

# Notes

## MEETING FROM 01.08

### **Finding literature**

### **VPN for illegal purposes**

Napster

Businessmodel

Daseinsberechtigung finden für Forschung

Theoretische Linse

Es fehlt die theoretisch daseinsberechtigung

Ich muss irgendwie ein theoretischen rahmen finden und dann specificien können welche daten ich wirklich sammeln will warum ich hier Preisunterschiede von ländern mir hier angucken möchte

Klang noch sehr ideen offen für anderen theorien

TCE war apparently nicht gut genug

Piracy and VPNs for geo arbitrage impact the business models of Netflix Spotify and co

Which in turn impact the whole market for consumers

My research would test if the presented method of comparing prices are viable and do work, and theoreticise about its broader impact of the whole market

Can also compare with other industries with allowed or not allowed geo arbitrage,

ie mobile network services across eu countries, before and after not allowing different prices in different countries.

## MEETING FROM 15.08

BMI

New product development

DSPI

Risiko für streaming Dienste

Daten von

Aktien statements und öffentlichen statements von streaming and VPN provider risiken und  
co

Text analysen

Bird AI

PRSMI literature review

Possible new titles

- 1. From Piracy to VPNs: Business Model Innovation in Response to Digital Circumvention**
- 2. Competitive Responses to Digital Circumvention: A Comparative Analysis of Piracy and VPN Use in Global Digital Services**
- 3. Piracy, VPNs, and the Battle for Access: Business Model Strategies in Digital Platforms**
- 4. Business Model Responses to Consumer Circumvention: Lessons from Piracy Applied to VPN-Enabled Geo-Arbitrage**
- 5. Circumvention as Competition: Comparing Piracy and VPN Use in Shaping Digital Service Strategies**

6. From Napster to NordVPN: Strategic Adaptations of Digital Platforms to Circumvention Technologies
7. The VPN as the New Napster? Business Model Innovation and Competitive Viability in the Age of Geo-Arbitrage

## 1. Artikel nach quellen durchforsten

- a. Bestehende quellen durchgehen, neue finden...
- b. Max 50, min ~20

## 2. Angucken wie andere text analyse gemacht haben

- a. Chaten
  - i. Qualitative Content Analysis
  - ii. Discourse/Framing Analysis
  - iii. Coding Scheme:

Code Category	Code Name	Description	Example Text
Framing	[Frame: Legal Compliance]	Presenting geo-blocking as a non-negotiable legal or contractual necessity.	"We strive to offer a global catalog, but our licensing agreements with content producers vary by region." (Netflix)
	[Frame: User Freedom]	Presenting circumvention as a user's right to access content or an open internet.	"Your subscription, your rules. Access the content you paid for, no matter where you are." (VPN Provider)
	[Frame: Privacy/Security]	Justifying VPN use primarily through the lens of data protection, with streaming as a secondary benefit.	"Protect your digital life from prying eyes and unlock a world of entertainment." (VPN Provider)
Justification	[Justify: Protecting Partners]	Explaining enforcement as necessary to protect the interests of content creators.	"We must enforce regional blackouts to honor the agreements we have with our partners." (Netflix)
	[Justify: Maximizing Value]	Framing VPN use as a smart consumer choice to get the most out of a paid subscription.	"Don't let your subscription go to waste while traveling. Use our service to watch your home library." (VPN Provider)
Action	[Action: Deterrence]	Language related to blocking, detecting, or punishing circumvention.	"The use of a VPN to circumvent geo-restrictions is a violation of our Terms of Service." (Netflix)
	[Action: Adaptation]	Language related to business model changes that reduce the need for circumvention.	"We are thrilled to announce the global premiere of our new film, available to all subscribers on the same day." (Netflix)
Tone	[Tone: Regretful/Forced]	A tone suggesting the company wishes things were different but its hands are tied.	"We know it can be frustrating... we are working to secure global rights for more content." (Netflix)
	[Tone: Empowering/Defiant]	A tone suggesting the user is taking back control from restrictive corporations.	"Break down the digital borders and take control of your internet experience." (VPN Provider)

- 1.
2. Does Netflix use the [Frame: Legal Compliance] more in its ToS and the [Action: Adaptation] frame more in its marketing blogs?

