

# Digital Technology Will Create a New World After the Global Spread of Covid-19

By Naoyuki Haraoka



The explosive outbreak of the coronavirus infection in 2020 has started to transform the economics of society drastically. As what we call “social distancing” is the only way to avoid the rapid global spread of the virus until medicine for a cure and a vaccine are produced, people now increasingly depend upon communication through the Internet rather than face-to-face communication. Most people today are staying and working at home and communicating with their colleagues at their company by e-mail. As people get used to this, it could become a new working style in the future even after Covid-19 has gone. Even without the pandemic, 2020 was supposed to be the year of 5G – the fifth generation of wireless communication technologies – being promoted significantly around the world after its commercial use began in 2019 in many nations. The pandemic has even caused nations to benefit from 5G and will significantly accelerate development of the digital economy. What will this digital economy look like, and what are its merits and challenges? The answers to these questions will need to be scrutinized. The rapid global spread of the virus could shorten the time for reflection on these issues given the urgent need to stop the infection by using digital technology. I hope the articles of this issue’s cover story will be useful in thinking about the digital economy from a longer-term perspective.

Our cover story starts with an interview with Dr. Kei Sakaguchi, professor at Tokyo Institute of Technology. He introduces how 5G will realize a “Super Smart Society” where remote control of machines or automated driving or telemedicine will be seen. These technologies will be a kind of social overhead capital in society, and those without the knowledge and skills to handle them would be poor, while those with such knowledge and skill would be rich. Such a “digital gap” would be a new challenge for policy makers.

We then introduce three business points of view on a world dominated by 5G. The first is an interview with Taro Shimada, corporate senior vice president and chief digital

officer of Toshiba Corporation, president and CEO of Toshiba Digital Solutions Corporation, CEO and representative director of Toshiba Data Corporation, and board chairman of ifLink Open Community. He emphasizes the need to share the benefits of Big Data by using the Cyber-Physical System (CPS) technology to enhance the welfare of people living in a digital society. The second is an article by Dr. Takanao Uchida, former chief engineer at Honda Corporation. He discusses how virtual engineering could make a Japanese automobile company’s international competitiveness much less significant, as digital technology would terminate the competitive advantages born of human skills, a key in the automobile manufacturing process and a strength of the Japanese automobile industry, as feasible virtual engineering will replace human skills. The third is an interview with Sean Deng, CEO of OPPO Japan, a smartphone producer of Chinese origin that represents Asian digital business very well. For his business, consumers’ needs and interests are keys to success, and as for any digital product, the end users will determine the producer’s business structure and strategy.

We then move on to public policy perspectives. Kazumasa Oguro, professor of the Faculty of Economics at Hosei University and a member of *Japan SPOTLIGHT*’s editorial committee, talks about the possibility of new public services born from applications of new technologies, replacing the government’s functions and thus leading to alleviating the government’s fiscal deficit. How we can achieve a fair and relevant taxation policy for digital services is now a big question, and Shigeki Morinobu, research director of the Tokyo Foundation for Policy Research, highlights in his article the debate on taxing digital services, in particular the points where interests clash.

Finally, we introduce the rule-making aspect of the digital economy. Dr. Jota Ishikawa, professor of International

Economics in the Graduate School of Economics at Hitotsubashi University, provides an update on current progress in digital trade and the status of rule-making in this domain.

## (Brief Introductions)

### COVER STORY 1

Interview with Dr. Kei Sakaguchi, Professor at Tokyo Institute of Technology

#### **5G – a Technology to Realize a “Super Smart Society”**

By Japan SPOTLIGHT

A “Super Smart Society” to be achieved by 5G technology will bring new digital services like automated driving bus transportation, automated driving taxis or a “connected city” with the introduction of automated driving cars. In such a society, different levels of knowledge about these new technologies would create serious inequality. To mitigate this gap, open education for all people regardless of jobs and generations will be crucial.

### COVER STORY 2

Interview with Taro Shimada, Corporate Senior Vice President & Chief Digital Officer of Toshiba Corporation, President & CEO of Toshiba Digital Solutions Corporation, CEO & Representative Director of Toshiba Data Corporation, Board Chairman of iLink Open Community

#### **CPS Technology Creates a Society Sharing the Benefits of Big Data**

By Japan SPOTLIGHT

Promoting the sharing of the benefits of Big Data in a digital economy will be a key to achieving enhanced social welfare. Respecting the privacy of individual data owners and avoiding monopolies on data on the business side will also be important in achieving it.

### COVER STORY 3

#### **Development of a Global Manufacturing Model in the Digital Economy – a Revolution Brought About by Virtual Engineering**

By Takanao Uchida

Virtual engineering is creating a revolution. The automobile industry will not need specific human skills in the manufacturing process as virtual engineering makes it possible to assemble a product perfectly in accordance with the detailed design of the product. Japanese automakers that have been dependent upon human skills would lose their competitiveness.

### COVER STORY 4

Interview with Sean Deng, CEO of OPPO Japan

#### **Consumers’ Needs Are the Engine of Business for Smartphone Producer OPPO Japan**

By Japan SPOTLIGHT

While the Chinese and Southeast Asian populations are more adaptive and ready to accept new things, in Japan people still have a lot of things being done manually or on paper.

### COVER STORY 5

#### **New Public Services Created by Diversity & Connections: Possibilities for Applications of New Technologies**

By Kazumasa Oguro

Private-sector-led donations and philanthropic activities are other forms of redistribution, in addition to those carried out under government policies that collect taxes from some people and transfer them to others. These can be new public services created by diversity and connections throughout digital networks.

### COVER STORY 6

#### **The Debate on Taxing Digital Services, Where Interests Clash**

By Shigeki Morinobu

The development of the digital economy has provoked debate on how to tax digital services. We need to achieve international rule-making in this domain to avoid a situation where countries impose unilateral taxes. Coordinating the interests of the respective countries would be the essence of international taxation.

### COVER STORY 7

#### **Progress of Digital Trade & the Current Status of Rule-Making**

By Jota Ishikawa

There is an urgent need for minimum multilateral rule-making for digital trade so that all the nations can benefit from the digital economy with equal opportunities. Japan, as the country having started the Osaka Track, is expected to continue leadership in this rule-making.

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