

MSI Webinar:

Privacy Rights and Data Security: GDPR and Personal Data Markets

March 28, 2023 | Virtual | 12:00 pm – 12:30 pm EDT

Speakers:

Tony Ke – *Associate Professor of Marketing and Associate Professor of Decision Sciences and Managerial Economics at The Chinese University of Hong Kong Business School.*

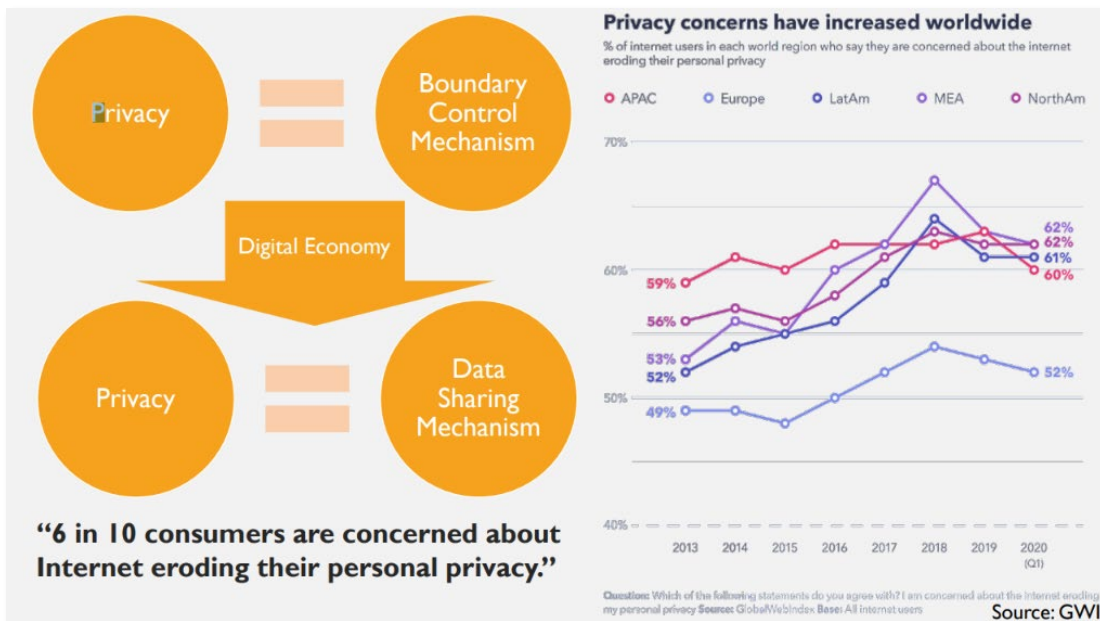
Overview:

In this MSI Webinar, presenter Tony Ke (Chinese University of Hong Kong) discussed opportunities and challenges from privacy rights and data security mandates stemming from the General Data Protection Regulation (GDPR)—the European Union’s protection regulation, created to protect consumer privacy. Ke’s presentation was based on preceding and ongoing research both he and K. Sudhir (Yale) conducted on the topic ([see the MSI white paper](#)) which is forthcoming in the journal *Management Science*. In his discussion, Ke described his research on GDRP as developing an economic understanding of GDPR and analyzing its impact on personal data markets. Results from the study varied depending on whether the privacy rights occurred in a competitive or monopolistic market, with the latter benefiting the firm and not the consumer. Overall, the study found benefits from privacy rights extended to both the firm and the consumer, though those benefits were nuanced. Additionally, benefits from privacy rights also considered the risks presented by the heightened possibility of a privacy breach.

