

Japan Fair Trade Commission  
Competition Policy Research Center

# **Report of the Study Group on Competition Policy for Data Markets**

**[Tentative translation]**

June 25, 2021

## Members of the Study Group on Competition Policy for Data Markets

IKEGAI Naoto	Associate Professor, Hitotsubashi University Graduate School of Law
ITAKURA Yoichiro	Attorney, Hikari Sogoh Law Offices
KUROSAKA Tatsuya	President and Chief Executive Officer, Kuwadate, Inc.
KOBAYASHI Shintaro	Public Policy Group Manager and Senior Consultant, ICT Media & Service Industry Consulting Department, Nomura Research Institute, Ltd.
KORENAGA Daisuke	Professor, Graduate School of Law and Politics, Tokyo Metropolitan University
MATSUSHIMA Noriaki (Chair of the study group)	Professor, Institute of Social and Economic Research, Osaka University Director, Competition Policy Research Center, Japan Fair Trade Commission
MORIKAWA Hiroyuki	Professor, Graduate School of Engineering, the University of Tokyo
WATANABE Yasutora	Professor, Graduate School of Economics, the University of Tokyo Director, U Tokyo Economic Consulting Inc.

[Title of each member is as of May 24, 2021.]

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[Disclaimer]

This report summarizes the discussion of eight meetings of the Study Group on Competition Policy for Data Markets organized under the Competition Policy Research Center (hereinafter referred to as “CPRC”) of the Japan Fair Trade Commission (hereinafter referred to as “JFTC”). It aims at providing reference for institutions relevant to the discussion in their policy makings.

During the discussion, the study group gathered opinions from experts and businesses relevant to the topic. It referred to opinions from the General Secretariat of the JFTC, which is the secretariat of the study group. However, this report only represents opinions of the study group. It does not represent official opinions of the JFTC.

## Section 1: Introduction

In recent years, data<sup>1</sup> has been called as “the oil of the 21st century” and recognized as a source of competitiveness in the digital age. Under these circumstances, the field for competition in the rapidly changing digital age is now shifting from “cyber spaces” where digital platform operators provide services such as search engines or social networking services, to “Second Phase” where businesses compete for “integration of cyber and physical” to sophisticate businesses in “physical (real) space” such as automatic driving, medical care, nursing or agriculture by utilizing data analyzed in cyber spaces.<sup>2</sup>

In a global context, some governments in foreign countries or regions are developing policies to create data spaces where high quality and large amount of data can be accessed easily and securely, while keeping in mind the competition in the rapidly changing digital age as European Commission has announced “A European strategy for data”<sup>3</sup> focusing on the importance of data. In October 2020, the Japanese government also started formulating a data strategy for building a data-utilization platform suitable for a digital nation in the 21st century by organizing the Data Strategy Task Force.<sup>4</sup> In June 2021, the Japanese government has formulated a comprehensive data strategy.<sup>5</sup>

Under these circumstances, it is of great significance to discuss measures from the view of competition policy to promote competition of businesses utilizing data and innovation, which may lead to the development of the Japanese economy in the digital age.

Given this background, the JFTC has held the “Study Group on Competition Policy for Data Markets (hereinafter referred to as “the study group”)” under the CPRC, which discussed various issues and challenges of competition policy in data markets based on the knowledge of experts and the state of Japan’s data markets.

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1 In this report, the term “data” refers to numbers, characters, pictures and sounds indicating objective facts. Normally, data can be mechanically processed.

2 New IT Policy Principles for the Digital Age, June 7, 2019, Strategic Conference for the Advancement of Utilizing Public and Private Sector Data, Strategic Headquarters for the Advanced Information and Telecommunications Network Society

3 COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A European strategy for data, COM/2020/66 final

4 Decision by the Digital Government Ministers’ Meeting on October 12, 2020

5 Attachment of “Priority plans for achieving digitalized society,” Cabinet Decision, June 18, 2021

Following the eight meetings of the study group, this report summarizes the result of discussion on recommended points from the view point of competition policy to discuss data utilization and establishing mechanisms for it.

### Appendix: Meetings of the Study Group on Competition Policy for Data Markets

Date	Topics	Speaker
<b>#1</b> November 20, 2020	○ Organization of the Study Group on Competition Policy for Data Markets	
	○ State of data markets	KUROSAKA Tatsuya (Member of the study group)
	○ Characteristics of data	
<b>#2</b> December 21, 2020	○ Draft discussion points for the Study Group on Competition Policy for Data Markets	
	○ Approaches for data collection and utilization from the view point of competition policy	
	○ Utilization of personal data and privacy	MATSUSHIMA Noriaki (Chair of the study group)
	○ Situations of Europe in terms of data related policies	IKEGAI Naoto (Member of the study group)
<b>#3</b> January 19, 2021	○ Initiatives by the platform sharing IoT data of ships (“IoS-OP”)	Ship Data Center Co., Ltd.
	○ Overview of the contract guidelines for using AI and data	Ministry of Economy, Trade and Industry
	○ Data utilization in agriculture markets	
<b>#4</b> February 9, 2021	○ Initiatives by information banks	Information Technology Federation of Japan
	○ Trends of rules and digital platforms related to IoT data	KOBAYASHI Shintaro (Member of the study group)
	○ Initiatives of data utilization in healthcare sectors	
<b>#5</b> March 17, 2021	○ Free discussion	-

<b>#6</b> April 7, 2021	○ Impacts of the amendment of the Personal Information Protection Act on data distribution	ITAKURA Yoichiro (Member of the study group)
	○ Direction of the study group report	
<b>#7</b> April 30, 2021	○ Draft outline of the study group report	-
<b>#8</b> May 24, 2021	○ Draft of the study group report	-

## Section 2: Data markets

### 2.1 Market overview

#### 2.1.1 Current status of data utilization

In the past, data utilization was mainly in the form of digital platform operators<sup>6</sup> providing highly convenient services such as search services, social networking services (SNS), e-mail services, and e-commerce to individuals online, collecting data on the individuals using the services, and utilizing the data for online search advertising, and so on. In recent years, with the spread of smartphones and the development of sensor technology and IoT devices, there is a growing trend of utilizing data from physical (real) space, so-called real data, not only in cyber (virtual) spaces as in the past, but also in business in physical space. For instance, in areas such as agriculture, shipping, healthcare, broadcasting, energy and mobility, initiatives are being made to create new value from data by accumulating various kinds of data in shared platforms and allowing various businesses to utilize the data to expand their business. In addition, new initiatives have begun, such as data trading markets,<sup>7</sup> which provide a place to match data providers (sellers) and data users (buyers) to conclude transactions of data generated by factory or plant machinery, and so-called Personal Data Bank, which manages personal data entrusted by individuals and provides some benefits to them in exchange for providing the data to businesses that wish to use the data.

As described above, we are beginning to see new forms of data distribution and utilization, where data is traded through intermediaries such as data trading markets, Personal Data Bank, and platforms that aggregate data in specific fields (data sharing platforms), and these projects often involve stakeholders such as data generators, providers, users, governments, and organizations. In light of these circumstances, this

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<sup>6</sup> In this report, a “digital platform” has the characteristic of providing third parties with online platforms for various services by using information and communication technologies and data in such a way as to create multi-sided markets with multiple user segments and so-called indirect network effect (the effect that, as the number of users increases in one side of a multi-sided market, the utility in another side increases). A “digital platform operator” refers to an enterprise that provides the digital platforms with the above-mentioned characteristic, such as online shopping malls, internet auctions, online flea markets, apps markets, search services and SNS. (“Guidelines Concerning Abuse of a Superior Bargaining Position in Transactions between Digital Platform Operators and Consumers that Provide Personal Information, etc.” (December 17, 2019, JFTC))

<sup>7</sup> As an example of data trading markets, EverySense Japan, Inc. operates an IoT information distribution platform that mediates the buying and selling of data by matching data obtained from sensors with information (desired conditions) required by companies and research institutions that are using data for business development, new services, and academic research. (“Summary of Findings by the Data Trading Market SWG,” website of the Ministry of Internal Affairs and Communications: [https://www.soumu.go.jp/main\\_content/000501156.pdf](https://www.soumu.go.jp/main_content/000501156.pdf))

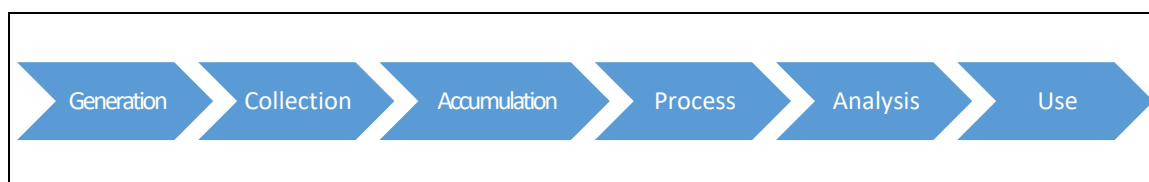


report provides a summary of views on various topics and issues concerning competition policies by broadly defining “data markets” as “spaces for data distribution,” which include not only places for transactions related to various kinds of data taking place in each stage of the process (see Fig. 1 of the Section 2.1.2 below) from data generation through data use but also places where products and services utilizing data are finally provided to end users.

### 2.1.2 Forms of data utilization

Fig. 1 shows a typical process from when data is generated to when it is used.

[Fig. 1] Process from Generation to Use of Digital Data



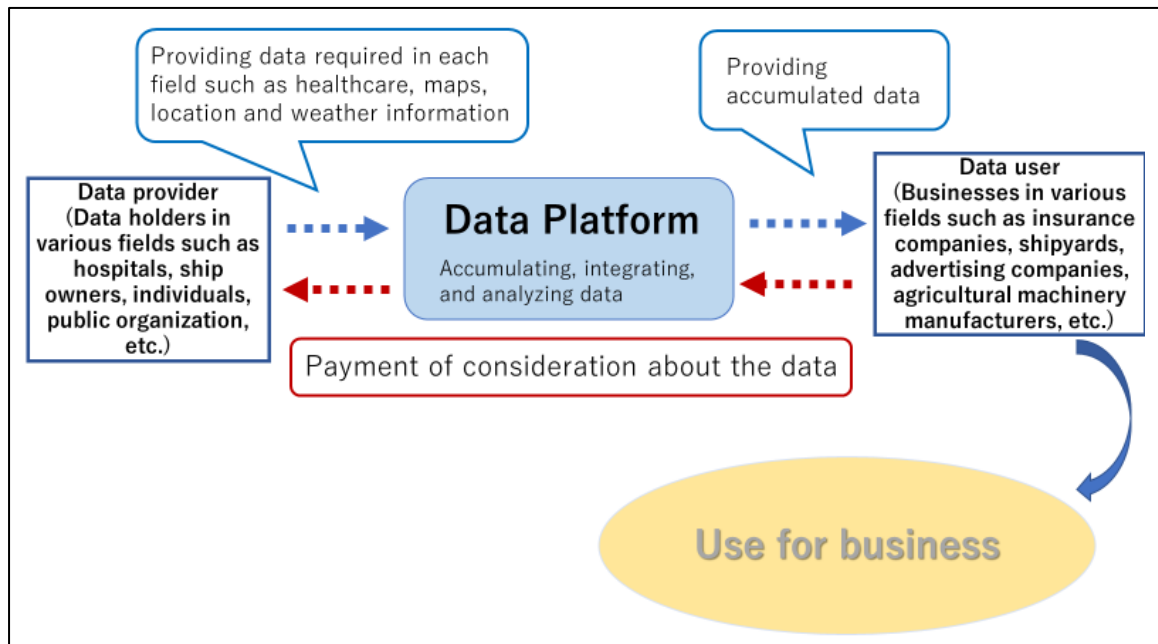
(Source) Prepared by the secretariat of the study group with reference to Chart 2-1-1-1 of the 2019 White Paper on Information and Communications, Ministry of Internal Affairs and Communications

One form of utilizing data of individuals and businesses is where a single business enterprise does everything from collecting data to accumulating, processing and analyzing the data and then providing products and services that utilize the data.<sup>8</sup> Meanwhile, some businesses may find it difficult to collect various types of data on their own, so they may establish a platform for data collection and analysis, or data trading markets, in order to procure and utilize data. By aggregating data trading on such platforms and trading markets, the transaction costs for both data providers and users can be reduced compared to individual transactions. At the same time, the indirect network effect, whereby the more users on one side of the platform, the more benefit users on the other side receive, is expected to make data distribution more active. Some data utilization schemes, including the platforms and trading markets described above, can be illustrated as follows:

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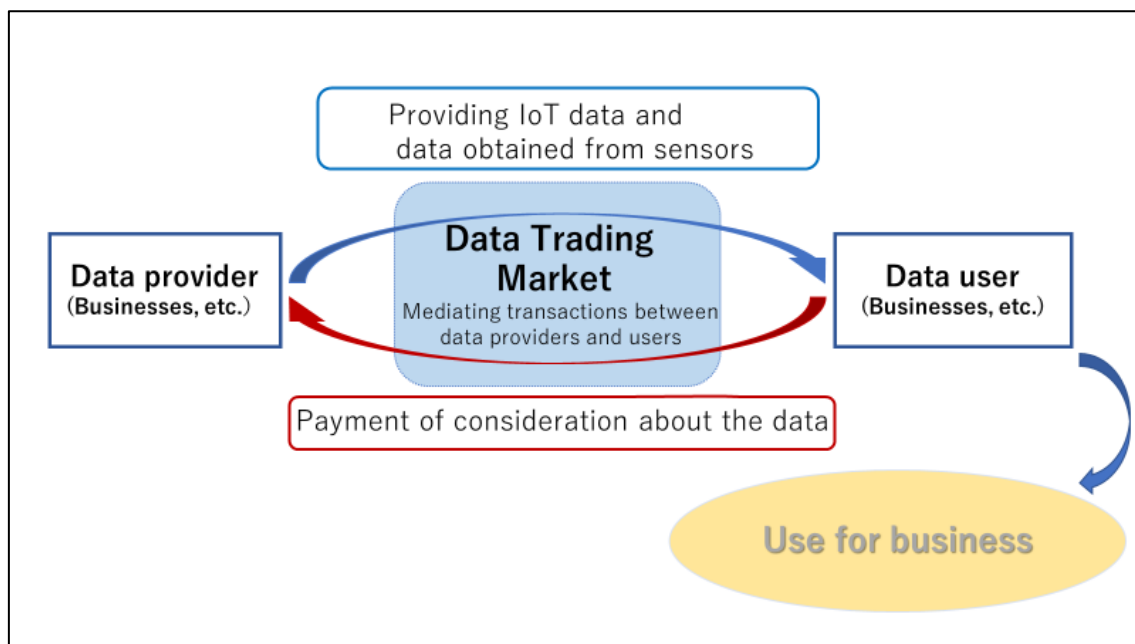
<sup>8</sup> One case in the field of IoT, for example, is where Company B installs sensors in Company A's factory, analyzes the data collected from the sensors, such as information regarding the manufacturing facilities, and then provides Company A with a service to help manage the facilities. In the digital platform business, cases in which a digital platform operator analyzes data such as those pertaining to users' search histories collected through a search service provided by the digital platform operator and makes use of the data for its own digital advertising service would also fall under this category.

