The Platform Owner's Challenge to Capture Value – Insights from a Business-to-Business IT Platform

Completed Research Paper

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Abstract

IS research has acknowledged the increasing importance of IT platforms. While substantial insights on value co-creation between the platform owner and complementors have been established, the platform owner's challenge to capture value remains largely unaddressed. We therefore conduct an exploratory field study of an enterprise software vendor who has launched a business-to-business IT platform. Conducting 27 interviews with actors involved in the platform ecosystem, we derive three distinct mechanisms of value capture: absorption, co-selling, and verticalization. We interpret how these mechanisms of value capture in turn affect value co-creation. With our results, we, first, enhance literature on value in IT platforms by adding mechanisms of value capture to the already established mechanisms of value co-creation. Second, we contribute to the discussion on the impact of digital business strategies on firm performance by showing that an organization that implements an IT platform needs to consider value co-creation and value capture jointly.

Keywords: Value capture, IT platform, platform ecosystem, value co-creation, platform owner

Introduction

In today's hypercompetitive markets, firms no longer create value on their own or in dyadic relationships with supply chain partners. Instead, firms co-create value with partners as part of a fragmented interfirm network (Bitran et al. 2007; Pagani 2013). In order to benefit from value co-creation in their interfirm networks, firms need to capture a sufficient share of the value that is co-created (Bharadwaj et al. 2013; Rai and Tang 2014). As value co-creation and capture can affect each other in both reinforcing and alleviating ways, it remains a key challenge for firms to make most of the interfirm networks they are involved in (Lepak et al. 2007).

In the last decade, digital business strategies have emerged that rely heavily on IT to coordinate different actors participating in value co-creation (Bharadwaj et al. 2013). In particular, IT platforms supporting multisided digital business models have proven to enable value co-creation in interfirm networks (Grover

and Kohli 2012; Venkatraman et al. 2014). IT platforms are IT artefacts that provide core functionality shared by the applications that interoperate with it and the interfaces through which they interoperate (Baldwin and Woodard 2008; Boudreau 2007), thus they enable collaboration with partners and "unlock" the potential of a broader ecosystem of complementors (i.e., third-party developers) for value co-creation (Kuk and Janssen 2013; Zittrain 2006).

While value co-creation on IT platforms has been intensely studied during the last years, the platform owner's challenge to capture value is still poorly understood. We identify two main reasons why this is the case. First, the IS domain has predominantly focused on the effect of IT on value co-creation, for example the effect of improved coordination in supply chains through IT integration (Rai et al. 2006). Value capture is rarely considered as distinct mechanism alongside value co-creation – although this approach has been identified as relevant and promising in strategic management research (Lepak et al. 2007; Priem 2007). In research on IT platforms, for example, boundary resources (Eaton et al. 2015; Ghazawneh and Henfridsson 2013) and control mechanisms (Boudreau 2010; Manner et al. 2013; Tiwana 2015) have been shown to contribute to value co-creation. However, it remains unclear what share of the co-created value accrues to the platform owner. Few distinct mechanisms of value capture have been identified such as pricing (Hagiu 2006; Tiwana 2014) and bargaining (Oh et al. 2015) between platform owner and complementors. These mechanisms have been derived from ideal platform models and may not sufficiently acknowledge the "complex and dynamic coordination across multiple companies" that is required in IT platforms (Bharadwaj et al. 2013, p. 478).

Second, in digital business strategies, value is captured from interfirm networks, thus value capture mechanisms might in turn affect the ongoing value co-creation in the interfirm network (Bharadwaj et al. 2013; Rai and Tang 2014). In the context of IT platforms, value capture refers to claiming parts of the value that is co-created within the platform's ecosystem (Venkatraman et al. 2014). This requires mechanisms that let platform owners claim a share of the value in the interfirm network without alleviating value co-creation. For example, the platform owners can provide boundary resources to their partners to enable them to co-create value, while claiming a certain share of their revenue (Eaton 2012). As the share the platform owners claim gets bigger, the partners' incentives to co-create decrease. This interaction is raised in literature on IT platforms (e.g., Tiwana 2014), but has rarely been analyzed for distinct mechanisms of value capture. Our overall research objective is therefore *to develop an empirical understanding of the mechanisms platform owners apply to capture value from IT platforms and how these mechanisms in turn affect value co-creation.*

