Five Years of the Centre for the Fourth Industrial Revolution Japan

COMMUNITY PAPER

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Foreword

Jeremy Jurgens
Managing Director,
World Economic Forum

As the Fourth Industrial Revolution continues to progress exponentially, as evidenced by the recent developments in generative AI, issues of technological transformation of industries, economies and societies, as well as trust, safety and governance, are timelier than ever. These topics have been central to the work of the Centre for the Fourth Industrial Revolution Japan since its launch in July 2018. As the first centre in the Global Network to partner with our office in San Francisco, the Centre for the Fourth Industrial Revolution Japan has spearheaded not only agenda-shaping partnerships on agile governance, smart cities and digital transformation but also the growth of the network, which now stands at 19 centres worldwide.

On its fifth anniversary, I would like to congratulate our colleagues at the Centre for the Fourth Industrial Revolution Japan for everything they have achieved and express my gratitude to the centre's co-founding partners: the Ministry of Economy, Trade and Industry (METI) and the Asia-Pacific Initiative (now International House). Having had the privilege to participate in the Centre for the Fourth Industrial Revolution Japan's G7 events in April, I remain convinced that Japan will continue to play a crucial leadership role in helping economies and societies transition into the Fourth Industrial Revolution. The World Economic Forum will continue to strengthen our partnership with Japan building on the success of the centre and will further accelerate its Fourth Industrial Revolution activities both within Japan and globally in the coming years.

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2018-2021:
Working "outside-in" to change Japan

Chizuru Suga
Head, Centre for
the Fourth Industrial
Revolution Japan
(2018-2021)

In the technology industry, companies sometimes entrust important innovation efforts to "skunk works" –autonomous research and development units that operate outside the business' normal hierarchy. Freed from entrenched procedures and ways of thinking, skunk works can produce breakthroughs that would be impossible inside the parent organization.

To me, the Centre for the Fourth Industrial Revolution Japan was a kind of skunk work for Japanese governance innovation.

For several years before the centre's launch in 2018, I had been preoccupied with Japanese regulators' inability to adapt to technological change. I first noticed it in the fintech sector, which I helped oversee at the Ministry of Economy, Trade and Industry. Fintech was at the leading edge of the Fourth Industrial Revolution – a concept that was then still unfamiliar to me – and financial regulators were struggling to keep up. Laws would be updated one year only to become obsolete the next.

The story turned out to be bigger than one industry. I asked a group of lawyers to help me and other bureaucrats understand the root cause of the fintech problem, and together we found similar issues in many sectors, from transport to healthcare. We argued for scrapping Japan's siloed gyōhō system of regulation in favour of a more flexible, cross-industry approach. Our proposal received plenty of positive feedback… but not much changed.

It was then that I got the chance to set up the Japan centre skunk works.

If you had told me then that, in a span of little more than five years, a Japanese prime minister would launch a major global initiative on cross-border data flows aligned with the centre's work (Data Free Flow with Trust), or that we would build a network

of thousands of "smart cities" around the world (the G20 Global Smart Cities Alliance), or that the centre's work would shape the agenda of a G7 summit (G7 Hiroshima 2023), I'm not sure I would have believed it.

But it all happened.

Good timing and support from the right people got things started. In 2017, the World Economic Forum was looking to expand its new Centre for the Fourth Industrial Revolution, which it had established in San Francisco to study the very "governance gaps" that we had been finding in Japan and to develop concrete solutions to fix them. A group of influential Japanese thinkers and policy-makers (including then-Chief Cabinet Secretary Yoshihide Suga, former Economy Minister Heizo Takenaka, then-Asia Pacific Initiative (API) Chairman Yoichi Funabashi, and then-METI Vice-Minister Takashi Shimada) endorsed setting up a sister centre in Tokyo as a joint venture between the Forum, the Japanese government and API. I suppose I had been preaching about governance reform loudly enough that I was asked to be its first leader.

The centre had no template to work from. Neither the government nor the Forum had ever been part of an organization quite like it. We started with a rough-and-ready series of health-technology dialogues, where we brought together stakeholders from across the public and private sectors and identified leading thinkers, some of whom became important partners or leaders of centre teams. Through similar processes we built out our projects on mobility, smart cities and data policy. It was a privilege and a luxury to be able to hand-pick the staff. I'm grateful to everyone who answered the call.

Perhaps the most visible symbol of our uniqueness was the centre's office in Akasaka. Less a traditional workspace than a salon, it was inspired and designed by Studio Ghibli producer Toshio Suzuki.

The goal was to make it a place where our diverse community would want to gather and collaborate – which is exactly what they did, even through the disruptions of the COVID-19 pandemic.

Beyond the centre's specific achievements, which also included the successful World Economic Forum Global Technology Governance Summit hosted by Japan in 2021 – I'm proud that we helped change attitudes and build a community of like-minded people working for positive change. Thanks in no small part to the centre's work, radical initiatives like society-wide digital transformation are no longer greeted in Japan with "why?" or "do we really need it?" Instead, the question is, "how can we get it done?"

Good skunk works don't just come up with ideas. It brings its new ways of thinking and working back home, rejuvenating its parent organization from the inside. Having returned to the civil service, I can see the centre's mark on the Digital Agency, established in 2021, and the government's review of tens of thousands of laws and regulations to make them fit for the digital age.

All of this impact would not have been possible without the centre's dedicated partners, seconded fellows, staff, interns and other collaborators. It is this community that is the Japan centre's real legacy. I'm proud of what we've accomplished over the past five years and excited to see what we'll do next. I have no doubt it will transform Japan again!

Inauguration ceremony of the centre in 2018

First four!

Annual Meeting in 2019

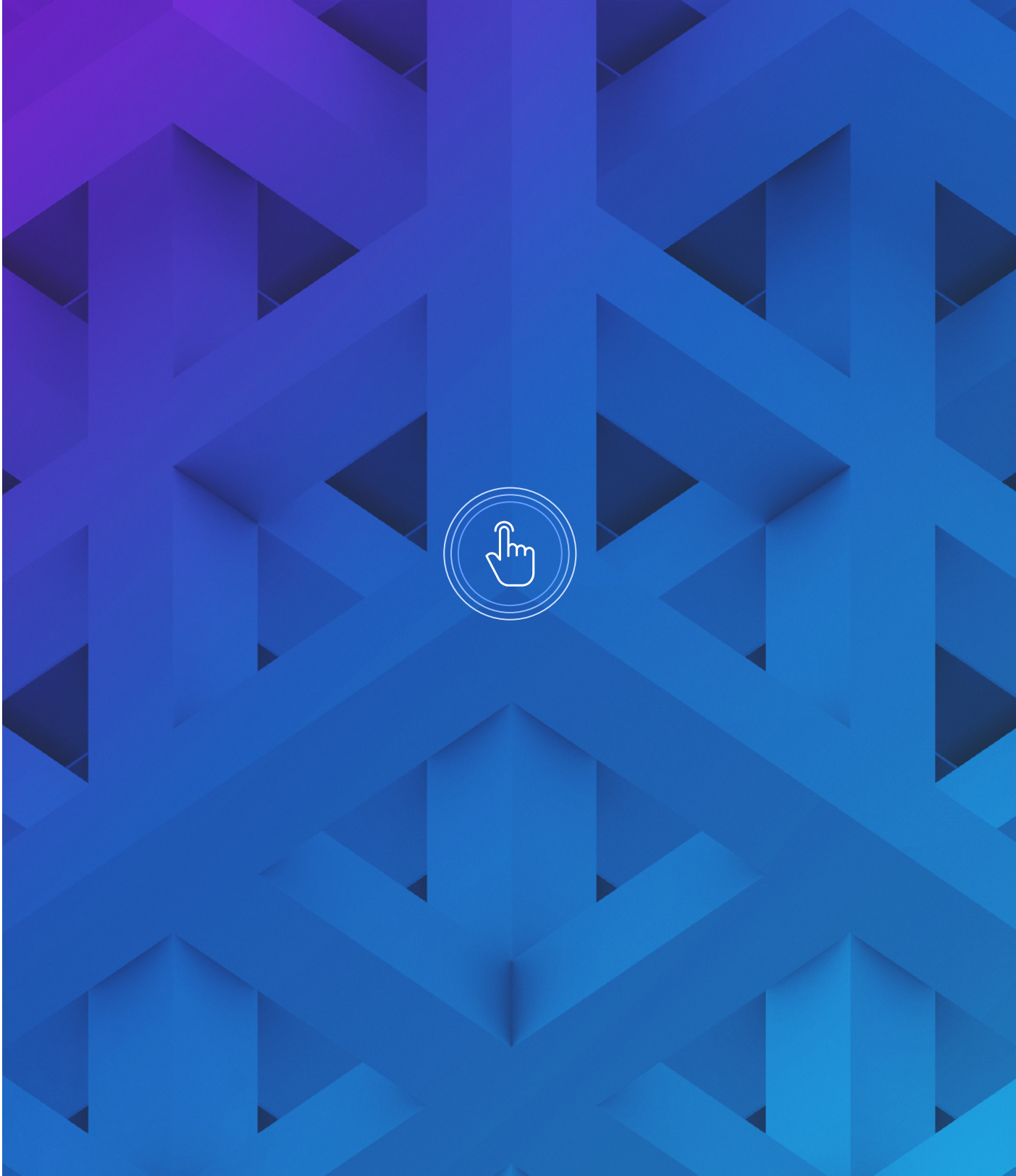Truly grateful for your great support!