[Fig. 2] Data Platform



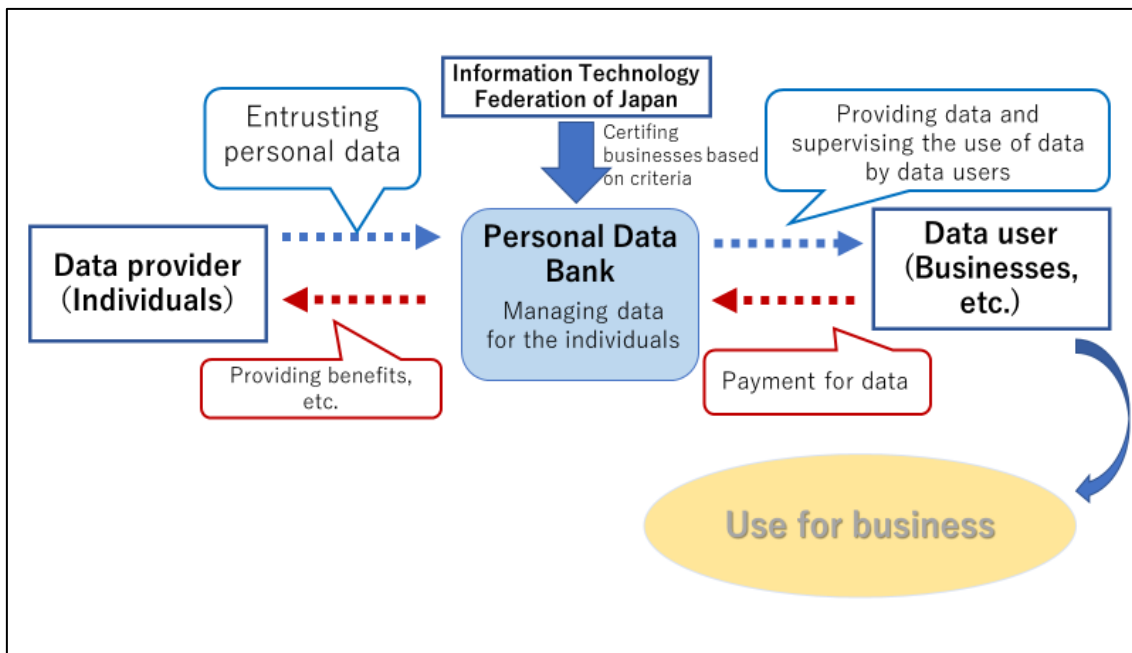
(Source) Prepared by the secretariat of the study group

[Fig. 3] Data Trading Market



(Source) Prepared by the secretariat of the study group

[Fig. 4] Personal Data Bank



(Source) Prepared by the secretariat of the study group

### 2.1.3 Data classification

While data can be classified in various ways, data generated in the course of the business activities of businesses may be referred to as industrial data,<sup>9</sup> and data related to individuals may be referred to as personal data.<sup>10</sup> Industrial data include, for example, data generated by equipment in places such as factories, plants, ships, or vehicles, and collected through sensors installed in the equipment, while personal data include electronic medical record information, TV viewing history, location information obtained from devices like cell phones, bank account information, and SNS user information.

9 "Industrial data" refers to digitalized and structuralized knowhow (called "digitalized intelligence," which refers to non-personal data owned by industries or companies from agriculture and infrastructure management to business services) and "M2M data" (M2M (Machine to Machine) streaming data, e.g., IoT device data in production sites and sensing data (including strains, vibrations, and types and weights of passing vehicles) from IoT devices installed on bridges). ("Information and Communications in Japan 2017," Ministry of Internal Affairs and Communications)

10 The term "personal data" has no definition in current law. According to "Contract Guidelines on Utilization of AI and Data Version 1.1" (December 2019) by the Ministry of Economy, Trade and Industry, however, it includes "personal attributes, movement/action/consumption history, wearable device data and other personal information, as well as human traffic and product information that has been processed to prevent specific persons from being identified." Therefore, personal data can include "in addition to personal information, a wide range of information with which a relationship to an individual can be found, including information that has an ambiguous boundary with personal information."

Data is intangible and not subject to property rights such as ownership under the Civil Code, and there are no general rules regarding the attribution of rights pertaining to data. For this reason, the provision and use of industrial data are conducted through agreement between the parties, except in cases where the data is protected as intellectual property or trade secrets under the Unfair Competition Prevention Act. For personal data, if the data contain personal information specified under the Personal Information Protection Act, their provision and use are conducted after undergoing the procedures required under the Act, such as obtaining the consent of the individual, or otherwise, by obtaining consent on an individual basis as to whether or not and how the data will be used in accordance with the policies, and so on, formulated by the business that holds the personal data.

## **2.2 Data characteristics**

As mentioned in the Section 2.1 above, various initiatives pertaining to data utilization are currently underway, and data can be said to have characteristics that differ from other goods. This point was mentioned in the reports of study groups previously assembled by the CPRC of the JFTC, and our study group also made additional mention of it.

### **2.2.1 Points raised in past study group reports**

Among various data characteristics presented by the “Report of Study Group on Data and Competition Policy” (June 6, 2017, CPRC of the JFTC; hereinafter referred to as “Data Study Group Report”) and the “Report of Study Group on Business Alliances” (July 10, 2019, CPRC of the JFTC; hereinafter referred to as “Business Alliances Study Group Report”), the following points are considered especially important from the view point of competition policy when discussing initiatives to promote competition in data markets.

#### **[Data Study Group Report]**

- Replication is technically easy.
- Exclusive ownership cannot be envisaged in general.
- In some cases significant knowledge can be obtained only after a certain type of data has been accumulated to a certain amount.
- Usage value is created only after data accumulation and analysis.
- Combining different types of data may result in various synergies, such as increasing the authenticity of the data.

- As for the data obtained from the use of a product that produces network effects, as a result of the improvement of the product's performance, the product attracts more users, which could result in the following flow: data accumulation -> improved product functionality -> further data accumulation -> further improvement in functionality.

[Business Alliances Study Group Report]

- There is a possibility that data accumulation will be improved continuously and in an amplifying manner due to network effects and economies of scale or scope.
- The greater the amount and the wider the range of data, the possibility the average cost entailed will be significantly reduced.
- Because data is intangible, there is no established way of thinking about data attribution and ownership. At present, it is not possible to prevent others from accessing and using data, except in cases where the data is legally protected as intellectual property; rights and obligations related to use are agreed through a contract, and so on, between the parties; or practically speaking, you are in a position of being able to control access to and use of the data.

### 2.2.2 Points raised in the study group

"Volume," "variety," and "velocity"<sup>11</sup> characterize the so-called big data, and with an addition of "value,"<sup>12</sup> which some argue is generated from these characteristics, they are sometimes expressed as "4V" and are considered to be an indicator of data value creation and competitiveness.<sup>13</sup>

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11 OECD "Data-driven Innovation for Growth and Well-being: INTERIM SYNTHESIS REPORT" (October 2014), p. 11; OECD "BIG DATA: BRINGING COMPETITION POLICY TO THE DIGITAL ERA -- Background note by the Secretariat" (October 2016), p. 5

12 "Summary of Competition Policy Issues on Unilateral Action by Digital PF - Significance of Data Possession for Innovation Competition" (December 2019, TOSA Kazuo, Konan Law School Professor/CPRC Visiting Researcher), pp. 12-17. In "Information and Communications in Japan 2019," Ministry of Internal Affairs and Communications, the term "4V" is used to refer to "volume," "variety," "velocity," and "veracity."

13 "Guidelines to Application of the Antimonopoly Act Concerning Review of Business Combination" (May 31, 2004, JFTC) states in Part VI 2 (2) as follows: In assessing the importance that data has for competition purposes or whether a business will become a potential influential competitor, the following points will be taken into consideration: 1) what kind of data are held or collected, 2) how much data are held and how much data are collected daily from how wide an area, 3) how frequently data are collected, and 4) how much are the data held or collected by one of the parties relating to the improvement of the service provided by the other party in the product market.

It is economically rational to distribute data as much as possible because data is non-rivalrous, i.e., one consumer's use does not reduce the amount available for consumption by other consumers, as is the case with public goods.<sup>14</sup>

On the other hand, when combining data held by multiple parties, it is often necessary to process the data so that it can be used, for example, by aligning the format, because data cannot be used as is if the items contained in the data or the names of the items vary depending on the party holding the data.

Because the effects of the use of personal data vary depending on the situation (context-dependent), it is necessary to consider the market environment and consumers' attitude toward the use of personal data.

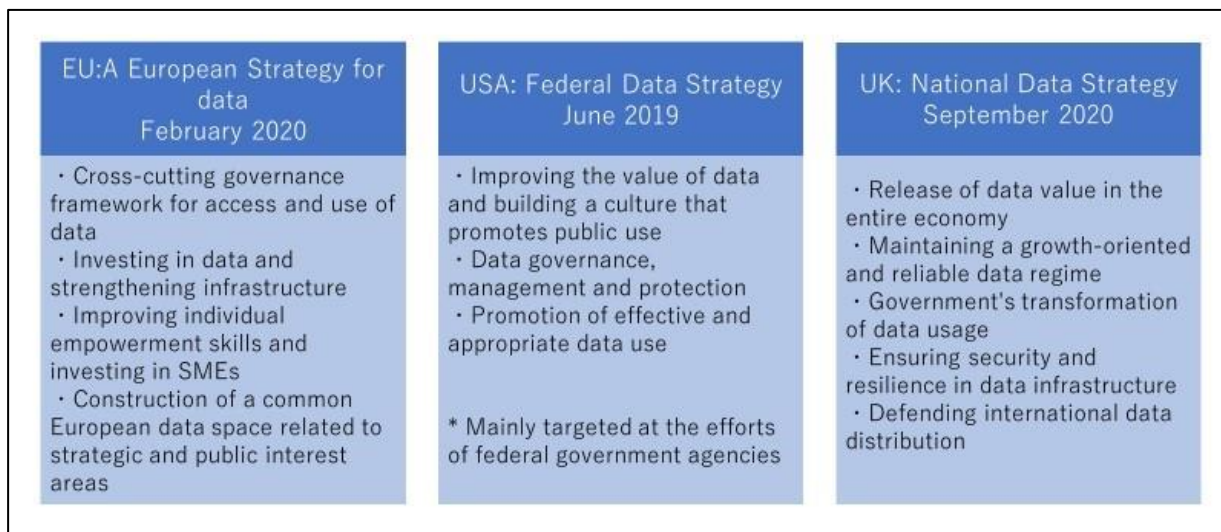
### **2.3 Data utilization initiatives by governments of various countries**

Against the backdrop of increasing data volume due to the progress of digitalization and innovation, as well as the improvement of AI capabilities, countries around the world are considering data to be the foundation of national prosperity and international competitiveness in the digital society, and are formulating and strongly promoting new data strategies. In the US and Europe, comprehensive and detailed data strategies have been released in the last one to two years, and measures in line with these strategies are being vigorously promoted.

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<sup>14</sup> "Public goods" are goods that have properties including "non-rivalry," i.e., the use by one consumer does not reduce the amount available for consumption by other consumers, and "non-excludability," i.e., those who enjoy the goods without paying for them cannot be excluded.

[Fig. 5] Data Strategies in Other Countries



(Source) Fig.1 of the First Report of the Data Strategy Task Force (Decision by the Digital Government Ministers' Meeting on October 12, 2020)

Taking Germany and the UK as examples, as well as the EU, where notable developments have been seen in the world, and Japan, the following is a summary of recent initiatives by governments regarding data utilization.

### 2.3.1 Relevant initiatives in Japan

Japan has been promoting measures to form an advanced information and telecommunications network society by enacting the Basic Act on the Formation of an Advanced Information and Telecommunications Network Society (hereinafter referred to as "IT Basic Act") in 2000 and establishing the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society in January 2001. Meanwhile, the focus has gradually shifted to the utilization of IT, leading to the formulation of the first "Declaration to be the World's Most Advanced IT Nation" in June 2013 as a national strategy towards the utilization of big data and open data. Furthermore, the Basic Act on the Advancement of Public and Private Sector Data Utilization was enacted in December 2016, after which the "Basic Plan for the Advancement of Public and Private Sector Data Utilization," based on the latter Act, and the "Declaration to be the World's Most Advanced IT Nation" ("Declaration to be the World's Most Advanced Digital Nation" from 2018 onwards), based on the IT Basic Act, have been compiled together every year.

The “Declaration to be the World’s Most Advanced Digital Nation/Basic Plan for the Advancement of Public and Private Sector Data Utilization,” endorsed by the cabinet in June 2019, designates eight fields (electronic administration; health, medical, and nursing care; tourism; finance; agriculture, forestry, and fisheries; manufacturing; infrastructure and disaster management; and mobility) as priority fields, and indicates that initiatives will be made to promote the social implementation of Personal Data Bank.

As a strategy to survive amid the changes described in the Section 2.1 above, the Strategic Conference for the Advancement of Public and Private Sector Data Utilization under the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society adopted the “Future Direction of IT Policy” in December 2018. To further elaborate on this and present it in an easy-to-understand manner, the “Outline on the New IT Policy in the Digital Era” was published in June 2019.

The “Integrated Innovation Strategy 2020,” endorsed by the cabinet in July 2020, lists the objectives as follows: in order to ensure the reliability of data, advance the organization of common rules pertaining to the authenticity of the provider of the data, the reliability of the data, and so on; as an advanced model of a data-driven society, promote and carry out social implementation of initiatives for Personal Data Bank and data trading markets, and so on, from Japan; technologies for cross-sectional data federation, which easily provide interoperability and achieve smooth data federation with the data exchange platforms for each field, will be developed.

In order to formulate a data strategy suitable for a digital nation, the “Data Strategy Task Force” has been discussing it since October 2020 with the understanding that full utilization of data is essential in a digital society and is a source of competitiveness, and the awareness of the inadequacy of data utilization infrastructure in both the public and private sectors brought by the recent corona crisis. In June 2021, a comprehensive data strategy was formulated. It mainly includes the following:

- Establishment of data action principles in public administration, such as data utilization principles, data-based administration, construction of data ecosystems, and maximum utilization of data, and functions that public administration should have as a platform
- Establishment of trust infrastructures through building accreditation schemes, and summarizing issues for the establishment of trust infrastructures, such as the



establishment, accreditation standards, and international mutual recognition of trust infrastructures from the perspective of developing trust frameworks

- Development of concrete common rules and tools necessary for data federation; summarizing rules to promote data distribution and eliminate impediments; building platforms for priority fields (health, medical, and nursing care, education, disaster management, and so on); and presenting the concept of data trading markets from the perspective of developing platforms
- Designation of a base registry<sup>15</sup> (names, trade names, locations, and corporate numbers of legal entities, map information, laws, government ordinances, ministerial ordinances, support systems, etc.), identifying issues for the development of the base registry and studying the direction of solutions, and strengthening data management and promoting open data

Meanwhile, the Act on the Protection of Personal Information (Act No. 57 of 2003, hereinafter referred to as the “Personal Information Protection Act”), through successive amendments, has established provisions to promote the utilization of personal data. The amended Personal Information Protection Act, which was enacted in September 2015 and came into effect in May 2017, clearly states that items such as physical characteristics are included in the definition of personal information and has established new provisions on the utilization of anonymously processed information (personal information which has been processed so that a specific individual cannot be identified), in order to ensure the usefulness of personal information with the aim of eliminating the gray zone, thereby contributing to the utilization of personal information. Another amendment of the same Act, which was enacted in June 2020, defines “pseudonymized information” in which data such as names are deleted, from the perspective of promoting innovation. It has provisions that ease the obligation to respond to requests for disclosure, and suspension of use on the condition that such information is only used for purposes such as internal analysis.

Furthermore, the Act on the Arrangement of Related Laws for the Formation of a Digital Society (Act No. 37 of 2021), which was enacted in May 2021, includes the following amendments from the perspective of promoting data utilization beyond boundaries of public and private sectors and regions: 1) The Personal Information

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15 The “First Report of the Data Strategy Task Force” defines it as “a database that serves as a foundation of society, ensuring the accuracy and up-to-dateness of data it holds, which is basic social data on people, legal entities, land, buildings, qualifications, etc. which are registered and published by public institutions and referred to in various situations.”

Protection Act, the Act on the Protection of Personal Information Held by Administrative Organs (Act No. 58 of 2003), and the Act on the Protection of Personal Information Held by Incorporated Administrative Agencies, etc. (Act No. 59 of 2003) will be integrated into a single law, which will also stipulate nationwide common rules for the personal information protection systems of local governments, putting all matters under the central control of the Personal Information Protection Commission; 2) In order to unify regulations in the medical and academic fields, public hospitals, universities, and so on will in principle be subject to the same regulations as private hospitals, universities, and so on; 3) In order to obtain adequacy decision of the EU's GDPR (General Data Protection Regulation) including in academic research fields, the exemption system for academic research will be elaborated in the form of exceptions for each obligation; and 4) The definition of personal information will be unified among national and local governments and private sectors, and the rules regarding the handling of anonymously processed information by administrative agencies will be clarified.

