Chapter 3

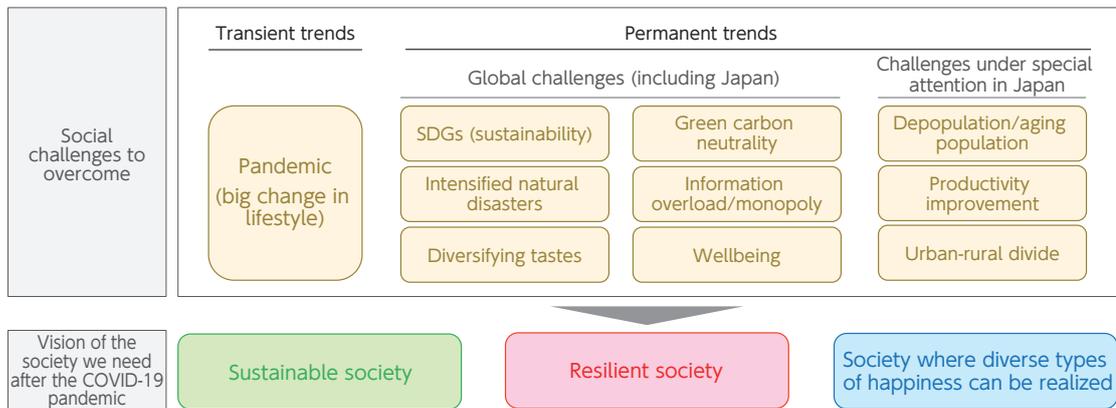## Toward Realizing Digital Transformation that "Leaves No One Behind"

> This Chapter summarizes the social challenges facing the country and surveys the vision of the society we need after the COVID-19 pandemic. It examines the changes in social structure which have been brought about by rapidly progressing digitalization since the outbreak of COVID-19. This is followed by a summary of the efforts necessary for overcoming the social challenges caused by digitalization and for achieving economic recovery.

1. Vision of the Society We Need after the Pandemic

This part summarizes the vision of the society we need after the pandemic together with the challenges facing Japan and the world under the pandemic, based on the results of hearing of experts (Figure 3-1-1-1).

Figure 3-1-1-1   The Society We Need After the Pandemic

(Source) MIC (2021) "Research on the actual state of digital technology utilization during the COVID19 pandemic and changes in user awareness"

2. Contribution of Digital Technologies to the Solutions of Social/Economic Challenges
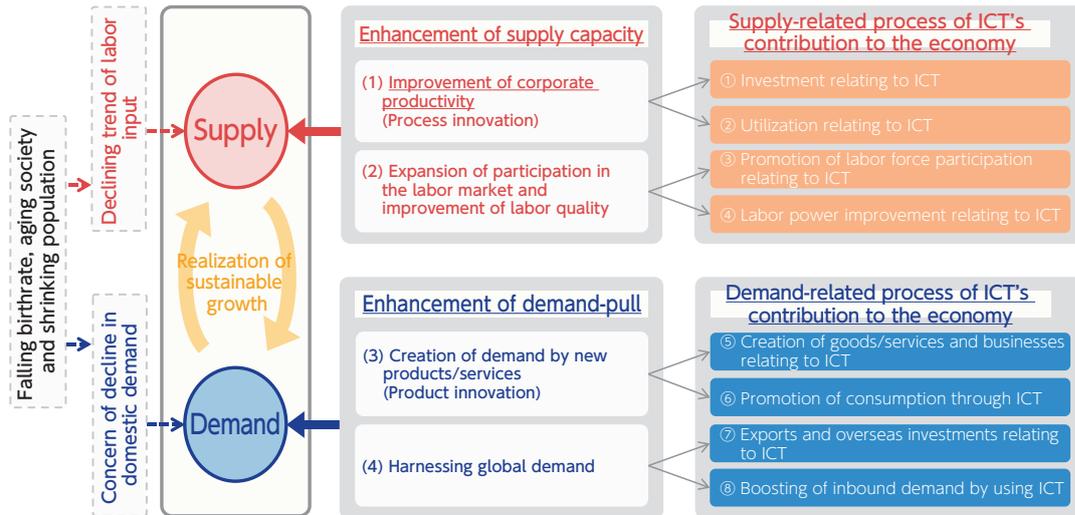
This section again confirms the process of digitalization contributing to economic growth and explains that digitalization is necessary also for ensuring social and economic resiliency against disasters such as the COVID-19 pandemic.