Online farewell in 2021

At the office

Global Technology Governance Summit (GTGS 2021)

On 6-8 April 2021, the first **Global Technology Governance Summit** (GTGS) was convened as a virtual meeting hosted by Japan, comprising more than 40 governments and international organizations as well as 150 companies. The inaugural gathering of the GTGS covered the following key topic areas:

1) industry transformation, 2) government transformation, 3) global technology governance, and 4) frontier technologies.

In collaboration with the government of Japan, the Japan centre organized 13 sessions with ministers and industry leaders.

Mukesh D. Ambani
Chairman and Managing Director, Reliance Industries

Vivian Balakrishnan
Singapore Foreign Minister

Marc Benioff
Chair and Co-Chief Executive Officer, Salesforce

Sharan Burrow
Director General, ITUC

Alice Gast
President, Imperial College

Yuriko Koike
Governor of Tokyo, Tokyo Metropolitan Government

Hiroaki Nakanishi
Chairman, Hitachi

Elizabeth Rossiello
Founder and Chief Executive Officer, AZA Finance

Jim Snabe
Chairman, Siemens

Susan Wojcicki
Chief Executive Officer, YouTube

Technology Governance Outlook

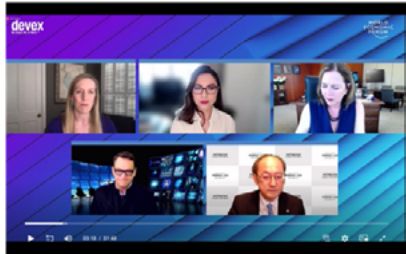Technology Governance Outlook

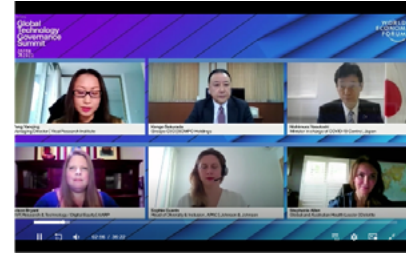Transformation in Action: Technology Leadership

Wearable Data Troves

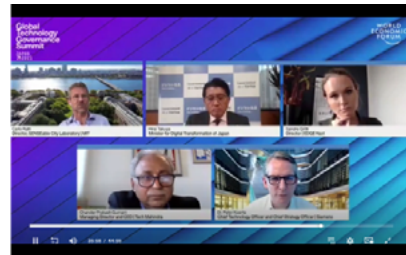Building Trust into Technology

Digital Payments: Realizing the Vision

Rebuilding the Trust to Travel
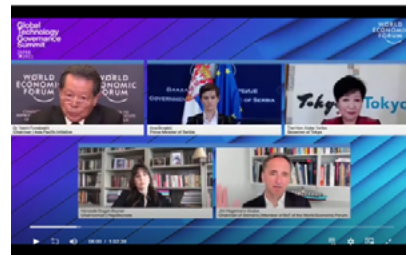
The New Frontier: Healthy Ageing

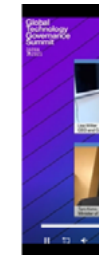Future of Digital Infrastructure

Economic Recovery with Smarter Cities

Driving Circular Growth with Data

Leading Industry Transformation 2

Governing Goods on the Move

3 | 2021-2023:
Towards social implementations

Yoshitaka Yamamuro
Head, Centre for
the Fourth Industrial
Revolution Japan
(2021-2023)

When I assumed the position of Head of the World Economic Forum's Centre for the Fourth Industrial Revolution Japan in July 2021, the COVID-19 pandemic was still in full swing, and I knew I would be steering the organization through a challenging period.

Yet no one could have predicted how much more turbulent the environment would become.

In the two short years since, Russia invaded Ukraine, disrupting the global political and economic order, and a new AI application, ChatGPT, has become the most talked-about technology in recent memory. Once-abstract issues of technology governance are now a real-life conundrum affecting millions of people.

My first task was to develop a strategy for what the Japan centre should focus on next, after the successful Global Technology Governance Summit (GTGS) in April 2021. I felt the Fourth Industrial Revolution was entering a new phase and that practical implementation of the concepts we had been developing should become more central to our mission.

This shift coincided with a significant opportunity. In the autumn of 2021, Japan established a new Digital Agency to oversee the digital transformation of government, the economy and society. Implementation of digital policies was now at the core of the government's agenda.

In August 2021, I spoke with Takuya Hirai, who was then Minister for Digitalization, and advocated for the implementation of the concepts nurtured at the Centre for the Fourth Industrial Revolution Japan. The Centre's Agile Governance project had been urging a sweeping review of analogue-era regulations to make them fit for the digital age. With my predecessor Chizuru Suga, closely involved

in the Digital Agency's work, we were able to turn that idea into one of the agency's most important initiatives, driving an unprecedented review of tens of thousands of laws and regulations.

The centre's achievements have extended to local governments as well. Working with local government leaders such as the mayors of Tsukuba, Fukuoka, Kakogawa and Miyakonojo, we helped turn initiatives such as the G20 Global Smart Cities Alliance (GSCA) into real-world ordinances. I saw first-hand that Japan's regions are full of energy and will drive change in Japan as a whole.

Another major pillar of my tenure was the centre's G7 initiative. As the host country in 2023, Japan would play a crucial role. Klaus Schwab visited Japan in April 2022 and met with Prime Minister Kishida to discuss themes for the Japanese G7 presidency. A few months later, at the Global Technology Governance Retreat held in San Francisco in June, Japan centre staff worked with the Centre for the Fourth Industrial Revolution Global Network to create a G7 Impact Promotion Team, which launched the following month with the mission of shaping the G7 agenda.

The Forum's Annual Meeting in Davos in January 2023 added momentum to the work. METI Minister Nishimura and Digital Minister Kono presented the G7 agenda and announced that they would hold official government-private events in cooperation with the Centre for the Fourth Industrial Revolution Japan.

The first was connected to the G7 Urban Ministers' Meeting, where we exchanged views with the Ministry of Land, Infrastructure, Transport and Tourism and the Governor of the host municipality, Kagawa Prefecture, and held a first-ever government-private high-level roundtable.

Two events supported the G7 Digital Tech Ministers' Meeting: the Digital Transformation Summit and the Agile Governance Summit. The Centre for the Fourth Industrial Revolution Japan initiatives presented at these events, such as an international framework for the implementation of Data Free Flow with Trust (DFFT) and new principles to promote better digital governance, were later reflected in the ministerial statement.

Prior to the leaders' summit in Hiroshima, we had a chance to present the results of the Digital Transformation Summit directly to Prime Minister Kishida at the Next Generation Leaders' Meeting on AI, held at the Prime Minister's Office.

When the Japan centre was established in 2018, ideas like the Fourth Industrial Revolution and technology governance were still gaining traction in Japan. Now, with the emergence of ChatGPT, a major aspect of the Fourth Industrial Revolution has become a tangible reality for many people. That the Japan centre was able to contribute to the debate on artificial intelligence (AI) and data at this crucial time was an achievement beyond initial expectations.

The past five years can be said to have been the true dawn of the Fourth Industrial Revolution. The two major global gatherings hosted by Japan during this period – the 2023 G7 as well as the G20 in 2019 – helped the centre deliver significant global impact and secure a place for Japan on the global agenda.

I would like to express my heartfelt gratitude to the partner companies, government agencies, fellows and interns who actively participated in the activities of the Japan centre over the past five years.

