

## THEORETICAL RESEARCH

Reinventing your business model

<https://www.innosight.com/wp-content/uploads/2008/12/Reinventing-Your-Business-Model.pdf>

Have to reinvent sometimes; what is business model; when; examples: Itunes, tata, hilti

## Purchasing power parities (PPPs)

Alternative measures of output in global economic-environmental models: Purchasing power parity or market exchange rates?

<https://www.sciencedirect.com/science/article/abs/pii/S0140988306000144?via%3Dihub>

The study examines the question of the use of purchasing power parity versus market exchange rates.

It compares three approaches: MER accounts, world-price PPP accounts, and superlative PPP accounts.

The myth of price convergence under economic integration: A proposed explanation for the difference in food prices across European countries

<https://www.sciencedirect.com/science/article/abs/pii/S0263237319301252?via%3Dihub>

data from 25 European countries to examine how hefty food and beverage price differentials between regions remained constant over the last decade.

## Transaction Cost Economics (TCE)

Using Transaction Cost Economics to explain outsourcing of accounting

<https://link.springer.com/article/10.1007/s11187-008-9149-3>

Transaction cost entrepreneurship

<https://www.sciencedirect.com/science/article/abs/pii/S0883902606000255?via%3Dihub>

Transaction cost economics provides guidance to firms considering a make-versus-buy decision. In this paper we extend transaction cost economics to examine the novel transactions proposed by the entrepreneur.

## BMI / Business Models

Implications of Business Model Innovation Separation and Integration in Incumbent Firms

<https://ieeexplore.ieee.org/document/10315760>

we draw insights from eight cases of BMI in five large incumbent firms.

Is New Always Better? How Business Model Innovation Affects Consumers' Adoption Behavior

<https://ieeexplore.ieee.org/document/9171885>

The results show that effects of BMI on consumers' adoption intentions vary significantly, being strongest for innovations in the value offering architecture. Moreover, the strength of the effect on adoption intention also increased with the perceived degree of innovativeness for some of the business model elements.

Strategic Agility, Business Model Innovation, and Firm Performance: An Empirical Investigation

<https://ieeexplore.ieee.org/document/8726152>

strategic agility is positively related to BMI and that this relationship is indeed strengthened by the degree of environmental turbulence.

Navigating grand challenges: How environmental dynamism shapes robust action and business model innovation

<https://sms.onlinelibrary.wiley.com/doi/10.1002/sej.70001>

suggests that depending on environmental turbulence, companies may pursue robust action in distinct ways. This, in turn, requires changes of varying scope and novelty in their business models, from incremental adjustments to a radical redesign of their core business model elements.

The Risks of Business Model Innovation in Established Firm: Insights From an Expert Study

<https://onlinelibrary.wiley.com/doi/10.1111/caim.70012>

comes with risks, particularly in established firms

Pathways to digital business models: The connection of sensing and seizing in business model innovation

<https://www.sciencedirect.com/science/article/pii/S0963868722000385?via%3Dihub>

- The creation of different types of digital business model innovation depends on the combination of the four variables context, attentionality, resources, and strategic orientation.
- There is a fifth type of business model innovation in extension to the four ideal types identified by Foss and Saebi (2017), that is unique to the digital context as it consolidates the firm's digital infrastructure to enable future digital business model innovation.
- Sensing and seizing capabilities interact to influence the creation of digital business model innovations along the four previously mentioned variables.
- Technology innovation is not found to enable complex business model innovation.

The dark side of business model innovation: An empirical investigation into the evolution of customer resistance and the effectiveness of potential countermeasures

<https://onlinelibrary.wiley.com/doi/10.1111/jpim.12627>

Our findings confirm that passive innovation resistance is a strong inhibitor of continuous BMI adoption.

The dark side of business model innovation

<https://onlinelibrary.wiley.com/doi/10.1111/ijmr.12309>

We systematically review the existing BMI literature, articulating it around three clusters of negative consequences: those affecting the firm as an entity; those affecting the firm's stakeholders; and those that are specific or context-dependent.