3. Do VPN providers prioritize the [Frame: Privacy/Security] on their homepage but the [Frame: User Freedom] on their blogs?
- b. Analyse must be reliable and consistent
- c.
3. Unternehmenskommunikations suchen
  - a. Von VPN Anbietern
    - i. Official statements
      1. Official Blog Posts & Guides:
      2. Website Marketing Copy
    - ii. Inofficial statements
    - iii. sponsored
  - b. Von Service Providern
    - i. Official statements like quarterly earnings reports and such
    - ii. Inofficial statements
      1. Netflix's CEO, Reed Hastings, has mentioned that they plan to end the geoblocking of their services one day, however negotiating intellectual property on a global scale is complex.
    - iii. Sponsored
  - c. Sources:
    - i. Terms of Service (ToS)
    - ii. Official Company Blogs & Press Releases
    - iii. Shareholder Letters & SEC Filings
    - iv. Interviews and Public Statements by Executives
  - d. dritten?

Garcia, Gabriel. 'Netflix Bloqueia Usuários que Burlam Restrição Geográfica [Netflix Block Users who Circumvent Geographic Restriction]', Abril, 4 January 2015, <http://info.abril.com.br/noticias/internet/2015/01/netflix-bloqueia-usuarios-que-burlam-restricao-geografica.shtml>.

Silva, Rafael. 'Netflix Bloqueia Acesso de Assinantes Usando VPNs [Netflix Blocks Access to VPN Subscribers]', Tecnoblog, December 2014, <https://tecnoblog.net/172153/netflix-bloqueio-acesso-vpn/>.

## Services where EU Geo-blocking Regulation in full effect.

This means for any service on this list, a provider cannot block you, automatically redirect you, or refuse your payment based on your EU nationality or country of residence. You have the right to purchase from any EU country's website.

### 1. Cloud Services & Infrastructure

- **Infrastructure as a Service (IaaS):**
  - AWS (Amazon Web Services)
  - Microsoft Azure Cloud
  - Google Cloud Platform
- **Platform as a Service (PaaS):** Services offering platforms for software development.
- **Data Warehousing & Online Storage:**
  - Google One
  - Dropbox (for paid business or personal plans)
  - iCloud+

### 2. Software as a Service (SaaS)

- **Productivity & Business Tools:**
  - Microsoft Office 365 / Microsoft 365
  - Google Workspace
  - Slack Pro (and other paid tiers)

- Notion (for paid plans)
- **Creative Software:**
  - Adobe Creative Cloud
  - Canva Pro
- **Customer Relationship Management (CRM) & Enterprise Software:**
  - Salesforce
  - HubSpot

### 3. Web Hosting & Domain Services

- **Web Hosting Providers** (e.g., IONOS, GoDaddy, Hostinger)
- **Domain Name Registrars**
- **Website Builders** (e.g., Squarespace, Wix for their premium plans)

### 4. Digital Security Services

- **VPN Services** (the sale of the subscription itself):
  - NordVPN
  - ExpressVPN
- **Antivirus & Security Suites:**
  - McAfee+ Premium
  - Norton 360

### 5. Other Electronically Supplied Services

- **Dating Apps & Services (for their premium subscriptions):**
  - Tinder (Tinder Plus, Gold, Platinum)
- **Professional Networking Services:**
  - LinkedIn Premium
- **Ride-Sharing & Delivery Membership Programs:**
  - Uber One

## Services Explicitly EXCLUDED from the Regulation:

For clarity, the following services are **not** covered by the geo-blocking rules regarding access and pricing:

- **Audiovisual services:** Netflix, YouTube Premium, Disney+, Amazon Prime Video, HBO Max, Hulu.
- **Music streaming services:** Spotify Premium, Apple Music, Deezer Premium.
- **E-books and online audiobooks.**
- **Online video games:** Steam, PlayStation Store, Xbox Game Pass, Nintendo Online.

## The EU VAT Law

For digital services sold within the EU, the law is very clear: VAT must be charged based on the **customer's country of residence**, not the seller's country or the location of the IP address used for the purchase.

To enforce this, the EU requires sellers like Microsoft to collect **at least two non-contradictory pieces of evidence** to determine the customer's true location. An IP address is only one piece of evidence. Other pieces include:

- **The Billing Address** provided by the customer.
- **The country where the credit/debit card was issued** or the bank account is located.
- The country code of the SIM card (for mobile purchases).

Intentionally providing a fake Portuguese address to match your VPN location would be an act of providing false information and constitutes tax fraud.

