

BIG DATA, AI, AND COMPETITION LAW — JAPAN'S DISCUSSION —

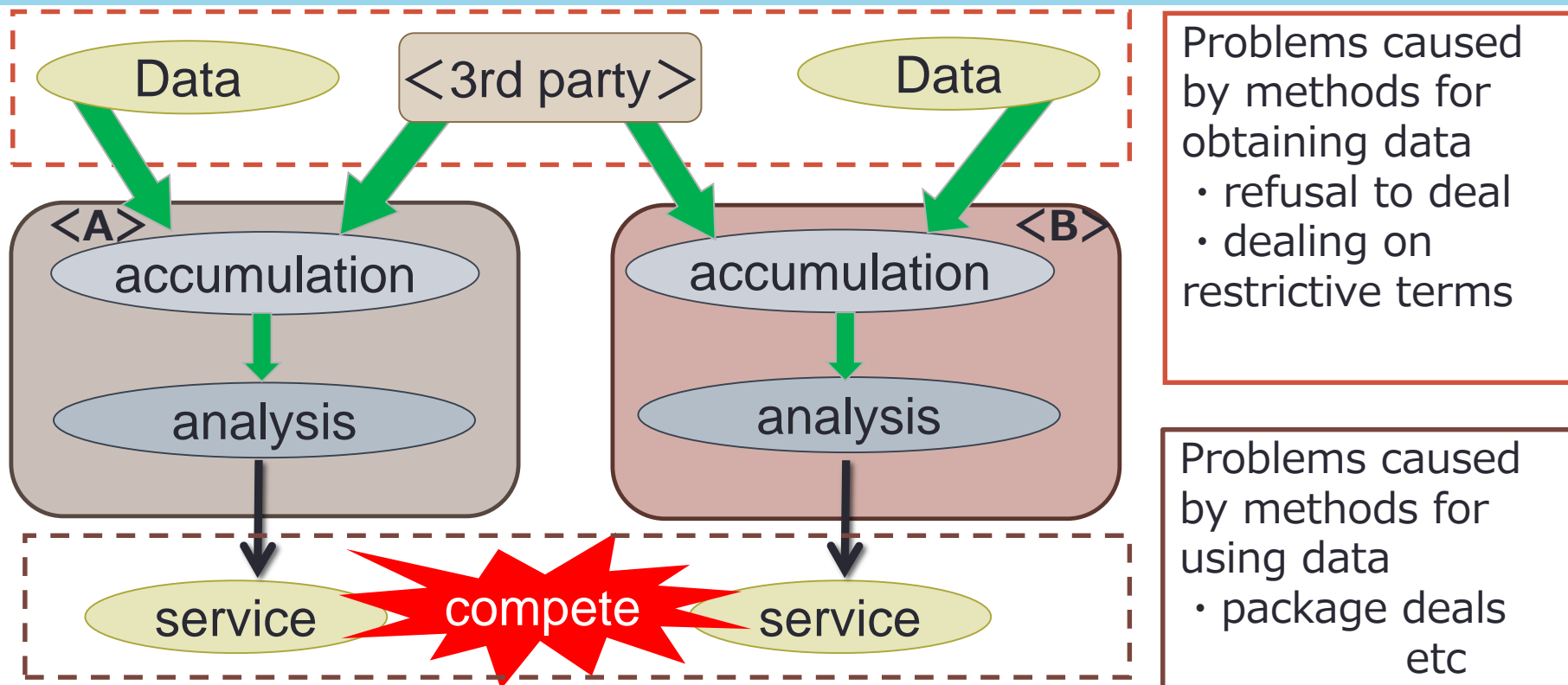
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Introduction 1 : Big Data in Platform

- Data utilization has just got started in Japan. Currently it can not be asserted that data utilization is clearly a problem in competition policies, for no such acts have been confirmed by authorities (further investigations are needed).
- On the other hand, there is no evidence indicating that the current status quo will be maintained into the future. It is thus important to consider hypothetical cases in advance so as to lead the 4th industrial revolution in Japan.
- Some hypothetical cases about data accumulation/utilization are as follows.



Introduction 2: AI

- According to the current competition law and policy concerning data and platform, it is important to have an interdisciplinary review for the actual conditions of the industries that utilize big data , machine learning and deep learning of **Artificial Intelligence (AI)** for **innovation policies, IP policies, and trade policies** relating to them. This is also for the purpose of constitutional elements such as **human rights aspect** in protection of personal data.

