PLATTFORM.MACHER TAGE 2023

B2B Marktplätze (in Deutschland): State-of-the-Art & Erfolgsfaktoren

Studie des Instituts für Strategisches Management (ISM) der Wirtschaftsuniversität Wien (WU Wien)

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Agenda



- 1 Study 1: Background and Design
- 2 Study 1: Overview and Data Categories
- 3 Study 1: Findings
- 4 Study 2: Overview and Definitions
- 5 Study 2: Preliminary Findings
- 6 Study 2: Best Practices and Success Factors

Study on marketplaces in Europe and the US



"The aim of the study is to provide an overview of the current distribution of B2B platforms in Germany. Furthermore, success factors are identified that show how B2B marketplaces can grow sustainably, acquire and retain customers, and position themselves."

Overview



- Platforms active until the year 2022 (n = 175)
- Focus on metal products, machinery and equipment (CPC4 category)
- Platforms either
 - Only in German (= AT + DE)
 - Only in English
 - In English in addition to home langue; else not included if only home langue and not English (e.g. only French, only Spanish)

Data Collection and Analysis

- Data was retrieved from Crunchbase, LinkedIn and Company Websites in the period from August 2022 to May 2023
- Data was analyzed with quantitative content analysis

Limitations

- Some information might not be publicly accessible
- This study focuses only on sourcing platforms (no e-commerce channels of established incumbents)



Definitions



- A platform is a meta-organization that (1) federates and coordinates actors; (2) creates value through economies of scope in supply and/or in demand; and (3) entails a modular technological architecture (Gawer, 2014; Kretschmer, Leiponen, Schilling, & Vasudeva, 2022)
 - Types of platforms:
 - Transaction platforms and innovation platforms (Cusumano, Gawer, & Yoffie, 2019)
 - Examples of transaction platforms: Airbnb, Uber, eBay (Evans & Schmalensee, 2016; Gawer, 2021; McIntyre et al., 2021)
 - Examples of innovation platforms: Android, PlayStation (Cennamo & Santaló, 2019; Gawer, 2022; Jacobides, Cennamo, & Gawer, 2018; Kretschmer et al., 2022; Ozalp, Cennamo, & Gawer, 2018)
- Research focus in the past on B2C platforms, recent growth of B2B platforms:
 - B2B platforms such as Mercateo have been growing rapidly

Categories and data collected I



Demographic Variables

- Entrant type: stand-alone platform vs. incumbent-hosted platform
- Platform name
- Platform legal name
- Platform legal form (Sole proprietorship, General partnership, Corporation (e.g. AG, Corp., Inc., Ltd.), Limited liability company (e.g. GmbH, LLC, LC), Alliance/Partnership, n.a., No separate legal form than incumbent)
- If incumbent sponsored: legal name incumbent
- Legal form incumbent
- Year of founding
- Headquarter (EU/USA/CANADA)
- City
- Country (Australia, Austria, France, Germany, Italy, Netherlands, Spain, United Kingdom, USA, Canada)
- Region: EU, US, CA, UK, EFTA
- Number of employees (< 10, 10-49, 50-249, >250, >1.000, >10.000, >100.000, n.a.)
- Hybrid (B2C + B2B vs. B2B only)



Categories and data collected II



- Products categories
- Central Product Classification (CPC): is a complete product classification covering goods and services. It is intended to serve as an international standard for assembling and tabulating all kinds of data requiring product detail, including industrial production, national accounts, service industries, domestic and foreign commodity trade, international trade in services, balance of payments, consumption and price statistics.
- CPC section 3: Other transportable goods, except metal products, machinery and equipment (CPC 31-CPC 39)
- CPC section 4: Metal products, machinery and equipment (CPC 41-CPC 49)
- CPC section 8 Business and production services (CPC 81-CPC 89)
- CPC Section 0-9 (except for Section 4)
 - 0 Agriculture, forestry and fishery products
 - 1 Ores and minerals; electricity, gas and water
 - 2 Food products, beverages and tobacco; textiles, apparel and leather products
 - 5 Constructions and construction services
 - 6 Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services
 - 7 Financial and related services; real estate services; and rental and leasing services
 - 9 Community, social and personal services



Categories and data collected III



Accessibility

- Currency (USD, EUR, CAD, MULTIPLE = USD AND/OR EUR AND/OR CAD)
- Number of languages
- Channel (online only, online and offline)
- Registration required? (yes, no) → verification for seeing products with prices = yes, verification for seeing products without prices = no

Business model

Revenue stream (Subscription fee, Commissions, Advertising, n.a.)