## When going out of EU

- EU Regulations No Longer Apply
- Violation of Terms of Service Becomes the Central Issue
- Significant Practical and Technical Hurdles
  - local payment method
    - Maybe fix: Virtual Credit Card (VCC) & Prepaid Card Services
  - Address Verification System (AVS)
  - Crypto would fix this but is not accepted

General structure geben und kontext zur ganzen thesis

Wo will ich hin

BMI (im sinne von) konkurrierende BMI vpn Services und VPNs wegen möglichkeit von geoarbitrage

Technological and business model innovations to enable vs prevent these possibilities

- LAtex structure aufbauen
- Für jeden chapter schonmal überlegen was ich da haben will
- Welchen deeperen focus sollte die thesis haben (muss kompatibel mit TIM sein)
- 

1 Monat

Theoretical background durchgehen

2 monat

Rahmen eintrichnern und genau verbinden BM innovation & RQ

## WIE STELLE ICH DIESES THEMA VOR:

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 evolvement 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.

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.

### 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

### **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.

### 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.

### Optimal Pricing of Digital Experience Goods Under Piracy

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

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

### 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.

### 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.

How does digital piracy affect innovation? Evidence from software firms

<https://www.sciencedirect.com/science/article/abs/pii/S0048733322002220?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.

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.

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.

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.

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.

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.

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.

## **Customer Circumvention (NOPE)**

## **VPN for Arbitrage / VPN for Circumvention / VPN (NOPE)**

## **Illegal BM (NOPE)**

## **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.

import competition exposure (ICE)

limits-to-arbitrage (LTA)

## Daten sammeln

VPN each service across [10-15] high-, middle-, and low-income countries  
[Quantitative]

- price sampling
  - to calculate a Digital Services Price Index (DSPI) relative to Purchasing Power Parity. (EXEL)
  - technical enforcement mechanisms (e.g., geo-blocking errors, payment method restrictions)

qualitative text to identify strategic framing. (Text Data [Qualitative])

- corporate Terms of Service (ToS),
- shareholder letters, Transcripts
- Press Releases? / Official Blog?

using a deductive-inductive scheme to categorize firm responses into strategies

- Coercive (Legal),
- Technical (Preventive),
- Adaptive (Business Model).

## Aufbereiten

Quantitative

- Numbers with boolean questions into Excel (manually)

Qualitative

- Clean the text (ignore headers/footers/ads)
- Rename all PDFs (Date\_Company\_Type)



- Import into MAXQDA
- Tag the documents with attributes (Company Name, Service Type, High/Low Price Variance)?

## Analysieren

triangulate the findings by comparing the firms' stated strategies (Text Data) against the empirical reality of their pricing and enforcement (Price/Tech Data).

**Frequency Analysis (Who is aggressive?)**

**Framing Analysis (How do they justify it?)**

Archetype	Observed Data (Quant)	Observed Strategy (Qual)	Example Firm
The Fortress (Coercive)	High Price Gap (-70%) + High Tech Barriers (SMS/ID).	Heavy use of "Termination" threats (A2) and "Fraud" language.	Netflix
The Globalist (Adaptive)	Low Price Gap (Prices are similar).	Focus on "Portability" (C3) and "Global Access."	Canva / SaaS
The Passive Gatekeeper	High Price Gap but Low Barriers.	Legal prohibition in ToS (A1) but no technical enforcement.	Spotify / Steam?

## Data Scope

Scope Dimension	Selection	Scientific Justification
Countries (N=11)	US, DE, CH, UK, PL, BR, JP, TR, AR, IN, PH	Covers the full spectrum of the Big Mac Index / PPP. Includes both stable and hyper-inflationary currencies.
Services (N=12)	Netflix, YT Premium, Disney+, Spotify, Apple Music, MS 365, Adobe, Canva, Xbox, Steam, NordVPN, ExpressVPN	Represents different business models (Sub vs. One-off) and different "Piracy Risks."

Quant Window	2 Weeks (Fixed dates)	Minimizes Exchange Rate Bias.
Qual Window	2020 – Present	Captures the "Post-COVID Digital Shift" and the recent inflation crisis.

Auch praktisch  
Theorie

Methodik der Analyse,

- Automated Content Analysis
- Längsschnittdesign (2020–Heute)
- Deduktiv
- Theorie (Sundararajan, 2004)
- BERT-basiertes Modell (facebook/bart-large-mnli) / Fin BERT, Legal BERT
  - Two-Stage Classification
  - Zero-Shot Classification
  - Analyseprozess in Python