The Fourth Industrial Revolution is poised to gain even more momentum, and the world's ability to unlock its positive potential and mitigate negative consequences rests on robust public-private partnerships. The Japan centre has provided a model for such cooperation, and I eagerly anticipate the continued growth and enhancement of public-private partnerships in the years to come.

Annual Meeting 2023 at Davos with **Minister Nishimura**

Global Technology Governance Retreat 2022 in San Francisco

Klaus Schwab's visit to Japan

High-Level Round Table for the G7 Sustainable Urban Development Ministers' Meeting

Opening remarks at Digital Transformation Summit for the G7 Digital and Tech Ministers' Meeting

(4) High-Level Roundtable for the G7 Sustainable Urban Development Ministers' Meeting

On 28 March, senior urban development officials from the G7 countries gathered in Tokyo for a high-level roundtable for the upcoming G7 Urban Ministers' Meeting. This official public-private event, co-hosted by the World Economic Forum and the Japanese Ministry of Land, Infrastructure, Transport and Tourism, brought together representatives from government, industry and academia to discuss critical urban issues ahead of the G7 Kagawa-Takamatsu Urban Ministerial Meeting, scheduled for 7-9 July. The goal was to generate insights and policy advice that could be incorporated into the ministerial meeting.

Yasushi Furukawa, Japanese Parliamentary Vice-Minister for Land, Infrastructure, Transport and Tourism

Toyohito Ikeda, Governor of Kagawa Prefecture

Roundtable one: Sustainable Cities

Sustainability goals are key to urban development, as G7 leaders acknowledged in Germany in 2022. Participants in this session discussed the critical role cities play in addressing global environmental crises such as climate change and biodiversity loss. They expressed broad agreement that a combination of political leadership and public-private partnership is critical to tackling these and other complex problems and advancing a more sustainable urban development.

Cristina Gómez Garcia-Reyes, Lead, Urban Nature-based Solutions, World Economic Forum

Hayato Shimizu, Mayor of Saitama City

Norihiro Suzuki, Vice-President and Executive Officer, CTO; General Manager of Research & Development, Hitachi Group

Lauren Sorkin, Executive Director, Resilient Cities Network

Corey Glickman, Head of Sustainability and Design, Infosys Limited

Kiyoshi Kitagawa, Director, Senior Executive Managing Officer, Mori Building

Mikolaj Sekutowicz, Partner and Vice-President, Therme Group

Akinori Morimoto, Professor, Waseda University; President of City Planning Institute of Japan

Roundtable two: Inclusive Cities

Cities are growing at an accelerated pace. This reveals increasing challenges around equality and accessibility to basic public services and infrastructure. Participants in this session discussed ways to ensure more affordable housing, promote urban development that incorporates social values, balance sustainability and housing security, and encourage long-term investments to address energy poverty and food insecurity.

Eriko Suzuki, Chief Executive Officer, Kind Capital

Tadashi Matsumoto, Head of Unit, Sustainable Development and Global Relations, OECD

Hiroshi Esaki, Professor, Graduate School of Information Science and Technology, University of Tokyo

Takehiko Nagumo, Senior Managing Executive Officer, Mitsubishi UFJ Research & Consulting Ltd; Executive Director, Smart City Institute Japan

Dagur Bergþóruson Eggertsson, Mayor of Reykjavik

Kazuya Suzuoki, Head, Project Development Division, Tokyu Corporation

Laxman Perera, Human Settlements Officer, UN-Habitat

Roundtable three:
Digitization in Cities

In Germany in 2022, the G7 Joint Statement on Sustainable Urban Development highlighted the opportunities that digitization brings to cities, including increased efficiency, increased mobility and improved public services and sanitation. Participants discussed urban digitization and its governance, including collaborative and people-centred digitization, the role of data in supporting resilient and sustainable urban development, accessibility, inclusion and efforts to bridge the digital divide.

Yasuhiro Okada, Mayor of Kakogawa City

Haruka Hamada, Manager, Deloitte

Toshiyuki Inoue, Executive Officer, Mitsubishi Estate

Joichi Ebihara, Managing Director, Accenture Japan Ltd

Christy Mitchell, Project Lead, World Economic Forum Centre for the Fourth Industrial Revolution Japan
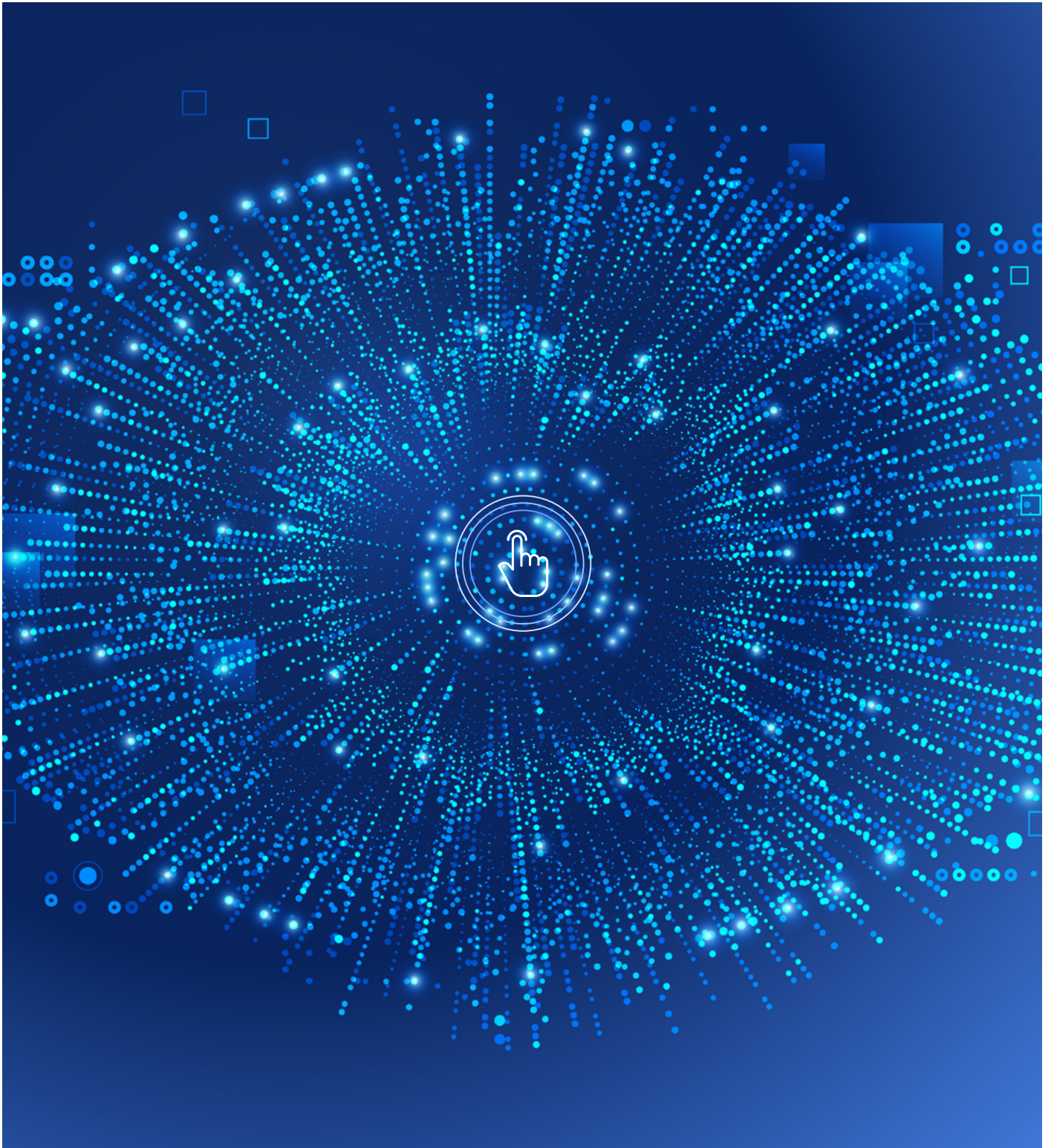

Yasunori Mochizuki, NEC Fellow, NEC Corporation

Atsushi Deguchi, Professor, Graduate School of Frontier Sciences, University of Tokyo

5 | Agile Governance Summit for the G7 Digital and Tech Ministers' Meeting

On 27 April 2023, Agile Governance Summit took place in Shibuya as a side event of the G7 Digital and Tech Ministers' Meeting. Summit participants discussed governance innovations required for a cyber-physical systems (CPS) society, applying practical knowledge to topics including ownership, green transformation (GX) and democracy, based on the premise of a pluralistic society. The governance principles discussed at the summit as a common guideline in CPS society were acknowledged in the Ministerial Declaration of the G7 Digital and Tech Ministers' Meeting.

