Multiple-Case Analysis on Governance Mechanisms of Multi-Sided Platforms

Andreas Hein¹, Maximilian Schreieck¹, Manuel Wiesche¹, Helmut Krcmar¹

¹ Technische Universität München, Lehrstuhl für Wirtschaftsinformatik, andreas.hein@tum.de, maximilian.schreieck@in.tum.de, wiesche@in.tum.de, krcmar@in.tum.de

Abstract^{*}

The concept of multi-sided platforms (MSPs) plays an important role in the environment of companies with internet-based business models. In the recent years several new platforms emerged and disrupted long-established companies. Prominent examples are Uber or Airbnb, challenging the taxi and accommodation industry. The centerpiece of MSPs is the platform governance which orchestrates the communication between the involved parties. As this communication is crucial for each platform, this paper aims to analyze six different MSPs in terms of platform governance to identify how different mechanisms are implemented in practice and which tradeoffs different implementation strategies cause. The paper starts with a literature review to determine the state of research on platform governance mechanisms and synthesizes the results. After that, a multiple-case study is conducted to identify how the different companies implemented each dimension of platform governance. In a final step cross-case conclusions are drawn to highlight important tradeoffs, for example that centralized governance models offer a high degree of control in exchange for less user involvement and transparency when implementing governance mechanisms differently.

1 Introduction

Technology-enabled business models such as multi-sided platforms are continuing to grow in importance (Hagiu and Wright 2015). In general, an MSP generates value by connecting two or more different parties who want to exchange products, services or information (Caillaud and Jullien 2003; Rochet and Tirole 2003). Prominent examples are start-ups like Airbnb or Uber who are challenging traditional business models in the taxi or hotel industry. These Internet companies make their respective market more accessible by providing a platform where everyone can offer services or products to a mass market. The economic importance of MSPs can be highlighted by Alibaba initial public offering (IPO), which holds the title of the largest IPO in history (Forbes 2014).

^{*} The first and second author contributed equally. We thank the German Federal Ministry for Economic Affairs and Energy for funding this research as part of the project 01MD15001D (ExCELL).

The basis of an MSP is the platform itself which orchestrates the interactions between the different sides (Boudreau and Hagiu 2008). Accordingly, the platform governance is an important mechanism to manage the way of communication between the different parties (Evans 2012; Tiwana et al. 2010). Due to this reason it is important to understand how different governance mechanism are contributing to an MSP's success.

Despite the fact that pricing and competition in MSPs are analyzed holistically (Armstrong 2006; Caillaud and Jullien 2003; Eisenmann et al. 2006), the current state of research in terms of platform governance focuses mainly on comparing similar MSP models, such as the Google Play Store and the Apple App Store (Fautrero and Gueguen 2013; Manner et al. 2013). Examining opposed platform governance concepts could help understanding tradeoffs on implementing platform governance mechanism for different MSP models. Therefore, this paper focuses on the research question of *what are governance mechanisms for multi-sided platform and which tradeoffs have to be considered when designing governance mechanisms*. Answering these questions provides a better understanding on how governance mechanisms are practically implemented and what effects a different implementation causes. Furthermore, the classified aspects are the basis for the subsequent multiple-case analysis and will identify potential tradeoffs and impacts on varying governance implementations. Overall this paper provides a better understanding on how companies are addressing theoretically important governance mechanism. In doing so, practically important tradeoffs can be derived.

The remainder of the paper starts by describing the methods used. Then a theoretical view on platform governance follows covering the result of the literature review and describing the concluding summary table on platform governance mechanism. After that, the outcomes of the multiple-case analysis are the subject of discussion. Finally, the paper concludes by a discussion and conclusion highlighting major findings, limitations and outlining future research.

2 Methods

This study used a literature analysis in conjunction with a literature search design (Vom Brocke et al. 2009) to identify theoretically important aspects of platform governance. In order to ensure a certain degree of quality, the current state of research was classified using only reputable journals from the AIS Senior Scholars' Basket. The summary table (Miles and Huberman 1994) provides a basic structure to visualize the results. From there a multiple-case study analysis (Yin 2013) was conducted to yield a more robust and generalizable understanding of the different multi-sided-platforms (MSPs).

