# 1–3

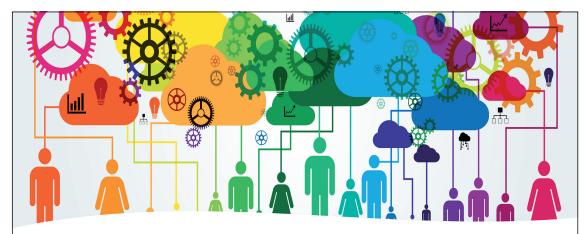
# Digital Ecosystem and Competition Law





### Ecosystem

- 'Traditional competition law' for 'normal competition'
- Freshwater ecosystem & marine ecosystem



# Emergence of 'Digital Ecosystem'

- The European Commission sent a Statement of Objections to Google over abusive practices in online advertising technology (adtech) on 14 June 2023: "a possible Google IV case" – Google Shopping, Google Android, Google AdSense
- The European Commission seems to consider the adtech sector as a type of 'digital ecosystem', and it seems to believe that Google controls the adtech ecosystem: behavioural advertising is one of the examples of controlling ecosystems by Big Tech<sub>3</sub>

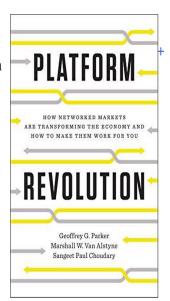
### Digital Ecosystem

- "A group of interacting firms that depend on each other's activities" & "communities of firms" (Jacobides et al, e.g., 'Towards a Theory of Ecosystems') & "co-evolution", "closely complementary", "co-creation" (Teece)
- Topics of digital ecosystem have been discussed lately:
- OECD (2020) 'Hearing on Competition Economics of Digital Ecosystems'
- Jocobides & Lianos (2021) 'Ecosystem and competition law in theory and practice'
- Parker, Petropoulos & Van Alstyne (2021) 'Platform mergers and antitrust'
- UK CMA (2021) 'Mobile ecosystems market study'
- Stuck & Ezrachi (2022) How Big-Tech Barons Smash Innovation – And How to Strike Back
- The concept of digital ecosystem has influenced the adoption of designation of gatekeeper and 'Core Platform Services'



# Digital ecosystem and envelopment (Parker et al, 2016)

- Ecosystem explains *the competitive environment* in the modern digital economy: a *hub* of inter-platform relations (Lianos)
- A platform or digital ecosystem can be understood as *an important infrastructure* designed to facilitate meaningful interactions between economic entities
- We have seen the varieties of openness in digital ecosystems, especially in the area of mobile OS: iOS & Android OS
- *Platform envelopment*: this indicates a situation when a platform can absorb the functions of an adjacent platform, similar to tying: Apple TV, Apple Pay, Apple Music, iCloud...
- This can improve inter-ecosystem competition. why?
- Digital platforms can easily respond to competitive moves of envelopment

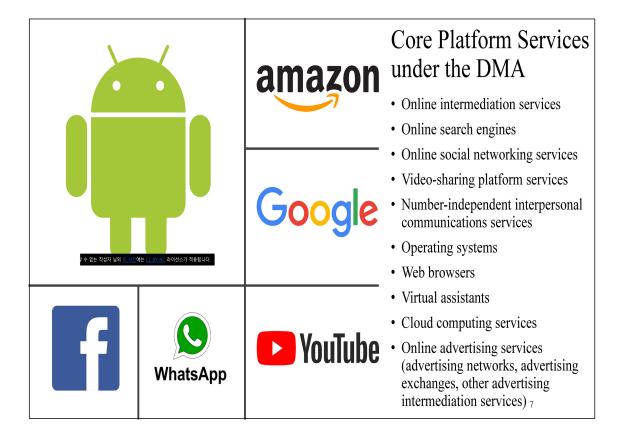


5

# New Digital Regulations in the EU

- An assumption: Big Tech can design their ecosystems to control the digital market
- DSA & DMA (the twin regulations)
- The European Digital Markets Act (DMA):
- Strong ex ante regulation
- Designation of gatekeepers
- Core platform services
- Formalistic approaches in the substantive provisions under Articles 5, 6 and 7 DMA

Ь





# Substantive Provisions of Korean Competition Law

- Objectives: fair and free competition
- Substantive provisions:
- Prohibition of anti-competitive agreements
- Prohibition of abuses of market dominance (presumption of market definition)
- Merger control
- Prohibition of unfair trade practices (UTPs)

### Digital Platform Cases

- Naver Shopping
- · Google Android
- · Google App Market
- Kakao Mobility
- Some cases are very similar to those in the EU:
- Self-preferencing
- Notable harmonisation





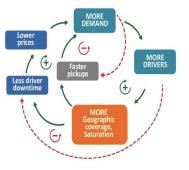
### Guidelines on Abuses of Market Dominance of Online Platforms