Session one: Governance principles and the pluriverse

How can we nurture technologies and technology governance that enables collaboration and cooperation, while respecting differences and diversities? Participants discussed the essence of governance principles and the pluriverse to find a new "common sense" for our emerging CPS society.

Federico Luisetti, Italian Culture and Society, School of Humanities and Social Sciences, University of St. Gallen

Tatsuhiko Inatani, Professor of Law, Principal Investigator (Law and Artificial Intelligence Research Unit); Center for Interdisciplinary Studies of Law and Policy, Kyoto University

Teruka Sumiya, Project Specialist, Agile Governance; World Economic Forum Centre for the Fourth Industrial Revolution Japan

Session two: Ownership and autonomy – redefining ownership in CPS

What are the governance models and tools that bring about a new kind of ownership that is suited to CPS societies? The participants discussed the Partial Common Ownership model envisioned by the RadicalxChange to discover alternative ways of thinking.

Matt Prewitt, President, RadicalxChange Foundation

Tasuku Mizuno, Partner and Founder, City Lights Law Office

Session three: Green transformation by digital transformation – digital governance bringing sustainability and circularity

How can agile governance and governance innovation drive green transformation? Participants discussed a circular economy based on diverse ecosystem cooperations and digital transformation to promote collaboration, shared value and trust with all stakeholders.

Bernice Lee, Director, Research, Futures, Chatham House

Kenichiro Senoh, Chief Executive Officer and Chief Research Officer, Industry-Academia Collaboration Initiative

Shihoko Aoki, Representative, Wholeness Lab

Session four:
Democracy beyond democracy

What is the outlook for democracy in a CPS society? Leading experts from Denmark, the US and Japan discussed dilemmas created by digital-age social fragmentation and the diversification of personal values – including how to promote coexistence between people with different values, avoid undue control by states and business monopolies, and improve the security of digital space.

Orly Lobel, University Professor and Warren Distinguished Professor of Law Director

Christian Bason, Chief Executive Officer, Danish Design Centre (DDC)

Tatsuhiko Yamamoto, Professor, Keio University Law School

6 Digital Transformation Summit for the G7 Digital and Tech Ministers' Meeting

On 28 April 2023, the Digital Transformation Summit took place in Ikaho, Gunma, as part of the G7 official public-private event for the G7 Digital and Tech Ministers' Meeting, which aims to foster public-private collaboration in the digital space and provide greater value for all stakeholders. Representatives of all sessions presented a high-level summary to Nishimura Yasutoshi, Minister of Economy, Trade and Industry of Japan and other G7 ministers to contribute to the meeting.

Session one: Digital transformation for well-being and society

The pandemic accelerated the adoption of digital health tools. Participants discussed what mechanisms can be put in place to continue leveraging new health technologies and data analysis for an inclusive, well-being-oriented society.

Koji Ishikawa, Group Chief External Relations Officer, Sompo Holdings

Basma Al Buhairan, Managing Director, Centre for the Fourth Industrial Revolution Saudi Arabia

Kevin Kawasaki, Global Head, Business Development, Palantir Technologies

Masato Iwasaki, Director, Japan General Affairs, Takeda Pharmaceutical

Session two: Digital transformation for an inclusive society

With renewed impetus for digital policy, participants discussed the opportunities to empower youth, women and small- and medium-sized enterprises (SMEs) in emerging countries as well as where the key areas for cooperation between the G7 and G20 are.

Purushottam Kaushik, Head, Centre for the Fourth Industrial Revolution India

Megumi Ishimoto, Steering Committee Member and Adviser, Women7 Japan

Wakana Asano, Y7 2023 Vice-President G7/G20 Youth Japan

Session three: Digital transformation for a green society

Digital technology could deliver one-fifth of the emission cuts needed to hit net zero by 2050. Participants discussed what examples of green transformation for sustainable society can be scaled internationally and/or applied across domains.

Naoyuki Iwatani, Managing Partner, McKinsey Japan

Takahito Tokita, Chief Executive Officer and Chief Digital Transformation Officer, Fujitsu

Angela Mondou, President and Chief Executive Officer, Technation Canada (Tech7 Representative)

Bernice Lee, Director, Chatham House; Hoffmann Distinguished Fellow for Sustainability

Session four:
AI and governance

Generative AI is likely to be a broadly transformative technology. Participants discussed its potential benefits and impacts: How can it be designed and used in a more human-centred way?

Ugo Pagallo, Professor, University of Turin

Mia Garlick, Senior Director, Asia-Pacific, Meta

Mike Yeh, Regional Vice-President, Corporate External and Legal Affairs, Microsoft

Michaela Browning, Vice-President, Government Affairs and Public Policy, Asia-Pacific, Google

Shigehiro Tanaka, Corporate Senior Executive Vice-President, NEC

Takeaki Matsumoto, Minister for Internal Affairs and Communications Japan

Session five: Digital infrastructure and governance

Today, robust digital infrastructure is needed, and it needs to be built in a way that avoids fragmentation. Participants discussed examples of digital infrastructure initiatives that are inclusive, collaborative and ensure social and economic growth with trust.

Michael Punke, Vice-President, Global Public Policy, Amazon Web Services

Kaori Iida, Head, Digital News Department, NHK

Margrethe Vestager, Executive Vice-President, European Commission

Robert Hedges, Chief Data Officer, Visa

Ulrik Knudsen, Deputy Secretary General, Organisation for Economic Co-operation and Development (OECD)

Taro Kono (avatar), Minister for Digital Transformation, Japan

Session six: Governance innovation in the era of disruptive technology

Digital and physical spaces increasingly coexist in today's world. Participants discussed how governments need to change in this digitalized society and what multistakeholder collaboration is needed to nurture governance innovation.

Mimi Zou, Fellow, University of Oxford

Yutaka Saito, Chairman, Information-technology Promotion Agency (IPA)

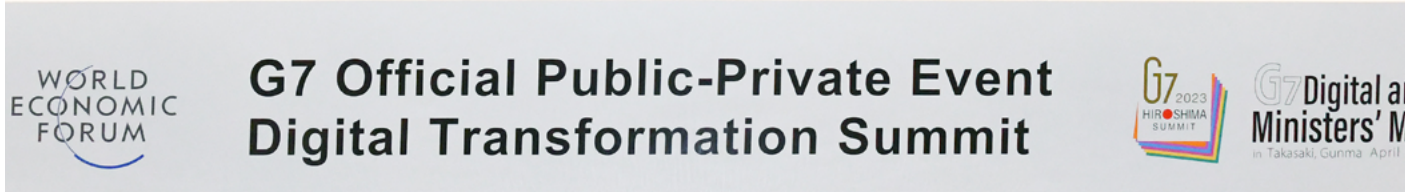**Robert Strayer**, Executive Vice-President, Policy, Information Technology Industry Council (ITI)

Yasutoshi Nishimura, Minister of Economy, Trade and Industry Japan

Session seven:
Closing session

Representatives of all sessions presented a high-level summary to Nishimura Yasutoshi, Minister of Economy, Trade and Industry Japan, and other G7 ministers to contribute to the G7 Digital and Tech Ministers' Meeting.

Closing session moderated by **Jeremy Jurgens**, Managing Director, World Economic Forum; **Nishimura Yasutoshi**, Minister of Economy, Trade and Industry, Ministry of Economy, Trade and Industry Japan; **Valentino Valentini**, Deputy Minister, Enterprises and Made in Italy; **Ulrik Vestergaard Knudsen**, Deputy Secretary-General, Organisation for Economic Co-operation and Development (OECD); **Francis Bilodeau**, Associate Deputy Minister, Innovation, Science and Economic Development Canada

G7 Official Public-Private Event Digital Transformation Summit

7 | Rural mobility for G7 Hiroshima Summit and for G7 Transport Ministers' Meeting

On 17 June 2023, Yoshitaka Yamamuro, Head of the Centre for the Fourth Industrial Revolution Japan, gave a keynote speech at the G7 Transport Ministers' Meeting in Ise-Shima Mie, on rural mobility empowered by public-private collaborations, with reference to the Shobara model.