In order to realize sustainable economic growth in the future, Japan needs to overcome its socioeconomic challenges. To this purpose, measures must be taken both on the supply side and the demand side. Below is a brief summary of the discussions on what role ICT (or digitalization) will play to contribute to economic growth. These discussions were included in the past Information and Communications White Papers (Figure 3-1-2-1).
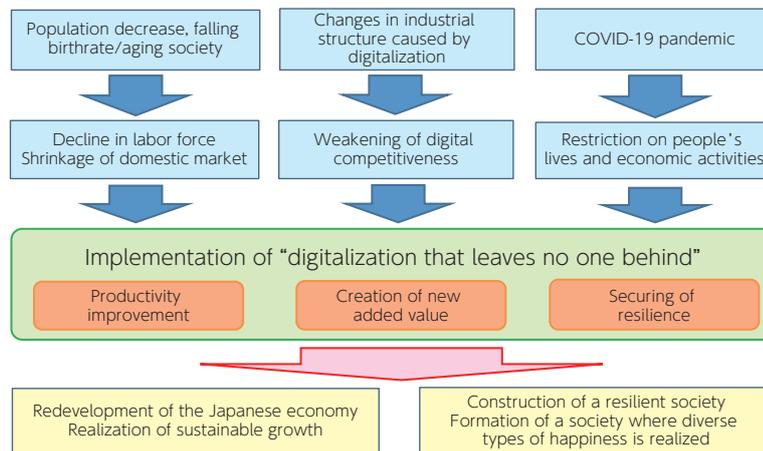
In addition to productivity improvement and creation of added value, ensuring the resilience of society to maintain and continue its functions under pandemics and natural disasters while at the same time minimizing influence on life and the economy is an important objective in the process of establishing digitalization that progressed under the COVID-19 pandemic (Figure 3-1-2-2).

Figure 3-1-2-1 Process of ICT's Contribution to the Economy

Falling birthrate, aging society and shrinking population

Declining trend of labor input

Concern of decline in domestic demand

Supply

Demand

Realization of sustainable growth

Enhancement of supply capacity

(1) Improvement of corporate productivity (Process innovation)

(2) Expansion of participation in the labor market and improvement of labor quality

Supply-related process of ICT's contribution to the economy

① Investment relating to ICT

② Utilization relating to ICT

③ Promotion of labor force participation relating to ICT

④ Labor power improvement relating to ICT

Enhancement of demand-pull

(3) Creation of demand by new products/services (Product innovation)

(4) Harnessing global demand

Demand-related process of ICT's contribution to the economy

⑤ Creation of goods/services and businesses relating to ICT

⑥ Promotion of consumption through ICT

⑦ Exports and overseas investments relating to ICT

⑧ Boosting of inbound demand by using ICT

(Source) MIC (2016) "White Paper on Inofrmation and Communication in Japan"

Figure 3-1-2-2 Digitalization Contributing to Solution of Social/Economic Challenges

Population decrease, falling birthrate/aging society

Changes in industrial structure caused by digitalization

COVID-19 pandemic

Decline in labor force Shrinkage of domestic market

Weakening of digital competitiveness

Restriction on people's lives and economic activities

Implementation of "digitalization that leaves no one behind"