- Visualisierung in Sheets

Datenquellen für Textanalyse,

- Extraktion des Rohtextes aus PDFs (Shareholder Letters, 10-K Risk Factors / Annual Report, Transcripts / )
  - Shareholder Letters = Das Narrativ (Was sie wollen, dass wir glauben).(Proaktiv)
  - 10-K Risk Factors = Die Rechtliche Realität (Was sie zugeben müssen).(Reaktiv/Verpflichtend)
  - Earnings Call Transcripts = Die Verteidigung (Wie sie auf Kritik reagieren).(Interaktiv)
- Sentence Splitting: Nutzung des NLTK-Tokenizers (Natural Language Toolkit), um Texte semantisch korrekt in Sätze zu zerlegen
- Two-Stage Classification
  - Context Filter (zwischen **Digital/Streaming** (relevant) und **Physisch/Logistik/Parks** (irrelevant))
  - Theoretical Classification
    - i. Coercive Restriction & Legal Threat (Protection-Strategie: Bans, Geo-Blocking, Klagen).
    - ii. Business Model Adaptation & Pricing (Pricing-Strategie: Ad-Tiers, Preisanpassung).
    - iii. General Corporate Operations (Kontrollkategorie für Rauschen).
- Auswertung
  - Relative Häufigkeit (Share of Voice)
  - pro Service pro Jahr
  - Longitudinal: Wie verändert sich der Strategie-Mix über die Zeit (Trendlinie)?
  - Cross-Sectional: Vergleich zwischen Pure Playern (Netflix, Spotify) und Ecosystem Playern (Amazon, Apple), um Unterschiede in der strategischen Resilienz zu prüfen.
  - quantitative Ausschläge durch eine manuelle qualitative Prüfung ("Deep Dive") der klassifizierten Sätze interpretiert (Mixed Methods Light).

## 1. Das Phänomen & Das Theoretische Problem

- **Ausgangslage:** Digitale Unternehmen nutzen internationale Preisdiskriminierung. Konsumenten nutzen Technik (VPNs), um diese Grenzen zu umgehen (Geo-Arbitrage).
- **Die Theoretische Linse:** Wir betrachten diesen Konflikt durch die Theorie von **Sundararajan (2004)**. Er postuliert, dass Unternehmen bei digitalen Gütern genau zwei strategische Hebel haben, um auf Umgehung/Piraterie zu reagieren:
  1. **Protection (Coercive):** Technische/Rechtliche Barrieren erhöhen.
  2. **Pricing (Adaptive):** Das Geschäftsmodell anpassen, um Umgehung unattraktiv zu machen.

## 2. Die Forschungsfrage (RQ)

- **Die Ableitung:** Da wir diese zwei theoretischen Optionen kennen, wollen wir wissen, wie Unternehmen sie *tatsächlich* nutzen.
- **Die Frage:** *"Wie verändert sich im Zeitverlauf (2020–Heute) der strategische Mix aus 'Coercive' und 'Adaptive' Antworten in der Unternehmenskommunikation?"*
- **Das Ziel:** Wir wollen den **Strategic Shift** identifizieren (z.B. von Toleranz zu hartem Durchgreifen).

## 3. Die Operationalisierung (Von Theorie zu Daten)

- **Die Annahme:** Strategie ist abstrakt. Wir machen sie messbar über **"Management Attention"**. Worüber das Management spricht, ist das, was strategisch Priorität hat.
- **Die Datenquellen (Triangulation):** Um ein unverzerrtes Bild zu erhalten, analysieren wir drei Perspektiven:
  1. *Shareholder Letters*: Das proaktive Narrativ ("Wir wollen wachsen").
  2. *Risk Factors (10-K)*: Die rechtliche Realität ("Wir müssen uns schützen").
  3. *Earnings Calls*: Die Reaktion auf Druck ("Wir verlieren Geld").
- **Der Scope:** Wir vergleichen **Pure Player** (Netflix, Spotify), die reagieren *müssen*, mit **Ecosystem Playern** (Amazon, Apple), die Streaming quersubventionieren können (Resilienz).

## 4. Die Methodik (Die Analyse)

- **Das Verfahren:** Wir nutzen **Automated Content Analysis** mittels **BERT Zero-Shot Classification**.

- **Der Link zur Theorie:** Das Verfahren ist **deduktiv**. Wir trainieren die KI nicht neu, sondern geben ihr exakt die Labels aus der Theorie von Schritt 1 vor ("Coercive" vs. "Adaptive").
- **Die Validierung (Neu):** Damit wir bei Mischkonzernen (Amazon/Disney) nicht "Äpfel mit Birnen" vergleichen, nutzen wir eine **Two-Stage Pipeline**:
  - *Stufe 1 (Filter)*: Ist der Satz thematisch relevant (Streaming) oder Rauschen (Logistik/Parks)?
  - *Stufe 2 (Analyse)*: Ist es strategisch "Coercive" oder "Adaptive"?
- **Das Ergebnis:** Wir berechnen die **relative Häufigkeit (Share of Voice)** der Strategien pro Jahr und visualisieren den Trend als Kurve.