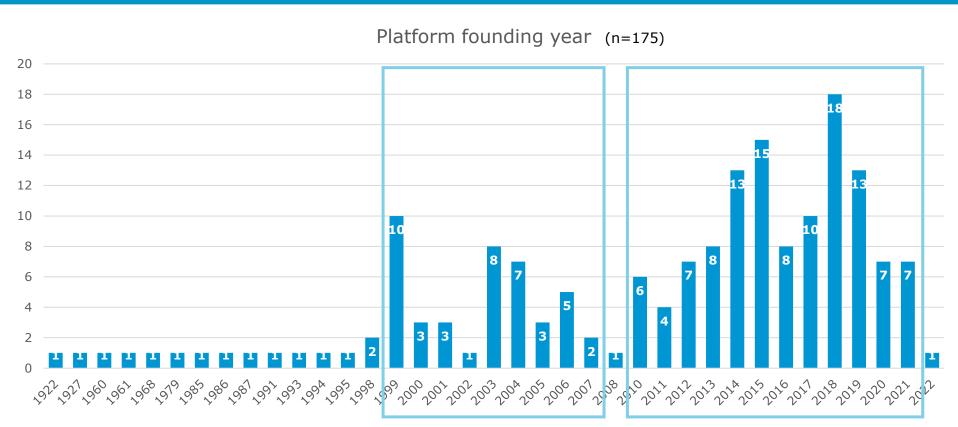
Performance

- Operating status (Active, Dissolved, Insolvency trial)
- SEMrush Monthly Visits
- SEMrush Average Visits (6 months)
- → identified via Company Website, LinkedIn, Crunchbase



Platform founding year



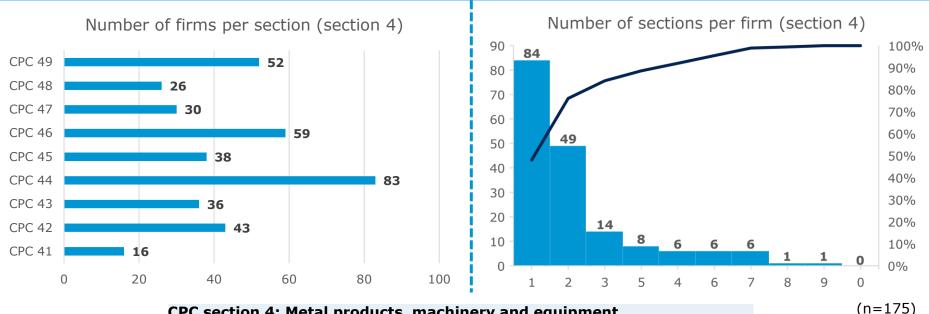


*Founding date of the company vs. going-live of the platform. If no platform founding year available \rightarrow Incumbent-hosted founding date

Key insight: the majority of platforms has been founded in the periods from 1999-2007 and 2010-2021

Section 4: Metal products, machinery and equipment





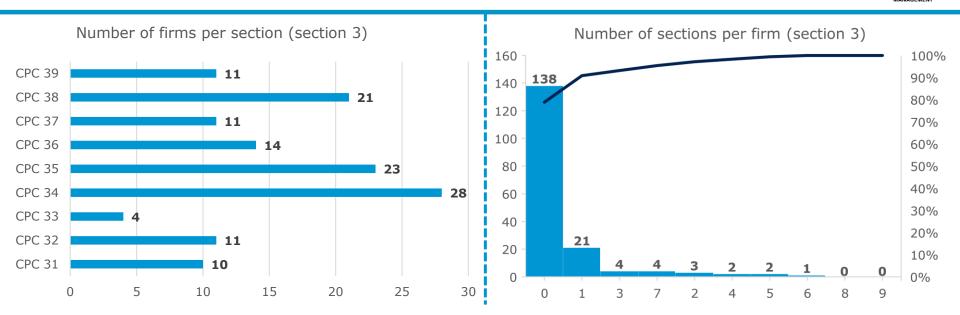
CPC section 4: Metal products, machinery and equipment

- 41 Basic metals
- 42 Fabricated metal products, except machinery and equipment
- 43 General-purpose machinery
- 44 Special-purpose machinery
- 45 Office, accounting and computing machinery
- 46 Electrical machinery and apparatus
- 47 Radio, television and communication equipment and apparatus
- 48 Medical appliances, precision and optical instruments, watches and clocks
- 49 Transport equipment

Key insight: most of the platforms that offer "metal products, machinery and equipment" specialize on the categories (1) special-purpose machinery, (2) electrical machinery, and (3) transport equipment. They also mainly focus on one or two sections.

