

Overview of
“Committee to Review Intellectual Property regarding
New Data-related Assets” Report

Secretariat of Intellectual Property Strategy Headquarters
Cabinet Office
03/2017

“Committee to Review Intellectual Property regarding New Data-related Assets”

Descriptions in Intellectual Property Strategic Program 2016

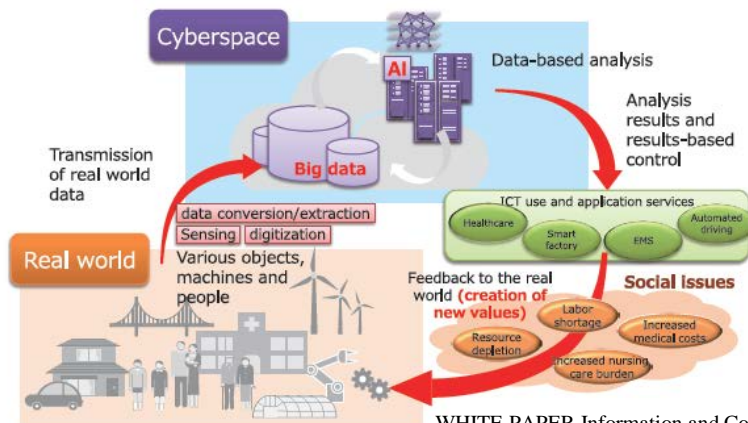
<<Adapting the Intellectual Property System to meet the emergence of New Data-related Assets>>

(Discussion of an IP System Capable of Accommodating Databases etc. in an Era of 3D Data, Big Data and Autonomously-created Works by AI)

Engage in concrete discussion about the necessity and nature of IP protection with regard to new data-related assets, such as AI-created works, 3D printing data, and databases for which creativity is hard to establish, in particular taking into account the value being created in the marketplace.

- With regard to new data-related assets earmarked for consideration in Intellectual Property Strategic Program 2016, future utilization of such new assets is expected to spread not only to the content industry such as novels, music, paintings, but also to other industries such as manufacturing, agriculture, advertising, retail, financial insurance, transportation, health industry, etc. It is becoming increasingly important from the perspective of strengthening industrial competitiveness to establish the intellectual property system which serves as a foundation of these industrial activities.
- Based on such backdrop, “Committee to Review Intellectual Property Related to New Data-related Assets” held extensive discussion on **how the intellectual property system should be adapted to serve as the foundation of promoting the utilization of new data-related assets such as data and AI** (process and product of AI learning).

<Image on new data-related assets utilization>



Investigation of intellectual property system to promote the utilization of new data-related assets

- Support for making contracts and establishing distribution infrastructure related to “valuable data”
- Establishment of a fair competitive environment as a basis for smooth sharing of, and consideration of possible rights to promote utilization of, “valuable data”
- Improvement of environment concerning promotion of creation of data sets for AI machine learning
- Clarification of how the intellectual property system relates throughout the generation process of AI

Intellectual property system for promotion of utilization of data

【 Current situation and issues 】

- With the progress of IoT etc. an environment where it is possible to efficiently collect and share huge amount of data (big data) is being realized and a certain legal basis regarding utilization of data including personal information is being developed. So it is expected that creation of new services by data utilization, such as combining self owned data with data owned by other companies, will increase and that competitiveness will be strengthened.
- Data utilization is not progressing as fast as expected, because of the fact that **business models and data distribution infrastructure for data utilization are insufficient, and concerns over unfair use and possible remedial measures remain.**
- In the current intellectual property system, there is no choice but to allow for unlimited unconditional use, other than keeping valuable data that is not subject to copyright etc. secret as a trade secret (including sharing on a bilateral basis with trusted partners under tight NDA). There is a possibility that **gaps in the legal framework that promotes wider data utilization under certain conditions,** is becoming a hindrance to open innovation where "knowledge" is shared across business boundaries and collaborations are promoted.

【 Matters for further concrete discussion with a view to action 】

➤ Support for contract for data usage

We will establish **contract guidelines concerning use of valuable data**, which will lead to clarification of points to be considered when establishing arrangements for sharing of profits created through data usage taking into account respective contributions.

➤ Construction of a good foundation for data sharing

We will promote efforts to secure information security and improve the environment such as demonstration of valuable data utilization and distribution infrastructure. In the data distribution base such as the data trading market, **we will explore concretely about making de facto rules concerning usage and profit sharing accompanying it.**

➤ Secure a fair competitive order

In order to ensure fair competition and orderly markets where data holders and users can reliably provide and use valuable data, **we will examine the data and actions which may be considered as “unfair competition practice” based on actual state of industry.**

【Matters for further consideration 】

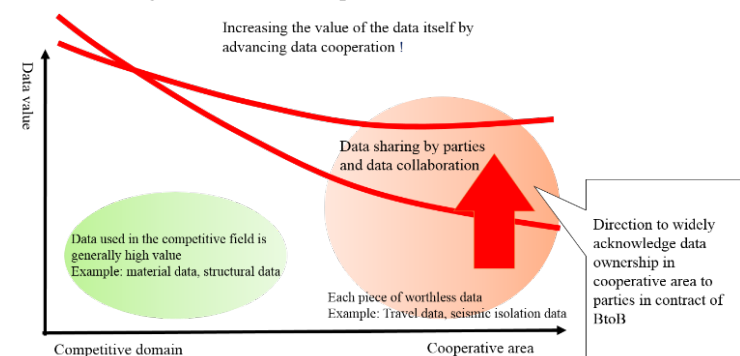
➤ Review of restricted rights for promotion of utilization

While paying close attention to trends in data utilization business, to the situation of data trading market, and to situation of regulation in foreign countries, we will continue to consider the option of possible introduction of limited rights.

