

## Case Studies



### AI-Assisted Diagnosis

NTT DATA is developing a solution for AI image diagnosis to assist radiologists. This solution uses AI to analyze the medical images of patients suspected of cerebral hemorrhage, emphysema and other diseases, indicating the most likely locations of disease. Its efficacy is being tested in the US and India. We will continue to conduct experiments in multiple countries to develop a global AI-assisted method.



### Navigation in Narita airport

NTT DATA developed "NariNAVI", an airport navigation application that provides highly accurate location information in real time within Narita International Airport. It uses "earth magnetism positioning" as an indoor positioning technology to display accurate indoor locations in real time. It also uses "2.5D maps" to present multiple floors in 3D in an intuitive and easy-to-understand fashion. These functions ensure the smooth transit of airport users.

## What is NTT DATA Technology Foresight?

With technology rapidly transforming both society and business, wouldn't you want a crystal ball to foresee the future? NTT DATA has something far more useful, a map and compass to guide us into the future. By continuously analyzing real-world case studies and other sources, our own R&D experts determine the most significant technology and societal trends driving change over the next 3-10 years. We summarize these within NTT DATA Technology Foresight.

We then share this vision with our clients as their trusted global partner, and collaborate to leverage these trends to create new value and achieve a more affluent and harmonious society.

Together, we make innovation happen.

### NTT DATA Corporation

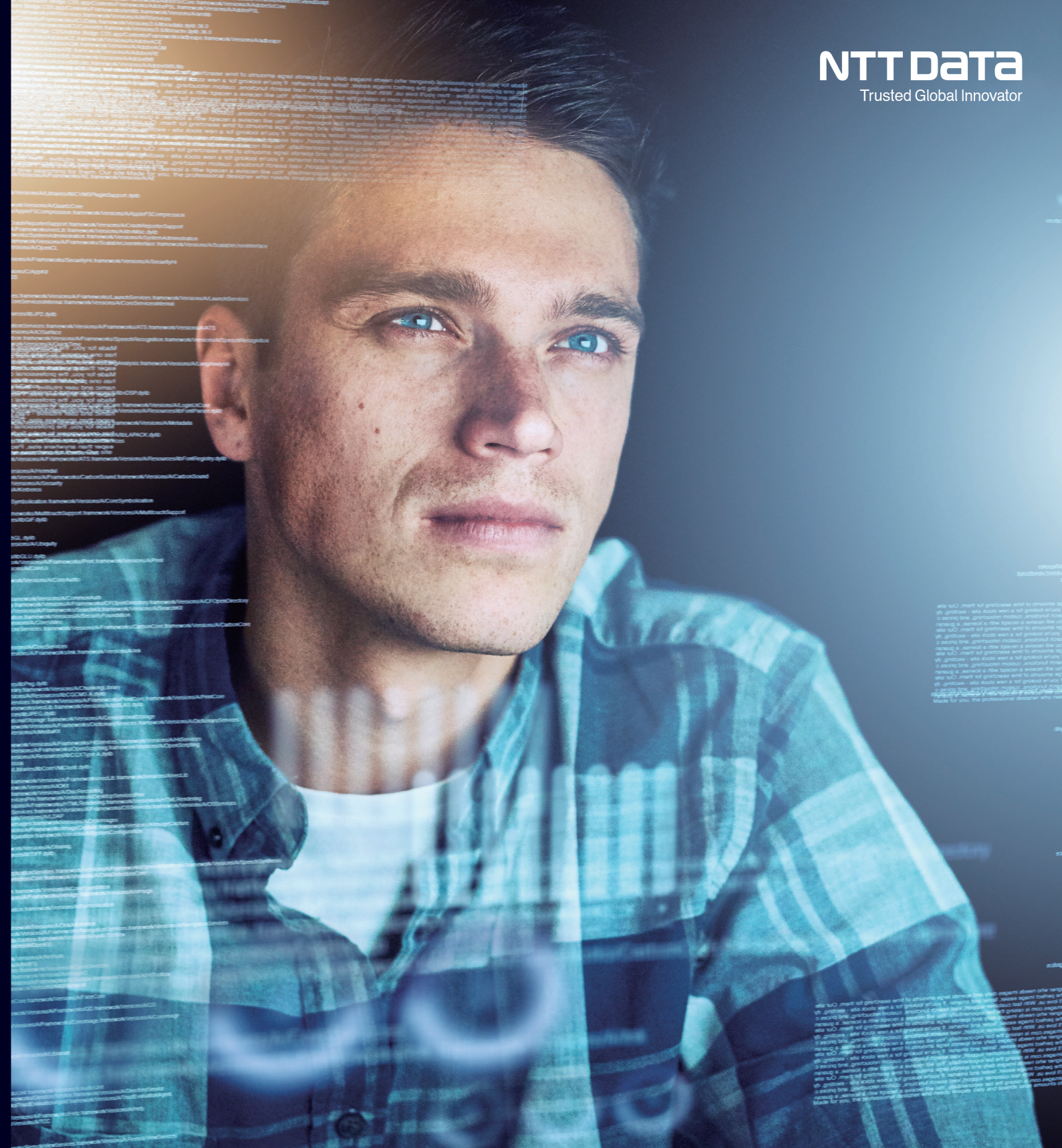
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# NTT DATA Technology Foresight 2019