2.1 Literature search design and literature analysis

For the literature design we use the framework for literature reviews starting with the definition of the review scope (Vom Brocke et al. 2009). The literature search was designed to identify commonly accepted, peer-reviewed research in terms of platform governance. The next step is the underlying concept which assists finding qualitatively, reputable and acknowledged authorities by using the Senior Scholars' Basket as a source. Thereafter the literature search consisting of the search strings 'Platform' AND 'Governance' and 'Online' AND 'Governance' looking in the title or with the exact phrase, 'Platform Governance' and 'Online Governance' in the text is set up. For the databases we selected ScienceDirect, ACM, AISL, Ebscohost and Springer Link. The outcomes of this literature and database review were 372 papers according to the search design. In the first

iteration the abstract and title were scanned to select relevant papers dealing with platform governance mechanisms. The resulting 52 papers were further investigated in a second iteration reading the full text. Therefore, only papers were chosen, which address the complex of platform governance mechanisms. We complemented the resulting six papers through a forward and backward search resulting in a total of 13 relevant papers. The literature analysis and synthesis is visualized by a summary table (Miles and Huberman 1994). Lastly the research agenda answers the first part of the research question by identifying the current state of research of platform governance which will be used as the basis of the multiple-case analysis.

The summary table is beneficial for structuring data that share similar characteristics and mechanisms on platform governance. Therefore, we analyzed each paper for potential platform governance dimensions. After that synthesizing and combining the different results compiled an overview (Miles and Huberman 1994).

2.2 Case study review

For the multiple-case study analysis we selected six companies to investigate on platform governance mechanisms according to our research question. We selected the cases based on the MSPs success and the underlying business model, whereby success is measured by taking the market capitalization of the company. Due to the fact of different underlying business models, we are able to draw cross-case results, which result in a generalizable conclusion. The multiple-case study method fits these needs, as it replicates findings across all cases and helps to detect similar and contrasting results (Yin 2013). For the cases we choose Airbnb and Uber as members of the one billion dollar start-up club, representing service platforms in the shared economy (Zervas et al. 2015; WSJ 2015). Alibaba and Facebook were chosen as cases for the merchant and social network model and the Google Play Store and the Apple App Store as application platforms, where success is measured by taking their market capitalization. In order to draw also conclusions within similar business models, we decided to select two cases in the category of service platforms and application platforms, as these platforms have shared similarities in size and market capitalization (PricewaterhouseCoopers 2015). The respective cases issue with one or more platform governance mechanisms shows the practical implementation and possible implications. Furthermore, each case validates the conclusion drawn from the cases before. Using the multiple-case study method helps to follow a certain replication logic and generating robust and evident based data (Yin 2013).

We used archival data from existing case studies, publications and information available on the company website as input for the multiple-case study analysis. Additionally, we selected sources that describe one or more of the dimensions shown in the summary table. Therefore, we used a literature search with the companies' names and each dimension of the summary table to identify relevant cases. As some mechanisms might have changed over time, e.g. the Google Play Stores evolvement from open to more closed (Fautrero and Gueguen 2013), we validated all findings according to the companies' websites. At the end of each case study, we finished with a report summarizing, updating and validating the summary table. In the last step we draw cross-case conclusions to identify tradeoffs for varying implementations of mechanisms.

3 Platform governance mechanisms

This chapter describes the classification of the current state of platform governance research in a summary table.

For the development of the summary table we investigated each paper to identify different platform governance mechanisms. Therefore, we started by collecting all relevant governance components in a first version of the summary table. After that, we combined similar mechanisms into one dimension in order to aggregate the information. In the last step, we synthesized the data by grouping related dimensions. Each dimensions consists of a group of mechanisms, an aggregated description as provided in the papers and the data source. Table 1 illustrates the final version of the platform governance summary table and will be explained in detail below.