Apart from that, the Act on Improving Transparency and Fairness of Digital Platforms (Act No. 38 of 2020), which came into effect in February 2021, requires large-scale platform providers to disclose information and establish procedures and systems. As part of this, the Act requires disclosure of contents and conditions for acquiring and using data concerning provided products, and so on.

### 2.3.2 Relevant initiatives in Europe

In the EU,<sup>16</sup> first, the communication on “Building a European Data Economy” (hereinafter referred to as the “2017 Document”)<sup>17</sup> was published in January 2017 and, as possible policy options to promote the use of data, mainly machine-generated data with a focus on non-personal data, the followings are proposed therein: “Guidance on incentivising businesses to share data,” “Fostering the development of technical solutions for reliable identification and exchange of data (APIs, etc.),” “Default contract rules,” “Access for public interest and scientific purposes,” “Data producer’s right,” and “Access against remuneration on FRAND terms, etc.”

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16 For more details, see Material 4 of the study group meeting #2, “Status of Data-Related Policies in Europe.”

17 COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS “BUILDING A EUROPEAN DATA ECONOMY,” COM/2017/09 final.

Next, the communication on “Towards a Common European Data Space,”<sup>18</sup> published in April 2018, presents the direction of data policy and concrete measures in a way that fleshes out the considerations of the 2017 Document, with “Guidance on sharing private sector data in the European data economy”<sup>19</sup> published as a guidance. This guidance lists the following five principles for B2B data sharing: “Transparency,” “Shared value creation,” “Respect for each other’s commercial interests,” “Ensure undistorted competition,” and “Minimised data lock-in.” With regard to data producers’ rights indicated in the 2017 Document, the communication states, “In general, stakeholders also do not favour a new ‘data ownership’ type of right, with a range of inputs indicating that the crucial question in business-to-business sharing is not so much about ownership, but about how access is organised.” Since then, there has been no specific consideration of the option of establishing exclusive rights to data, such as data producers’ rights, and the focus has been on how to expand access to data held by various entities.

“A European strategy for data” published in February 2020 sets out the direction for the development of a comprehensive data legislative framework, including initiatives such as the “Data Governance Act” (proposal released in November 2020) and the “Data Act”<sup>20</sup> (to be proposed in 2021). The strategy includes measures to remove barriers to data sharing which arise in the relationships between governments, businesses, and individuals, B2B, B2G, G2B, C2B, and to realize more data distribution, with the following three main approaches proposed:

- 1) Appropriate data contracting with a view to contract regulation (e.g., right to use co-generated data, fairness and correction of imbalances in bargaining power)
- 2) Compulsory data access legislation in certain circumstances (e.g., data held exclusively by some businesses)
- 3) Strengthening the trust of providers of data sharing services,<sup>21</sup> and so on

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18 COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS “Towards a common European data space”, COM/2018/232 final.

19 Staff Working Document - Guidance on sharing private sector data in the European data economy.

20 With regard to the Data Act, in May 2021, the European Commission released a document on Inception Impact Assessment and invited comments.

21 This may include “data trading markets”, “personal data bank”, and “data sharing platforms” in Japan.

1) and 2) above are related to the “Data Act” to be proposed in 2021, and “A European strategy for data” lists the following as elements that could be included in the Act:

- Support business-to-business data sharing, in particular addressing issues related to usage rights for co-generated data (such as IoT data in industrial settings), typically laid down in private contracts
- Only where specific circumstances so dictate, access to data should be made compulsory, where appropriate under fair, transparent, reasonable, proportionate and/or non-discriminatory conditions<sup>22</sup>
- Enhancing the portability right for individuals under Article 20 of the GDPR<sup>23</sup> giving them more control over who can access and use machine-generated data<sup>24</sup>

In relation to 3) above, a “Proposal for Data Governance Act”<sup>25</sup> was made in November 2020. The proposal includes regulations, instead of providing specific rights and obligations related to data, on providers of data sharing services such as separation from other businesses, fairness and transparency, security, business continuity, and protection of the interests of data providers for strengthening the trust of data sharing service<sup>26</sup> providers in Chapter III.

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22 A data access right should only be sector-specific and only given if a market failure in this sector is identified/can be foreseen, which competition law cannot solve.

23 REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC

Article 20 Right to data portability

1. The data subject shall have the right to receive the personal data concerning him or her [...] in a structured, commonly used and machine-readable format and have the right to transmit those data to another controller without hindrance from the controller to which the personal data have been provided.

24 For example, through stricter requirements on interfaces for real-time data access and machine creation and making machine-readable formats compulsory for data from certain products and services, e.g., data coming from smart home appliances or wearables.

25 Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on European data governance (Data Governance Act), COM/2020/767 final.

26 The following three types of services are considered as data sharing services: “intermediation services between data holders which are legal persons and potential data users” (incl. the creation of platforms or databases enabling the exchange or joint exploitation of data, as well as the establishment of a specific infrastructure for the interconnection of data holders and data users), “intermediation services between data subjects that seek to make their personal data available and potential data users” and “services of data cooperatives, that is to say services supporting data subjects or one-person companies or micro, small and medium-sized businesses, who are members

In addition, two new bills, the “Digital Services Act”<sup>27</sup> and the “Digital Markets Act,”<sup>28</sup> were proposed in December 2020, concerning the regulation of giant digital platform operators, which has been under consideration in parallel with the European strategy for data.

The Digital Services Act bill aims to drastically revise the Directive on electronic commerce in 2000,<sup>29</sup> and the bill includes regulations focused on “very large online platform” (hereinafter referred to as “VLOP”) operators with more than 45 million monthly active users in the EU, as well as the ones generally applicable to intermediary service providers and platform operators. The data-related regulations in the bill include the following:

- Recommender systems: VLOP operators shall set out, in a clear manner, the parameters used in their recommender systems, as well as any options for the recipients of the service to influence those parameters, and if several options are available, allow the recipients of the service to modify at any time their preferred option (Article 29).
- Online advertising transparency: General platform operators shall show (a) that the information displayed is an advertisement; (b) the natural or legal person on whose behalf the advertisement is displayed; and (c) meaningful information about the main parameters used to determine the recipient to whom the advertisement is displayed (Article 24). In addition, VLOP operators are required to compile and make publicly available through application programming interfaces a repository containing the following information, until one year after the advertisement was displayed for the last time on their online interfaces: (a) the content of the advertisement; (b) the natural or legal person on whose behalf the advertisement is displayed; (c) the period during which the advertisement was displayed; (d) whether the advertisement was intended to be displayed specifically to one or more particular groups of recipients of the service and if so, the main parameters used for that purpose; and (e) the total

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of the cooperative or who confer the power to the cooperative to negotiate terms and conditions for data processing.”

27 Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (Text with EEA relevance), COM(2020) 825 final.

28 REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on contestable and fair markets in the digital sector (Digital Markets Act) (Text with EEA relevance), COM(2020) 842 final.

29 Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market

number of recipients of the service reached and, where applicable, aggregate numbers for the group or groups of recipients to whom the advertisement was targeted specifically (Article 30).

The Digital Markets Act bill imposes certain obligations on “gatekeepers,” who are “providers of core platform services”<sup>30</sup> (Article 3, paragraph 1) who (a) have significant impacts on the internal market; (b) operate core platform services which serve as important gateways for business users to reach end users; and (c) enjoy entrenched and durable positions in their operations or it is foreseeable that they will enjoy such positions in the near future. The data-related obligations imposed on gatekeepers include the following:

- Refrain from combining personal data sourced from these core platform services with personal data from any other services offered by the gatekeeper or with personal data from third-party services, and from signing in end users to other services of the gatekeeper in order to combine personal data, unless the end user has been presented with the specific choice and provided consent in the sense of GDPR (Article 5, (a))
- Provide advertisers and publishers, upon their request, with information concerning the price paid (Article 5, (g))
- Refrain from using, in competition with business users, data which are generated through activities or provided by those business users of the core platform services (including data related end users) (Article 6, paragraph 1 (a))
- Provide access to the performance measuring tools for advertising services (Article 6, paragraph 1 (g))
- Provide effective portability of data generated through the activity of a business user or end user and shall, in particular, provide tools for end users to facilitate the exercise of data portability, in line with GDPR, including by the provision of continuous and real-time access (Article 6, paragraph 1 (h))

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30 Core platform services include “online intermediation services,” “online search engines,” “social networking services,” “video sharing platform services,” and so on. Core platform service providers are supposed to meet all the following conditions (Article 3, paragraph 2):

- An annual EEA turnover equal to or above EUR 6.5 billion in the last three years, or the last year's market capitalization being at least EUR 65 billion and providing service in at least three EU member states;
- The core platform service has more than 45 million average monthly active end users and more than 10,000 yearly active business users in the EU for the last three financial years

- Provide business users, or third parties authorised by a business user, with continuous and real-time access to aggregated or non-aggregated data that are provided for or generated in the context of the use of the relevant core platform services by those business users (access to personal data allowed only with the consent of the individual) (Article 6, paragraph 1 (i))
- Provide to any third-party providers of online search engines, upon their request, with access to fair, reasonable and non-discriminatory terms to rank, query, click and view data related to searches in an anonymized manner (Article 6, paragraph 1 (j))

In Europe, there are also national initiatives. For example, in 2018, Germany established the “Commission ‘Competition Law 4.0’” in the Federal Ministry for Economic Affairs and Energy to study the revision of competition law and the state of competition law at the European level to address competition law issues in the digital economy and published the final report on the digital economy, “A new competition framework for the digital economy report,” in September 2019. The report makes 22 recommendations to the minister, including the following regarding data and digital platform operators:

- Develop further open data legislation stipulating, both at European level and at Member State level, that all public institutions must provide structured data via standardised platforms and in open interoperable data formats. The group of data recipients and the sharing of costs should be regulated on a sectoral basis. In order to coordinate this work, a central institution of the Federation and the Länder should be set up in Germany with the participation of the business community, which also takes on responsibility for the management of registers and the maintenance of standards.
- Draw up overarching data strategies at European and Member State level which prescribe a cross-sectoral concept and cross-sectoral framework for the collection, use and provision of data of the public sector and from the delivery of public services.
- The European Commission and the Member States shall require that 1) where companies are entrusted with the delivery of public services, 2) where they are granted privileged access to scarce resources, e.g., in the awarding of a limited number of licences, and 3) where they are awarded public contracts, these companies should provide the data generated in the course of this work for use by the public sector in line with uniform criteria for use and forwarding to third parties.
- Dominant online platforms that fall under Platform Regulation shall be prohibited from favouring their own services in relation to third-party providers unless such self-preferencing is objectively justified.

- o Dominant online platforms that fall under the scope of the Platform Regulation shall be required to enable their users to port user and usage data in real time and in an interoperable data format (across platforms) and to ensure interoperability with complementary services.

In the UK, the Competition & Markets Authority (hereinafter referred to as “CMA”) issued 15 recommendations concerning “A new pro-competition regime for digital markets” in December 2020. The recommendations relate to tightening regulations on IT giants with a “strategic market status (hereinafter referred to as “SMS”).”<sup>31</sup> One of the recommendations is that the Digital Markets Unit (hereinafter referred to as “DMU”) established within the CMA should be given the authority for pro-competitive interventions in SMS companies in order to promote innovation. Specifically, it suggests the DMU should have the authority for imposing interoperability requirements on SMS companies and requiring them to allow third parties to access data so that consumers can manage and share their data.<sup>32</sup>

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31 A company may be considered to have SMS if it has both annual UK revenue in excess of £1 billion (around 139 billion Japanese yen) and annual global revenue in excess of £25 billion (around 3.5 trillion Japanese yen) and operates online marketplaces, app stores, social networks, web browsers, online search engines, operating systems, cloud computing services, and so on.

32 An example of overseas government initiatives outside of Europe is the introduction of the Consumer Data Right (hereinafter referred to as “CDR”) in Australia, where a related bill was passed by the Parliament in August 2019. The CDR gives consumers broader access and control over their own information held by businesses so that they can easily compare and switch between products and services. It was first introduced in the banking sector, then in the energy sector, and is now being considered for the telecommunications sector. In addition, the Australian Competition and Consumer Commission (“ACCC”), the competition authority, serves as the main supervisory body for CDR, and is in charge of establishing related rules, monitoring compliance, and enforcement activities.



## **Section 3: Analysis from the view point of competition policy**

### **3.1 General remarks**

As data markets and competition policy have been discussed in the Study Group on Data and Competition Policy and other fora, it has been pointed out that data markets are being monopolized or oligopolized by some businesses, including digital platform operators accumulating and utilizing data since they are obtaining more data and network effects and scale or scope of economies are enabling the monopolization and oligopolization. From the view point of competition policy, it is concerned that if these businesses refuse competitors' and customers' access to data, which is essential for competitors' businesses and of which competitors and customers are not able to obtain alternative one, it may lead to excluding rivals and deterring new entrants.

With respect to industrial data, relevant businesses in several sectors have been taking initiatives for sharing data. On the other hand, as discussed in the Section 2.2.1, how to consider data attribution and ownership has not been established. Except for cases where data is legally protected by intellectual property rights, it is important to define rights and duties on data by contracts between businesses for each case. In such situations, it should be noted that one party unfairly imposes disadvantages on another party such as SME by using its superiority in their trade relationship. When several businesses share data between them, refusal of providing data to certain businesses may lead to excluding rivals and deter new entrants. However, as businesses are concerned that data sharing between several businesses may lead to transport of their own data to competitors, such data sharing initiatives may not be active.

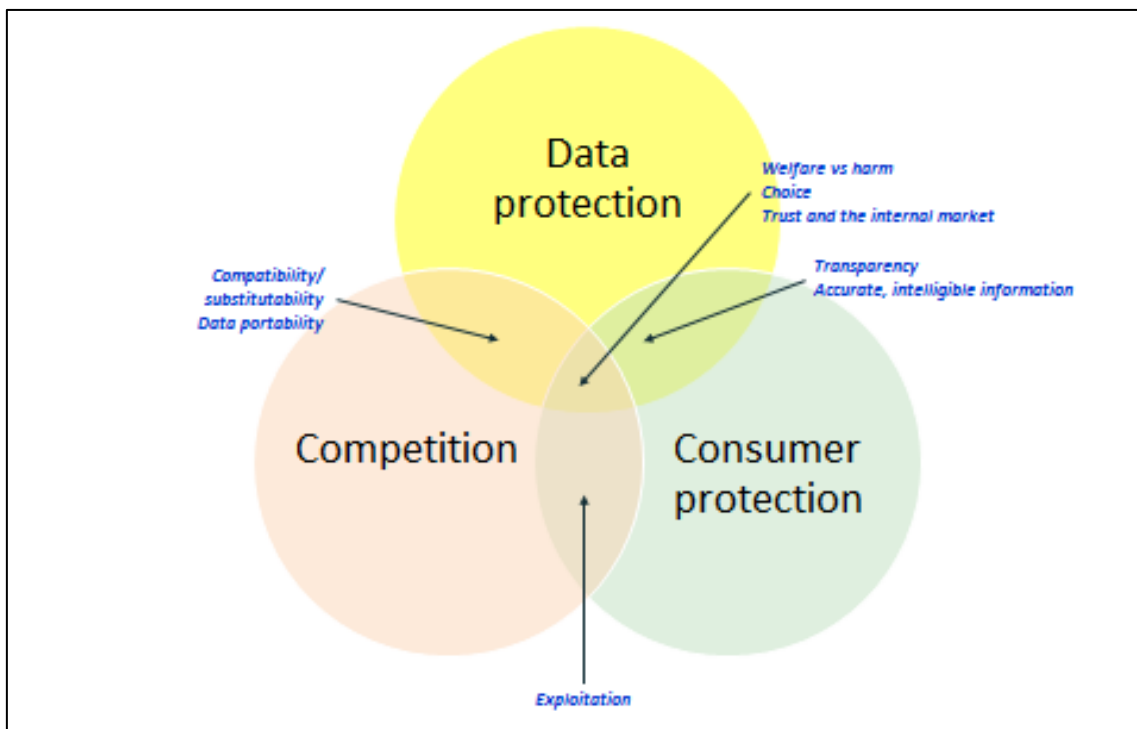
Therefore, in order to promote utilization of industrial data, it is essential to ensure environment activating data distribution by creating a system that addresses businesses' concerns on data transaction in view of above mentioned issues.