1. A Criticism against Amazon

Criticism going up against Amazon. AI price adjustment is “cold-hearted in emergency”



Tom Popomaronis, CONTRIBUTOR



I write about retail, e-commerce and online consumer behavior



Jeffrey Bezos, CEO of Amazon

(Photo by David Ryder/Getty Images)

- Criticism going up against Amazon. AI price adjustment is seen as “a cold-hearted in emergency”
- Hurricane Irma reached “category 5” which is the most intensity of a hurricane. While the residents in Florida State were keeping alert to prepare for Irma, Amazon --the giant e-commerce company used AI price adjustment and was exposed to the harsh criticism globally.
- The price of emergency supplies on the company’s website rose substantially and **automatically(using AI)** especially the price of bottle waters.

From the Forbes News

- The business insider website has posted a screenshot of Amazon's website on twitter that shows the prices of bottled water from different companies. For example, the price of Nestle's bottled water per case (500ml per bottle, 24 bottles) is ranging from **20 to 25 dollars**.
- However, the above mentioned price does not include the cost of "expedited shipping". According to a reviewer, when she was about to place the order to have the water delivered to her family in southern Florida, the "expedited shipping" charge is "**179.25 dollars**".
- Normally, this product from Nestle is sold at **4 to 8 dollars**.

Algorithm is the “dominator” ?

- Not just Amazon adjusted prices of products that are higher than they normally are. **The majority of companies were using algorithm to adjust prices too.**
- When retailers sell their products, they will consider other players in the market to decide the prices and the prices will later change in accordance with demand (so-called “**dynamic pricing**” technique). The companies thus do not need to pay much money for human resources to do the analysis and subsequently help companies to become more powerful and competitive in the market.
- **Price adjustment through algorithm usually ranges from one cent to several dollars.** Rise of price at three-digit percentage mostly happens during holiday seasons and the products whose prices rise drastically are not daily necessities. **However, when natural disaster like hurricanes or other emergencies happen, algorithm will work that prices of like water are tremendously going up along with the increase of demand.**

Moral Dilemma - From the Forbes News

- People are questioning the approach of deciding prices in response to the constantly changing demand. Provided that “the time” does exist, at what time will enterprises prioritize their own responsibility for social interest and a merciful heart, and decide prices by their own judgment instead of AI-based protocol.
- “Your algorithm does not have feelings. It cannot understand disaster. In order to avoid making unjustified profit out of people who are suffering from despair, you should take certain measures. It is necessary for you to make a precedent.”
- Technologies have wonderful merits. However, all the modern leaders must accept Irma, Harvey (which attacked Texas State earlier), and all other natural disasters as a warning. Whatever a top executive acknowledges the company’s technology will directly reflect the values of that person or that company. Then, consumers will decide their future attitude according to that values shown.
- From: <https://forbesjapan.com/articles/detail/17637>

2. Coming Back to Comp Law: Market Definition

- ▽ The abstract general “data market” and “AI market” do not exist.
- ▼ It is necessary to make clear that various players including platform operators are researching, developing, and investing in different kinds of businesses that are related to big data and AI. → Importance of Innovation market.
- → It is necessary to arrange what kind of competition and cooperation among suppliers will be assumed in big data and AI businesses.

Consideration of Innovation

- ▽ **Open Innovation/Closed Innovation**
- ▼ As two ways to push forward data and AI innovation, although the business models of open innovation and closed innovation can be assumed by the AI research and development of the company, how these innovation models will proceed in the future is **not foreseeable**.

3. Adverse Competitive Effect

- ▼ The main characteristics of data are: (1) non-exclusiveness, (2) substitutability, and (3) not only quantity but also quality is important, and, analysis of utilization will also affect the competitive power.
- → Based on the characteristics above, generally speaking, it is hard to consider anti-competitive effect through data collection only.
- ▼ Even if it is true, when the “exceptional conditions” are satisfied (such as, when the “data network effect” works, and when the routes for acquiring the data are limited), anti-competitive effect through data accumulation and utilization may occur.

False Positive of Government Intervention

▽ Application and execution of Unfair Trade Practices

▼ Unfair Trade Practices in the Japanese Anti-monopoly Act can be applied to prevent a wide variety of conducts, because it is an inclusive regulation that targets various competitive concerns and can be launched **even if there is merely possibility of impediment to the fair competition.**

▼ On the other hand, as AI business is still in cradle, there are opinions claiming that considering the severe changes in the market environment, **chilling effect to companies' activities should be avoided**, and Unfair Trade Practices should not be enforced when the specific bad effect is not being observed.