## Pricing / Pricing Arbitrage

Research Note—Cloud Computing Spot Pricing Dynamics: Latency and Limits to Arbitrage

<https://pubsonline.informs.org/doi/10.1287/isre.2015.0608>

Latency creates a dynamic pricing wedge that widens or narrows conditional on the latency differentials.

## Arbitrage

A Price is a Social Thing: Towards a Material Sociology of Arbitrage

<https://journals.sagepub.com/doi/10.1177/0170840606065923>

Patterns of trust and information exchange among known others are thus consequential, and arbitrage also has wider social aspects, manifest for example in deliberately constructed barriers to the short sales often required for arbitrage.

The puzzle of online arbitrage and increased product returns: A game-theoretic analysis

<https://journals.sagepub.com/doi/10.1111/poms.13992>

Once receiving a consumer's order, the arbitrage firm creates an order at the designer firm with a fake account and the consumer's shipping information. In this process, the designer firms fulfill all the purchase orders, and the arbitrage firm earns a profit without even touching the product.

Electronic Commerce, Spatial Arbitrage, and Market Efficiency

<https://pubsonline.informs.org/doi/10.1287/isre.2016.0653>

Overall, our results suggest that electronic commerce improves market efficiency not only by helping buyers and sellers transact across distance but also by helping arbitrageurs quickly exploit any remaining arbitrage opportunities

The effects of import competition on domestic financial markets: The role of limits-to-arbitrage

<https://link.springer.com/article/10.1057/s41267-023-00655-6>

Through the lens of asset pricing, we explore the financial market consequences of import competition exposure (ICE) and find a dark side of globalization. Consistent with the managerial objectives theory, we show that ICE is associated with high cash flow volatility, information asymmetry, and firm uncertainty. Moreover, ICE is positively related to limits-to-arbitrage (LTA), market inefficiencies such as holding and transactions costs.

## Digital Piracy

Regulating Digital Piracy Consumption

<https://journals.sagepub.com/doi/10.1177/00222437241256372>

Regulators across the globe have imposed penalties on consumers for digital piracy consumption. Contrary to expectations, however, digital piracy consumption has continued to grow. The authors develop a simple model of competition between a copyright holder and a

pirate firm to offer a plausible account for this observation as well as actionable guidelines for optimal regulation design.

[Formale Modellannahmen (Wettbewerbsmodell zw. Copyright-Inhaber und Pirat)]

Digital Piracy: Factors that Influence Attitude Toward Behavior

<https://link.springer.com/article/10.1007/s10551-005-1902-9>

influenced by beliefs about the outcome of behavior (cognitive beliefs), happiness and excitement (affective beliefs), age, the perceived importance of the issue, the influence of significant others (subjective norms), and machiavellianism.

[Umfragedaten (Messung von Überzeugungen, subjektiven Normen, Alter etc.)]

Explaining Digital Piracy: A Meta-Analysis

<https://pubsonline.informs.org/doi/10.1287/isre.2018.0821>

A moderator analysis shows that the influence of key drivers varies with cultural dimensions linked to the theoretical perspectives—individualism moderates social influence and control variables, masculinity moderates dilemma-solving variables, and uncertainty avoidance moderates reinforcement variables

[Hunderte existierende Studien zu diesem Thema.]

### **Business Model Responses to Digital Piracy**

<https://journals.sagepub.com/doi/10.1177/0008125618818841>

This article then considers a generic digital content distributor and explains how business model responses contribute to generating and capturing value.

[Viele Paper, Zeitungsartikel, Interviews, ...]

- Branchenberichte: Jahresberichte von Organisationen wie der Recording Industry Association of America (RIAA), der Intellectual Property Owners Association und der Alliance for Creativity and Entertainment.
- Medienartikel und Daten: Berichte von Bloomberg, Financial Times, The Economist, The Wall Street Journal und Reuters.
- Finanzberichte: Offizielle Investoreninformationen und Finanzberichte von Spotify und Netflix.
- Web-Quellen: Technische Webseiten, Diskussionen in Piraterie-Communitys und Expertenblogs.
- Akademische Arbeiten: Frühere wissenschaftliche Artikel zum Thema.