Moreover, when discussing personal data markets, competition, data protection and consumer protection should not be discussed separately. It is essential to discuss them as a whole considering balanced approaches.<sup>33</sup>

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<sup>33</sup> Material 2 of the study group meeting #1, "The state of data markets –Presentation material at the Study Group on Competition Policy for Data Markets", p.19

[Fig. 6] Interplay of three policies for considering data in the society



(Source) EUROPEAN DATA PROTECTION SUPERVISOR (EDPS), Privacy and competitiveness in the age of big data, March 26 2014 ([https://edps.europa.eu/sites/edp/files/publication/14-03-26\\_competition\\_law\\_big\\_data\\_en.pdf](https://edps.europa.eu/sites/edp/files/publication/14-03-26_competition_law_big_data_en.pdf))

Specifically, ministries and agencies regulating initiatives in relation to these three areas need to cooperate not to leave areas where no one takes enough measures, and not to bring conflicts between one area and the other two areas by setting excessive regulations in one area. The reason is that these three policies have certain areas conflicting with each other, and a measure in one area may bring negative effects on another area. For example, it has been pointed out that giant digital platform operators providing platforms in the digital advertising market are extending their higher market positions by declining provision of data for businesses analyzing conversion of advertisement, which is essential for the analysis of ad distribution on the ground of protecting consumers' privacy.

Therefore, it is not easy to ensure high levels of all three policies when keeping balance of them. However, there are efforts that can solve some of the three issues at one time. For instance, data portability can lead to data protection because consumers are enabled by it to control their personal information. It can also foster competition by promoting data utilization.

On the other hand, if high level standards for data protection and consumer protection are equally imposed on all businesses, only giant digital platform operators may be able to meet the standards. It may lead to accelerating oligopolization by such digital platform operators.

Moreover, consumers' reaction against privacy has been changing amid the arrival of new normal after the spread of the novel coronavirus. It is necessary to keep in mind that competition, data protection and consumer protection may conflict with each other under the structure of data markets, and continue initiatives with the consideration of the interplay of the three policies.

Following this premise, the study group kept in mind the interplay of the three policies, and mainly focused on what are important to promote competition when discussing data utilization and establishment of mechanisms for it.

As general approaches, following points are important. Data has various characteristics as mentioned in the Section 2.2. When discussing competition in data markets, "replication is technically easy.", "exclusive ownership cannot be envisaged in general.", and "data is non-rivalrous, i.e., one consumer's use does not reduce the amount available for consumption by other consumers." should be noted among the characteristics. Therefore, from the view point of efficiencies, it is desirable that data is distributed as much as possible. In order to achieve such data distribution, the market structure enabling free and easy access to data and new entries to businesses utilizing data has to be realized and maintained to prevent certain businesses from hoarding data and declining provision of their data.

Although this is a similar issue, it is important to ensure access to data. This is because, among the characteristics of data, it has been mentioned that data has strong network effects, and usage value is created only after data accumulation, and it is possible that market entries are not easy without certain types and amount of enough data.

Besides of above mentioned points, the study group pointed out problems as discussed in the Section 3.2.2 and 3.3.2 from the view point of promoting competition in data markets. It is concerned about intermediaries operating platforms for accumulating and utilizing huge amount of data, and giant digital platform operators that have intensive contacts with many consumers by providing essential online services for

social living and accumulate their personal data. It also pointed out that, if necessary, discussing additional rules in addition to the existing Antimonopoly Act can be an option for addressing such issues.

When making efforts based on above mentioned points, it should be noted that interventions must not be too excessive to harm innovation considering the fact that data accumulation and utilization promote competition and bring innovation in itself.

### **3.2 Review of industrial data**

As described in the Section 2.1.3, the classification of data is roughly divided into industrial data and personal data, and each data has some different issues. Therefore, in this section, the results of studies on industrial data are summarized, and in the Section 3.3 below, the results of studies on personal data are summarized.

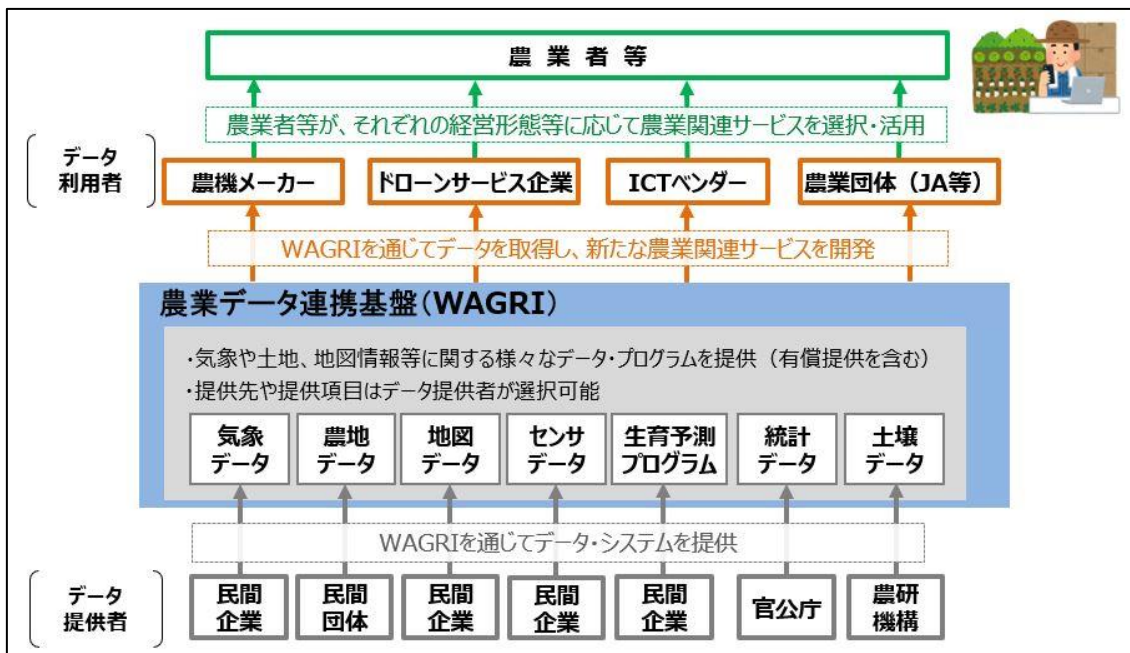
#### **3.2.1 Examples of initiatives relating to industrial data**

##### *(a) Initiatives in the agricultural sector*

In the agricultural sector, a business activity called “Agricultural Data Linkage Platform” (hereinafter referred to as “WAGRI”) that links data related to agriculture is in progress.

In this sector, use of agricultural ICT is indispensable for practicing data-based agriculture. However, there was a problem that the data could not be fully utilized because the data and services could not be linked with each other and various data were scattered. In order to solve the problems of agricultural ICT and create an environment where farmers can use data to improve productivity and management, WAGRI has been constructed as a data platform with functions of data cooperation, sharing, and provision. It has been in operation since April 2019 by the National Agriculture and Food Research Organization.

[Fig. 7] WAGRI Structure and Data Usage



\* Figure 7 - Figure 12 are not translated into English as they are quoted from their sources as they are in this report.

(Source) Ministry of Agriculture, Forestry and Fisheries website “Promotion of WAGRI, the Agricultural Data Integration Platform” (<https://www.maff.go.jp/j/kanbo/smart/forum/R2smaforum/oudan/seika85.html>)

Through WAGRI, data users such as agricultural machinery manufacturers and ICT vendors can refer to or acquire data provided by private businesses, organizations, and public offices, and use it for new services for farmers. In addition, WAGRI member companies can register their own APIs with WAGRI and provide data to other member companies for free or for a fee.

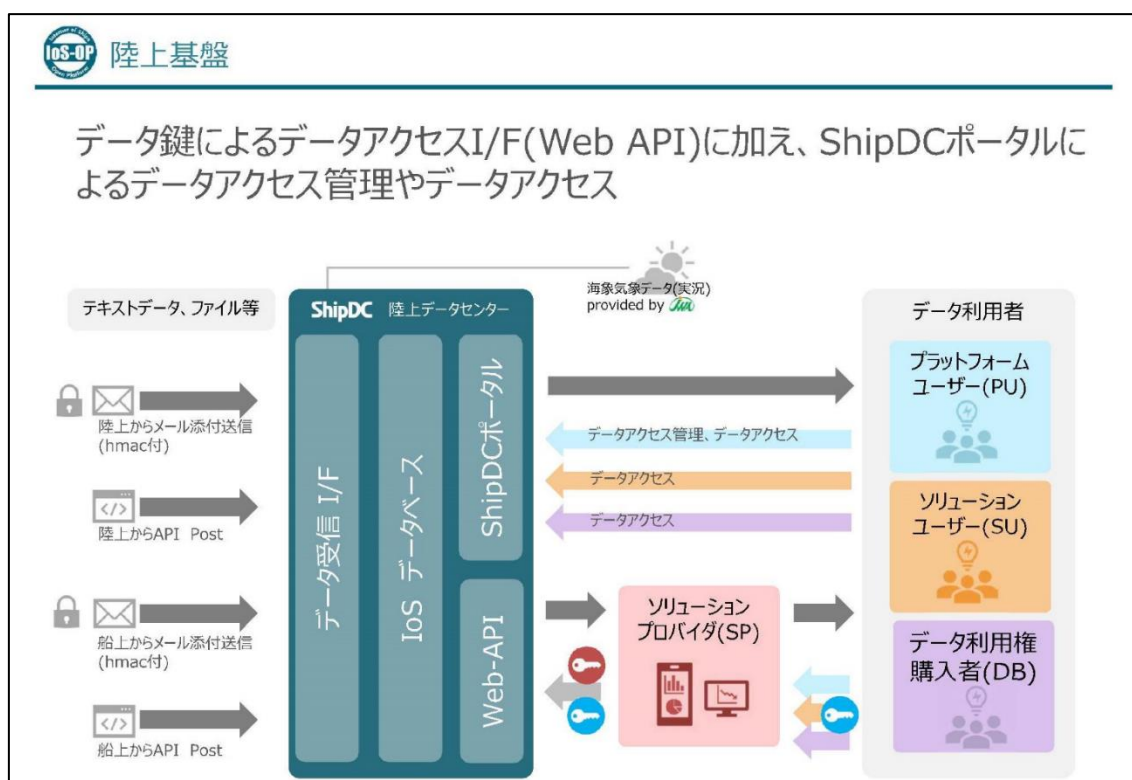
*(b) Initiatives in the shipping sector*

In the shipping sector, Ship Data Center Co., Ltd. has constructed an IoT data sharing infrastructure for ships (“Internet of Ships Open Platform”, hereinafter referred to as “IoS-OP”.) as a framework to utilize ship operation data in the maritime industry.

The maritime industry was aware of the need to tackle various challenges amid the limitations of hardware-centric transformation to keep up with a trend that digital transformation by AI, IoT, big data, etc. progresses with unprecedented speed and impact, and disruptive innovation begins to appear in the software field as well. Therefore, Ship Data Center, Inc. has developed IoS-OP, a platform for utilizing available ship operation data.

In IoS-OP, various data such as sensor of ship equipment, ship position, port entry or exit, cruising range information, etc. are provided by ship owners, ship management companies, etc., and collected on the IoS-OP data platform. Then, data users such as shipyards and ship equipment manufacturers who want to use the data can acquire various data on the platform by paying the data usage fee to the data provider through IoS-OP. With this mechanism, data users of shipyards, etc. can grasp the actual sea area performance of ships and equipment<sup>34</sup> manufactured by own company, and use it as information when building a new ship or for maintenance of ship equipment at the right time.

[Fig. 8] Structure of IoS-OP



(Source) Material 1 of the study group meeting #3, "Efforts of "IoS-OP", an IoT data sharing platform for ships"

In addition, IoS-OP defines the data format for data transactions through the platform and organizes the security system when sharing data. Other than that, IoS-OP

34 This is an evaluation of speed and fuel efficiency in the presence of wind and waves when a ship is actually navigating.

is also taking measures to support data transactions on the platform in order to suppress the disadvantages on the provider side due to the provision of data, by formulating rules necessary for transactions, such as restricting the collection of data related to competitors.

### 3.2.2 Consideration

Initiatives being made in various fields for the distribution and utilization of industrial data are not limited to the cases described in the Section 3.2.1 above. Given such circumstances, the study group has held discussions from the perspective of competition policy and the results are summarized as follows.

#### *(a) Involvement of a wide range of stakeholders when establishing frameworks*

When considering utilization of certain data or establishment of frameworks to utilize such data, first of all, there are (i) businesses who generate such data and (ii) businesses who collect such data. In addition, there are (iii) businesses who accumulate the data, (iv) businesses who process and analyze the data, (v) businesses who provide products and services using the analyzed data, and (vi) customer businesses who use the products and services (see Fig. 1 in the Section 2.1.2 above). It is noted that there may be overlaps among these businesses.

As described in the Section 2.2 above, the characteristics of data include the following; the utility value of data is generated only when data is accumulated and analyzed; various synergistic effects such as the improvement of the truthfulness of data are sometimes observed when different types of data are combined; and the accumulation of data leads to further improvement in the quality of goods and services or to new demand, which in turn leads to further accumulation of data. For this reason, acquiring, accumulating, and analyzing a wider range of data from a wider range of businesses will improve the quality of the data distributed in the frameworks to be built, and it will be possible to create value that meets business needs from the data. In this way, it will be possible to attract the attention of more businesses that provide products and services and businesses that use such products and services, and as a result, the utilization of data will become more active. On the other hand, there is no point in having a system where the necessary data cannot be obtained for businesses that are trying to create new products and services by utilizing data.

Thus, in establishing a frameworks for data utilization, it is important to consider paying attention not only to the market in which data transactions take place, but also

to the way how data is distributed and utilized, including upstream and downstream market. When considering that way, it is desirable to design rules with the participation of many stakeholders involved in data distribution.

With respect to industrial data, in light of the fact that what kind of data and by whom and how it can be provided and used are currently determined by agreement between the parties concerned as described in the Section 2.1.3 above, it is conceivable that, in the event that agreement is not obtained in advance from the specific parties concerned who possess the data needed to create a new product or service, they may not be able to receive and use such data depending on the intentions of the parties concerned. In such a case, necessary data will not be sufficiently accumulated, and the above-mentioned effects cannot be fully expected, resulting in a situation where the utilization of data will not progress. In addition, if a system is established only by existing businesses, it may be possible to design the system so that it is difficult for new entrants to use, for example, by limiting the scope of data to be provided in order to avoid active competition among competing businesses. From this perspective, it is desirable that many stakeholders participate in the discussion.

As described above, even if only a portion of the stakeholders concerned establish frameworks and rules for data utilization, there may be stumbling blocks, such as insufficient accumulation of necessary data, at the stage of actual operation, which may hinder the development and provision of attractive products by customer businesses. Therefore, in order to avoid such a situation, when considering frameworks for data utilization, from the viewpoint of more active competition in the data market, it is important to carry out obtaining the participation of as many stakeholders as possible in advance, based on the business needs of each stakeholder.