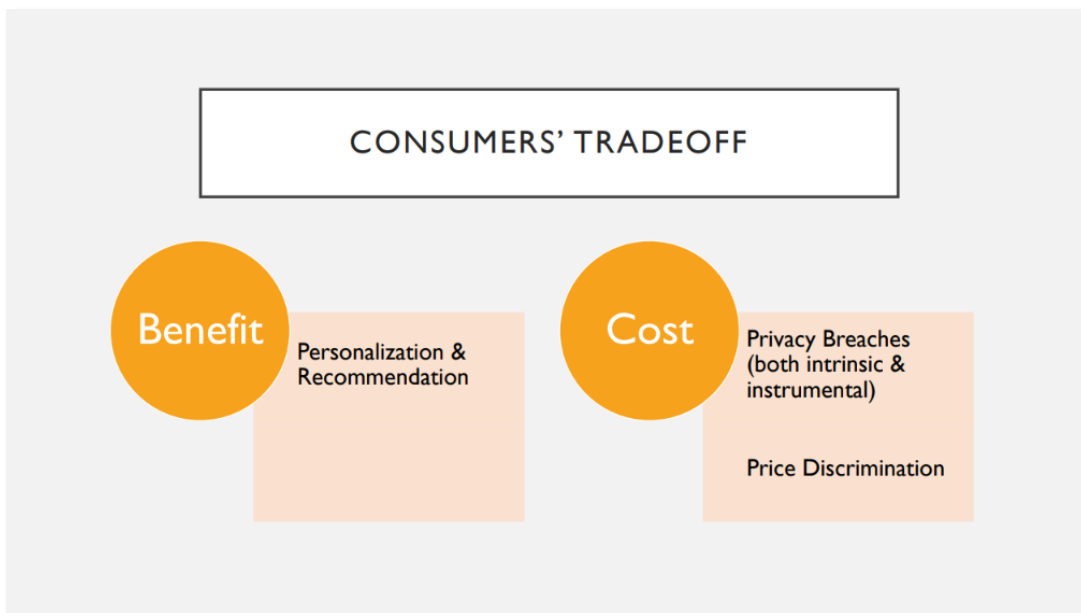
Takeaways

- Ke noted that in their study, he thinks of **consumer privacy as a boundary control mechanism** that "allows individuals to set personal boundaries on whom to interact with, when to interact with, how and where to interact with."
 - In "today’s digital economy” for individuals, this means: Who should I share my data with? How, when and where should I share my data?
 - Privacy research has highlighted the "**privacy paradox**" which indicates that "**people tend to say they care about privacy but at the same time choose to share their personal data either for convenience or minimum reward.**"

- In a separate study on Alipay users, results suggested that **users may be willing to share their data, not because they don't care about their data being shared, but because sharing it may involve benefit(s)** going beyond a monetary reward ([Xiong, et al., 2021](#)).
 - It is important to consider the consumers' tradeoff regarding privacy control.



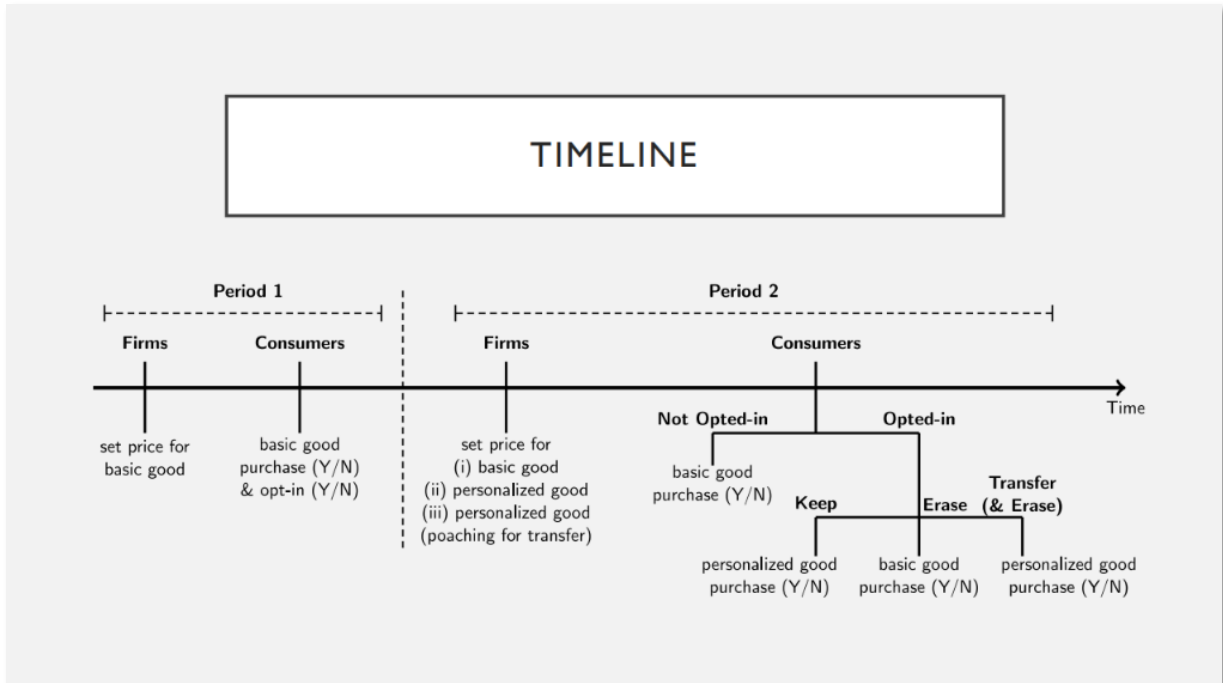
- In their study, Ke and Sudhir **formalized the consumer trade-off in privacy control**, specifically the **benefit and the cost** when sharing consumer data.