Section 3: Other transportable goods, except metal products, machinery and equipment





CPC section 3: Other transportable goods, except metal products, machinery and equipment

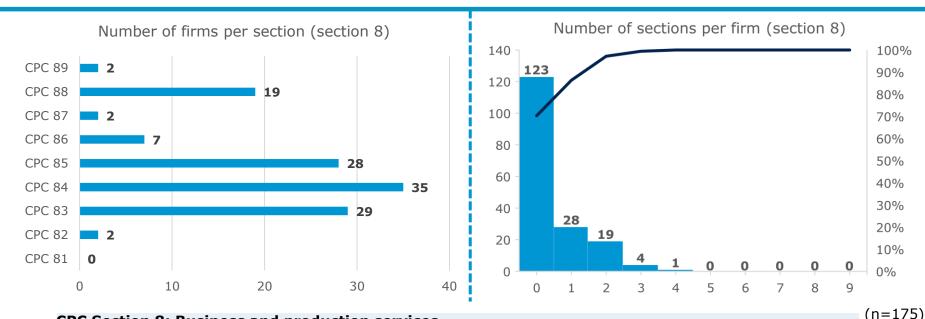
- 31 Products of wood, cork, straw and plaiting materials
- 32 Pulp, paper and paper products; printed matter and related articles
- 33 Coke oven products; refined petroleum products; nuclear fuel
- 34 Basic chemicals
- 35 Other chemical products; man-made fibres
- 36 Rubber and plastics products
- 37 Glass and glass products and other non-metallic products n.e.c.
- 38 Furniture; other transportable goods n.e.c.
- 39 Wastes or scraps

<u>Key insight</u>: most of the platforms that offer "other transportable goods, except metal products, machinery and equipment" specialize on the categories (1) **basic chemicals**, (2) **other chemical products**, and (3) **furniture**. They also mainly focus on **one section**.

(n=175)

Section 8: Business and production services





CPC Section 8: Business and production services 81 Research and development services

- 82 Legal and accounting services
- 83 Professional, technical and business services (except research, development, legal and accounting services)
- 84 Telecommunications, broadcasting and information supply services
- 85 Support services

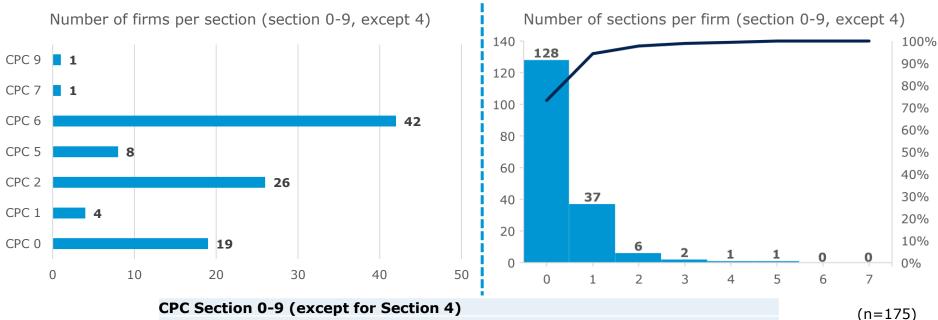
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- 86 Support and operation services to agriculture, hunting, forestry, fishing, mining and utilities
- 87 Maintenance, repair and installation (except construction) services
- 88 Manufacturing services on physical inputs owned by others
- 89 Other manufacturing services; publishing, printing and reproduction services; materials recovery services

Key insight: most of the platforms that offer "business and production services" specialize on the categories (1) **telecommunications**, broadcasting and information supply, (2) **professional**, **technical** and business services, and (3) support services. They also mainly focus on one or two sections.