*(b) Free and easy access to data*

The approach under the Antimonopoly Act regarding access to accumulated data has already been summarized in the Data Study Group Report and the Business Alliances Study Group Report. As a general matter, whether or not to allow access to the data by other businesses and what conditions to set in the case of allowing access is basically a matter of freedom of businesses to choose their business partners, and even if this is not allowed, it will not necessarily become a problem under the Antimonopoly Act per se. On the other hand, a problem under the Antimonopoly Act may arise in cases where business activities become difficult due to the inability to access data that is indispensable for conducting business activities related to specific technologies or



products/services.<sup>35</sup>

Meanwhile, regardless of whether there is a problem under the Antimonopoly Act or not, in light of the characteristics of data as described in the Section 2.2 above and the fact that data plays an increasingly important role in the digital age and data has become an important element of competition, it can be said that basically, if as many businesses as possible distribute and utilize as wide and many data as possible, competition in the data market will be activated and innovation will be promoted.

Therefore, it is desirable from the standpoint of competition policy to ensure that as many businesses, including potential new entrants, as possible have free and easy access to accumulated data. Furthermore, it is desirable from the standpoint of competition policy to avoid, for example, certain business's, obligating data providers to provide data only with the businesses in order to make exclusive use of certain data.<sup>36</sup>

However, from an economic perspective, data characterized by non-competitiveness tends to be supplied in smaller quantities than the socially optimal amount, because businesses have incentives to hoard data instead of distributing it for fear of creative destruction by other businesses.<sup>37</sup> Therefore, when considering the establishment of a framework to enable free and easy access to data, it is considered necessary to pay attention to ensuring incentives for businesses to actively generate and accumulate data.

In addition, for data created through the involvement of multiple parties, the analysis results and know-how obtained from the data will be used to provide services

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35 There are initiatives to create new value-added data by sharing and jointly collecting data among partner businesses, and accumulating and analyzing such data. In such efforts, when the created data is made available to other businesses, as a way of doing that, pooling the data among the partner businesses and having them all use the data at once (data pooling) may be possible. In this case, "Guidelines on Standardization and Patent Pool Arrangements" (June 29, 2005, JFTC), Part 3 of the Data Study Group Report, pp. 48-50, and Exhibit 5-6 of the Business Alliances Study Group Report may be referred to.

36 For a similar case, see "Report on the Actual Condition of Business Practices of Startup Companies" (November 27, 2020, JFTC) [Case 26].

37 See "Nonrivalry and the Economics of Data" (Charles I. Jones and Christopher Tonetti, American Economic Review, September, 2020).

to third parties. This is what is called reapplication for others.<sup>38,39</sup> In this regard, for example, there may be a case where a large company does not allow small and medium-sized companies that process and analyze the data to utilize the analysis results for providing services to third parties at all, making reapplication by the small and medium-sized companies difficult. However, from the perspective of encouraging more businesses to enter the data-driven business and more active competition, it is desirable to create an environment in which such reapplication for others is not unreasonably hindered.

Furthermore, the degree of contribution to data creation varies depending on the case, and it is difficult to set uniform standards as to who should have “data ownership.”<sup>40,41</sup> For that reason, if it is left to contractual arrangements between the parties, a situation may arise where one party is forced by the other party to accept unfair disadvantages due to unreasonable arrangements regarding access to data on the background of power balances in business transactions.<sup>42</sup> Therefore, consideration could be given to the development of contractual rules to deal with such problems, while giving consideration to the protection of trade secrets.<sup>43</sup>

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38 For example, there may be a case where Company B, which is providing solution services to Company A based on the results of acquiring data from Company A's facilities and analyzing the data, uses the processed data and analysis results when providing other solution services to parties other than Company A, and where a company constructs database and analysis model for the analysis by processing the data acquired from multiple businesses, and that it utilizes it as solution service for the third party.

39 Factors to be considered when forming such contracts relating to “reapplication for others” are described in “Contract Guidelines for the Use of AI and Data” Data Part 5-2(5)(2), Ministry of Economy, Trade and Industry.

40 So-called “data ownership” is considered to mean the status on claim by contract or de facto position in which the person can access lawfully, control the utilization of the data.

41 Material 2 of the study group meeting #3, “Summary of Contract Guidelines on Utilization of AI and Data”, page 11.

42 For similar cases, see “Report on the Actual Condition of Business Practices of Startup Companies” [Case 18] and [Case 22].

43 EU, with regard to B2B in particular, aims at establishing a framework that allows more entities to access various data. As mentioned in the Section 2.3.2 above, “the European strategy for data” presents approaches related to the Data Law, which is scheduled to be proposed in 2021, such as (1) the rationalization of data contracts including regulations (Right to use jointly generated data, fairness and correction of imbalances of bargaining power, etc.), and (2) legislation for mandatory data access in certain circumstances (data held exclusively by some businesses, etc.). In the study group meeting, it was pointed out that in Japan as well, it may be necessary to consider not only the development of contract rules concerning the approach described in (1), but also the enforcement of data access for some businesses in specific situations concerning the approach described in (2).

*(c) Government's support for business activities in the areas where businesses cooperate or compete*

Initiatives are being made in the areas where businesses cooperate, which includes data distribution such as the development of platforms and rules to enable sharing of data among stakeholders, sales of rights to use data, and provision of various services, in order to promote data utilization within the industry, while the areas where businesses compete are defined as the areas of innovation and development of new services utilizing data. In the case of IoS-OP described in the Section 3.2.1(b) above, the former is being addressed to promote the utilization of data in the industry. Although it is considered difficult to make a uniform distinction between the area where businesses cooperate and the area where businesses compete, the involvement of the government in both areas is considered important in order to promote data utilization or to stimulate new entry and competition in the business using data. In particular, in the area where businesses cooperate, it is required for the government to support the initiatives of businesses<sup>44</sup> as described in the Section 3.2.2.d below, while, in the competitive domain, the government is required to regulate anticompetitive conduct.

As in the case of IoS-OP above, in recent years, business alliances for the purpose of joint collection and utilization of data or as the basis of business activities are being actively utilized. It is also important to create an environment in which businesses can work with peace of mind, since there may be cases where businesses hesitate to take actions in the area where businesses cooperate because of the concerns for violating the Antimonopoly Act. In examining the issues under the Antimonopoly Act concerning such initiatives, the ideas in the Business Alliances Study Group Report and the "Guidelines Concerning Joint Research and Development under the Antimonopoly Act" (April 20, 1993, JFTC) can be helpful. Continuously, it would be effective for the JFTC to present guidelines and points to be noted under the Antimonopoly Act regarding such

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44 In addition to the Section 3.2.2(d) below, for example, with regard to personal data, from the perspective of promoting the appropriate use, Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry have been jointly holding the "Study Group for Ideal Approaches to a Certification Scheme Concerning Verification of the Proper Management of Organization which handle Personal Data" since November 2017 to study the ideal certification system including the requirements required of persons in charge of the information trust function and the operation scheme of certification, and in June 2018, compiled the "Guidelines for Certification Schemes Concerning Verification of the Proper Management of Organizations which handle Personal Data ver. 1.0", which refers to the mechanism of voluntary certification of Personal Data Banks by private organizations, etc. These guidelines are developed intended to effectively function the voluntary certification mechanism by private organizations, etc. for "Personal Data Bank" which provides information trust function, focusing on the distribution of data starting from individuals and ensuring reliability from individuals.

initiatives in order to promote them.

*(d) Government's support for data utilization initiatives*

In some cases, the government or organizations supported by the government promote or support the data utilization initiatives.

For example, to date, the government has taken measures for the safe, secure, fair, and free distribution and utilization of data, such as the enforcement of the Act for Partial Revision of the Unfair Competition Prevention Act (Act No. 33 of 2018), which includes the establishment of an injunction system against unauthorized distribution of data. Besides, the Contract Guidelines on Utilization of AI and Data,<sup>45</sup> which comprehensively summarizes contract terms and conditions, etc. by contract type concerning the use of data and adds an AI section that shows negotiation points and points to be noted concerning rights and responsibilities related to AI technology was published, and the Act on Special Measures for Productivity Improvement (Act No. 25 of 2018), including support for private businesses' initiatives in the area of coordination, were enforced.

As initiatives in individual fields, in the sector of finance, from the perspective of promoting open innovation,<sup>46</sup> the Banking Act was amended by the Act for Partial Revision of the Banking Act (Act No. 49 of 2017), subject to which banks were obliged to make efforts to establish a system for introducing open APIs.<sup>47,48</sup> As a result, so-called FinTech<sup>49</sup> companies can safely and securely access data such as personal deposit account information and, using such data, provide household account bookkeeping services and accounting services.

In addition, the Ministry of Economy, Trade and Industry and the Ministry of Internal Affairs and Communications has held "IoT Promotion Consortium Data

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45 Sector-specific contract guidelines reflecting peculiarities and problems in individual industries, such as "Contract Guidelines on Utilization of Data, Industrial Security Version (2nd edition)" (April 2019, Ministry of Economy, Trade and Industry) and "Data Contract Guidelines in the Agricultural Field" (December 2018, Ministry of Agriculture, Forestry and Fisheries), have been developed.

46 To develop innovative products and services by collecting and integrating new technologies and ideas from outside.

47 "Open API" means a bank's providing an API ("Application Programming Interface") to an other business to grant access to the bank system.

48 Article 11 of the Supplementary Provisions of the Act for Partial Revision of the Banking Act

49 "FinTech" is a coined word by combining "finance" and "technology", which indicates an innovative financial service business using IT.

Distribution Promotion Working Group” since January 2016, in which consultation cases from businesses have been discussed with the aim of encouraging businesses that are considering B2B data distribution transactions and, as the summary of the advice from the working group members, they have compiled and published the “Collection of Case Studies on New Data Distribution Transactions.”<sup>50</sup>

Besides, with the recognition that data held by the governments, both national and local governments, is a public good, initiatives for open-data has been promoted to make such data as open as possible for public disclosure.<sup>51,52</sup>

With regard to the government’s encouragement, such as the publication of contract guidelines for data, with some case studies therein, it is considered to be effective from the perspective of promoting new entrants and competition, as the hurdles to practice in accordance with the relevant rules are expected to be reduced, which would lead to reduction of the transaction costs, through either such initiatives itself or the increase of discussions brought by such initiatives among the parties concerned.

Also, open data initiatives will serve as a starting point for data distribution, contributing to the reduction of data collection costs for businesses and encouraging the promotion of innovation and the creation of new businesses by allowing businesses to use their own analysis methods and combine their own data with open data to increase added value. It is important for the government to fully recognize its role as a “platform of platforms” in cyber spaces, and to continue to promote open data initiatives with the recognition that it should contribute to the advancement of the digitization of our country as a whole, not just that of government itself.<sup>53</sup>

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50 Ministry of Economy, Trade and Industry published “Collection of Case Studies on New Data Distribution Transactions ver. 1.0” in March 2017, “Collection of Case Studies on New Data Distribution Transactions ver. 2.0” in August 2018, and “Collection of Case Studies on New Data Distribution Transactions [Part 1]” in September 2020.

51 “Declaration to Be the World’s Most Advanced Digital Nation / Basic Plan for the Advancement of Public and Private Sector Data Utilization” (Cabinet decision on June 14, 2019), pp. 47-49

52 For example, Ministry of Land, Infrastructure, Transport and Tourism is carrying out “Project PLATEAU” for improvement and utilization of a 3D city model to reproduce a real city in cyber spaces, and open data business (<https://www.mlit.go.jp/plateau/>). By preparing a 3D urban model as a platform data of urban activities, creating its use case, and disclosing it as open data, it is expected that anyone can freely extract and utilize the data of cities.

53 “First Report of the Task Force for Data Strategy”

*(e) Ensuring data portability*

Digital platform operators accumulate and utilize large amounts of data. Digital platform operators utilize data to provide a “place” for a wide variety of services and have become the bearers of innovation that continue to create innovative businesses, the benefits from which have become important to Japan’s economy and society, dramatically increasing the possibility of market access for businesses, including small and medium-sized businesses, and improving benefits and convenience for consumers.

On the other hand, the service provided by the digital platform operators which shoulders the multifaceted market in which multiple user layers exist expands through characteristics such as network effects, low marginal cost, economy of scale, etc., and monopolization and oligopolization in the markets are easy to advance. In addition, as data is concentrated through network effects and economies of scale, etc., the utility of users increases, and as data is accumulated and used by digital platform operators, and a business model based on data is constructed, a cycle is created in which the accumulation and use of data advances further, thereby maintaining and strengthening competitive advantage.

Under these circumstances, from the perspective of increasing competition in the businesses using data, it is important to enable users to switch to or to use multiple different platforms (multi-homing) without obstacle, which will encourage competition among digital platforms by ensuring users’ freedom of service selection. In order to make switching and multi-homing easier this way, ensuring data portability is important.<sup>54</sup>

With regard to personal data, it is pointed out also in the Data Study Group Report that “if portability of personal data is not ensured for services that may cause lock-in effects, such as social networking services, it will be easier to maintain market dominance in the relevant service market. This is why some policy measures are desirable.”<sup>55,56</sup> Given the fact that giant digital platform operators are moving into the

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54 Multiple giant digital platform operators are carrying out a voluntary effort called “Data Transfer Project” to transfer data directly to other companies’ services.

55 In Europe, the GDPR stipulates the right of data portability as a general right of individuals, which strengthens the basic right of individuals to control their own data and, for start-ups and SMEs, the right is positioned as a means to gain more consumers by lowering barriers to entry into markets dominated by large IT companies.

56 “Investigation of Competition in the Digital Markets - Majority Staff Report and Recommendations” (October 2020, U.S. House of Representatives Subcommittee on Antitrust) also made recommendations on ensuring data portability.

collection of data of physical area in various industries and that it is necessary to ensure freedom of choice for data providers, the importance of ensuring data portability from the perspective of competition policy is considered to be the same for industrial data.

In this regard, in the EU, “the Regulation on the Framework for the Free Flow of Non-Personal Data in the EU”, which includes provisions on data portability for industrial data, was enacted in November 2018 and it has been in effect since May 2019.<sup>57,58</sup> Furthermore, as mentioned in the Section 2.3.2 above, the Bill of Digital Market Act includes provisions that require business users to secure access to data accumulated and held by core platform operators and to enhance data portability.

*(f) Data portability and interoperability*

As mentioned in the Section 3.2.2(e) above, from the viewpoint of competition policy, it is important to ensure data portability. In order to materialize data portability, it is considered to be important to ensure interoperability among different systems for using technologies and systems of identity management<sup>59</sup> (all technical means to authenticate and manage identifiers such as IDs), and for handling data (data format, storage method, etc.).

Even if data portability is ensured, in case, for example, where the specifications of the systems among digital platform operators differ from each other, so that the data cannot be used in the same way on other digital platforms, switching with the transportation of data will be difficult, and multi-homing will be meaningless. This would reduce the opportunity to create new products and services using such data, and thus reduce the effect of ensuring data portability in promoting competition.

On the other hand, it is necessary to carefully examine the specific measures and targets for ensuring interoperability so that it does not become a factor that inhibits competition. In other words, the development of interoperability is likely to require a

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57 REGULATION (EU) 2018/1807 OF THE EUROPEAN PARLIAMENT AND COUNCIL of 14 November 2018 on a framework for the free flow of non-personal data in the European Union

58 As a result, when a business store and process industrial data using cloud services, the business can request the cloud service providers to transfer the industrial data to another cloud services or its own system. This regulation is not legally binding for data portability, but promotes the establishment of voluntary codes of conduct by the cooperation of cloud service providers, users, and organizations of small and medium businesses and startup businesses.

59 It refers to process management such as distribution, utilization, and renewal of user identity from generation to erasure (Identity Management Challenges in the Cloud (Information Processing Vol. 51 No. 12 Dec. 2010)).

reasonable amount of cost, and depending on the level required, it may be technically difficult. Therefore, for example, if a high level of interoperability or data portability that comes with it were to become mandatory for all businesses, regardless of size, in all fields, the cost burden would become a barrier to entry, which in turn would discourage new entrants and inhibit investment incentives for innovation and service improvement.

