates the capacity to connect people with needed resources after disasters. The centers improve identification of requirements in disaster areas and help target specific relief responses more efficiently. In addition, the centers provide emotional support to communities affected by disasters.