Keynote speech by **Yoshitaka Yamamuro**, Head, Centre for the Fourth Industrial Revolution Japan

G7 Transport Ministers' Meeting

8 | Data governance project

Fumiko Kudo
Project Strategy Lead

Data governance is one of the top policy priorities in the Fourth Industrial Revolution.

Behind this now universally recognized fact lies a lot of hard work. Communities coordinated by the Centre for the Fourth Industrial Revolution Japan have played a key role: we have been working since 2018 to anticipate, prepare for, and implement data policies whose importance has become clearer with the emergence of pandemics, increased geopolitical fragmentation and the rise of generative AI.

I can still recall my surprise when I joined the centre in the summer of 2020 and learned that policy dialogues it had hosted had contributed to a major global initiative on cross-border data flows, Data Free Flow with Trust (DFFT). DFFT was first proposed by Prime Minister Shinzo Abe with the intention of accelerating the growth of the digital economy while protecting fundamental rights. Since its "debut" in Davos in 2019, DFFT has been endorsed by members of the G20 and G7 and incorporated into numerous international trade agreements.

To support these outcomes, we planned and managed global events, codesigned agendas with practitioners, compiled survey findings and inputs from experts into white papers, assisted pilot programmes, and engaged with the press. I learned about this dynamic process through Forum initiatives and carried it out at the Global Technology Governance Summit (GTGS) hosted by Japan in April 2021. I am pleased that global business leaders who have conferred with Japanese ministers, as well as representatives of global non-governmental organizations (NGOs), have said they were inspired by the ideas put forth at GTGS.

Our communities have also functioned as platforms for fostering public-private partnerships. The pursuit of effective data governance necessitates the implementation of multistakeholder processes, encompassing regulatory cooperation and technological collaboration.

For example, to support the establishment of an international cooperation framework to operationalize DFFT – a Japanese government goal at the G7 – we proposed a tangible technological prototype. We also arranged sessions at Davos for the Japanese government to discuss the idea with private-sector stakeholders. The Digital Transformation Summit, an official G7 public-private side event that the Centre for the Fourth Industrial Revolution Japan hosted, is another example of multistakeholder collaboration.

At the G7 Digital and Tech Minister's Meeting, the ministers' declaration mentioned the Digital Transformation Summit and endorsed a new cooperation framework on DFFT. Our project idea was mentioned in the annex of the declaration. I believe that was a historic achievement and will lead to social change.

Lastly, I would like to express my sincere appreciation to everyone who contributed to this project. Thank you for your efforts and support. Many colleagues, fellows, interns and outside collaborators helped greatly with their passion and hard work. Without the outstanding teamwork and cross-functional collaboration, we would not have been able to achieve the remarkable milestones we have reached today. I wish you continued success and fulfilment in all your endeavours.

November 2018	Data Policy Dialogue Series
January 2019	Annual Meeting in Davos
	– Data Free Flow with Trust (DFFT) was first proposed by Prime Minister Shinzo Abe
	– Data Governance Osaka Track was also proposed aimed at the G20 Osaka Summit
June 2019	G20 Osaka Summit – DFFT received endorsement from the G20 leaders
August 2019	Advancing the Osaka Track (AOT) project launched
January 2020	Annual Meeting in Davos: DFFT/AOT session Agenda blog: "How to restore trust in data"
March-May 2020	DFFT/AOT workshops at the World Trade Organization margin
June 2020	White paper: *Data Free Flow with Trust (DFFT) Paths towards Free and Trusted Data Flows*
July 2020	DFFT Webinar "Unlocking Data's Global Potential"
December 2020	Data for Common Purpose Initiative (DCPI) was launched with more than 50 global partners from 20 countries, including the Japanese government
	Four-country online public-private dialogue (Philippines, Thailand, India, Vietnam) project launched
January 2021	Davos Agenda: The DFFT was promoted by Prime Minister Yoshihide Suga in his speech
April 2021	Global Technology Governance Summit (GTGS) hosted by Japan
	– DFFT was reemphasized by Prime Minister Yoshihide Suga in his speech
	– Data for Common Purpose Initiative (DCPI) session "Making Data Work for All"
	– White paper: *Data-driven Economies: Foundations for Our Common Future*
	– White paper: *Advancing Data Flow Governance in the Indo-Pacific: Four Country Analysis and Dialogues*
June 2021	DCPI was cited in Japan's National Data Strategy
August 2021	Briefing paper: *Developing a Responsible and Well-designed Governance Structure for Data Marketplaces*
November 2021	DCPI online workshop series launched
	Fumiko Kudo was appointed as a committee member of the expert group on DFFT hosted by the Ministry of Economy, Trade and Industry (METI)
	DFFT session at the 11th International Cyber Security Symposium
January 2022	Davos Agenda
	– DFFT was promoted by Prime Minister Fumio Kishida in his speech
	– Agenda blog: "The World is drawing in data. Why don't we trade it like on a stock exchange?"
May 2022	Annual Meeting in Davos
	– DCPI session: "Strengthening Trust in Public-Private Data Exchanges"

	– Agenda blog: "Every country has its own digital laws. How can we get data flowing freely between them?"
June 2022	Data-ecosystem workshop series launched for the G7 digital agenda shaping
	Global Technology Governance Retreat (GTGR) in San Francisco: DCPI sessions
October 2022	DFFT session at the CEATEC 2022 ANNEX Tokyo
	Security and trust session at the 12th International Cyber Security Symposium
November 2022	Global Partnership on Artificial Intelligence (GPAI) Summit 2022: Co-hosted three sessions at side events with the METI
December 2022	*Submitted DFFT Transparency Project Proposal* to the METI, co-developed with St. Gallen University: aim to provide a base registry and API for rules on cross-border data transfers
January 2023	Annual Meeting in Davos

- Public session: "Data Collaboration: Lessons from the Field". Digital Minister Kono Taro proposed a new international framework to operationalize the DFFT for the G7; The G7 official public-private event hosted by the Centre for the Fourth Industrial Revolution Japan in April was also introduced

- Private (closed) session: "Addressing Fragmented Approaches to Data Policy": Minister Kono presented the details of the framework, named Institutional Arrangement for Partnership (IAP), and participants from the public and private sector supported the proposal

- Briefing paper: *Data Free Flow with Trust: Overcoming Barriers to Cross-Border Data Flows*

- Agenda blog: "We must enhance cross-border data flows — here's why"

January 2023	DFFT report proposing the IAP is released from the METI: Fumiko Kudo contributed as a committee member
March 2023	*DFFT Transparency Project Proposal* was presented to the G7 member states, aiming for the endorsement of the IAP
April 2023	G7 Official Public-Private Event: Digital Transformation Summit

- Eight public figures, including three Japanese ministers, in dialogue with over 100 global leaders from the private sector

- White paper: *From Fragmentation to Coordination: The Case for an Institutional Mechanism for Cross-Border Data Flows*

G7 Digital and Tech Ministers' Meeting

- Joined working lunch as an official G7 Ministerial Meeting schedule and highlighted the achievements of the Digital Transformation Summit in front of the G7 Ministers

- The Digital Transformation Summit was mentioned in the G7 Declaration

- The G7 Declaration endorsed the establishment of the IAP; The DFFT Transparency Project was mentioned at the beginning the Annex 1

May 2023	Fumiko Kudo shared with Prime Minister Fumio Kishida about the Digital Transformation Summit outcomes towards the G7 Hiroshima Summit
	G7 Hiroshima Summit: G7 leaders endorsed the IAP establishment as the operationalization of DFFT

9 | Smart cities project

Yuta Hirayama
Project Lead, IoT and
Urban Transformation

It has been five years since the inception of the Centre for the Fourth Industrial Revolution Japan, and as we compile a document summarizing approximately four and a half years of activity in the smart city project, I must admit that it is difficult to look back as though we have reached the "finish line". This is because the initiative I was involved in, the G20 Global Smart Cities Alliance, is a community-driven effort, and even if the Centre for the Fourth Industrial Revolution Japan reaches a milestone in its activities, it does not mean the project comes to a halt. If I were to ask all of you reading this document how you would approach summarizing a project that will continue into the future, I believe many of you would share the same sentiments as I do. Nevertheless, I would like to take a moment to briefly look back on the past four and a half years of our journey.