Dimensions	Mechanisms	Description	Source
Governance structure	 Governance structure Decision rights Ownership status 	Centralized or diffused governance. Platform governance then entails how the authority and responsibility for each class of decisions is divided between the platform owner and module developers. Ownership declares whether a platform itself is proprietary to a single firm or is shared by multiple owners.	(Nambisan 2013; Tiwana et al. 2010)
Resources & documentation	Platform transparencyPlatform boundary resources	Documentation ensures easy understanding and usability of the platform. Transparency of the platform. Governance decisions concerning the platform's marketplace are easy to follow and understand. Application programming interfaces (APIs) for cultivating platform ecosystems through third-party development.	(Benlian et al. 2015; Ghazawneh and Henfridsson 2013)
Accessibility & control	 Output control & monitoring 	The platform governance pre-specifies the principles by which outputs are evaluated, penalized, or rewarded.	(Tiwana et al. 2010)
	Input controlSecuring	Controlling which products or services are allowed. Assess quality of services or products as a gatekeeping mechanism.	(Tiwana et al. 2010; Ghazawneh and Henfridsson 2013)
	 Platform accessibility Process control Platform openness	Who has access to the platform and are there any restrictions on participation? Who controls the process and is in charge for setting up regulations? Is the platform open or closed? Constraints: Technical performance cost of required equipment, and cost of selling.	(Benlian et al. 2015; Eisenmann et al. 2006; <u>Tiwana et al. 2010;</u> <u>Tilson et al. 2010;</u> Boudreau 2010)
Trust & perceived risk	 Strengthen trust Reduce perceived risk 	Platform enhances trust. Perceived risk of platform participants is minimized.	(Nambisan 2013)
Pricing	• Pricing	Pricing is depended on who is setting the price, who decides on participation, who is paying and who values.	(Bakos and Katsamakas 2008; Tan et al. 2015; Caillaud and Jullien 2003; Armstrong 2006)
External Relationships	management	Management of inter-firm dependencies. Architecture of participation. Firm's ability to manage the relationships between its IT function and external stakeholders. The platform allows technical interoperability between other systems.	(Benlian et al. 2015; Tan et al. 2015; Selander et al. 2013)

Table 1:	Final platform governance summary table
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The first dimension deals with the overall *governance structure* and contains decision rights and the ownership status of the company. A platform governance can for example be structured centrally or diffused (Nambisan 2013). Furthermore, it is important how the authority and responsibilities are organized (Tiwana et al. 2010). Is it all centered with the platform owner or is one side of the platform empowered over another?

Platform transparency and usage of platform boundary resources is covered in *resources* & *documentation*. Platform boundary resources such as application programming interfaces (APIs) were identified as an important factor for cultivating a platform ecosystem (Ghazawneh and Henfridsson 2013). Offering helpful tools which support developing applications, transparency on how to develop and how the platform works are important as well (Benlian et al. 2015).

The next three dimensions can be clustered as *accessibility & control*, starting with the mechanisms of output control and monitoring. According to the literature, output control is defined as a pre-specification of principles by which an output of a developer is evaluated, penalized or rewarded (Tiwana et al. 2010). In order to apply this dimension to our case study selection, we broaden the scope to user or developer output. Control and securing covers what is allowed to be on the platform (Tiwana et al. 2010). Another way of protecting the platform of unwanted input is securing it to establish control (Ghazawneh and Henfridsson 2013). The third dimension is platform accessibility and platform openness and covers regulations on restrictions and ownership of those (Eisenmann et al. 2006). Examples for constrains are the technical performance, cost of required equipment, the cost of selling and distribution restrictions in terms and conditions (Benlian et al. 2015). Another important aspect is process control, which contains methods and procedures that are in place to regulate the platform (Tiwana et al. 2010).

Trust & perceived risk forms the next dimension which relates to the nature of a platform ecosystem to enhance trust (Nambisan 2013) on the user or developer side. The seventh section topics *pricing* as an important platform governance mechanism. It clarifies which party is setting the price, who decides on participating on the platform, who is paying and which side profits (Bakos and Katsamakas 2008; Tan et al. 2015; Armstrong 2006; Caillaud and Jullien 2003). Lastly the eighth dimension is represented by managing *external relationships* (Tan et al. 2015; Selander et al. 2013). Another aspect is that the platform supports the mechanism of interoperability between different systems (Benlian et al. 2015).

Overall the underlying business model can have an impact on all mentioned dimensions and how the implementation of governance mechanisms is shaped. Therefore, we complemented this dimension in the following multiple-case study analysis.

4 Multiple-case study

The implementation of a multiple-case analysis combines the summary table and the selection of companies to identify how and if multi-sided-platforms implement each dimension. According to our case study design we determined several cases for each company to answer research question two. Therefore, we populate the dimensions for all companies. It should be noted that each company underlies a different business model with distinct products and services, what might be the reasons for a different implementation. This is why we included an additional dimension addressing the business model. We focused on observing platform governance mechanisms on a general level to ensure comparability. In the second part we focus on drawing cross-case conclusions to answer the second part of our research question. We analyze the first three dimensions in detail, as the implementation of those provides unique insights in addressing tradeoffs.

4.1 Results of the multiple-case study analysis

Table 2 summarizes the practical implementation of governance mechanisms ordered by the selected companies. We start with dimension number four and explain the cases one to three in the following paragraph to illustrate tradeoffs in a detailed analysis, as they differ significantly in the way how they were implemented.