Productivity improvement

Creation of new added value

Securing of resilience

Redevelopment of the Japanese economy Realization of sustainable growth

Construction of a resilient society Formation of a society where diverse types of happiness is realized
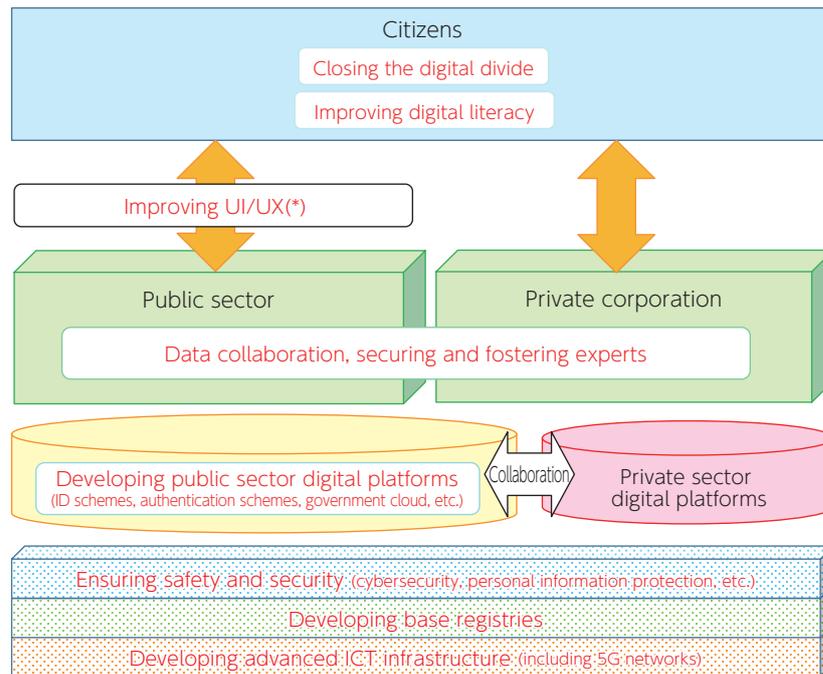
(Source) Prepared by the MIC

3. Promotion of Digitalization that "Leaves No One Behind"

In order to overcome the social/economic challenges Japan is facing and realize the society that we should create after the pandemic, digitalization of the entire society has become more important than ever.

This part describes the efforts necessary for digitalization that "leaves no one behind" in three aspects: (1) promotion of utilization of digital technologies by people who are users; (2) digitalization in private enterprises and the public sector who are the providers, and; (3) construction of the common bases of digital society. Because many factors of these efforts are interrelated, it is necessary to promote digitalization not separately but strategically and integrally (Figure 3-1-3-1).

Figure 3-1-3-1 Digitalization that "Leaves No One Behind"

(Source) MIC

4. Toward Establishment of Digitalization after the COVID-19 Pandemic

(1) Surfacing Challenges for Establishment of Digitalization

Hasty digitalization exposed hidden problems. For example, when digitalization of urgent business operations was required in response to the pandemic, serial business operations were not completely digitalized, which increased the inefficiency of the process as a whole. The ideal way of providing resident services to people who cannot be digitalized was also called into question once again.

While non-contact/non-face-to-face lifestyle and economic activities have become commonplace and telework has spread, it is said that an increasing number of people feel isolated and lonely due to decreased opportunities of contact with others. The implementation rate of telework decreased at the time of the second declaration of a state of emergency compared with the first declaration. Possible reasons may include the fact that knowledge about the infection became available to a certain extent, and "telework fatigue" including lowered productivity and reduced communication with people. There are also moves to explore ways to balance attendance and telework.

The progress of digitalization may have triggered reconfirmation of the value of the real world. People rediscovered that casual chatting in school or the workplace had meant much for communication with others and learned the attractiveness of live events after experiencing remote or virtual sightseeing and entertainment using digital technologies.

These phenomena together with the characteristic aversion of Japanese people to change may have led to the conservative view regarding establishment of the changes caused by digitalization.

(2) We Need to "Share Values through Digitalization" and "Create a Trusted Digital Environment"

Above is an explanation of the fact that in Japan many people have a conservative opinion regarding the establishment of changes caused by digitalization in society after containment of COVID-19. While people who have benefited from digitalization will continue the use it after the pandemic, people who are not feeling the benefits of digitalization or reluctantly using digital technologies may not accept digitalization and intend to return to analog styles.

However, in order to realize the society we need after the COVID-19 pandemic through digitalization that "leaves no one behind" in Japan, instead of recognizing digital technologies as mere "effective tools to prevent infection from spreading in time of emergency," it is necessary to identify and share other intrinsic values of digitalization throughout the entire society. In other words, it is important to realize digital transformation of the entire society by employing every available means, including policies. In addition, there will be a need for efforts to reduce anxiety to digitalization and to enhance its reliability by developing an environment for safe and secure use of digital technologies.