It was around November 2018 when I was approached to be involved in the project. After going through multiple rounds of interviews, the contract was finalized at the end of February 2019. From there, it was a whirlwind of days, starting with the B20 in March, U20 in May, G20 in June and leading up to the establishment meeting in October. I remember feeling extremely exhausted and overwhelmed by all the unfamiliar tasks. Looking back, I can laugh about it because it ended well, but if I were asked to do the same thing again, I would definitely think twice.

Perhaps many people might think that this project was heavily supported by the Japanese government and started off with their full backing. However, in reality, I had to dedicate a significant amount of time and effort to explain and gain understanding from government officials in Japan. In that sense, I still hold deep gratitude to everyone who supported me during those challenging times. As someone who was involved from the beginning,

I am truly filled with emotion that we were able to hold a jointly organized event with the Ministry of Land, Infrastructure, Transport and Tourism during the previous G7 Urban Ministers' Meeting.

From the beginning of its activities, the Global Smart Cities Alliance (GSCA) received generally positive responses from many municipalities in Japan, and what I have felt throughout the course of our work is that we may have received similarly positive evaluations overseas as well. In particular, the award we received at the Smart City Expo in 2021 was a significant achievement for us. In 2022, I had the opportunity to engage in discussions with various urban representatives at numerous international conferences, and during those interactions, I strongly reaffirmed the importance and power of community building. Needless to say, the initiative and participation of each individual within the community are crucial. Therefore, although I have indeed been involved as the main contact person in this project from its launch until now, the protagonists are undoubtedly the participating municipalities, the fellows and the experts who contributed to the development of model policies. My role was simply to connect all of you together.

I would like to express my expectations for the future of this project. Undoubtedly, the smart city market has grown in scale since the visions of many companies four and a half years ago. Nevertheless, the overarching trend of urban digital transformation remains irreversible, and the issue of insufficient technology governance persists since the project's inception. Therefore, I firmly believe that through the continued activities of this community, we can emerge as a leading force in the global smart city market. As an alumni, I hope to provide my support.

Lastly, thank you for the past four and a half years.

December 2018	Smart City Workshop
March 2019	Smart City Dialog Series
	B20 Tokyo 2019
June 2019	Appointed as secretary to GSCA
October 2019	Launch of the G20 GSCA
May 2020	First working group meeting was held
	Launch the Regional Alliance (Japan)
July 2020	G20 Digital Economy Ministers Meeting chaired by Saudi Arabia
November 2020	Launch of GSCA Pilot City Programme
February 2021	Launch of Smart City Policy Roadmap
April 2021	Global Technology Governance Summit (GTGS) hosted by Japan
	GSCA Japan Summit 2021 (GTGS Side Event)
	Agenda blog: "Japan's smart city initiatives will play key role in its digitisation and economic revival"
July 2021	White paper: *Governing Smart Cities: Policy Benchmarks for Ethical and Responsible Smart City Development*
November 2021	Governance Economy Award at Smart City Expo World Congress/Launch the Regional Alliance (Latin America)
April 2022	GSCA Japan Summit 2022
June 2022	GTGR published *Building Regional Alliances for Urban Transformation*
August 2022	Workshop on Fukuoka City's Green Field Project
	Article contribution at Japan Times: "For an ageing Osaka suburb, the best "smart city" innovations are low-key"
	Speaking at the U20 Mayors Summit Side Event of UCLG ASPAC-Smart Change Jakarta "Digital Governance in Accelerating Sustainable Development and Climate Resiliency"
October 2022	UCLG World Congress
	Article contribution The Japan Times: "The city aiming to change perceptions of electronic voting in Japan"
	GSCA Japan Summit Autumn 2022
November 2022	Agenda blog: "Open data is a game changer for cities worldwide — here's how to use it best"
December 2022	Article contribution at Japan Times: "Is it a bus or a taxi? For some small Japanese towns, the answer is both"
January 2023	Regional Alliance (South East Asia) launch and first workshop
March 2023	Finalized security policy in Fukuoka City and started to implement privacy impact assessments (PIAs) policy in Tsukuba City.
	G7 Official Private-Public Event: High-Level Round Table for the G7 Sustainable Urban Development Ministers' Meeting

10 | Agile governance project

Teruka Sumiya
Project Specialist,
Agile Governance

In February 2020, I was asked to join the Agile Governance Project by Chizuru-san, who was then Head of the Centre for the Fourth Industrial Revolution Japan. I remember how excited I was to hear that the project would develop "multistakeholder rule-making" globally, which has been my long-term mission.

There is a big difference between prevailing views then and the views we see now: from a place where only a few people knew the term "agile governance" back in 2020, to one where agile governance is acknowledged in the G7 Digital and Tech Ministerial Declaration in 2023. I am very happy and honoured to have been a part of this big change through the Centre for the Fourth Industrial Revolution Japan's Agile Governance Project.

Activities over the three years can be categorized into three: 1) awareness raising and community building, 2) theorizing, and 3) implementation.

In the awareness-raising phase, we worked with Forum members in Geneva and San Francisco to initiate the Agile50, which awards 50 people around the world who are implementing agile governance activities, as well as the peer-to-peer network, where regulatory authorities from different countries learn from each other. Also, in response to the strong demand for government digital transformation that arose due to COVID-19, we organized the Digital Governance Lab series, which brought people together to examine digital transformation issues in administrative organizations.

In the theorizing phase, we published a white paper, *Rebuilding Trust and Governance*, with METI volunteers and Hitachi, which examined the relationship between governance and trust. The paper successfully conveyed the message that effective governance is essential for building trust and vice versa.

In the second year, at the Global Technology Governance Summit in April 2021, we organized two sessions, with Minister Kono speaking on agile governance and Hitachi's chief technology officer Suzuki on trust.

The implementation stage focused on the five digital principles, including the agile governance principles that were adopted by the Digital Temporary Administrative Commission in November 2021 and led a working group on digital legal administration. This achievement was based on the efforts in the first year to organize the processes for the digital transformation of legal administration work with the input of the digital-ready legislation in Denmark, for which we made a recommendation to Minister Kono of the Digital Legislative Bureau.

The activities of the Digital Governance Lab led us to the digital marketplace (DMP), a new transparent and efficient procurement reform. Our research and activities included international workshops and recommendations to the Digital Agency, and input to the then Deputy Minister Kobayashi. These efforts brought a great success and led to the agenda for the Digital Agency's Procurement Reform Study Group.

In the third year, the study of DMPs began in earnest and I participated as a member of the Procurement Reform Study Group. The DMP task force brought together about 70 practitioners from various positions, and an "agile" process was embodied, including study through the construction of mock-ups.

As a community-building activity, our Agile Governance Lab functions as a forum for sharing national and international governance innovation practices.

In 2023, it was also a great accomplishment to have agile governance acknowledged in the declaration of the G7 Digital and Tech Ministers' Meeting, as well as to act as the secretariat of a task force consisting of a group of experts and practitioners from G7 countries on the governance principles, whose recommendations were referred to in that declaration. It was also a great learning experience to organize the Agile Governance Summit.

There is now a strong need for a vision and grand design of the kind of society we want to live in, not just one of increased productivity and efficiency. We must accommodate an increasingly diverse and conflicting set of values, and we need to face these dilemmas head-on, build consensus and update democracy to show a third way forward.

We have high hopes that the practice of agile governance can make a significant contribution to this movement.

The Centre for the Fourth Industrial Revolution Japan has represented a wide range of stakeholders, providing them with a "third place" to connect.

I would like to thank not only the full-time members of the Centre for the Fourth Industrial Revolution Japan but also the consultants who worked alongside us on the project, the fellows who generously provided their perspectives from the field, the interns who supported the project as behind-the-scenes helpers, and the many others who directly and indirectly supported agile governance.