▼ Based on such argument, regarding the application and execution of the Unfair Trade Practices on AI business, it is necessary to discuss whether preventative enforcement is good or not, i.e., whether enforcement should be done after the adverse effect is identified.

Rule of Reason Approach

▼ How to make a distinction among conducts that are considered to be problematic under competition law and legal activities? This is a very important question in unilateral conduct, especially based on the actual condition of big data and AI business and deeper discussion on this question makes sense.

- (i) whether these criteria are reasonable
- (ii) whether the appropriation of these requirements should be judged based on such evidence.

▼ As to the objective nature of the conduct, whether the conduct is economically unreasonable but for its purpose of excluding other business operators.

◇ whether the measure is reasonable and necessary to achieve a legitimate purpose

◇ whether there is a LRA that is less competition-restrictive

◇ From the viewpoints of foreseeability and freedom of the business operator to choose the business model, the discussion issue is whether the authority should be cautious when retroacting from the time the judgment was made and determining the propriety of the conduct that comes from the actor's business judgment

Factors to be considered, Relationship with other Laws

▽ Discussion on the substantiation of the factors

▼ To measure among the degree of exclusive effect, the following factors can also be considered as examples.

- ◇ to improve convenience and user experience
- ◇ to ensure security and protect personal information
- ◇ to ensure interoperability
- ◇ reasonable and essential to the prevention of fragmentation and improvement of platform
- ◇ necessary to the guarantee for the return and incentive of investment to positively accumulate and utilize data
- ◇ to prevent free ride

▼ Relationship with the Act on the Protection of Personal Data

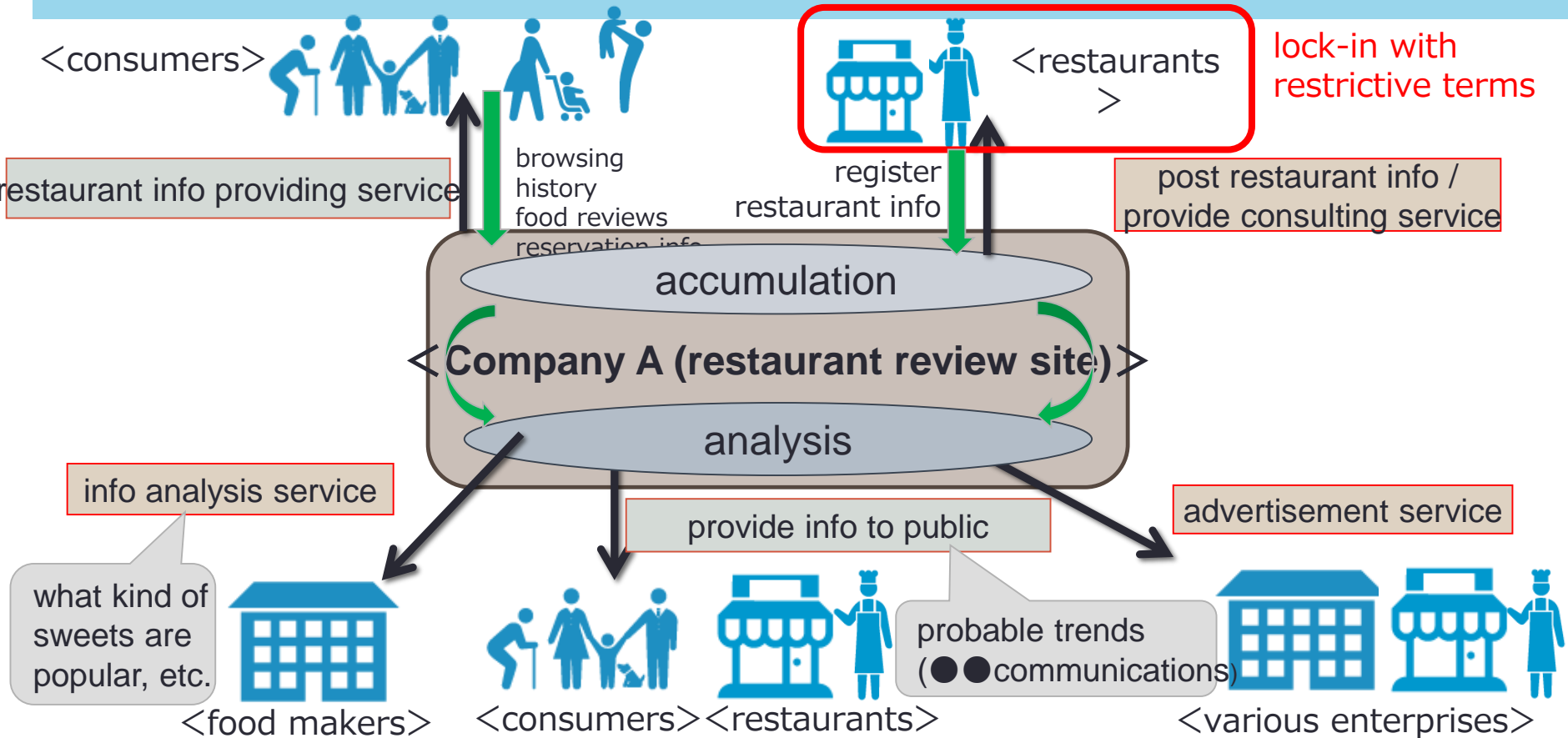
◇ As the legal system of personal Data protection and normative consciousness differ from region to region, whether it is appropriate to introduce foreign arguments as they are.