- The Guidelines became effective from January 2023
- I.1. (objectives): to improve predictability and legal certainty in implementation of Article 5 MRFTA (prohibition of abuses of market dominance) in the area of online platforms
- I.2. (exterritorial applications): effects doctrine under Article 3 MRFTA
- I.3. (definitions):
- Online platform service: online platform intermediary service, online search engine, social networking service (SNS), digital content (video) service, operation system (OS), online advertising service, other types of online services improving interactions between different groups

### II.2. Distinctive Features of Online Platforms

- Multi-sided market & cross-side network effect
- Economies of scale (knowledge-based economy) & high fixed cost and low incremental cost
- Importance of data for competition: problems of the lack of data portability and interoperability
- Issues involving free services (freemium): transactions between platforms and users data collection in exchange of free service targeting advertisement





11

# i support Data Portability

### II.3. Assessments on Abuse of Market Dominance

- Market definition in the multi-sided market:
- Indirect network effect
- Providing direct intermediary service between two groups
- Possible alternatives recognised by users
- Presumption of market dominance:
- Indirect network effect, economies of scale, economies of scope, competitive advantages
- Influences of a gatekeeper (scope of users, dependence of services, single-homing, etc.)
- Capabilities of collecting, possessing, and processing data (data portability, interoperability, lock-in effect, access to data, etc.)
- Possibilities of new products or services
- Turnover for market share assessments and other means, such as a number of users, audiences, visiting, etc.



- General principles:
- A typical trade-off test: efficiency improvements efficiency should contribute to the fair share of the public interest as a whole
- Efficiency outcomes include a reduction of price, improvement of quality, progress of users' welfare highly likely in the future!

# Anti-competitive Effects

- Other elements that should be considered:
- In case of free services: a decrease of diversity of product, degradation of quality and increase of users' cost, deterioration of innovation, etc.
- Leverage of market power (platform envelopment)
- Distinctive features of multi-side of platforms
- Influences on innovation

13



### III. Substantive Assessments

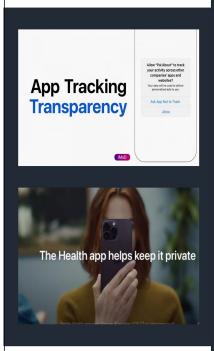
- Restrictions on multi-homing
- Exclusive dealing or imposing disadvantages when trading with rivals
- Inducing economic advantages when having exclusive dealings
- Refusals to access to data or restrictions on data portability
- Factors of assessments
- Intentions or purposes of conduct
- A period and distinctive features of product or service
- Methods to restrict multi-homing
- Opportunity cost for using rival platforms
- Market foreclosure
- A position of the platform and competitive pressure
- A number of trading parties and market share
- Entry barrier
- Diversity in the market and innovation
- Improvement of efficiency and consumer welfare



# Anti-competitive Conducts (or Strategies) in Digital Ecosystems

- MFN clause
- Self-preferencing
- Tying
- Formalistic
- Similar to the provisions of Articles 5 and 6 DMA
- Strong complementary and interdependences between digital services – 'lock-in' and 'singlehoming' problems
- The Guidelines:
- Do we need a new digital act as an alternative, or are the Guidelines sufficient?

1



### The Focus of Competition Law Enforcement

- The traditional approach to inter-brand competition can offer some ideas of competitive assessments in the case of inter-ecosystem competition, e.g., iOS vs Android OS
- Take the example of adtech: competition between SNS and video-sharing ecosystems & competition between SNS and OS (value creation and value capture in and across ecosystems)
- The quality of data protection or privacy: ATT and privacy sandbox (the German *Facebook* case exploitative abuse) digital consumer welfare
- The problem within the quantitative approaches (the market or economic analysis): the focus of quality and innovation
- About criticisms on the antitrust's focus on narrowly defined markets rather than on ecosystems:
- SSNDQ is not a perfect tool, but it may work
- A typology of ecosystem (in the EU and Korea) may be necessary, but quantitative tests will be necessary

### Future of Digital Competition Rules

- Consider the importance of "competitiveness of ecosystems and their participants" (Adner, 2017): competitive dynamics
- The focus should be digital consumer welfare: price, quality, choice, innovation and *privacy*
- "Ecosystem competition among firms that are not horizontally related do have important consequences for consumer welfare" (Crane)
- Controlling digital ecosystem:
- The problem of Big Tech's controlling governance of reshaping rules in the ecosystems at the expense of participants
- Controlling market power in the digital economy (Bergqvist & Choi, forthcoming) a choice of *ex ante* or *ex post* rule?:
- The EU's *ex ante* regulation: an adoption of DMA as a sector-specific competition law 'special responsibility' (*contestable* and *fair* market)
- Korea's *ex post* rule: an increasing role of the UTP rule, a catch-all provision (*fair* and *free* market) a Korean alternative to digital dominance, e.g., *Naver Shopping*, *Kakao Mobility*, etc.

### kakaomobility