- neun ausführliche, halbstrukturierte face-to-face Interviews

Build a framework

Three-Level Mechanism of Consumer Digital Piracy: Development and Cross-Cultural Validation

<https://link.springer.com/article/10.1007/s10551-014-2075-1>

This study develops a three-level mechanism of determinants of consumer digital piracy behavior, with personal risk as an individual factor, susceptibility to interpersonal influence as an inter-personal factor, and moral intensity as a broad societal factor.

[Umfragedaten (Messung von persönlichem Risiko, sozialem Einfluss und moralischer Intensität)]

Optimal Pricing of Digital Experience Goods Under Piracy

<https://www.tandfonline.com/doi/abs/10.2753/MIS0742-1222240304>

Implicit incorporation of these different consumer segments will cause the producer to charge lower prices and, therefore, lead to higher legal product diffusion.

[Formale Modellannahmen (segmentierter Markt mit Piraterie)]

Antecedents and consequences of explicit and implicit attitudes toward digital piracy

<https://www.sciencedirect.com/science/article/abs/pii/S0378720621001336?via%3Dihub>

This study demonstrates the salience of explicit and implicit attitudes in the context of digital piracy and identifies their antecedents and consequences.

[Verhaltensdaten (Messung expliziter/impliziter Haltungen, wahrsch. im Labor)]

Managing Piracy: Pricing and Sampling Strategies for Digital Experience Goods in Vertically Segmented Markets

<https://pubsonline.informs.org/doi/10.1287/isre.1050.0069>

This paper develops a pricing model for digital experience goods in a segmented market and explores the optimality of sampling as a piracy-mitigating strategy.

[Formale Modellannahmen (Preis- und Sampling-Strategien)]

How does digital piracy affect innovation? Evidence from software firms

<https://www.sciencedirect.com/science/article/abs/pii/S004873322002220?via%3Dihub>

- Rising software piracy leads large public firms to increase R&D and IP filings.
- Piracy pushes firms with many patents to diversify toward copyrights, trademarks.
- Piracy acts as a shock to competition (not appropriability) to software firm strategy.
- We use matching and instrumental variables to control for endogeneity in piracy.

[Firmendaten (F&E-Ausgaben, IP-Anmeldungen) und Piraterieraten.]

Competing with Piracy: A Multichannel Sequential Search Approach

<https://www.tandfonline.com/doi/abs/10.2753/MIS0742-1222300206>

First, we show that a nonshopper's channel choice is determined by a simple comparison of two reservation prices. Second, we analyze how piracy threats affect in-channel pricing among retailers.

[Formale Modellannahmen (Kanalwahl).]

Pricing and coordination with consideration of piracy for digital goods in supply chains

<https://www.sciencedirect.com/science/article/abs/pii/S014829631730111X?via%3Dihub>

- Revenue-sharing coordination between the supplier and the two retailers for digital goods
- A Stackelberg game is utilized to obtain the optimal revenue-sharing ratio.
- The two retailers can obtain the equilibrium retailing prices with consideration of piracy.
- With the equilibrium retailing prices and the mechanism of revenue sharing, a win-win situation can be achieved.
- Industries with extremely low marginal costs and multiple channels can be benefited.

[Spieltheoretische Annahmen (Stackelberg-Spiel in einer Supply Chain)]

Preventing Digital Music Piracy: The Carrot or the Stick?

<https://journals.sagepub.com/doi/10.1509/jmkg.72.1.001>

Based on three studies, the results suggest that negative incentives are a strong deterrent for certain consumers but can actually increase piracy tendencies for others. Conversely, positive incentives, such as improved functionality, can significantly reduce the tendency to pirate among all the consumer segments studied.

[Studiendaten (Ergebnisse aus drei Studien, wahrsch. experimentell)]

Converting Pirates Without Cannibalizing Purchasers: The Impact of Digital Distribution on Physical Sales and Internet Piracy

<https://pubsonline.informs.org/doi/10.1287/mksc.1100.0600>

We analyze these data in a difference-in-difference model and find that NBC's decision to remove its content from iTunes in December 2007 is causally associated with an 11.4% increase in the demand for NBC's pirated content. This is roughly equivalent to an increase of 48,000 downloads a day for NBC's content and is approximately twice as large as the total legal purchases on iTunes for the same content in the period preceding the removal. We also find evidence of a smaller, and statistically insignificant, decrease in piracy for the same content when it was restored to the iTunes store in September 2008.