Section 0-9 (except 4)





O Agriculture, forestry and fishery products

1 Ores and minerals; electricity, gas and water

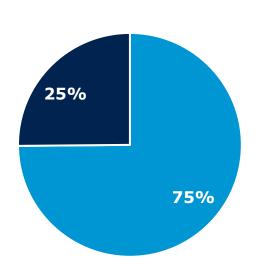
- 2 Food products, beverages and tobacco; textiles, apparel and leather products
- 5 Constructions and construction services
- 6 Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services
- 7 Financial and related services; real estate services; and rental and leasing services
- 9 Community, social and personal services

<u>Key insight</u>: most of the platforms that offer products in other sections specialize on the category (1) **distributive trade** services; **accommodation, food and beverage** serving services; **transport** services; and **electricity, gas and water** distribution services. They also mainly focus on **one section**.

B2B platforms: entrant & platform types



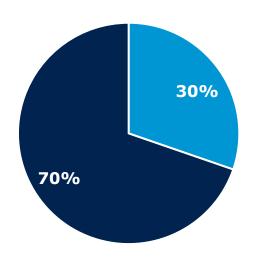




incumbent-hosted platform stand-alone platform (n=175)

Entrant type	# of platforms
stand-alone platform	131
incumbent-hosted platform	44

Platform type / customers focus of marketplace



■ B2B + B2C (Hybrid) B2B

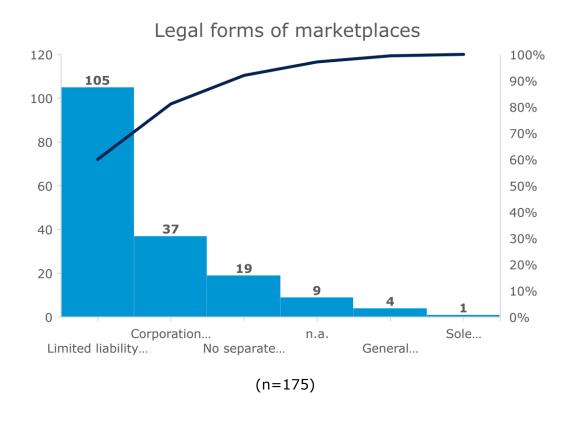
(n=175)

Platform type	# of platforms
B2B	122
B2B + B2C (Hybrid)	53

Key insight: B2B platforms are mainly stand-alone platforms and have a focus on B2B (compared to hybrid)

Legal forms of marketplaces





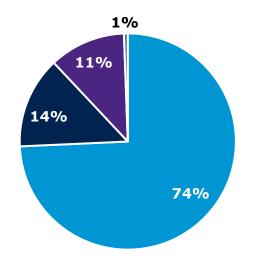
Marketplace legal form	in %
Corporation (e.g. AG, Corp., Inc., Ltd.)	21%
Limited liability company (e.g. GmbH, LLC, LC)	60%
General partnership	2%
Sole proprietorship	1%
No separate legal form than incumbent	11%
n.a.	5%

Key insight: the majority of marketplaces has a limited liability company for their legal form

Legal form of incumbents



Legal form of incumbents



Legal form incumbent	# of firms
No incumbent	130
Limited liability company (e.g. GmbH, LLC, LC)	24
Corporation (e.g. AG, Corp., Inc., Ltd.)	20
General partnership (z.B. OG, KG, GmbH & Co. KG)	1

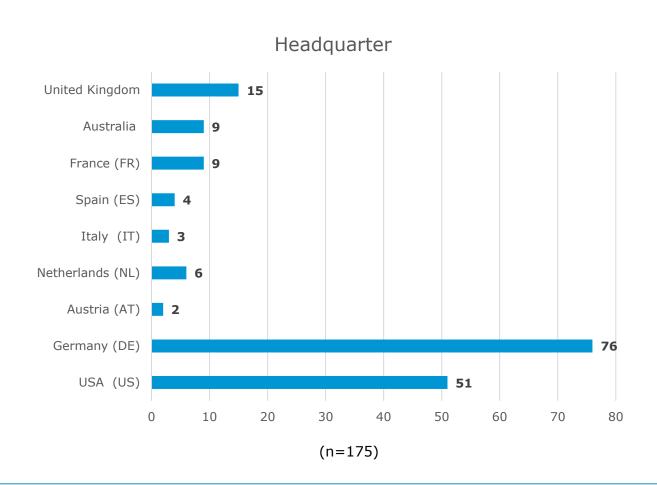
- No incumbent
- Limited liability company (e.g. GmbH, LLC, LC)
- Corporation (e.g. AG, Corp., Inc., Ltd.)
- General partnership (z.B. OG, KG, GmbH & Co. KG)