【 Main review object of this review committee 】

Resource	Types of data	Non-personal data	Anonymously processed data	Data including personal information
Private investment, etc.		The main study subject of this Committee		
Public money				

【 Image of the relationship between data utilization and value 】



Source: Committee to Review Intellectual Property regarding New Data-related Assets 4th meeting Document 6 (Ministry of Economy, Trade and Industry (Information Economics Division) Explanatory Material

Intellectual property system for promotion of creation and utilization of artificial intelligence (AI)

【 Current situation and issues 】

- Various types of AI (AI having a specific function) already exist and are being utilized. Recently, with the advent of a method called deep learning, the accuracy of the result of image recognition etc. is improved and **application to a wide range of industries is expected to expand.**
- From the viewpoint of strengthening industrial competitiveness, it is essential to accelerate creation and utilization of AI. Because there are indications that **there is a problem with the preparation of “data sets for machine learning”** and that **protection under the current intellectual property system of “trained models” that require large investment may be insufficient**, it is necessary to consider the handling of the elements of the process of AI generation using machine learning (“data sets for machine learning”, “trained model”, “AI product” etc.) on the intellectual property system.

【 Matters for further concrete discussion with a view to action 】

➤ Promotion of creation of data sets for machine learning

To promote the creation of AI in Japan, regarding the act of providing and presenting “data sets for machine learning” beyond specific parties, **the rights restriction provision of the copyright law will be revisited in the context of the current revision of the copyrights system to correspond to the needs of the new era.**

➤ Proper protection and promotion of utilization of trained models

- Since AI technology changes extremely fast, and consideration in other countries has not progressed enough, **we will explore how we can accord proper protection through contracts**, while leaving open a possibility of introducing new rights.
- **We will examine the concrete requirements for patenting and the scope within which the patented invention can be protected.**

➤ Continuous grasp of specific cases concerning AI products

【 Matters for further consideration 】

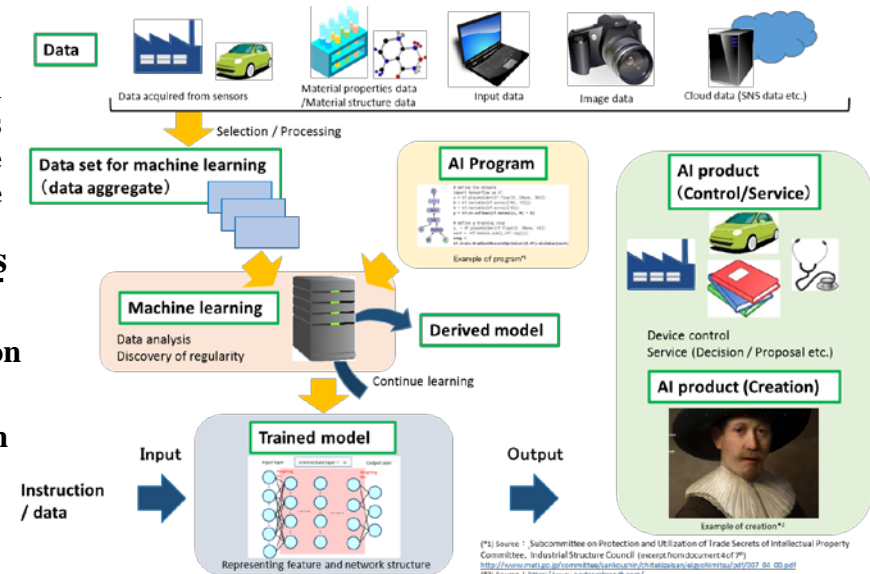
➤ Treatment of AI program in the intellectual property system

In the meantime, we will refrain from introducing new rights, and we will continue to monitor changes in the technology of AI programs and the utilization situation.

➤ Treatment of AI creations in intellectual property system

With regard to **the misuse of AI** and **how the degree of human creative contribution to AI creations should be assessed**, we will continue to consider specific cases as we pay attention to changes in AI's technology.

【 Image of AI generation process using machine learning 】



【 Image of AI product classification 】

Types of AI products	Output (data) corresponding to “property produced through creative activities by human beings”		Other output (data)
	Presence of human creative contribution	Other output (data)	
Presence of human creative contribution	Things equivalent to copyrighted work (music, painting / illustrations, novels, etc.)	Equivalent to inventions, designs and others	Judgment · suggested result etc.
No contribution	autonomously created works by AI (AI-created works) <small>In Intellectual Property Strategic Program 2016, it is said that it is not subject to the right under the existing intellectual property system.</small>		
Contributed	Works that used AI as a tool		