In addition, realistically, it may not function for the government to ensure interoperability by prescribing certain disciplines in detail in advance, if the technological progress is rapid and the circumstances related to system construction vary by business fields or businesses. For these reason, it is necessary to consider the specific measures and targets for ensuring interoperability, especially after carefully identifying the requirements in terms of what benefits would be brought to whom if they are realized.

Then, for example, in addition to the size of the business to which the discipline is applied, the distinction of data, industrial data or personal ones, or the level of maturity of the sectors and markets should be considered. In other words, compared to the area of utilization of personal data, where the collection and utilization of data is already widespread, especially by giant digital platform operators, the area of utilization of industrial data is in its infancy, and various initiatives are just beginning. In a market at such a stage, mandating data portability or interoperability without careful consideration will increase the cost of entry, which may result in some businesses giving up entering the market, and may in fact hinder the development of the market.

#### *(g) Role of intermediaries*

In recent years, as a framework to promote the distribution and utilization of data, initiatives have been made for a data trading market and Personal Data Bank which is originated in Japan. The data trading market is a framework that enables more efficient trading of data than on a negotiation basis, by matching the needs of data providers and data users. In this market, industrial data is mainly traded. An Personal Data Bank is similar to a data trading market in that it acts as an intermediary between data providers and data users, but the subject of transactions is mainly personal data, and it is a business model in which data is entrusted, provided to a trusted third party,<sup>60</sup> the data user, based on the consent of the individual, the data provider, and the benefits are

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60 In the accreditation system of the Personal Data Bank by the Information Technology Federation of Japan, the obligation of the Personal Data Bank to supervise whether the system related to information security and governance is appropriate, not only its own system, but also the system of third parties using data is prescribed.



returned to the individual.

Such intermediaries as Personal Data Banks or data trading market operators are considered to be important in order to reduce transaction costs for both data providers and data users, and to promote new entrants and competition in businesses related to data provision and businesses that utilize data. In addition, data portability can be expected to be promoted by a business model like Personal Data Bank, in which personal data held by many businesses are accumulated under an intermediary with the involvement of individuals. Therefore, if such intermediaries are able to gain a lot of contact and trust from service users, as described in the Section 3.3.2(a) below, the services provided by such intermediaries will become a solid infrastructure for data distribution and utilization, and their social significance will increase.

On the other hand, intermediaries operating services for data distribution and utilization may, like the services provided by existing digital platform operators, be able to monopolize or oligopolize markets due to economies of scale and network effects. Therefore, from the perspective of promoting new entrants and competition in the services provided by intermediaries, it is necessary to consider a mechanism to facilitate switching and multi-homing, such as data portability. Government is also required to monitor markets to identify anticompetitive conduct of a certain intermediary such as exclusion of new entrants by preventing data providers or users from multihoming.

#### *(h) Rules for intermediaries*

In the data market, due to the non-competitive nature of data, it is important to distribute a larger volume and variety of data. As shown in the case of IoS-OP described in the Section 3.2.1(b) above, some intermediaries build a platform as a framework to accumulate a large amount of industrial data of each field, receive and accumulate data from a large number of data producers, and mediate transactions with data users. These intermediaries are considered to play a certain role in actively utilizing data. When such a platform is constructed, for example, there may be a way where they do not dare add value to its providing service in light of the role of an intermediary which collects data and makes it available to other businesses.

Such a policy can be commendable from the standpoint of promoting competition, given the fact that the service provider plays the role of an intermediary in data sharing. On the other hand, from the standpoint of accumulating and distributing larger amount of data, it sometimes may be desirable to add some value to its services.

Particularly in the case where the intermediary business is in the early stage of business creation, i.e., in its infancy, in order to attract more users to use the service, it may be desirable to add value to the service to bring greater benefits to the users, which may lead to the collection of data from more data providers and thereby increase the distribution of data.

On the other hand, given that intermediaries may be able to monopolize or oligopolize markets due to the characteristics of such platforms described in the Section 3.2.2(g) above, such as the economies of scale and network effects, it should be noted that intermediaries might cause competition issues as they grow to gain market power by combining their intermediating services and value-added services.

As the Data Study Group Report states that unjust data hoarding, such as not allowing access by competitors or customers without justifiable reasons, can be a problem under the Antimonopoly Act, some of such competition policy issues related to the operation of platforms can be regulated within the framework of the existing Antimonopoly Act. However, from the perspective of promoting competition in the data market, necessary measures may be considered in the future, provided that certain conditions are met, as follows.

Specifically, in light of their role as an intermediary, intermediaries should take measures in relation to the platforms they operate depending on the phase of the market, cradle or mature. In particular, in the mature markets, if there is a competition concern such that an intermediary will gain market dominance which may lead to the exclusion of competitors or impeding new entrants, imposing a responsibilities for providing value-added services can be an option for consideration.

In addition, from the perspective of ensuring access to data, it is necessary to keep a situation in which all businesses can participate in the utilization of data, and in cases where competition is considered to be impeded, it is necessary to ensure access from startups and new entrants from other industries on fair terms.

Besides, from the standpoint of activating the smooth distribution of data, the first step would be to promote voluntary initiatives by each industry, for example, the implementation of interoperability such as the Open APIs to enable data linkage between platforms, and the formulation of fair contract rules, including the case where data is accumulated jointly by businesses on platforms.

In implementing these measures, as necessary, establishing additional regulations by the government may be an option. From the viewpoint of fairness, for example, such approaches can be considered as including regulations that stipulate the general framework of regulations by law while leaving the details to the voluntary initiatives of businesses (so-called “joint regulations”), or “ex-ante regulations”<sup>61</sup> through neutral third parties as well.

As an example of the rule for intermediaries, the Data Governance bill described in the Section 2.3.2 in the EU provides stipulation that regulates, among the intermediaries that accumulate data and mediate transactions, the providers of “(1) intermediation services between data holders which are legal persons and potential data users (services including bilateral or multilateral exchanges of data or the creation of platforms or databases enabling the exchange or joint exploitation of data, as well as the establishment of a specific infrastructure for the interconnection of data holders and data users)”, “(2) intermediation services between data subjects that seek to make their personal data available and potential data users (including making available the technical or other means to enable such services, in the exercise of the rights provided in GDPR)” and “(3) services of data cooperatives, that is to say services supporting data subjects or one-person companies or micro, small and medium-sized businesses, who are members of the cooperative or who confer the power to the cooperative to negotiate terms and conditions for data processing before they consent” through separation from other businesses, ensuring fairness, transparency, safety, business continuity of the service of intermediaries, and protecting the interests of data providers.

In considering the necessity of the regulations on the intermediaries, including those in the example of the EU above, from the view of competition policy, the regulations should be designed to promote competition in the data market, i.e., to have the effect of promoting data distribution, new entry in data-driven businesses, and innovation.

### **3.3 Review of personal data**

This section summarizes the results of studies conducted by the study group on personal data.

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<sup>61</sup> “Ex-ante regulations” refers to regulations such as the Digital Market Act in the EU described in the Section 2.3.2, since such regulations are positioned to complement existing competition laws as ex-post regulations. The same applies below.

### 3.3.1 Examples of initiatives relating to personal data

#### *(a) Initiatives in Personal Data Bank*

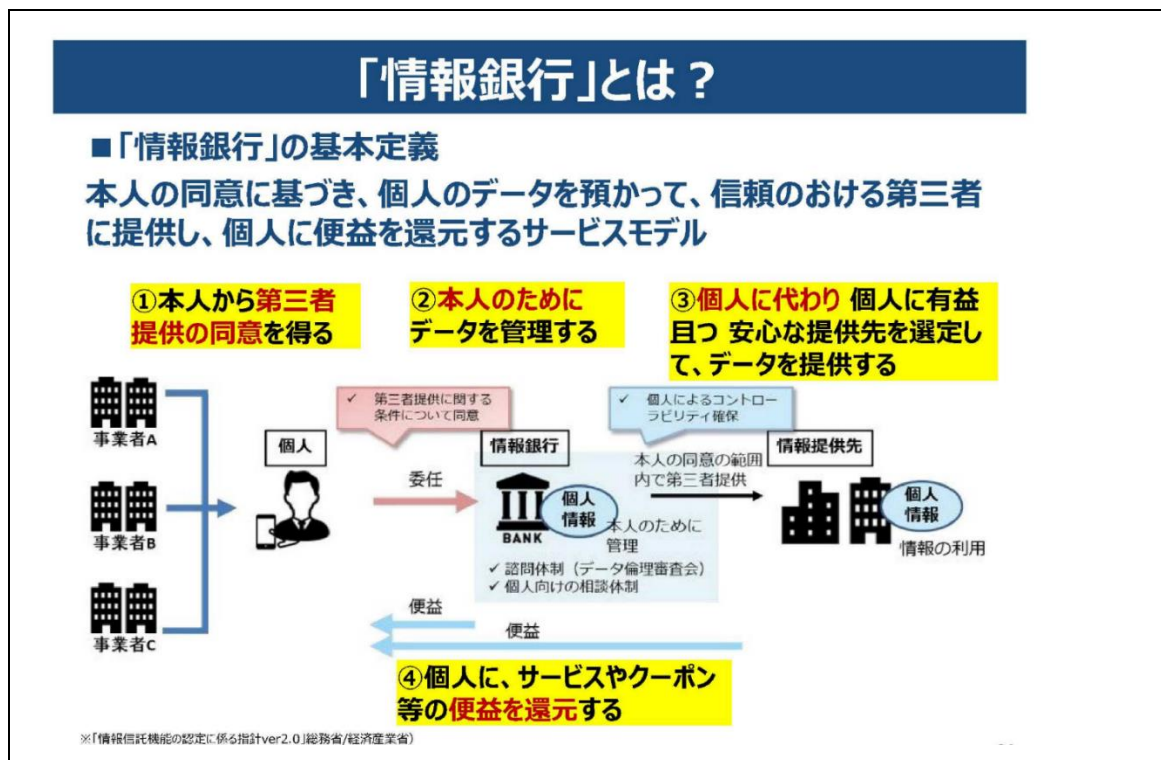
In promoting the utilization of data, Information Technology Federation of Japan, a general incorporated association, started an certification program in August 2018, based on discussions on the effectiveness of a “Personal Data bank,”<sup>62</sup> which is a new business form of managing personal data entrusted by individuals and providing it to third parties within the consent of the individual in order to contribute to economic development and the resolution of social issues through reducing the anxiety of providing personal information to third parties and promoting data utilization.

The Personal Data Bank’s certification program is intended to show compliance with the “Guidelines of Certification Schemes Concerning Functions of Information Trust” (Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry) and the certification standards for information security measures, privacy protection measures, etc. formulated by the Federation. Although the certification by the Federation is not necessary to conduct a Personal Data Bank’s business, the services and businesses that can entrust personal data of individuals with trust can be appealed as a “Personal Data Trust Bank” that is secure and safe.

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62 “Data Utilization WG Interim Report for the AI and IoT Era” (February 2017), Data Distribution Environment Development Committee, etc.

[Fig. 9] Structure of the Personal Data Bank



(Source) Material 1 of the study group meeting #4, “Activities of Personal Data Bank”

At present, there are not many businesses that conduct business with the certification of Personal Data Bank, but as a concrete example, there are cases where an individual who is a data provider entrusts various personal data such as residence, family structure, hobby, interest, outing history, purchase history to the Bank, and receives benefits such as services and coupons that match the daily life and behavior of the individual from the business who is a data user.

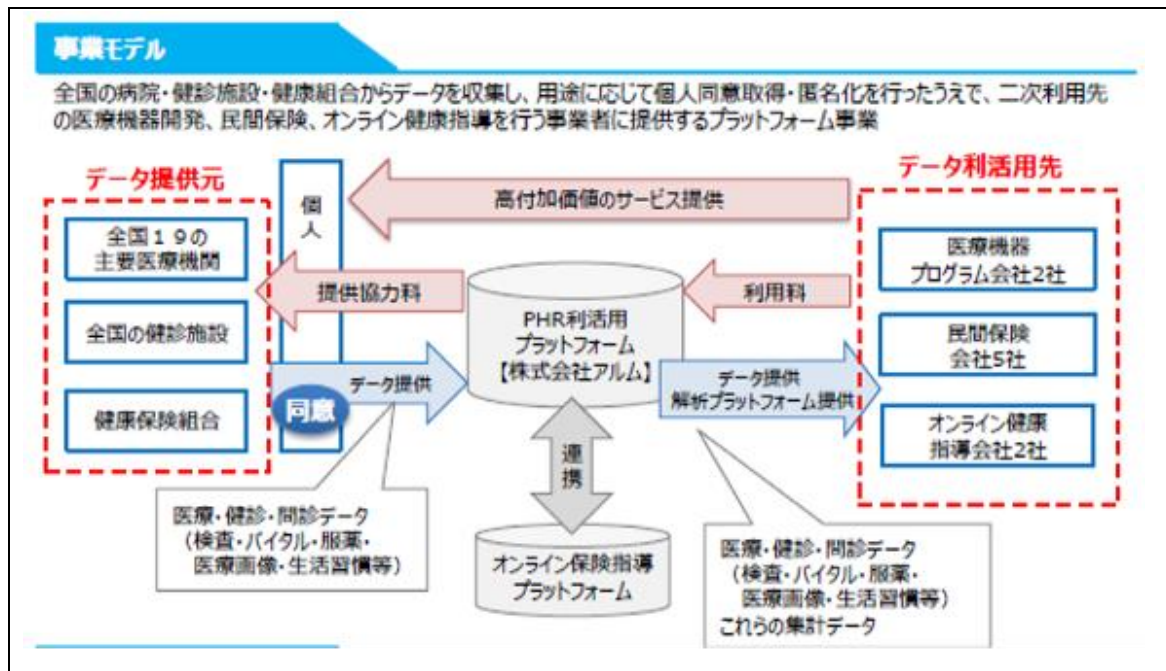
*(b) Initiatives in the medical sector*

In the medical sector, for example, Jikei University and Allm Co., Ltd. utilize medical data and wearable data of the individual, and they carry out PHR (“Personal Health Record”)<sup>63</sup> secondary usage platform business. In this business, medical data of hospitals, health facilities, health associations, etc. across the country which are data providers and wearable data of individuals are collected on a data platform, integrated as PHR, processed anonymously and with acquisition of consent of individuals, and then provided to medical device development companies, private insurance companies,

63 In the “Growth Strategy Follow-up” (Cabinet Decision on June 21, 2019), PHR is defined as “a system that enables individuals and their families to understand their health status, medication history, etc., in order to improve their daily lives and promote their health”.

businesses which carry out on-line health guidance, which are data users. This business will make it possible to provide insurance products that meet the individual needs of people with diseases who have not been able to obtain medical insurance, and to provide online health guidance to individual users based on medical, health, and inquiry data.