(n=175)

Key insight: for the **incumbent-hosted platforms**, the most common legal form is either a **limited liability company or a corporation**

Headquarters of studied platforms



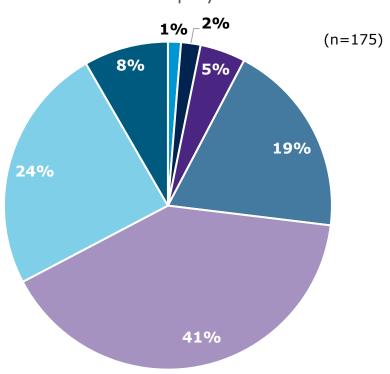


 $\underline{\text{Key insight}}$: the majority of studied platforms has their **headquarters in Germany or the US**

Number of employees per platform







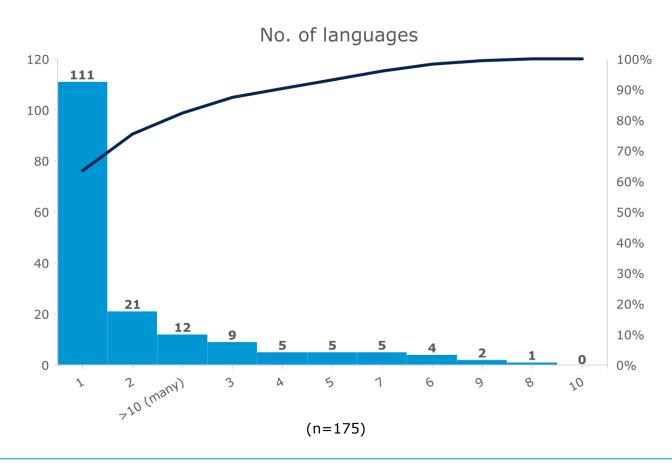
No. of employees	in %
11-49	41%
1-10	24%
50-250	19%
n.a.	8%
251-500	5%
1001-5000	2%
10001+	1%

■10001+ ■1001-5000 ■251-500 ■50-250 ■11-49 ■1-10 ■n.a.

Key insight: most of the studied platforms (75%) range between 1 and 250 employees

Languages available on platforms

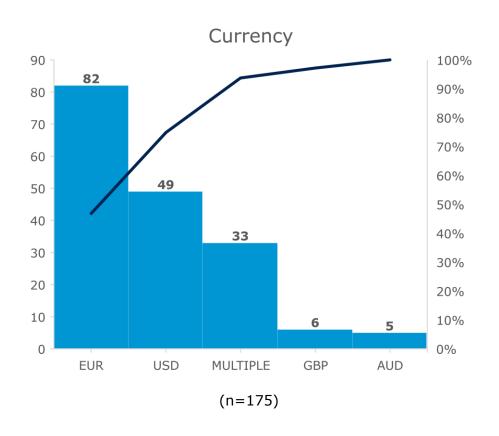




Key insight: most of the platforms offer one (63%) or two languages (12%), some more than 10 (7%)

Currencies used on platform





<u>Key insight</u>: most of the studied platforms offer the products in **EUR** (47%), **USD** (33%) or **MULTIPLE** (19%)

Business model types studied



1. Subscription Fee:

- Users pay a recurring fee to access the platform's services or content.
- Revenue is generated by charging customers for ongoing access or usage.
- Examples: Netflix, Spotify, Adobe Creative Cloud.
- Advantages: Provides a predictable revenue stream, encourages customer loyalty, and allows for continuous service improvements.
- Considerations: Ensuring the value proposition justifies the subscription cost, managing customer churn, and maintaining a high-quality service.

2. Commissions:

- The platform acts as an intermediary connecting buyers and sellers, earning a percentage-based fee on each transaction or sale.
- Revenue is generated by taking a portion of the value exchanged between platform users.
- Examples: Uber, Airbnb, eBay.
- Advantages: Scalable business model, as revenue grows with the platform's user base and transaction volume. Encourages platform growth and incentivizes the platform to facilitate successful transactions.
- Considerations: Balancing commission rates to attract users and maintain profitability, managing trust and safety between users, and handling disputes.