Business Model	External relationships	Pricing	Trust & perceived risk	Accessibility & control			Resources & documentation	Governance structure	Dimension
Underlying business model	• External relationship management	Pricing	 Strengthen trust Reduce perceived risk 	Output control Monitoring	Input controlSecuring	 Platform accessibility Process control Platform openness 	 Platform transparency Platform boundary resources 	 Governance structure Decision rights Ownership status 	Mechanism
Social network	Strategic partnerships	Advertising, marketing, applications	Privacy settings, privacy issues	Ratings, "Likes", comments, Advertising dashboard	Community standards	No restrictions	API, Software Development Kit (SDK), documentation	Autocratic and centralized, self- organizing platform	Facebook (Facebook 2015; Champoux et al. 2012; Goodman and Dekay 2012)
Merchant	Partnerships through acquisition	Sales margins, payment and service fees	Several services to strengthen trust	Reviews, ratings, feedback profile, statistics	Optional inspection service	No restrictions	API, SDK, learning and training center	Central, self- organizing	Alibaba (Tan et al. 2015; Wing Sum et al. 2014; Alibaba 2015)
Service platform	Localities and local communities	Service and conversion fee	Insurance, verification and rating system	Asynchronous ranking, reviews, statistics, comments	Identity verification	Host is in control, identity verification,	Help center	Split, host has decision rights	Airbnb (Zervas et al. 2015; Satama 2014; Airbnb 2015; Kaplan and Nadler 2015)
	Strategic partnerships, service extension	Dynamic pricing, service fee	Background check, pricing surging, insurance, privacy issues	Two-sided ranking, suspension on ranking, comments	Background check, car requirements	Background check, Uber controls pricing	Help center, API, documentation	Split, Uber controls pricing, passenger controls through rating	Uher (Hall and Krueger 2015; Feeney 2015; Rogers 2015; Bond 2015; Isaac 2014; Uber 2015)
Application platform	Many partnerships	30% of sales, one time registration fee	Malware, rating, diversity of systems	Ratings, comments, number of downloads	No manual app reviews	Google developer account needed	SDK, API, documentation, checklist	Centric, from loose to tight control	Play Store (Fautrero and Gueguen 2013; Pon et al. 2014; Google 2015; Tilson et al. 2012)
	Selective, strategic partnerships	30% of sales, annual fee	Ratings, feedback mechanism, less fraud and mal ware	Ratings, comments, number of downloads	Manual reviews. censorship, protected system	Apple developer account needed	SDK, API, toolkits, documentation, guides	Centric, tight control	App Store (Tilson et al. 2012; Pagano and Maalej 2013; Chin et al. 2012)

 Table 2:
 Result of the multiple-case analysis

Input control and securing: A vivid comparison of input control can be drawn between the Google Play Store and the Apple App Store. Where Apple follows strict censorship and manual application review processes, Google is less strict and executes only automated reviews. The result is that Apple has less security or quality issues, where the Play Store has a broader variety of applications (<u>Tilson et al. 2012</u>; Pon et al. 2014). This comparison shows that no or laissez-faire input control causes a greater variety of input but entails a decreased quality.

Output control and monitoring: Result of the case study analysis is that all review companies use an output control mechanism to check the quality of products or services. Facebook for example uses "Likes", ratings and comments to show the popularity of user-generated content. Especially

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likes indicate the acceptance of content and are an important part for Facebook's infecting success. The downside of this mechanism is the increase in perceived risk (Roosendaal 2011). Google and Apple implemented a one way ranking system to check the quality of applications (Pon et al. 2014; Pagano and Maalej 2013), where Alibaba, Uber and Airbnb use a two-way-ranking system, where the supplier and demand side are allowed to rank each other (Isaac 2014; Zervas et al. 2015; Tan et al. 2015). Both mechanisms shift quality assurance to the respective parties and therefore reduce administrative work for the platform owner in a tradeoff for a decreased control (Tan et al. 2015).

Trust & perceived risk: Alibaba provides several services such as Alipay, the 'gold supplier' status or Trustpass to increase trust for the platform. Therefore users are more likely to use the platform due to the protective mechanisms (Wing Sum et al. 2014; Tan et al. 2015). Facebook is offering privacy settings to reduce perceived risk, but is not successfully overcoming those problems. The resulting tradeoff is that users have the chance to use Facebook anonymously without social consequences which can lead to a higher degree of perceived risk as the result of cyber mobbing or crimes (Stutzman et al. 2013), where Alibabas' services decrease anonymity but increases trust.