[Fig. 10] Structure of PHR Secondary Usage Infrastructure

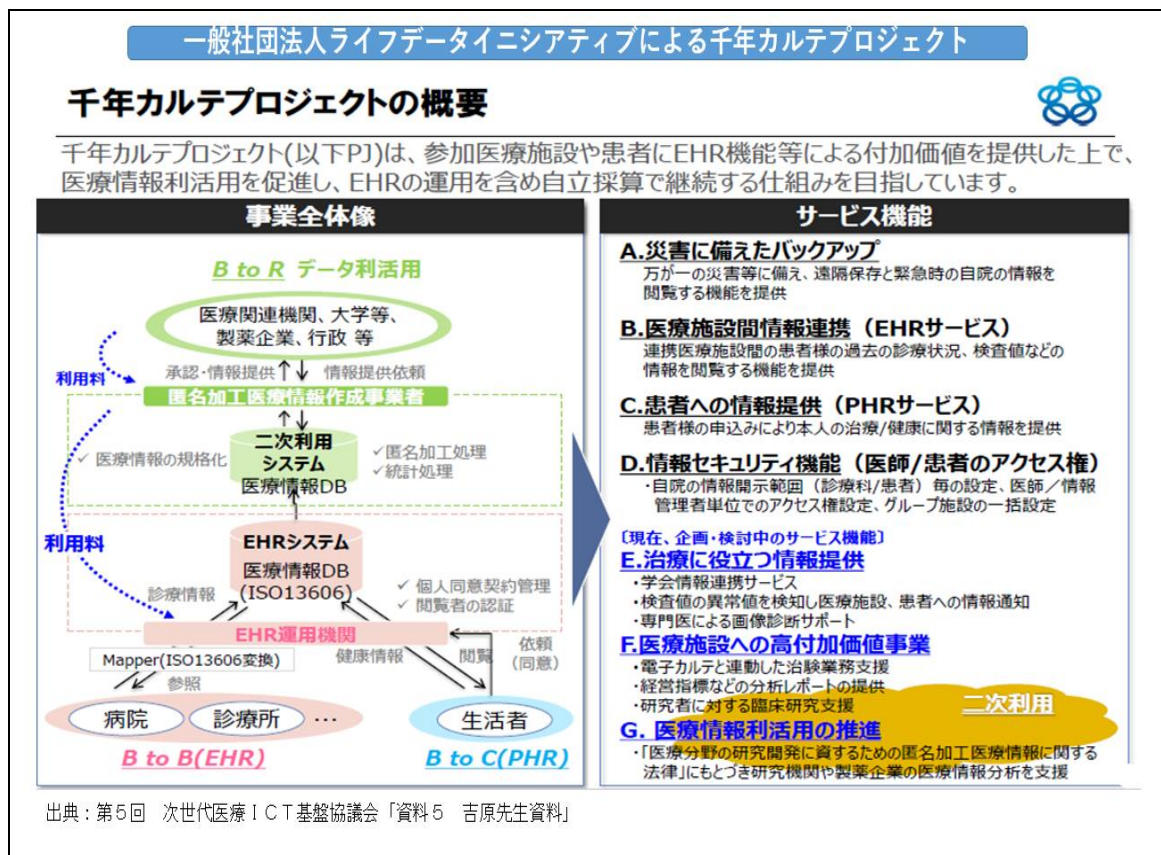


(Source) Material 3 of the study group meeting #4, "Initiatives for Data Utilization in the Medical Field"

In addition, Life Data Initiative, a general incorporated association, has been working on a Millennium Medical Records Project to promote medical data utilization by providing added value through EHR ("Electronic Health Record")<sup>64</sup> function to medical institutions and patients. This function is a data platform that collects information from hospitals and clinics, such as past medical examinations and test values, and provides the data to medical institutions, universities, pharmaceutical companies, etc. after anonymizing and statistical processing the medical data on a secondary usage system. In addition, this system enables backup of medical data in case of disaster and data collaboration among medical facilities.

64 "EHR" refers to electronic health records, which accumulate medical data from medical institutions across the country, disclose the medical data to patients, and allow multiple medical institutions to collaborate on medical treatment.

[Fig. 11] Structure of the Millennium Medical Records Project

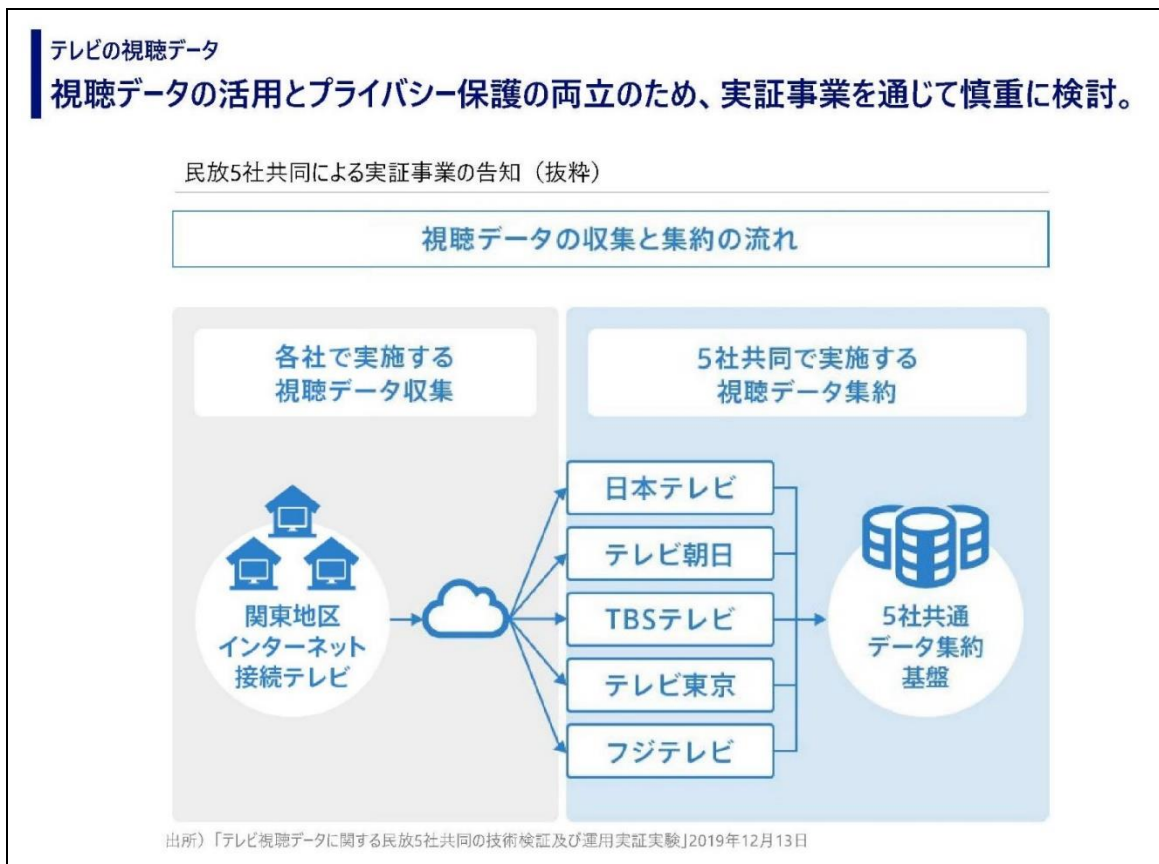


(Source) Material 3 of the 4th meeting of the study group, “Initiatives for Data Utilization in the Medical Field”

(c) Initiatives in the broadcasting sector

In the broadcasting sector, since the “Guidelines for the Protection of Personal Information Held by Broadcast Recipients” published by the Ministry of Internal Affairs and Communications were revised in 2017, business activity has been made to utilize TV viewing data of individuals jointly by 5 commercial broadcasting companies. This activity is to collect viewing data such as viewing history and viewer attributes of the individual who is a data provider connected to the Internet in the Kanto district in Japan on a common data platform operated by the companies, and to provide this data to commercial broadcasting companies and advertising companies which are data users, in order to utilize it for program making desired by the viewers and distribution of advertisement meeting the needs.

[Fig. 12] Structure of TV Viewing Data Utilization



(Source) Material 2 of the study group meeting #4, “IoT Data Rules and Platform Trends”

### 3.3.2 Consideration

In addition to the cases described in the Section 3.3.1, initiatives have been made in various fields related to distribution and utilization of personal data. In light of such circumstances, the results of the consideration by the study group from the viewpoint of competition policy seem to generally apply to all of the points summarized in the Section 3.2.2 above, including the desirability of securing more businesses, including potential new entrants, to have free and easy access to accumulated data and the importance of ensuring data portability in order to promote competition in data market. In addition, the following points should be noted with regard to personal data.

*(a) More careful consideration to gain individual’s safety and trust*

Personal data is similar to industrial data in that it is desirable to have as many stakeholders as possible participate in constructing mechanisms for data utilization to meet each stakeholder’s needs.<sup>65</sup> In addition, with regard to personal data in particular,

<sup>65</sup> The questionnaire survey of consumers in “Empirical Analysis of Factors Determining the



it is expected that data closely related to individuals' lives will become increasingly usable in the future. Ensuring individuals' security and trust taking DFFT ("Data Free Flow with Trust") into account when they provide such data to businesses may lead to increasing volume of flowing data.<sup>66</sup>

At present, it is considered that the point of contact with consumers and the trust of consumers are concentrated in digital platform business operators. However, from the view point of promoting new entry and competition of businesses utilizing data, careful consideration, with the involvement of government, is desirable to establish frameworks where not only digital platform operators, but also other businesses can obtain personal data with individuals' security and trust ensured.<sup>67</sup>

In this regard, as described in the Section 3.3.1(a) above, the certification criteria in the certification system of the Personal Data Bank and other initiatives referred to in this study group also include careful consideration with a wide range of stakeholders and the involvement of the government, etc., in the construction of the mechanism. These initiatives are considered to be effective in the sense that they enhance the sense of security and reliability.<sup>68</sup>

The Act on the Protection of the Interests of Consumers Using Digital Platform for Transactions (Act No. 32 of 2021), which was enacted in April 2021, requires the formation of a public-private council consisting of government administrative agencies, associations of digital platform operators, and consumer groups to exchange information and hold discussions necessary for the effective and smooth implementation of measures to protect the interests of consumers using digital platforms. In this way, the framework in which a wide range of stakeholders are involved while the government,

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Evaluation of Personal Data Banks by Consumers" (Ministry of Internal Affairs and Communications, "Information and Communications Policy Research," Vol. 4, No. 1), indicates that many people choose the benefits of "more convenient services" as a reason for wanting to use Personal Data Banks. Hence, it seems to be desirable to obtain the participation of as many parties as possible, because such service can meet the expectation of the consumers found in the survey.

66 This concept advocates the synergistic effect of "trust" and "free distribution" by further facilitating data free flow and strengthen consumer and business trust by addressing challenges related to privacy, data protection, intellectual property rights and security, and was also included in the Leaders' Declaration at the G20 Osaka Summit 2019.

67 In addition, checks by third parties such as regulatory authorities are also likely to be concentrated on digital platform operators.

68 There are examples of efforts such as "Study Group on the Development of Society and Industry Using Mobile Spatial Statistics," the "Smart House Building Standards and Business Promotion Study Group," and the "Council on the Handling of View-related Information."

etc. are involved is considered to be a useful reference for promoting the construction of the mechanism, etc. through more careful consideration.

*(b) Consideration of mechanisms and rules for business abandonment*

From the viewpoint of obtaining social trust for business utilizing data and promoting data distribution, when entering such business, it is important to simulate the situations where the business is abandoned, assuming the business continuation as long as possible. This is considered to be the same for industrial data, but for personal data, it is considered particularly important in the sense that it is desirable to construct a mechanism through more careful examination as described in the Section 3.3.2(a) above.

Businesses may abandon their businesses utilizing data due to their review of business strategies or changes in the market environment, etc. It is desirable to set some kind of rules in advance so that individuals who have used the service will not suffer disadvantages such as not being able to use the data provided to the service, in case service providers abandon their businesses.

In addition, when establishing such rules, it is considered desirable to take the risks of the businesses into account within a mechanism that a wide range of stakeholders, including the government are involved, as necessary, as in the 3.3.2(a) above.

On the other hand, if too strict rules about business abandonment are required at the stage of business formation, the costs for the business will increase accordingly, and hurdles in starting new business will be raised, which may become a factor to deter new entry. Therefore, it is considered that taking the promotion of new entry into account in such consideration is important.

*(c) Responding to privacy concerns*

As described in the Section 3.3.2(a) above, from the view point of promoting new entry and competition of businesses utilizing data, it is desirable to ensure individuals' security and trust when businesses obtain their personal data. From the perspective of enabling businesses to receive personal data in such manner, it is important for businesses to enhance quality of explanations on their use of personal data and to obtain adequate

approvals from users.<sup>69</sup>

In this regard, transactions between a digital platform operator and a consumer who provides personal data are regarded as an abuse of a superior bargaining position if such digital platform operator, which has a superior bargaining position over the consumers, do acts concerning the acquisition or use of personal information,<sup>70</sup> etc. in a way unjustly disadvantageous to the consumers in light of normal business practices.<sup>71,72</sup> On the other hand, it does not seem to become a problem as an abuse of a superior bargaining position, when the approvals have been obtained from the consumers through the process which is legal under the Act on the Protection of Personal Information.<sup>73</sup>

On the other hand, while various services are developed with the evolution of

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69 Notification and publication of purpose of utilizing personal data by businesses to individuals and obtaining consent pertaining to provision to third parties are required by the Act on the Protection of Personal Information, etc., and are of course important from the viewpoint of compliance with the Act.

70 "Acquiring personal information against consumers' intention beyond the scope necessary to achieve the purpose of use," "Using personal information against the intention of consumers beyond the scope necessary to achieve the purpose of use," etc.

71 "Summaries of 'Guidelines Concerning Abuse of a Superior Bargaining Position in Transactions between Digital Platform Operators and Consumers that Provide Personal Information, etc'" (December 17, 2019, JFTC), p. 8

72 "Views on Guidelines Concerning Abuse of a Superior Bargaining Position in Transactions between Digital Platform Operators and Consumers that Provide Personal Information, etc'" (August 2019, Personal Information Protection Commission) presents the following views on Personal Information Protection Commission's response to digital platform operators that have a superior position over consumers.

1. Personal Information Protection Commission evaluates the unjustness from the viewpoint of personal information protection policy on the handling of personal information by digital platform operators based on the Act on the Protection of Personal Information, and carry out necessary law enforcement.
2. In the above case, if Personal Information Protection Commission becomes aware of the fact that it is suspected that a digital platform operator which may be evaluated as having an advantageous position over consumers is unjustly obtaining or using personal information, apart from whether it is justified or not in terms of personal information protection policy, Personal Information Protection Commission will cooperate with Fair Trade Commission to the necessary extent.
3. In addition, if Fair Trade Commission becomes aware of handling of personal information which may constitute an abuse of a superior bargaining position by a digital platform operator against a consumer, Personal Information Protection Commission shall request Fair Trade Commission to promptly cooperate with Personal Information Protection Commission to the necessary extent, because evaluations from the viewpoint of personal information protection policy is also required.

73 "Summary of opinions on the draft and views on the opinions (Guidelines Concerning Abuse of a Superior Bargaining Position in Transactions between Digital Platform Operators and Consumers that Provide Personal Information, etc.)" (December 17, 2019, JFTC) "Views" column of No. 140 and 181

the Internet environment, there are problems that explanations at the time of obtaining approvals become complicated and difficult to understand because more and more information is collected from consumers and its usage become more and more complicated and diversified. In addition, it has been pointed out that the repeated acquisition of approvals leads to the so-called “approval fatigue” that leads to insufficient understanding by consumers. Under such circumstances, data collected from consumers are consolidated and integrated by businesses, and the processing becomes a black box, which causes serious privacy concerns.<sup>74</sup> In particular, digital platform business operates can match and integrate various data with identifiers that are given to individuals almost fixedly, while the consumers are not aware of them or there are concerns about the consumers’ understanding.<sup>75</sup>

Therefore, in light of this situation, from the viewpoint of competition policy, making additional rules based on “data fiduciary duty” can be an option to ensure individuals’ security and trust when businesses obtain their personal data.<sup>76</sup>

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74 In the 2020 Amendment Act on the Protection of Personal Information, “personally referable information (Meaning information relating to a living individual which does not fall under personal information, pseudonymously processed information or anonymously processed information; the same applies hereinafter)” was newly defined. Under the Amendment Act, when it is expected that personally referable information provided to a third party is obtained as personal data by the third party, the provider of the personally referable information must obtain individual’s consent in advance.

75 “Evaluation of Competition in the Digital Advertising Market Final Report” (April 2021, Digital Market Competition Council)

76 There are information asymmetry and dependency relationships between consumers and businesses that obtain and use personal data due to the asymmetry occur, and it is difficult for consumers to fully recognize and control the acquisition and use of personal data by businesses. Taking those situations into account, the idea that businesses are under “data fiduciary duty,” which require businesses to handle personal data carefully so as not to bring disadvantages to consumers, is becoming widespread overseas (“Evaluation of Competition in the Digital Advertising Market Final Report,” p. 189).