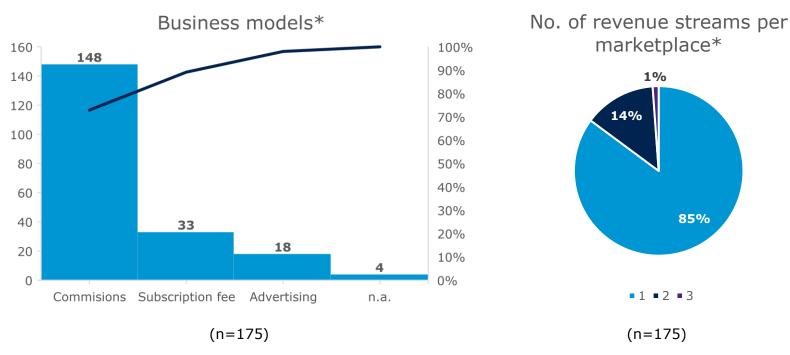
3. Advertising:

- The platform offers free access to users and generates revenue by displaying targeted advertisements to its audience.
- Revenue is generated by charging advertisers for ad space, clicks, impressions, or conversions.
- *Examples*: Google, Facebook, YouTube.
- Advantages: Can reach a wide user base without charging for access, offers targeted advertising capabilities, and benefits from the network effect as more users attract more advertisers.
- Considerations: Balancing user experience with ad placements, ensuring relevance and effectiveness of advertisements, and maintaining user trust and privacy.



Business models distribution





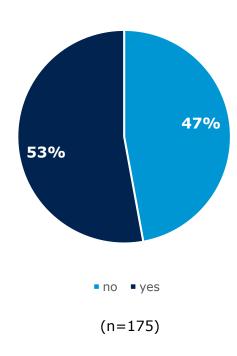
^{*}These business models are not mutually exclusive, and platforms sometimes combine multiple revenue streams to diversify their income sources.

<u>Key insight</u>: the vast majority of the studied platforms has **commissions** as for their business model type. In addition, **85% (149)** have **1 revenue stream**, but also **14% (25)** offer **2 different revenue streams** at the same time.

Verification of buyers required?



Verification of buyers nessecary to see product price



Key insight: more than half of the studied platforms (53%) require users to have an account to access more product-specific information such as the product price.

Study 'Success Factors of B2B Platforms'



- What is the study about?
 - Platforms that connect businesses are rapidly growing on a global scale.
 - However, success factors of B2B platforms remain unclear, especially with respect to
 - how to grow successfully?
 - how to attract and retain business customers?
 - how to successfully position the platform?



Participants

- Experts on B2B platforms (e.g., founders, business developers, account managers, and product managers at B2B platforms; venture capitalists, consultants, and analysts specializing in B2B platforms)
- Experts from Germany, Austria, and the US
- We invited to an interview that consists of open questions on the above topics



B2B Marketplaces



- Rapid growth of B2B marketplaces in industrial markets
- Benefits of B2B marketplaces for different user groups (Kaplan & Sawhney, 2000; Landsperger & Spieth, 2011)
 - Widened market reach for buyers and sellers (Lanzolla & Frankort, 2016)
 - Cross-side value generation (Anderson et al., 2022)
 - Neutrality of B2B marketplaces (Kaplan & Sawhney, 2000)
- Challenges in capitalizing on benefits
 - → Optimal platform governance choices required (incentive & control mechanisms)
- Call for greater diversity in empirical settings (Rietveld & Schilling, 2021)
- Research aim: Developing theory on platform governance in the context of industrial markets
- ==> Research question: How are B2B marketplaces in industrial markets governed?

Theoretical Background - Platform Governance I



- Platform governance refers to the "set of overarching rules, constraints, and inducements that platform owners develop and utilize to address market frictions in coordinating and deploying co-specialized capabilities" (Chen et al., 2022a: 153)
- Governance choices made by platform owners are key in orchestrating resources and business activities (Chen et al., 2022a)
 - Effective incentive and control mechanisms chosen by the platform owner are crucial factors in platform governance (Chen et al., 2022a)
- Membership and participation rules are important in ensuring the quality of complements and clarifying who can connect and innovate on the platform (Gawer, 2022: 114)
 - Platforms can define **different participation rules for different members**, and the strictness of rules can vary (Wareham et al., 2014)
- Support rules play a role in increasing desirable variance of platform offerings, such as through solution catalogues, sales and marketing support, financing facilities, and provision of benchmarks (Wareham et al., 2014; Reischauer & Mair, 2018)