Pricing: The case study review shows that all underlying price models are strongly related to the business models and are therefore hard to compare. However, similar business models like the Play Store and the App Store show that higher registration fees for developer can be considered as a quality gate trading quantity over quality (<u>Tilson et al. 2012</u>). The case of Uber showed that a lack of transparency on price setting can cause issues regardless of the business model (Bond 2015).

External relationships: The example of the Google Play Store and the Open Handset Alliance with 34 founding members aiming for an open standard for mobile phones illustrates the rise of the Play Store's underlying operating system Android which even exceeded Apples' iOS growth (Tilson et al. 2012). As Google wanted to maintain the cohesion of Android and the Play Store to protect it from patent issues, the tradeoff was limiting the platforms openness and partnerships (Fautrero and Gueguen 2013).

Business model: In order to reflect the fact that each of the selected business models has an impact on the set up of platform governance mechanism, we included this dimension as well. Nevertheless even similar business models like Airbnb and Uber, delivering services and described as shared economy, are different in terms of services like accommodations and transportations (Uber 2015; Airbnb 2015). In order to draw correct conclusions, we recommend comparing not only similar business models, but also similar products and services like the App Store and the Play Store.

In general, all dimensions show tradeoffs if implemented differently. As the first three dimensions show significant contrasting ways of realizing governance mechanisms, they will be analyzed in the following chapter in detail.

4.2 Detailed tradeoff analysis

Governance structure: This dimension shows the tradeoff between a high degree of centralization compared to a split approach between central and de-centralized governance. Facebook and Apples governance can be described as centralistic, as no one besides of the platform owner is involved in setting up and changing the platform governance, which causes in-transparency on the user side but ensures full platform control (Tilson et al. 2012; Facebook 2015). Furthermore users can only react on governance changes and are therefore less actively involved (Booth 2014).

Uber can be described as half centralistic and half de-centralistic. On the one hand Uber has full control over price regulation, but out-tasks gatekeeping mechanism to customers by implementing

a driver rating system, where drivers below a certain rating are automatically dismissed from the platform. Having full control over pricing allows Uber to commercialize the platform for high profit, but also causes negative feedback and press. Shifting control to the user by out-tasking quality assurance established a self-organizing platform and reduced administrative work for Uber as no further quality regulating processes are needed (Isaac 2014; Bond 2015; Feeney 2015).

The last example for the dimension platform governance structure is the Google Play Store. It shifted from a free to use open source version with a de-centralistic governance to a more tight led model (<u>Tilson et al. 2012</u>; Fautrero and Gueguen 2013). The de-central and open approach led to a rapid growth in terms of user base in comparison to the App Store but also brought tensions due to the lack of control and problems to commercialize the platform (Fautrero and Gueguen 2013). So the tradeoff of having a more closed and centralized governance with platform control and regulation abilities is a reduced user growth and problems with commercialization.

Across all cases and business models, we could identify tradeoffs in implementing the platform governance structure in different ways. A centralized governance model offers a high degree of platform control and commercialization in exchange for less transparency and user involvement. On the other side a more de-centralistic approach allows to benefit from self-organizational effects by reducing administrative work when implementing for example rating systems to determine the product or service quality. The tradeoff is a shift in platform control towards the users making it harder to regulate the platform.

Resources & documentation: The two different characteristics of this dimension are if a platform provides additional resources like APIs or SDKs coupled with documentation or not. Uber and Facebook represent the first manifestation of this dimension, where both provide an API to open up new business markets (Goodman and Dekay 2012; Uber 2015). Uber for example expanded its platform by integrating the service of taxi reservations into hotel booking systems (Martin 2014). Facebook used the API to crate the sub-market of applications, which is now a million dollar market with over 150 million user every month (Facebook 2015). By providing an API both companies allowed developers to create new out of the box applications.

The second manifestation of resources & documentation is shown by the cases of the Google Play Store and the Apple App Store. For one and the other company providing an API and SDK is mandatory to get developers engaged (Apple 2015; Google 2015). Therefore, having an API and SDK is a prerequisite for this business model.

Alibaba illustrates the third appearance of implementing platform boundary resources and platform transparency. The company offers an API in order to get a connection to the suppliers' enterprise resource planning system. Furthermore the API is used for affiliate programs to increase sales for commissions (Alibaba 2015). The result is shortening of distribution, supply and customer channels and an increase in connectivity and effectiveness of business.