November 2020	Digital Governance Lab #1 Challenges towards government digital transformation
December 2020	Launch of Agile 50: The World's 50 Most Influential People Revolutionizing Governments
	Digital Governance Lab #2 Core system of the Japan government
January 2021	Digital Governance Lab #3 Frontline of local government digital transformation
	Digital Governance Lab #4 Public procurement and digital transformation
March 2021	Digital Governance Lab #5 Frontline of corporate digital transformation
	White paper: _Rebuilding Trust and Governance: Towards Data Free Flow with Trust (DFFT)_
April 2021	Agenda blog: "Trust is fraying in the digital age. How 'trust anchors' could help"
	Global Technology Governance Summit (GTGS) hosted by Japan
	Digital Governance Lab #6 Unlocking value of data
July 2021	Digital Governance Lab #7 Human resources for digital transformation
September 2021	Digital Governance Lab #8 Council update and UX reform
October 2021	Digital Governance Lab #9 Proposals for the Digital Agency
November 2021	Agile 50, 2021
December 2021	Launch of the Digital Marketplace Project and the international workshop for public procurement reform
	Five digital principles came into force. This is a centralized coordination with the government's Digital Legislation Bureau to ensure every law and regulation conforms to digital goals. This is part of the centre's initiative with the government.
January 2022	Proposal on IT public procurement for the Digital Agency
February 2022	Article contribution, The Japan Times: "Bringing public services into the digital age needs a legal revolution"
April 2022	Presenting the Digital Market Place to the Vice-Minister of the Digital Agency
May 2022	Start of the workshop for citizen-centred AI governance in Kashiwanoha Living Lab

June 2022	Had the agile governance session at the Global Technology Governance Retreat (GTGR)
July 2022	Agile Governance Lab #1 Agile governance as an essential capability
August 2022	Agile Governance Lab #2 Agile business model
	DMP Task Force #1
September 2022	The final session of the workshop on AI governance in Kashiwanoha Living Lab
	Agile Governance Lab #3 CPS and agile governance
October 2022	DMP Task Force #2
November 2022	Agile Governance Lab #4 Foresighted policy design
December 2022	Agile Governance Lab #5 Decision-making by multistakeholders
January 2023	Agile Governance Lab #6 System design in system of systems
	Agenda blog: "A digital revolution for Japan and the world"
	Hand over of the proposal on the Digital Market Place to the Digital Agency of Japan
March 2023	Launch of the Task Force on Governance for a Digitalized Society
April 2023	*Agile Governance Summit* and the *Governance Principles for a Society Based on Cyber-Physical Systems* report was published
	The governance principles were addressed in the Ministerial Declaration of the G7 Digital and Tech Ministers' Meeting
June 2023	Agile Governance Lab #7

Healthcare data policy project

11

Takanori Fujita
Project Lead,
Healthcare Data Policy

6,935,889.

This is the number of deaths due to COVID-19 as of 24 May 2023. During the "Spanish Flu" pandemic, more than 17 million people, and by some estimates 100 million, died. Medical advances over the last 100 years have undoubtedly contributed to this difference, and advances mean more effective use of healthcare data.

When looking back over the five years of the Healthcare Data Policy Project (HDP) at the Centre for the Fourth Industrial Revolution Japan, the COVID-19 pandemic cannot be ignored.

HDP began with the Healthcare Dialogue Series in August 2018. Attending as a participant at the time, I was unexpectedly asked to take the stage to discuss governance in healthcare data.

Following discussions with the World Economic Forum's healthcare and data policy teams and partner companies, the HDP project was launched the same year. The key global issue identified at that time was addressing chronic diseases, particularly age-related diseases such as dementia.

Healthcare data, such as genomic information, is highly sensitive and must be handled with care. How do we make use of data while protecting individual rights? One of the goals of the project was to solve this difficult problem. One key is data access that does not rely solely on consent: at the 2019 Annual Meeting of the New Champions and in a subsequent white paper, the project proposed authorized public purpose access (APPA), which seeks to promote appropriate data access for public interest purposes. We published the APPA white paper on 17 January 2020. On 30 January, the World Health Organization (WHO) declared a "public health emergency of international concern".

APPA was not necessarily proposed with COVID-19 in mind, but the pandemic has reframed its meaning.

In Asian countries, the use of data for infectious disease control was a given. In Europe, the use of healthcare data has been accompanied by careful debate and legislative changes. We at HDP have taken the position that we should be rather cautious about easy data use in terms of appropriate data access while at the same time being involved in the creation of mechanisms for public health measures and economic activities, such as the Commons Project. As part of this, I also helped supervise the contact verification application COCOA in Japan. The study on the use of COVID-19 and other data for infectious disease control was continued until the G7 in 2023. The Commons Project and other initiatives have also reminded us of the difficulties of international collaboration. It also became clear that the use of digital technology in Japan is not necessarily more dynamic than in other countries. On the other hand, the number of deaths due to infectious diseases was in some respects better, probably due to the efforts of the medical and health sectors.

After the Global Technology Governance Summit (GTGS) in 2021, the HDP team promoted digitalization in local authorities as the basis for generating usable data, as well as APPA for data use, in order to make use of the lessons learned in COVID-19 measures.

We decided to develop a toolkit to promote the social implementation of personal health records (PHR) and other systems in cooperation with the Digital Rural City Initiative, in particular, the Digital Rural Health Special Zone. At the same time, addressing the ageing population was an ongoing theme. Model cases for the use of local care data in the community were examined, and a mechanism was set up.

Together with the WHO to award excellent initiatives for ageing, called the Healthy Ageing 50. We also organized the Healthcare Data Governance Lab as an initiative for collaboration with innovators in healthcare, and discussions were held on

governance for the application of advanced technologies such as the metaverse and Web3 to the healthcare domain.

The fact that we were able to deal not only with age-related diseases but also with diverse themes and achieve a certain degree of success is likely thanks to the unique organization of the Centre for the Fourth Industrial Revolution Japan, namely the two project leads who were in place until 2021, the contributions of many fellows and interns, and the collaboration with other projects within the Centre for the Fourth Industrial Revolution Japan.

Looking back over the past five years and looking forward to the future, I feel that more work must be done on how we can make the world a better place while bumping up against rigid organizations. I hope to see more and more impactful initiatives on healthcare at the Forum.

August 2018	Healthcare Dialogue Series
December 2018	Core group of experts meeting
July 2019	Annual Meeting of the New Champions 2019
January 2020	White paper: *APPA – Authorized Public Purpose Access: Building Trust into Data Flows for Well-being and Innovation*
May 2020	Agenda blog: "Answering key data governance questions raised by COVID-19"
	Privacy and security evaluation and system operation notes of "Contact Confirmation App and Related System Specifications"
August 2020	Agenda blog: "A new data governance model for contact tracing: Authorized Public Purpose Access"
October 2020	Expanding the use of national database for public purposes by amending the Health Insurance Law (implementation of APPA in Japan)
March 2021	Agenda blog: "What is the biggest benefit technology will have on ageing and longevity?"
April 2021	White paper: *Resetting Data Governance: Authorized Public Purpose Access and Society Criteria for Implementation of APPA Principles*
	Briefing paper: *Good Data: Data-sharing and public trust and willingness*
	Global Technology Governance Summit (GTGS) hosted by Japan
May 2021	White paper: *Good Data: Sharing Data and Fostering Public Trust and Willingness*
	Agenda blog: "How can we best engage older workers in reskilling efforts"
September 2021	Healthcare Data Governance Lab #1
October 2021	Agenda blog: "Why we need to leverage data for healthy ageing"
December 2021	Healthcare Data Governance Lab #2 Public good and privacy at PHR field
January 2022	Agenda blog: "Predictions 2022: What are the biggest healthcare shifts? Here's what health experts think"
February 2022	Healthcare Governance Lab #3 Healthy ageing and AI/data
March 2022	Healthcare data and PHR workshop with municipal governments #1
April 2022	Healthcare data and PHR workshop with municipal governments #2
	Briefing paper: *Toolkit for Personal Health Records and Data Use by Municipalities*
	Healthy Ageing 50 in collaboration with WHO

August 2022	Briefing paper: *Key Agendas for Healthcare Data Use in 2040: The Future of Health Data in the Fourth Industrial Revolution*
September 2022	Healthcare Governance Lab #4 Healthcare well-being in the Web3 era
	Launch of Healthy Ageing 50
November 2022	Fifth Well Aging Society Summit Asia-Japan (WASS)
January 2023	Agenda blog: "Why we need to unlock health data to beat disease"
	Agenda blog: "How Japan's 'trusted web' could improve digital governance"
April 2023	Briefing paper: *Transforming Healthcare through the Metaverse*
May 2023	Expanding the use of healthcare data by amending the Next Generation Healthcare Infrastructure Act (implementation of APPA in Japan)

12 Mobility project

Fumiko Kudo
Project Strategy Lead

Societies around the world are ageing at unprecedented rates as people live longer and have fewer children. Japan is at the forefront of this phenomenon.

One challenge in ageing societies is transport. We have looked at rural Japan for hints about the world's mobility future. Our projects have aimed to take advantage of the opportunities presented by digitization and other technological advances to improve transport in cities, suburbs and rural areas from an integrated perspective.