[Marktdaten (Downloads, Verkäufe) + ein "Natürliches Experiment" (NBC entfernt 2007 Inhalte von iTunes)]

Piracy and Bundling of Information Goods

<https://www.tandfonline.com/doi/full/10.1080/07421222.2022.2096543>

Evidently, bundling abets piracy and, in certain situations, so much so that the losses from piracy more than nullify the traditional benefits of bundling.

[Formale Modellannahmen (Bundling-Modell)]

Pay-What-You-Want Pricing in the Digital Product Marketplace: A Feasible Alternative to Piracy Prevention?

<https://pubsonline.informs.org/doi/10.1287/isre.2021.1094>

We also examine the impact of network externalities on PWYW pricing. Counterintuitively, despite the full market penetration, PWYW pricing invariably becomes less profitable than posted pricing as network externalities become sufficiently strong.

[Formale Modellannahmen (PWYW vs. Festpreis, Netzwerkeffekte)]

## BM Content Provider

Optimal Management of Digital Content on Tiered Infrastructure Platforms

<https://pubsonline.informs.org/doi/10.1287/isre.2014.0548>

We model two fundamental effects with digital content: a revenue effect emanating from the tiered architecture and a traffic generating effect among media objects.

[Formale Modellannahmen (gestufte Infrastruktur, Traffic-Effekte)]

## Content Analysis

A Content Analysis of the Content Analysis Literature in Organization Studies: Research Themes, Data Sources, and Methodological Refinements.

<https://psycnet.apa.org/doi/10.1177/1094428106289252>

**Organizational Research Methods** (Rating: A)

Price Dispersion and Differentiation in Online Travel: An Empirical Investigation

<https://doi.org/10.1287/mnsc.48.4.543.203>

**Management Science** (Rating: A+)

Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go?

[https://doi.org/10.1177/0149206316675927?urlappend=%3Futm\\_source%3Dresearchgate.net%26medium%3Darticle](https://doi.org/10.1177/0149206316675927?urlappend=%3Futm_source%3Dresearchgate.net%26medium%3Darticle)

**Journal of Management** (Rating: A)

Loughran, T., & McDonald, B. (2011). When is a Liability not a Liability? Textual Analysis, Dictionaries, and 10-Ks.

**The Journal of Finance** (A+). <https://doi.org/10.1111/j.1540-6261.2010.01625.x>

Wirtz, B. W., Pistoia, A., Ullrich, S., & Göttel, V. (2016). Business Models: Origin, Nature and Future.

**Long Range Planning** (A) <https://doi.org/10.1016/j.lrp.2015.04.001>

Herath, T., & Rao, H. R. (2009). *Protection motivation and deterrence: a framework for security policy compliance*.

**MIS Quarterly** (A+).

[https://doi.org/10.1057/ejis.2009.6?urlappend=%3Futm\\_source%3Dresearchgate.net%26medium%3Darticle](https://doi.org/10.1057/ejis.2009.6?urlappend=%3Futm_source%3Dresearchgate.net%26medium%3Darticle)

*Advanced Customer Analytics: Strategic Value Through Integration of Relationship-Oriented Big Data*

### **MIS Quarterly(A+)**

*Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities*  
**Journal of MarketingA+)**

*Identifying Customer Needs from User-Generated Content*  
**Marketing Science**

Task	The Scientific Term	The "A/B" Paper to Cite
<b>Checking Prices via VPN</b>	"Online Price Dispersion Analysis"	<b>Clemons et al. (2002)</b> in <i>Management Science</i> (A+) OR <b>Ghose &amp; Yao (2011)</b> in <i>Information Systems Research</i> (A+)
<b>Checking Geo-Blocking</b>	"Friction in Digital Markets"	<b>Brynjolfsson &amp; Smith (2000)</b> in <i>Management Science</i> (A+) (The classic on online friction)
<b>Analyzing ToS Texts</b>	"Computer-Aided Text Analysis (CATA)"	<b>Short et al. (2010)</b> in <i>Organizational Research Methods</i> (A) (Justifies using MAXQDA)
<b>Analyzing "Framing"</b>	"Strategic Framing Analysis"	<b>Cornelissen &amp; Werner (2014)</b> in <i>Academy of Management Annals</i> (A) (Justifies your "RQ2 Framing" analysis)
<b>Connecting VPNs to BMI</b>	"Business Model Dynamics"	<b>Baden-Fuller &amp; Haefliger (2013)</b> in <i>Long Range Planning</i> (B) (Links technology to business models)

