
overview

- **Why “ Big Data” ?**
- **Two perspectives on Big Data**
- **Big Data Competition Issues**





Why “Data” ?

The 4th Industrial Revolution

- is the next-generation industrial revolution where advanced information and communication technologies are integrated to the economy and society.
- Key factors
 - ✓ Mobile and Artificial Intelligence
 - ✓ Internet of things
 - ✓ Big Data
 - ✓ Cloud

Why “Big Data” ?

Expansion of business area of global IT companies

-  Search engine
 - Robot·AI·Autonomous vehicle
 - Internet diffusion business, high-tech bio industry
-  Social media
 - AI·Chatbot, Platform enhancement
 - H/W such as Drone·VR devices, Brain research project
-  PC, Smartphone
 - Autonomous vehicle, AR, GPU, Micro LED
-  PC operating system
 - Cloud·AR, Expansion of Kotana-based ecosystem

Why “Big Data” ?

Assets needed to become leaders in Digital Economy

- Abundant capital

- A thick customer base

↙ Powerful platform

} Convergence

- Massive user data

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Big data

] Collection, Access
Combination, analysis

] Deriving a new meaning

Two perspectives on Big Data

- Data Privacy / Data Protection
- Competition



✓ **EU General Data Protection Regulation 2014**

"Digital services seem to be free,
but in fact they require personal information in return"



✓ **UK Competition and Markets Authority 2015**

"A operators with market dominance are more likely to
abuse their positions to collect consumer data."



✓ **Federal Cartel Office(Bundeskartellamt) 2016**

Investigation and sanctions on Facebook – "If you do not
enter your personal information, service is restricted."



✓ **China administration 2017**

"Data from China is kept on servers in China.
Permission is required for over for overseas transmission."

Big Data Competition Issues

- The existing tool box for competition law analysis
 - M/S as the parameter to assess market concentration and market dominance
 - Target is market where paid transactions are made
 - Price change is used to assess the illegality of conduct
- Challenges for Big Data cases
 - ✓ Market definition: users' personal data \leftrightarrow contents
 - ✓ Multi-sided platforms
 - ✓ Assessing a market player with low M/S but with Big Data

Big Data Competition Issues

Determining the Relevant Market and Dominance

- Case-by-case approach
 - If Big Data itself becomes the object of competition
 - If Big Data is input for competition (like raw material)
 - Multi-sided platforms (paid ad market v free social media)
- Determining market dominance
 - ✓ Sufficient to consider M/S based on turnover?
 - ✓ Potential growth of Big Data ?
 - ✓ Platform network effects and entry barrier ?

Big Data Competition Issues

Determining the Abuse

- **Exclusionary abuse**
 - Competitiveness from innovative transformation of Big Data ?
 - Big Data as essential facility and its access ?
 - Dynamic competition
- **Exploitative abuse**
 - ✓ Low level of privacy protection in exchange of platform use ?
 - ✓ Personalised pricing ?

Big Data Competition Issues

Determining the Abuse

- Analysing non-price competition
 - Price/efficiency – based approach
 - Consumer welfare – based approach
 - Challenges: merit-based competition v anticompetitive behavior; privacy consideration; transaction cost reduction; valuation of Big Data
- Consumer choice
 - Have all options been provided to consumers?
 - In particular, where price is not the main driver for competition; but independent and creative decision-making is important

Thank you