Our mobility team has been addressing two important transport challenges: rural mobility and the last-mile problem in delivery services. Both are especially pressing in Japan, where crowded cities exist alongside ageing, depopulating countryside that, in many cases, can no longer support traditional public transport networks.

That is the reason our approach attracted considerable attention at the G7 Hiroshima Summit and the G7 Transportation Ministers' Meeting. I am honoured to have shared our insights with global leaders in the public and private sectors, including ministers and C-suite executives, through wonderful opportunities such as the G7 and GTGS.

At the same time, I believe that our mobility project is one of the most hands-on and implementation-oriented projects at the Centre for the Fourth Industrial Revolution Japan. We arranged a study group with our wonderful partners in Shobara City, Hiroshima Prefecture. With the consent of the residents, we have been supporting the analysis of consumption and traffic data and facilitating discussions with stakeholders based on the results of the analysis.

Public-private collaboration with the participation of residents is a desirable goal but putting it into practice entails a variety of challenges. Our project is a rare example of an initiative that overcame these difficulties and was able to increase stakeholder ownership.

As we reach the end of this remarkable project, I would like to express my heartfelt gratitude to all involved.

First and foremost, I want to acknowledge the remarkable efforts and expertise brought to the table by project team members, including fellows and interns. Each of you has contributed a unique set of skills and perspectives, which has undoubtedly enriched our project and made it a success.

I would like to extend my gratitude to the individuals who went above and beyond their designated roles to ensure the project's success. Your extra effort, initiative and willingness to take ownership have not gone unnoticed. Your dedication to delivering exceptional results has set a benchmark for excellence that will be remembered.

We would also like to express our deepest gratitude to everyone who collaborated on the project, including experts, business leaders, local community members and government officials. Let us take a moment to celebrate our accomplishments together. We have demonstrated that through collaboration, hard work and a shared vision, we can achieve remarkable outcomes. Once again, thank you all for your remarkable contributions.

October 2018	Mobility dialogue series for agenda shaping
	– Developed a "**Public Transportation Sustainability Index**" to help define "transport white space" – priority areas with unsustainable public transport under shrinking population, to trigger debate and encourage local governments to accelerate policy reforms.
January 2020	White paper: *Transforming Rural Mobility in Japan and the World* about the index and type of solution
	Agenda blog: "A roadmap for repairing rural mobility in Japan - and beyond"
	– Specific activities for the realization of sustainable local transport, including support for the formulation of a transport network formation plan in Shobara City, Hiroshima Prefecture
September 2020	Future of Last-Mile Logistics project launch. Discussed with experts from public, private sectors and academia
November 2020	Development of a case study in cooperation with Shobara City in line with the revision of the guidelines for preparing a regional public transport network formation plan
April 2021	Global Technology Governance Summit (GTGS) hosted by Japan
	– GTGS21 celebration event, webinar "MaaS in Rural Mobility"
	– GTGS21 session "Governing Goods on the Move"
	– White paper: *Transforming Rural Mobility with MaaS*
	– Briefing paper: *Efficient and Sustainable Last-Mile Logistics: Lessons from Japan*
	– Agenda blog: "Ageing is changing the way we move. Japan shows how transport systems can adapt"
July 2021	Agenda blog: "Robots can help Japan solve its 'last-mile' crisis in logistics. Here's how"
	– Supporting data analysis in Shobara City: A cycle of planning and implementation of measures derived from the analysis of overlapping behavioural data, verification of the agile effects of the data and return of benefits to the community through improvements were created.
April 2022	Mobility session at the GSCA Japan Summit 2022
	Briefing paper: *The Shobara Model: Leveraging multi-source local data for the public good*
August 2022	Our Shobara City case study featured in the Digital Agency's report *The Future of the Digital Transportation Society 2022*
September 2022	Mobility session at the GSCA Japan Summit 2022 Autumn
March 2023	Briefing paper: *The Benefits of Comprehensive Data Use in Mobilizing Regional Projects: Improving Residents' Quality of Life by Leveraging Mobility*
May 2023	Official exhibition of the G7 Hiroshima Summit
June 2023	G7 Transport Ministers' Meeting
	– Keynote speech at G7 Transport Ministers' Meeting
	– Official exhibition
	– White paper: *Mobility as a Leverage to Improve Quality of Life with Resident Participation*

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World Economic Forum Centre for the Fourth Industrial Revolution Japan staff

Fellows:

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NEC

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Takeda Pharmaceutical

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Hisaki Fukutomi
Tokio Marine & Nichido Fire Insurance

Haruka Hamada
Deloitte

Yuki Haramoto
Deloitte

Yukio Hayashi
Toyota Motor

Kazuaki Hayata
Salesforce

Michihiro Higuchi
Ministry of Agriculture, Forestry and Fisheries

Yaeko Hodaka
Baker McKenzie

Satoshi Hondo
Toyota Motor

Yoichi Horii
Hitachi

Yosuke Horii
Eisai

Hidenobu Iizuka
Takeda Pharmaceutical

Sanae Imai
Salesforce

Yusuke Inoue
Ministry of Health, Labour and Welfare

Yoshihiro Irino
Suntory

Yusuke Ito
Toyota Motor

Daichi Iwata
NEC

Tadashi Kaji
Hitachi

Koji Kawabata
Sompo Japan Insurance

Masafumi Kawasaki
McKinsey

Takeshi Kondo
NTT Communications

Shuichi Kuroishi
Deloitte

Takuya Masuda
Salesforce

Mao Matsumoto
NEC

Hiroyuki Miuchi
Takeda Pharmaceutical

Yasunori Mochizuki
NEC

Takehiko Nagumo
Mitsubishi UFJ Research & Consulting

Keisuke Naito
Eisai

Masanori Nakane
Eisai

Makito Nishibatake
Ministry of Finance

Yuiko Noda
Visa

Masayasu Okajima
Sompo Institute Plus

Masako Okamoto
Mitsubishi Tanabe Pharma

Reiko Onodera
Takeda Pharmaceutical

Mio Otashiro
Ministry of Foreign Affairs

Haruka Saito
Ministry of Land, Infrastructure, Transport and Tourism

Ryosuke Sakaki
Ministry of Foreign Affairs

Shuji Sakamoto
Takeda Pharmaceutical

Hitomi Sano
Eisai

Hexi Shen
McKinsey

Hirofumi Sugano
Suntory

Yasunori Suzue
Sompo Holdings

Yoshikazu Suzumura
Aisin

Mamoru Takano
Ministry of Agriculture, Forestry and Fisheries

Noriko Takata
Takeda Pharmaceutical

Hisato Tamiya
Ministry of Finance

Yuko Tanaka
NEC

Ryosuke Tawara
Takeda Pharmaceutical

Hiroto Uesaka
Denso

Satoru Urata
Takeda Pharmaceutical

Hiroyuki Yogo
Aisin

Junichi Yura
Fujitsu

Tomonori Yuyama
Financial Services Agency

Mizue Yuzurihara
Salesforce

Contributors:

Satoshi Hashimoto
Poliflect

Junko Tilgner
Capricom

Akira Tojo
Poliflect

Soichi Yamamoto
Awake

Interns:

Motohiro Aikawa
Ryuhei Aoyama
Nagisa Asano
Nguyen Anh Duong
Keishin Doino
Moe Furukado
Rina Hashigasako
Katsutoshi Hori
Mizuki Igata
Chiyuki Ikeda
Uehara Iori
Nozomi Ishii
Ryu Ito
Koichi Kaku
Kenta Kasuya
Sari Kawada
Yuhi Kawano
Jimin Kim
Yuya Kiyoshi
Reina Kobayashi
Rintaro Komaba
Yuhei Kotani
Hiroya Makihara
Yuhi Matsushita
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Tomoya Murakawa
Mayuka Murota
Yuki Nakano
Mika Nara

Sakiko Negishi
Shigetatsu Nishigai
Tomoya Nishira
Yuki Ohara
Naoki Okamoto
Yasuhiro Ota
Hiroaki Sagawa
Gianco Perez Velasco Sanchez
Seiya Sasaki
Moeka Sato
Ryoma Sato
Yui Sawano
Yuri Sayama
Gunjan Sharma
Kiko Shiga
Taichi William Sugai
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Taiga Yamada
Shugo Yamagami
Yosuke Yamagishi
Kohei Yamasaki
Yuri Yamasaki
Shiori Yano

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