# Virtual Competition

Antitrust in the New Economy Skolkovo Innovation Center

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# The Dynamics of Competition

#### The Promise of the Algorithm-Driven Economy

- Transparency and flow of information
- Lower Search Costs
- Dynamic competition
- Entry and Expansion
- Dynamic pricing
- Disruption and Efficiencies

• The Rise of Big Data and Big Analytics

#### The Perils of the Algorithm-Driven Economy

In some markets, competition, as we knew it -- the invisible hand of competition -- is being displaced with a digitalized hand.

#### The enforcement challenges –

- > Identify the adequate level of intervention.
- > Avoid chilling effect on competition and innovation.
- Collusion
- Discrimination
- Frenemy

### The Collusion Analytical Framework

- The Messenger Scenario
  - The Algorithm as an Intermediary
- Hub and Spoke
  - Intentional and unintentional use of algorithms to align price. *Eturas and Others*
- Tacit Collusion on Steroids: The Predictable Agent
  - *Fast* predictive & similar analytics
  - Adopt a similar approach to Mergers review?
- God View and Artificial Intelligence
  - Big data and big analytics

### **Behavioural Discrimination**

Price Discrimination and dynamic pricing.
 O Differential pricing and limited arbitrage

The Rise of "Almost Perfect" Behavioural Discrimination
 Over 100 biases,...

○ Decoys, price steering, complexity, drip pricing ...

• Controlled Ecosystems: *The Truman Show* 

• Fairness as a limit to behavioral discrimination.

### Frenemies

- The dynamic Interplay among Frenemies
- Data-driven network effects.
- Gatekeepers
- The rise of super platform
- Digital butler
- Disruptive innovation

# Enforcement

### Competition law Challenges -

- Conceptual and practical challenges.
- IP/Competition interface.
- Identify the adequate level of intervention.

#### • Wider toolbox –

- Privacy laws, Customer Empowerment.
  Ex-ante measures
- Enforcement approach:
  - EU Commission 'e-commerce sector inquiry'
  - CMA 'digital comparison tools' market study.
  - o OECD, EDPS, House of Lords, France/German Report...