“Fiduciary duty” is a concept that has been used by lawyers, medical doctors, and financial institutions in Europe and the United States. Lawyers have the duty to do their best to carry out lawsuits for their clients, and doctors have the duty to do their best to restore the health of their patients. A financial institution entrusted with the management of assets has a duty to do its best to generate investment returns” (“What is Fiduciary Duty?”, Monthly Capital Market, July 2016, No.371).

With regard to trust relationship, in the case of financial institutions, doctors, and lawyers, the relationship basically arises in relation to the customer who is the other party to the service (this does not mean that the relationship with other parties are denied), whereas the trust relationship here is not a contract but a relationship that comes from one party’s trust in the other party. Thus, for example, in the case of a relationship between a free-of-charge search service provider and a consumer, when the consumer provides data in exchange for receiving the search service, the consumer has given the service provider the trust that no disadvantage will be caused to the

Specifically, it was pointed out that, for example, businesses that receive and manage personal data should be required to clearly distinguish what should be done after obtaining approvals from individuals in an opt-in manner and what may be done in an opt-out manner with the participation of many stakeholders, and that the businesses should be required to ensure transparency and fairness by designing a mechanism that enables withdrawal of approvals even after obtaining approvals in a comprehensive or specific manner.<sup>77</sup>

*(d) Positioning of intermediaries in data portability mechanism*

As mentioned in the Section 3.2.2(e) above, it is important to ensure data portability, including that for personal data, from the viewpoint of competition policy.<sup>78</sup> In addition, as mentioned in the Section 3.2.2(g) above, it is considered that the role of intermediaries is important to promote new entry and competition in businesses utilizing data.

In addition, it is difficult for individuals to fully control data portability by themselves, especially with regard to personal data. Therefore, in the data portability mechanism, the question of how to position intermediaries in order to ensure the effectiveness of data portability may also be considered.

For example, to establish a mechanism such that intermediaries who meet certain requirements and is certified play a role in realizing data portability on behalf of individuals can be an option.

*(e) Rules for digital platform operators*

As noted in the footnote 54 above, digital platform operators utilize data they collected for their own services, etc., while in order to comply with laws and regulations such as

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consumer. (“Interim Report on the Evaluation of Competition in the Digital Advertising Market” (June 2020, Digital Market Competition Council), p. 74)

77 As for the measures for the utilization of TV viewing data described in the Section 3.3.1(c) above, the rules for utilization of viewing data are being developed among multiple stakeholders, such as the “Practice for Handling of Unspecified Viewing History Obtained by Opt-Out Method” compiled in the “Council for Handling of Viewing-Related Information.”

78 In Japan, the Amendment Act on the Protection of Personal Information enacted in June 2020 enables individuals to choose the methods of disclosure of their retained personal data, including the provision of electromagnetic records. In the meetings of the study group, it was pointed out that, while this can be appreciated that progress has been made in terms of access to personal data, in terms of ensuring data portability, compared with the provisions on data portability in the EU GDPR described in the footnote 23 above, the situation is not sufficient.

privacy protection, they have promoted collaborative initiatives among themselves and established voluntary rules concerning restrictions on the use of Cookie as described below.<sup>79</sup> Moreover, recently, there is a movement that the digital platform operators are entering into business fields other than on-line services such as collection of real data in each industry. In addition, personal data collection through IoT devices for individuals and homes, such as wearable devices and smart home related products, is expected to become increasingly active in the future. From the viewpoint of promoting competition in data markets, including the privacy issues described in the Section 3.3.2(c) above, it is pointed out various problems due to such digital platform operators are happening or might happen in the future. Therefore, it is considered that the government should pay close attention to the market situations and promptly consider necessary measures as necessary.

For example, when each user's ID issued by digital platform operators with respect to their services and the data that the users provide or generate is inseparable, the digital platform operator may try to enter a new market by using such users' data.<sup>80</sup> Due to economies of scale or scope, such digital platform operators can have a huge competitive advantage over incumbents. In this way, by hoarding user's data through IDs and using it in various fields, digital platform operators can gain market power even in the market they entered. In order to prevent such data hoarding and enable switching from digital platform operators, considerable options include providing data portability to users, implementing interoperability for transferring data to other operators, and enabling fair access to data from users and other operators.

Regarding access to data held by digital platform providers, ranking, query, click, and view data related to search services are important for providers of such services. In addition, information on Cookie including users' browsing history is important for providers of online advertisement intermediation services. In particular, the use of third-party Cookie, which are used for targeting advertisements, has recently been restricted

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79 "Cookie" is user data that is issued by the web server of a website etc. and automatically stored in the user's web browser when the user visits the website. Cookie is used to identify user and to record website URLs that user has visited and login information. ("Final Report Regarding Digital Advertising" (February 17, 2021, JFTC), pp. 93-94)

80 In the meetings of the study group, there was an opinion that, by entering another market at a low cost using the existing database by the digital platform business, the competition in the market of the entering party becomes active, and the consumer can receive goods and services at a low price, which may have a positive effect on the competition policy.

by web browser providers from the viewpoint of protecting users' privacy.<sup>81</sup> It is anticipated that such restriction has a big impact on business activity of advertisement intermediation service providers which obtain user data using third party cookies. Taking those situations into account, it is also pointed out that rules such that other businesses can access these data held by the digital platform operators need to be considered, paying attention to privacy.

In addition, as described in the Section 3.2.2(h) above, if an intermediary is in its infancy, in order for such intermediary to promote data provision and distribution, providing their own value-added services besides the intermediary service may bring greater benefits to users and promote competition. On the other hand, in the markets which have developed to some extent such as digital advertisement market, some measures in terms of competition policy such as imposing some obligations to digital platform operators which intermediate between sellers and buyers regarding their value-added services.

As it is considered that ex-post regulations based on the existing Antimonopoly Act may not be sufficient enough to deal with the above problems, discussing additional ex-ante rules can be an option for regulating such digital platform operators if necessary.

In this regard, the EU is to introduce ex-ante regulations especially on giant digital platform operators including that of data handling, from the perspective of competition in the digital market.

For example, as described in the Section 2.3.2, the EU Digital Markets Act proposal defines core platform services providers that meet the criteria as "gatekeepers" and requires gatekeepers to be subject to regulations such as "refrain(ing) from combining personal data sourced from these core platform services with personal data from any other services offered by the gatekeeper," "refrain(ing) from using, in competition with business users, any data not publicly available, which is generated through activities by those business users," "provid(ing) effective portability of data,"

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81 "Third-party cookie" is Cookie that is issued by a web server other than website that user is visiting. Third-party cookie can collect user data across websites and are used for advertising targeting according to user's interests and type. On the other hand, first-party cookie is Cookie from a web server of website that user is visiting. Digital platform operators, which own their search services or shopping sites, are said to be able to continue conducting targeting without using third-party cookie, because they can collect user data from first-party cookie etc. ("Final Report Regarding Digital Advertising," pp. 93-94, 97)

“provid(ing) [...] third parties authorised [...] with [...] real-time access,” and “provid(ing) to any third party providers of online search engines, [...] with access [...] to ranking, query, click and view data.” It also stipulates that when a gatekeeper buys another digital business, it must notify the European Commission in advance regardless of the provisions of existing competition laws. In the case of violation of this act, the European Commission is empowered to seek measures to resolve problems and to impose measures such as divestitures. In the case of non-compliance with those obligations, it is also possible to impose a fine.

In the UK, as mentioned in the Section 2.3.2, the Competition and Markets Authority has made proposals regarding new regulations on digital platform operators, including measures to ensure access to the data they hold.

Based on the above-mentioned overseas trends, rules for digital platform operators in Japan can be an option from the viewpoint of promoting competition in data market. In designing such ex-ante rules, as described in the Section 3.2.2(h) above, these ex-ante rules should promote data distribution, new entry and innovation, and care should be taken not to nip the buds of new entrants or reduce innovation.<sup>82</sup>

It is also important to use appropriate tools to take necessary remedies in a timely and expeditious manner, and to intervene only in problematic areas with minimized impediment to economic activities. Since the targets are rapidly changing markets, in order to respond to problems flexibly and quickly, the process that business associations in each sector voluntarily set rules for interoperability and data portability by themselves then government intervenes in a necessary manner if necessary, is worth consideration.

In this case, it is necessary to determine whether all digital platform operators or specific digital platform operators are subject to the regulations. In other words, as in the case of the EU and the UK, taking into account the impact of the concentration of data on specific operators on market competition, to target only digital platform operators which is larger than a certain threshold can be an option. However, it is not appropriate to measure the size of an operator only based on the market share of one

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82 In the meetings of the study group, it was pointed out that to promote international cooperation is necessary when implementing regulations on data markets, including enforcement of the Antimonopoly Act, in order to respond to foreign businesses' activities and ensure international data portability.



market because of the multi-sided nature of platform services. In addition, not only sales amount in a market but also the number of active users or the number of IDs, etc. can be used as measures of market share.

## **Section 4: Recommended points from the view point of competition policy**

Summarizing the discussion in the Section 3.2.2 and 3.3.2, the study group argues six points recommended from the view point of competition policy to discuss establishing mechanisms for data utilization and data utilizing platforms.

### **4.1. Involvement of a wide range of stakeholders when establishing frameworks**

Regardless of industrial or personal data, it is desirable to consider needs of many stakeholders in markets when establishing cooperation frameworks involving various companies for utilizing data. That could avoid consequences that data accumulation through the frameworks is not large enough to develop or provide attractive products and services for business users.

With respect to personal data, ensuring individuals' security and trust based on DFFT ("Data Free Flow with Trust") when they provide it to businesses may lead to increasing volume of flowing data. From the view point of promoting new entry and competition of businesses utilizing data, careful consideration, with the involvement of government, is desirable to establish frameworks where not only digital platform operators, which have intensive contacts with consumers, but also other businesses can obtain personal data with individuals' security and trust ensured.

Moreover, it is desirable to set rules among stakeholders in advance for preventing future damages to service users in case service providers abandon their businesses. On the other hand, it should be kept in mind that such rules may not deter new entry.

### **4.2. Free and easy access to data**

From the view point of promoting new entry and competition of businesses utilizing data, it is desirable to ensure that as many businesses as possible, including potential new entrants, have free and easy access to data. Businesses should be able to broadly use results and know-how obtained from their data processing and analysis without any unfair interference. At the same time, securing incentives of businesses to generate data should be kept in mind. In addition, from the same perspective, discussion for setting contract rules can be an option to address the issue that one party is forced by another party to accept unfair terms of data access.

### **4.3. Government's support for business activities in the areas where businesses cooperate or compete**

In some cases, businesses define areas where they cooperate or compete and promote data utilization according to the definition. From the view point of promoting new entry and competition of businesses utilizing data, it is required to support business activities in the area where businesses cooperate. In the area where businesses compete, it is required to regulate anticompetitive conduct.

In the area where businesses cooperate, government's support such as revising relevant legislations, providing guidelines explaining items and terms for concluding civil contracts and publishing compilations of analyzed business cooperation may lead to reducing transaction cost. These initiatives are effective for promoting new entry and competition. Moreover, it is important to continue such initiatives as opening government data which will support promoting innovation and creating new businesses.

However, because of the concerns for violating the Antimonopoly Act, businesses might avoid taking initiatives in the area where they cooperate. The JFTC has been providing how it applies the Antimonopoly Act and how businesses should be concerned about the act. Those continuous future efforts are effective for supporting initiatives of businesses in this area.

### **4.4. Ensuring data portability and interoperability**

With respect to both industrial and personal data, ensuring data portability is important to enable users to switch or to use multiple different platforms (multi-homing) without obstacles. Especially for personal data, it is important to discuss what role the intermediaries play to make data portability workable. For example, the mechanism in which certain intermediaries themselves transport individuals' data for them can be one of the options.

In order to materialize data portability, it is important to ensure interoperability among different systems for using technologies and systems of identity management, and for handling data. On the other hand, details and scope of data portability and interoperability should be carefully considered not to harm competition by increasing cost or deterring innovation. For example, size of targeted businesses, distinction of data (industrial or personal), and maturity of targeted sectors and markets should be fully considered.

#### **4.5. Privacy concerns**

From the view point of promoting new entry and competition of businesses utilizing data, it is desirable to ensure individuals' security and trust when businesses obtain their personal data. And it is important for businesses, also from the view point of compliance with the Personal Information Protection Act, to enhance quality of explanations on their use of personal data and to obtain adequate approvals from users in order to remove concerns by individuals.

On the other hand, it is concerned that digital platform operators collect various data by using unique identifiers assigned to each user and integrate personal data without being noticed or understood by consumers. In these circumstances, making additional rules based on "data fiduciary duty" can be an option to ensure individuals' security and trust when businesses obtain their personal data. Following the duty, digital platform operators collecting data are required to consider and handle the data without causing harms against individuals.

#### **4.6. Rules for regulating intermediaries and digital platform operators**

Intermediaries operating "data sharing platforms" and "Personal Data Bank", which provide new types of platform services for data distribution and utilization, may be able to monopolize or oligopolize markets because of the structure of the services. In addition to considering mechanisms for data portability and interoperability, government is required to monitor markets to identify anticompetitive conduct such as exclusion of new entrants.

It is possible that intermediaries promote data distribution by adding value to their intermediating services. However, it should be noted that intermediaries might cause competition issues as they grow to gain market power by combining their intermediating services and value-added services. These competition issues concerning operations of platforms can be addressed by initiatives of adding ex-ante rules to the framework of the Antimonopoly Act, if necessary. In mature markets, imposing certain responsibilities for providing value-added services, ensuring data access from startups and new entrants on fair terms, and setting rules for concluding fair contracts can be options for consideration.

On the other hand, data hoarding by digital platform operators can be addressed by rules enabling users and other businesses to have access to data accumulated by digital platform operators on fair terms as well as rules ensuring data

portability or interoperability. In developed markets such as a digital advertisement market, measures based on competition policy can tackle the issue that digital platform operators provide both their platform services and their own value-added services. Therefore, these measures focus on similar issue that the above mentioned rules on intermediaries target. Moreover, discussing additional ex-ante rules can be an option for regulating such digital platform operators if necessary since the ex-post regulation by the existing Antimonopoly Act might not be effective enough in some cases.

From the view point of competition policy, these ex-ante rules should promote data distribution, new entry and innovation. It is important that such rules are able to provide adequate tools to swiftly take necessary measures in a timely manner but only focus on problematic points without inhibiting business activities. The process that business associations in each sector voluntarily set rules for interoperability and data portability by themselves then government intervenes in a necessary manner if necessary, is worth consideration.

When drafting the ex-ante rules, scope of the regulation should be carefully considered. Taking into account the impacts on market competition by certain big companies accumulating data, digital platform operators having certain size can be target of the ex-ante rules.

## **Section 5: Conclusion**

Data utilization is significantly important for the social and economic development of Japan. Under the recent spread of the novel coronavirus, the protection of people's lives and the economic revitalization have been added to its mission. Therefore, the data utilization is getting more and more important in this situation.

In Japan, relevant ministries and business associations have been taking various initiatives for promoting data distribution and utilization. However, it is necessary to have a variety of continuous initiatives including initiatives for promoting more competition of businesses utilization data.

Following the discussion of the study group, this report summarizes the state and challenges of initiatives made by governments in Japan and foreign countries, businesses and business associations for promoting data distribution and utilization. It publishes the result of discussion on recommended points from the view point of competition policy to consider establishing mechanisms for data utilization and data utilizing platforms.

As mentioned above, in order to solve issues for promoting data distribution and utilization as a whole, regulation by the Antimonopoly Act should be discussed in conjunction with regulation by the Personal Information Protection Act, consumer protection laws and sector laws as well as government's support for business activities aiming at balanced approaches. Moreover, setting new ex-ante rules targeting issues that existing regulations cannot cover can be an option for preventing data hoarding and other problems.

The study group expects vigorous efforts taken by relevant ministries and business associations in the future to address issues of data distribution and utilization with reference to recommendations by this report.