Theoretical Background - Platform Governance II



- Incentive and control as key governance mechanisms determining digital and nondigital design features of a platform (Chen et al., 2022a)
- Value of a B2B platform separated into standalone product value, value of participants on the platform, and value of complementary products (Anderson et al., 2022)
- Customer orientation and loyalty as critical factors for platform success (Shree et al., 2021)
- Distinct affordances of B2B marketplaces in nascent industrial markets, including special logistics requirements and large, complex, or dangerous goods (Kaplan & Sawhney, 2000; Cui et al., 2019; Hein et al., 2019)
 - → Need for more understanding of governance of B2B marketplaces, considering operational complexity, data governance concerns, and strategic challenges (Anderson et al., 2022; Shree et al., 2021)
- Call for deeper study of factors leading to successful B2B platforms from the perspective of platform owners (Shree et al., 2021)

Methods



- Comparative case study design (Eisenhardt, 1989)
- In-depth case study research to develop novel theory on platform competition (Rietveld & Schilling, 2021; Anderson et al., 2022; Shree et al., 2020)
- Sample: 12 cases in the German manufacturing industry where B2B marketplaces are rapidly emerging since 2014
- Setting: Market of marketplaces for industrial goods in early stage of market formation (Santos & Eisenhardt, 2009; McDonald & Eisenhardt, 2019)
- Triangulation for construct validity (Gibbert, Ruigrok, & Wicki, 2008)
 - Data sources:
 - 42 <u>semi-structured interviews</u> with managers from sampled cases
 - 80 <u>public interviews</u> for the studied cases
 - 2000 pages of <u>case archival data</u> (internal documents, public documents, and firm-specific press coverage)
 - 42 semi-structured interviews with industry experts
 - 1300 pages of industry archival data obtained through Factiva (Henkel, Schöberl, & Alexy, 2014)
- Cross-case analysis technique (Eisenhardt, 1989)
 - Two steps:
 - Within-case analysis
 - Cross-case analysis
 - Focus on governance choices, antecedents, contingencies, and outcomes as units of analysis



Preliminary Findings



	Bureaucratic governance	Enabler governance	Essentialist governance
Transparency	Low	High	Low
rules			
Gatekeeping	High	Low	High
rules			
Logistic rules	High	Low	Low
Segmentation	High	Low	High
rules			
Market entry	Incumbent-	Stand-alone	Stand-alone
	hosted		

- Governance systems of b2b marketplaces characterized by 4 sets of rules:
 - (1) **transparency rules** relates to the visibility of shared information to buyers and sellers
 - (2) **gatekeeping rules** are about rules that determine who can be a seller
 - (3) **logistic rules** refers to rules on how to integrate offerings after a completed transaction
 - (4) **segmentation rules** are about creating different user groups.

A key antecedent of choosing a governance system type was **market entry**, i.e., whether a sourcing platform was an incumbent-hosted platform or a new platform venture

- However, not every surveyed marketplace had all rules set in place, indicating that **each dimension varies between 'high'** and 'low'.
 - (1) **Bureaucratic governance** defines a more restrictive approach towards using the platform
 - (2) **Enabler governance** is about attracting and retaining users
 - (3) **Essentialist governance** refers to a governance approach that is only concerned with providing basic structures of a transaction

Finding the right level of openness and transparency



- 3 different types
 - Completely closed / untransparent
 - Completely open / transparent
 - Hybrid
 - Which one is the best?



Thank you very much for your attention and interest!

Backup



Selected key success factors for B2B marketplaces in industrial markets I



- Industry-specific expertise: It is paramount to possess in-depth knowledge and expertise in the industrial market you target. Gain a comprehensive understanding of the industry's nuances, challenges, and trends to deliver tailored solutions that effectively meet the needs of both buyers and sellers.
- Robust supplier base: Establish a strong and diverse supplier base consisting of reputable manufacturers, distributors, and wholesalers in the industrial sector. Ensure that these suppliers offer high-quality products, competitive pricing, and efficient fulfillment capabilities to meet the demands of buyers.
- Comprehensive product catalog: Curate an extensive product catalog encompassing a wide range of industrial products, components, and equipment. Provide detailed specifications, technical data, and compatibility information, enabling buyers to make well-informed purchasing decisions based on their specific requirements.
- Seamless user experience: Prioritize a user-friendly interface, intuitive navigation, and streamlined processes within your marketplace. Enable buyers to easily search, compare, and purchase products, while enabling sellers to efficiently manage their listings and orders. A seamless user experience enhances engagement and satisfaction.
- Trust and transparency: Foster trust and transparency between buyers and sellers by implementing robust seller verification processes, showcasing ratings and reviews, and facilitating open communication channels. By promoting trust and transparency, you create an environment conducive to successful transactions and long-term relationships.

