

# Digital Society — Issues & Challenges

By Naoyuki Haraoka

We need economic growth. Without economic growth, we cannot be well prepared for an aging society through enhanced social welfare programs. We cannot deal with global climate change. We cannot mitigate increasing income inequality. We will need public expenditure to meet all those challenges. Increased tax revenues supported by economic growth will be the only way of overcoming them.

Today, however, without new sources of growth created by innovation, it seems to be difficult to achieve sustainable economic expansion. Developed nations will find only a thin possibility of growth as their economies have already reached maturity, while developing nations will find impediments to growth in the lack of a middle class that could increase its consumption due to insufficient structural economic reforms. Developed nations, mostly due to a lack of growth, tend to be occupied with protectionist thoughts and thus developing nations' growth is hampered and they cannot achieve sufficient structural reform of their domestic economies.

This vicious cycle in the world economy will make us expect new technology to play a pivotal role in achieving high economic growth. It is true that traditional economic theory always has a high regard for the role of disruptive innovation in raising productivity and eventually economic growth.

Digital technology, the new technology of our age, could help rescue the world from the economic vicious cycle. New technology, however, always brings concerns as well as merits. Concerns about jobs being lost to new technology are well known, but digital technology raises many other issues such as the growing need for privacy protection, its possible impact upon democracy, competition, management, income gaps, and so on. In other words, the impacts of new technology are diverse and not limited to the economy, but reach into society as a whole.

It may be a little premature to say clearly what social impacts of digital technology must be addressed and how to mitigate them. But it is true that we are now at a stage where we should think about possible new rules and regulations to



meet these concerns and encourage the positive aspects of digital technology. This is surely the way to maximize the benefits of innovation for economic growth.

In this light, our outline of this issue highlights six articles and four interviews. The articles begin with one written by Marc Rotenberg, a distinguished expert on the privacy protection issue, followed by an introduction to recent OECD research on digital technology's socioeconomic impact by Dr. Dirk Pilat & Dr. Mariagrazia Squicciarini. A view of its impact on democracy is then presented by Jillian C. York, an NGO representative. We then reprint an article published in the *Nikkei* on March 12, 2018 by Prof. Noriyuki Yanagawa, a distinguished economist at the University of Tokyo, on institutional reforms to create relevant rules in the digital economy. Blockchain technologies, a core concept of our digital society, are introduced and their future discussed by Dr. Shahid Yusuf, an economist at George Washington University, and Takeshi Mori, a business economist at the Nomura School of Advanced Management, introduces the latest Nomura research results on the digital economy in Japan.

Following these articles, we have four interviews. First, Dr. Hiroshi Ohashi of the University of Tokyo talks about his concerns about the platform economy, with particular regard to competition policy. Then Dr. Tsuyoshi Abe, an eminent engineer and businessman at Yokogawa Electric Corporation, summarizes a digital society as a VUCA (Volatility, Uncertainty, Complexity and Ambiguity) world. Another well-known IT expert, Joichi Ito, director at MIT Media Lab, emphasizes the importance of balance between privacy, competitiveness and happiness, and Slava Orekhov, a young executive of the SAP Asia Pte Ltd., a large software company, talks about the key to surviving in a VUCA world.

Overall, we conclude that we should compile appropriate rules for the game to achieve a balance between efficiency and happiness in a digital society. To do so, as Dr. Abe says, we will need business and social leaders who are multi-disciplinary experts in social and natural science.

**(Brief Introductions)****COVER STORY 1****The Digital Economy & Privacy Protection: the Challenges Ahead**

By Marc Rotenberg

For solutions to the challenges of a digital society, we will need wise public policies as a means of regulating the technologies we have created.

**COVER STORY 2****Transformative Technologies & Jobs of the Future**

By Dirk Pilat &amp; Mariagrazia Squicciarini

Facilitation of worker redeployment, investing in skills, strengthening social protection, future-proofing labor market regulations and promoting social dialogue are the OECD's proposed remedies for the challenges of a digital society.

**COVER STORY 3****The Impact of Digital Technology Upon Democracy**

By Jillian C. York

Governments and corporations involved in the development of digital technologies such as e-voting will need to ensure all individuals are involved in every step of the process.

**COVER STORY 4****Examining "Multiple Rules" in a Country**

By Noriyuki Yanagawa

"Multiple Rules" in a country must be relevant to meeting a variety of human needs in our digital society where diversity is being pursued in working styles and lifestyles under rapidly progressing innovation.

**COVER STORY 5****Blockchain/Distributed Ledger Technologies: Where They Came From, Where They Are Heading**

By Shahid Yusuf

The impact of blockchain technology is not limited to the finance industry but spread across a wide range of sectors including the agriculture, retail and public sectors.

**COVER STORY 6****Digital Capitalism & Japan**

By Takeshi Mori

Japanese consumers are highly receptive to digital technology and thus Japan may play the global role of testing ground for new digital services.

**COVER STORY 7**

Interview with Dr. Hiroshi Ohashi, Professor of Economics, University of Tokyo

**The Digital Economy & Competition Policy**

By Japan SPOTLIGHT

In order to reduce information asymmetry between platform operators and SMEs, it may be better for Japan to introduce a European-type regulation such as the GDPR.

**COVER STORY 8**

Interview with Dr. Tsuyoshi Abe, Senior Vice President &amp; General Manager of the Marketing Headquarters, Yokogawa Electric Corporation

**A VUCA World in Digital Society**

By Japan SPOTLIGHT

Income inequality will most likely expand in our digital society, but there is no need for pessimism, since the managements of large enterprises are today moving from "egocentric" to "ecocentric".

**COVER STORY 9**

Interview with Joichi Ito, Director of the MIT Media Lab

**Will Digital Technology Make Human Beings Happy?**

By Japan SPOTLIGHT

The concern about the GDPR is that big companies like Google and Facebook will be able to adapt to it and lobby to turn it into something they can work with, though it is a good basic law.

**COVER STORY 10**

Interview with Slava Orekhov, Senior Vice President of Industries and Digital Leadership, Asia Pacific Japan (APJ), SAP Asia Pte Ltd.

**How We Can Benefit From New Technology?**

By Japan SPOTLIGHT

There are three key factors to surviving the VUCA world as a business – analyzing processes, creating new business models and changing the way the workforce operates.

Naoyuki Haraoka is editor-in-chief of *Japan SPOTLIGHT* & executive managing director of the Japan Economic Foundation (JEF).