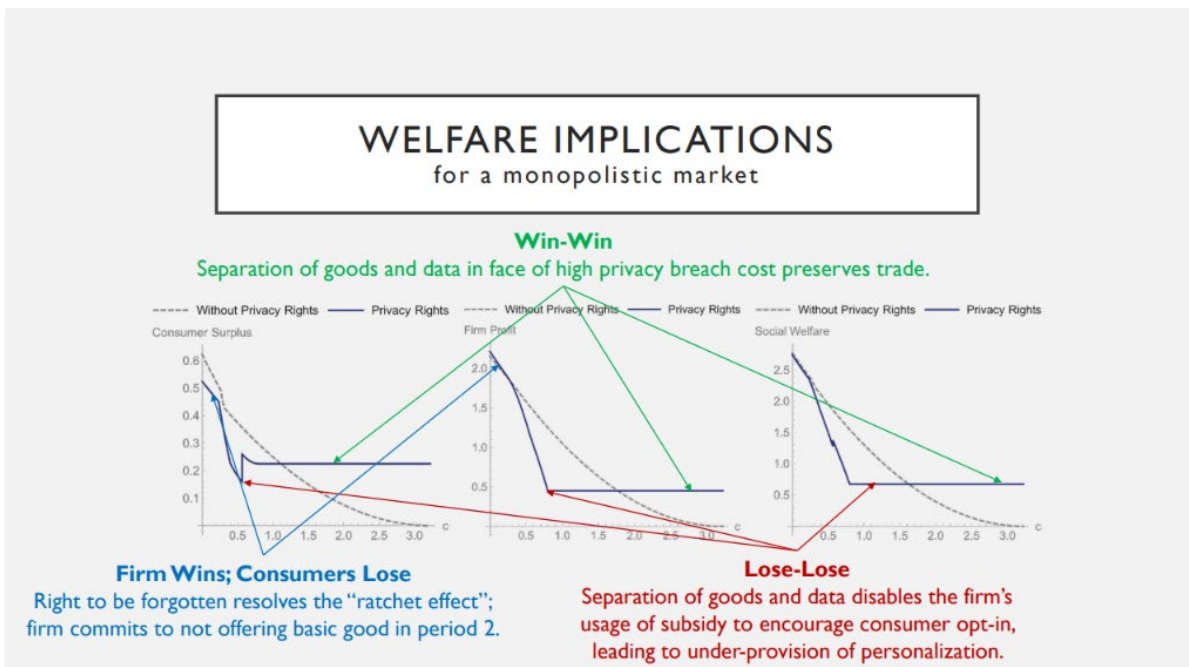
- The general data protection regulation (GDPR) "**endows privacy rights to consumers**":
 - The right to explicitly consent (data opt-in).
 - The right to be forgotten (data erasure).
 - The right to portability (data transfer).
- Additionally, GDPR imposes data security mandates on firms (protect collected data against unauthorized access).
- Though **GDPR** has been seen as a win for consumers, **it has been considered a top threat to data-driven marketing, specifically by digital marketers**, which has been corroborated by some empirical studies.
 - GDPR will hurt digital marketers by reducing targeting capabilities and reduce data availability ([Downes 2018](#), [Ghosh 2018](#), [Goldberg, Johnson and Shriver](#)).
 - To some extent, GDPR has been shown to hurt consumers by "depriving them of effective targeting and personalization" ([Ardor et al. 2020](#), [Goldfarb and Tucker 2011](#)).
- Research questions and a preview of findings from the study:
 - How does GDPR influence data availability?
 - **Overall GDPR decreases data** availability, but in some cases it could increase data availability due to "enhanced data security" which is consistent with recent empirical studies on the European Telecommunications industry ([Godinho de Matos and Adjerid 2020](#)).
 - How does GDPR influence consumer surplus?
 - Overall **data security mandates mostly benefit consumers**, but privacy rights may have more subtle effects on consumers.
 - How does GDPR influence firm profitability?
 - Firms benefit when the consumer privacy breach risk is high and/or when consumer data transferability is intermediate.

Research Strategy

- The study incorporated the privacy rights and data security of GDPR into a two-period model:
 - In one period firms collect consumer data to personalize services and prices.
 - In the second period, forward-looking consumers make choices on purchases as well as data opt-in, erasure and transfer by evaluating benefits from personalization and relative to potential losses due to privacy breaches and price discrimination (see the timeline graphic below).



- **Implications from the study** indicated some of the following key points:
 - **The effects from privacy rights are nuanced.** For example, **in a monopolistic market, consumers could get hurt by privacy rights** but **in a competitive market, consumers always benefit from privacy rights.**



- **"Consumer surplus is always higher with privacy rights in competitive markets** but could be lower in monopolistic markets."
- Firms may benefit from privacy rights when the data transferability is intermediate.
- **Data security mandates mostly benefit both consumers and firms.** Due to the trust privacy rights build with consumers (feeling of being protected), they are more willing to share data with the firms.
- Privacy rights will raise both firm profit and social welfare when the privacy breach cost is high. Conversely, it will do the opposite when the privacy breach cost is low.