

Overview of the 2018 White Paper on Information and Communications in Japan

Part 1 Special Theme: Sustainable Growth Through ICT in an Era of Population Decline

- Information and communication technology (ICT) can create new values by "connecting" between all kinds of entities, such as people, things, organizations, and communities. By stimulating demand, improving productivity, and promoting people's social and labor force participation through utilization of ICT, sustainable growth can be achieved in an era of population decline.
- First, the white paper takes an overview of ICT in Japan and the World (Chapter 1). Then, it analyzes the ICT utilization for stimulating demand, improving productivity, and promoting people's social and labor force participation for each phase of markets, organizations, and people (Chapters 2–4).

Chapter 1 ICT in Japan and the World

- Current state of the world's ICT market where dissemination of artificial intelligence (AI) and the internet of things (IoT) is making progress
- Current state of development of environment for ICT use in Japan and the world for responding to challenges associated with expansion of data distribution
- Comparison of the state of ICT investment, contribution of ICT capital stock to GDP growth, and innovation acceptance in Japan and the United States

Chapter 2 Formation of New Economies Through ICT (Markets): Market Creation Through the Spread of X-Tech

- **Creation of new products and services**
This section takes up formation of new markets through progress of X-Tech, which creates new values and systems through ICT transcending industrial barriers, and changes in the modes of business to business (B to B), business to consumer (B to C), and consumer to consumer (C to C) transactions through use of ICT platforms.
- **Capturing of global demand**
This section deals with the current state of overseas expansion of the ICT industry and utilization of ICT for capturing the demand of inbound visitors, both of which supplement the shrinking domestic demand resulting from the population decline.

Chapter 3 Productivity Improvement and Organizational Reform Through ICT (Organizations): Productivity Improvement Through "Aggressive ICT Investment"

- **Productivity improvement**
ICT contributes to labor productivity in both aspects of increasing the efficiency of the labor input and increasing the value added. This section takes up measures to resolve challenges and improve productivity through ICT and ICT that connects organizations such as cloud computing.
- **Organizational reform**
This section discusses organizational reform that brings out the potential of ICT, focusing on chief information officers (CIO) and chief digital officers (CDO) who lead ICT utilization in organizations.

Chapter 4

Promotion of Inclusion Through ICT (People): Use of ICT for Realizing "Multiple-Group Membership" for Enabling Diverse Lifestyles

- **Social participation**

This section takes up topics including the state of dissemination of ICT, such as social media, and the current state of communications, the state of participation in communities through social media, and "networking ability."

- **Labor force participation**

This section discusses the state of use of telework and crowdsourcing as means of labor force participation for diverse people, and the possibility that dissemination of AI would cause changes in work and recurrent education to deal with such changes.

Part 2

Basic Data and Policy Directions

Chapter 5

Basic Data on the ICT Field

This chapter introduces extensive data that illustrates trends in the market size, the number of workers, etc. of Japan's ICT industry and trends in use of ICT services, centering on the results of surveys conducted by the Ministry of Internal Affairs and Communications (MIC), including the Basic Survey on the Information and Communications Industry and the Communications Usage Trend Survey.

Chapter 6

ICT Policy Directions

This chapter introduces the latest trend in Japan's ICT policy for each of the fields including telecommunications, radio, broadcasting, ICT use and application, research and development, and international strategies, centering on initiatives by MIC.