

Disruption and the Digital Economy: Markets, Strategies, and Society (Bachelor and Master)

Topic Description

Disruption is a pervasive feature of the digital economy. Disruptions were particularly prevalent during the COVID-19 pandemic, which catalyzed the slow digitization process. Many sudden and drastic changes were the consequence. Lockdowns and homeworking shifted many businesses online. Online markets thrived while markets that could not move online collapsed. Recently, advances in AI forced firms to rethink their business models.

Other examples include FinTechs disrupting the banking sector, streaming services scrambling up the television industry, and Apple's introduction of robust tracking prevention measures threatening internet services that monetize through online advertising. Digital public goods, such as Wikipedia, Google Maps reviews, or forecasting platforms, have significantly remodeled information markets and are now ubiquitous in our everyday lives. In the coming years, the metaverse might fundamentally redefine how people interact. Several lawsuits scrutinizing Big Tech's abuse of market power might force them to rethink their business models.

In this seminar, students investigate a market that was (or might be) disrupted. "Disruption" and "digital economy" can be interpreted broadly. Roughly speaking, the market should be subject to a drastic change, and technology or digitization should play a role.

1. Students demonstrate that they understand the essential features of the market before and after the disruption.
2. They look for economic models that help to understand the market before and after the disruption or explain why existing models do not fit well. An overview of such models can be found in IO textbooks like Belleflamme & Peitz (2015) or Tirole (1998).
3. Students discuss how the disruption affects business strategies, incentives, and market outcomes.

Scope of the Seminar

In the seminar, no topics will be handed out. Instead, students can work on a market they are particularly interested in, and developing a research question is part of their performance. They will work in groups of up to four, depending on the total number of participants. If the process of group formation is unsuccessful, participants will be assigned.

The seminar starts with an introductory meeting on **Friday, 27 October 2023**. Ideas will be presented in a blocked event in **January 2024**. Each presentation should last 20 minutes. Successful participation requires attendance at the presentations of all groups. Each group has to hand in a seminar paper of 8 – 10 pages at the end of the semester.

Applying to the seminar via the centralized platform will be possible until **Sunday, 8 October 2023**.

Please note that we will ask you for a brief description of the topic you are interested in to ensure a well-balanced variety in the seminar. Prior attendance in a course that teaches game theoretical reasoning (e.g., Einführung in die Spieltheorie) is helpful but not required. An excellent example of game-theoretical reasoning about strategies and incentives without a formal mathematical analysis can be found in Brandenburger and Nalebuff (1996, 2021). Do not hesitate to contact Frank Rosar (frank.rosar@kit.edu) for further questions.

References

- Belleflamme, P. & Peitz, M. (2015): Industrial organization: markets and strategies. Cambridge University Press.
- Tirole J. (1988): The theory of industrial organization. MIT press.
- Brandenburger, A. & Nalebuff, B. (2021): The rules of co-opetition. Harvard Business Review January-February 2021 (<https://hbr.org/2021/01/the-rules-of-co-opetition>)
- Brandenburger, A. & Nalebuff, B. (1996): Co-opetition. Currency.