LOOKING AHEAD: Technology Trends Driving Business Innovation

# Information Society Trends

## Societal trends impacting people and businesses

### Innovation Beyond Borders

Digitization allows physical objects or characteristics to be visualized and controlled through data, blurring ownership lines. Data owners now have increasing control over object owners. This new information power balance goes beyond digital and physical realms, changing the social framework.



### Power of the Individual

The growing influence of the individual is changing social systems and business. Once harnessed, information possessed by an individual becomes the basis for creating new value, which in turn forms the foundation for the continuous growth and progression of companies and society in the future.



### Social Impact of Technology

Technologies bring benefits while concurrently polarizing society into two groups: those who leverage technology and those who do not. To prevent growing social imbalance, people must change behavior to coexist with technologies while adapting culture and regulations.



### Sustainable Society

Resolving global issues fosters open collaboration within society. Collective business strategies together with this transformation will encourage the expansion of global opportunities and resolve uneven resource allocations. A more sustainable society and business environment will be created.



# Technology Trends

## Technology trends spearheading development of an information society

### Socially Accepted AI

As AI continues to permeate society, practical issues are emerging. Technology advancements that improve both the accuracy and ease of building AI will further expand its application. Additionally, ensuring transparency will create more socially accepted AI, accelerating its integration into society.



### Usable Augmented Data

In an era where data quality dictates business success, more usable and complete data by augmentation will be critical as mixing good with bad data continues. The development of technologies that generate and refine data will expand the possibilities of data usage.



### Digital Life Science

IT has progressed beyond promoting healthier behaviors and supporting medicine. Devices for monitoring enable at-will diagnosis and changes the way people engage medical care. IT involvement in genetic and cerebral disorders have also initiated research in incurable diseases and life extension.



### Natural Interaction

Conversations between humans and machines are becoming a normal part of life. Machines respond to user instructions, emotions and the context of communication. As machines communicate more naturally, machines will provide people with new insights and assist human thinking.



### Spatial Computing

Technology to capture real world environments has become commonplace, allowing the replication of objects and space in precise size and positional relationship. Generated environments with augmented information will become an entirely new medium transforming business and individual perception.



### Quantum Leap in IT Infrastructure

Demands for accelerating system processing continues. Domain specific development infrastructures and entirely new computers are appearing. Consequently, the ability to select a high-speed infrastructure that enhances performance is now a requirement for businesses.



### Personal Data for the Digital Era

Massive leaks are precipitating a global imperative to protect information. While personal data is becoming a security focal point, its value mandates active utilization by broad distribution. Balancing the utilization and protection of personal data has become a prerequisite for economic development.



### Service Design Innovation

A design process that fosters services via continuous improvement builds a foundation for corporate competitiveness. Successful businesses use the flexibility of IT to take advantage of change through service design. Services, now the main driver of business change, will transform business operations.