▼ Relationship with the Unfair Competition Law

◇ When the conduct of foreclosing data within the legal scope of the Unfair Competition Prevention Act is made objective of the enforcement of the Anti-monopoly Act because of its anticompetitive effect how to keep balance with the protection from the Unfair Competition Prevention Act.

4. Example : Dealing on Restrictive Terms (hypothetical)

- Company A analyzes restaurant info, user's browsing history, food reviews and reservation info collected from its own restaurant review site, and uses them to provide its services.
- If company A forbids or restricts restaurants to register on (provide info for) other review sites as a condition to register on A's own site, under what circumstances would this constitute a competition law issue?



Points for Consideration of Dealing on Restrictive Terms

- Possible Discussion Points based on existing criteria and past precedents

Possible criteria for consideration

➤ Who are the “competitors” that are influenced by restriction?

- Even if there was only one transaction being restricted, multiple markets might be under influence because of the lack of data.

【check point】

- For what purpose is the data obtained by such restriction used?

➤ Has it become difficult to carry on business activities due to restrictions?

➤ Do “other substitutable clients” include customers or companies of totally different business?

- Although the routes of obtaining data are limited by restrictions, is it possible to use other data to substitute it?

e.g.: Even if one could not trade with restaurants due to restrictions, she could analyze the ongoing trends by collecting reviews on other social networking sites.

【check point】

- In order to provide service, from whom are the competitors obtaining the data and in what manner are they using it?

5. Data Protectionism

▼ In the relationship with the development of data business, it may be necessary to pay attention to the foreign policy which checks the data protectionism from some countries.

▼ In addition, because of such policy, it may be also necessary to pay attention to avoiding the consequence of data protectionism instead of the enforcement of competition law.

▽ Discussion on data portability and competition policy

▼ **Open data policy or data portability** is also an issue in the context of competition law in big data. On the other hand, this is an issue that should be discussed not within the enforcement of competition law but as a part of the **ICT policy** as a whole.

▼ It is necessary for the discussion on data portability especially in EU(GDPR), which has an origin for **constitutional human rights**, to cautiously consider the appropriateness of being introduced to Japan as it is.

6. Compulsory Access to Private Company's Data

- ▼ In comparison with patent law, the establishment of legal exclusive right cannot be assumed. Some people point out that it is necessary to discuss **with caution** about imposing the obligation of access on private business operators who have collected data through their own investment and creative ideas and efforts as well as implementing those access conditions with **FRAND**. This is due to the facts that there is severe free ride problem after disclosure.
- ▼ Business operators should be given the freedom to choose from the open innovation business model and the closed innovation business model depending on their own strategies. Based on the fact that data is the source of innovation, there is no reason for making the choice of open innovation compulsory, or forcing the data to be accessed

Negative Effect of Compulsory Data Access

- ▼ Making Access of the collected data should be firstly entrusted to the **market mechanism** even if private company's access to the data that is essential to providing specific services is denied. → **It should not be considered conflict with the Anti-monopoly Law unless there is anti-competitive effect which the market rules cannot solve.**
- ▼ Disclosing and sharing of the data owned by public institutions (the state or the local governments) should be promoted. On the other hand, for the pure private companies, for reasons such as their big market share, when open data access is requested, cautious consideration based on the factors above may be required.

The End

Thank you for your attention !