Lastly Airbnb represents the fourth manifestation having no official API or SDK in place (Airbnb 2015). However, there is a sub-community hosted by Airbnb called "nerds.airbnb.com" illustrating concepts like deep linking to overcome the fact of not having an API. Furthermore, unofficial platforms like insideairbnb.com appeared, crawling data from the Airbnb platform and evaluating it. The result of not having an API is that there are no interfaces available to get, analyze or validate the data, which leads to a high degree of information control. On the opposite, business opportunities are dismissed in order to keep information superiority.

The conclusion is that implementing this dimension offers companies to open up new business markets, increase interconnectivity and effectiveness of distribution, supply and customer channels as well as being a prerequisite for business models relying on external developers. Arguments for not having an API are keeping information superiority by having a closed architecture, dismissing business opportunities and opening the field for third party platforms publishing platform data.

Platform accessibility: This dimension divides in two categories, making the platform accessible for everyone and having restrictions. An example for the first category is Facebook, struggling with negative feedback and abuse but granting users anonymity (Champoux et al. 2012; Facebook 2015). The platform started with a restriction that only allowed universities to join and opened in 2006 for public, gaining massive user growth (Stutzman et al. 2013). Alibaba followed a similar story from being restricted to China and opening globally. Similar to Facebook a growing period followed, accompanied with an increase in perceived risk. The company introduced services like "gold supplier" status or Trustpass to mitigate this risk (Wing Sum et al. 2014; Tan et al. 2015).

Airbnb and Uber are more restrictive, as they implemented mechanisms to secure the platform. They demand background checks and identity verification to strengthen trust and reduce anonymity. In terms of process control Airbnb empowered the host to decide whom to pick for a stay and how much to charge. The result is transparency in exchange for a lower platform control. Uber follows the opposite approach, by keeping the pricing superiority, causing in-transparency going along with negative feedback, process control and increased monetization (Zervas et al. 2015; Hall and Krueger 2015; Kaplan and Nadler 2015; Isaac 2014; Bond 2015).

The last cases for platform accessibility are the Google Play and Apple App Store. Google follows an open source approach, bringing the store to a variety of devices, reaching more potential users. Results are a rapid development of applications and user growth accompanied by a lower usability, as the software needs to work on a variety of devices (Fautrero and Gueguen 2013; Pon et al. 2014; Google 2015). Apples' App Stores version on the other hand is restricted to Apple devices. Furthermore, a service development kit and hardware is needed to develop applications. This limits openness in exchange for high process control, quality and customer satisfaction (Chin et al. 2012; Pagano and Maalej 2013; Tilson et al. 2012; Apple 2015).

In summary we could identify that complete openness goes with a potential higher user base, a less secure platform due to anonymity and increased perceived risk. Having restrictions in place showed that the quality of products and services can improve, process control is retained causing intransparency and negative feedback limiting user freedom. This summary supports the idea of a maturity model, where critical mass is achieved in the early stages with low control, where a more mature state focuses on platform control (Wareham et al. 2014) and complements those findings by highlighting tradeoffs that need to be taken into consideration.

5 Discussion & conclusion

This study provides insights on platform governance, the centerpiece of multi-sided platforms (MSP), by showing how platform governance mechanisms discussed in theory are implemented in practice. The results of this paper allow companies to see which tradeoffs they need to take into consideration, when setting up a governance model. Furthermore the literature review (Vom Brocke et al. 2009) identifying platform governance mechanisms in combination with a multiple-case study analysis (Yin 2013) of six successful MSPs provides evidence based data on how those theoretical concepts are practically implemented, what has been identified as a research gap (Manner et al.

2012). Important findings are, for example, that a decentralized governance, i.e. no restrictions in terms of accessibility or a low input control, may lead to a more rapid user growth and could therefore be used in the early mature states, where a centralized governance, having restrictions and limited accessibility offers a high level of platform control in exchange for a reduced user involvement and transparency on governance processes. This also supports the thesis of different states of maturity in MSPs (Wareham et al. 2014). It needs to be noted that there are methodical limitations. By using the Senior Scholars' Basket we ensure a high quality database. In order to get a more detailed and recent picture of the literature, this review needs to be extended. Despite the fact that this study underlies the principle of analytical generalization (Yin 2013) only six companies are compared. Therefore, the results are only a first indication and future research should substantiate the findings with more data. There might be an effect of multi-homing (Doganoglu and Wright 2006) with different log-ins and exclusivity. Also an analysis of not only similar business models, but more specific on comparable services and products needs to be carried out, to determine their unique effects on the platforms governance. It would be also interesting to see if non-successful MSPs differ in implementing platform governance mechanisms.

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