Selected key success factors for B2B marketplaces in industrial markets II



- Streamlined procurement processes: Enable efficient procurement processes, including RFQs, bulk ordering, and customizable solutions. Simplify complex purchasing workflows, facilitate negotiations, and provide tools to manage quotes, contracts, and approvals. By streamlining these processes, you enhance efficiency and enable smoother transactions.
- Seamless integration with backend systems: Integrate with sellers' and buyers' backend systems, such as ERP (Enterprise Resource Planning) and CRM (Customer Relationship Management), to ensure seamless data flow. This integration streamlines essential processes such as inventory management, order processing, and invoicing, resulting in increased operational efficiency.
- Value-added services: Offer value-added services that enhance the overall buying experience. These
 services may include logistics management, financing options, and technical support. By providing
 these additional services, you differentiate your marketplace and provide a competitive advantage to
 buyers and sellers.
- Compliance with industry-specific regulations: Ensure compliance with industry-specific regulations, certifications, and standards. Stay updated with regulatory changes, safety guidelines, and quality assurance measures. By adhering to these requirements, you instill confidence in buyers and sellers, fostering trust and reliability within the marketplace.
- Continuous improvement and innovation: Embrace a culture of continuous improvement and innovation within your marketplace. Gather feedback from users, analyze market trends, and leverage technological advancements. This enables you to enhance the marketplace's features, functionalities, and user experience, staying ahead of the curve and meeting evolving industry demands.

Central Product Classification (CPC)



- The Central Product Classification (CPC) constitutes a complete product classification covering goods and services. It is intended to serve as an international standard for assembling and tabulating all kinds of data requiring product detail, including industrial production, national accounts, service industries, domestic and foreign commodity trade, international trade in services, balance of payments, consumption and price statistics.
- The CPC is structured in a hierarchical way with several levels of detail to accommodate various needs of users.
 Each product is identified by a numerical code, and the length of the code signifies the level of detail. For instance, a product at the most detailed level (a subclass) is identified by a code of five digits.
- Each level of the hierarchy serves a specific purpose. The first two levels represent broad categories of products, while subsequent levels offer increasing detail about the products in each category.
- It's worth noting that CPC doesn't categorize firms or industries directly. However, by categorizing the goods and services these firms produce, it indirectly provides a classification for the activities of firms.
- A practical example could be a car manufacturer. The cars they produce can be categorized under a specific
 code in the CPC, which corresponds to motor vehicles. This then provides a classification for the activities of that
 firm.
- It's important to note that the CPC is a dynamic standard that's subject to periodic reviews to incorporate changes in the market structure of products, the appearance of new products, and advancements in knowledge about products.
- Remember that CPC is designed for global use, not just for a specific country or region, making it an essential tool for the comparison of statistics on goods and services internationally.

Expected Contributions



- Contributes to platform governance literature by focusing on rule-based understanding of platform governance systems for organizations, not just individual users (Chen et al., 2022b; O'Mahony & Karp, 2022; Reischauer & Mair, 2018; Saadatmand et al., 2019; Zhang et al., 2022)
- Provides insights into governance systems and approaches in B2B
 marketplaces in the specific sector of nascent industrial markets (Anderson et al., 2022;
 Chen et al., 2022a; Kaplan & Sawhney, 2000; Lanzolla & Frankort, 2016)
- Contributes to understanding sweet spot of platform crowdedness in selecting complementors (Anderson et al., 2022; Chen et al., 2022a; Kaplan & Sawhney, 2000; Lanzolla & Frankort, 2016)
- Contributes to emerging discourse on **role of transparency in platform governance** by examining moderating factors that shape degree of transparency (Anderson et al., 2022; Chen et al., 2022a; Dushnitsky & Klueter, 2017)