## **Data i could use**

- Daten zur Preis-Arbitrage (selbst gesammelt)

- Daten zur Inhalts-Arbitrage (artikel und paper)
- Daten zum Nutzerverhalten (artikel und paper)
- Daten zur Reaktion der Unternehmen
  - VPN-Bans und -Erkennung
    - Technisch
      - Branchenanalysen zu VPN bans (artikel und paper)
      - technische Analysen (artikel und paper)
    - Rechtlich
      - Nutzungsbedingungen ToS (selbst gesammelt)

## Method i could use

### A: Datensammeln

#### 1: Die Quantitative Arbitrage-Analyse (Ökonometrischer Ansatz)

- "Wie groß ist das 'Arbitrage-Potenzial' (Kombination aus Preisvorteil und Inhaltsvorteil) im globalen Streaming-Markt?"
- Methode: "Streaming Value Index" pro Land (z.B. **Anzahl der Titel / Monatspreis in USD**).
- Ranking und Visualisierung der Länder mit dem höchsten und niedrigsten "Value". → **Arbitrage-Potenzial**.

#### 2: Die BMI-Reaktionsanalyse (Qualitativer/Fallstudien-Ansatz)

- "Wie *reagieren* Streaming-Dienste auf die Bedrohung durch Geo-Arbitrage, und was ist der *Impact* auf ihr Geschäftsmodell?"
- Methode: Qualitative Fallstudienanalyse durch (ähnlich dem BMI-Cluster ), in dem Netflix als "etablierten Akteur" (mit starker Abhängigkeit von Drittlicenzen) mit z.B. Disney+ (das stärker auf Eigeninhalte setzt) verglichen wird.
  - Anbieter blockieren bekannte VPN-IP-Listen.
  - Anbieter nutzen GPS-Daten-Abgleich.

- Anbieter beschreiben das als "Katz-und-Maus-Spiel".
- Anbieter verbieten VPNs explizit in den Nutzungsbedingungen (ToS).
- Anbieter begründen dies mit Lizenzverpflichtungen.
- Anbieter investieren massiv in globale Eigenproduktionen (Originals).

## B: Systematische Analyse

Die Befunde werden sortiert und kategorisiert

## C: Konzeptionelle Synthese

### 3: Framework-Entwicklung & Analyse

#### Typ 1: Technologische Antworten (Das "Katz-und-Maus-Spiel")

- *Aktion:* **VPN-IPs blockieren**, GPS-Daten abgleichen.
- *Wirkung:* Erhöht die "Transaktionskosten" für Arbitrageure (analog zu LTA). Schützt kurzfristig die Lizenzverträge.

#### Typ 2: Vertragliche Antworten (Die "Spielregeln")

- *Aktion:* Explizite Verbote in den **Nutzungsbedingungen**.
- *Wirkung:* Schafft die rechtliche Grundlage für Kontosperrungen; dient der Abschreckung und der rechtlichen Absicherung gegenüber Lizenzgebern.

#### Typ 3: Strategische Antworten (Die "Langzeitlösung")

- *Aktion:* Massive Investition in globale **Eigenproduktionen** ("Netflix Originals", "Disney+ Originals").
- *Wirkung:* Dies ist die fundamentalste BMI. Sie *löst* das Kernproblem, indem sie das Gut (den Inhalt) aus der regionalen Lizenzbindung befreit. Das Geschäftsmodell wandelt sich vom "Distributor" zum "globalen Produzenten", wodurch Geo-Arbitrage für diese Inhalte irrelevant wird.