Towards this end, we conduct an exploratory case study of an enterprise software vendor who has launched a business-to-business (B2B) IT platform. This case is particularly suited to explore value capture, as the platform owner *IS-Corp* (anonymized) is an established, successful organization that has already gathered significant experience in implementing IT platforms. Based on the explorative case study, we observe a variety of measures taken to capture value from the IT platform. We classify the observed measures into three mechanisms of value capture: absorption, co-selling, and verticalization. We describe these mechanisms along with their manifestations and interpret their interaction effects on value co-creation.

With our results, we contribute to the understanding of how IT platform ecosystems generate value and how the different actors of the ecosystem share the generated value. This has implications for the ongoing debate of openness and control of IT platforms and informs the more general discussion of the performance of digital business strategies that are based on interfirm relationships (Bharadwaj et al. 2013). Our insights furthermore inform platform owners in their challenge to establish sustainable IT platforms.

Theoretical Background

As recommended for exploratory case studies, we develop a theoretical pre-understanding of value capture in IT platforms (Walsham 1995). This covers extant work on value co-creation and capture as distinct mechanisms as well as the current state of knowledge on value capture in IT platforms.

Value Co-creation and Value Capture as Distinct Mechanisms

To stand their ground in today's hypercompetitive markets, firms can no longer solely rely on their own resources and capabilities but need to collaborate with partners to leverage their resources and capabilities

(Ferrier et al. 2010; Tanriverdi et al. 2010). Consequently, the locus of value creation has shifted from the single firm to supply chains and, more recently, to interfirm networks that may be complex and fragmented (Bitran et al. 2007; Pagani 2013; Peppard and Rylander 2006). This shift in the locus of value creation corresponds to management researchers moving from the resource-based view (Barney 1991; Wernerfelt 1984) towards a relational view of the firm (Dyer and Singh 1998). To benefit from the interfirm relationships in these networks, firms need to address a twofold challenge: (1) co-creating value by aligning decisions, resources and activities with their network partners (Grover and Kohli 2012; Im and Rai 2014; Rai and Tang 2010) and (2) capturing a sufficient share of the value that is co-created within the interfirm network (Bharadwaj et al. 2013).

To outline this twofold challenge, we first clarify our understanding of the terms value, value co-creation, and value capture. We interpret *value* as exchange value, "the amount the consumer actually pays, representing revenue to a value system" (Priem 2007, p. 220, based on Bowman and Ambrosini 2000). The term value system in that definition illustrates that the recipient of the exchange value is not necessarily a single firm but can also be an interfirm network that co-created the value the customer pays for. With *value co-creation*, we broadly refer to the collaboration between multiple stakeholders (Ranjan and Read 2016). This understanding of value co-creation goes beyond co-creation with customers, a view coined in marketing literature (Chen et al. 2012; Prahalad and Ramaswamy 2000; Zwass 2010). Our understanding explicitly considers other organizations as partners for value co-creation, a view established in IS research (Han et al. 2012; Lempinen and Rajala 2014; Sarker et al. 2012; Schreieck and Wiesche 2017; Venkatraman et al. 2014). In particular, complementors of a platform ecosystem can be partners for value co-creation (Smedlund 2012). In line with that, we refer to *value capture* as "the appropriation and retention [...] of payments made by consumers in expectation of future value from consumption" that one member of a value system can claim for itself (Priem 2007, p. 220).

The twofold challenge of value co-creation and value capture has been acknowledged in management research on value creation, but Lepak et al. (2007) and Priem (2007) note that still many studies do not distinguish processes of value creation (such as value co-creation in the case of interfirm networks) and value capture. For example, the relational view of the firm identifies determinants for relational rents in interfirm relationships but does not clarify how these rents are shared among the partners in the interfirm relationship (Dyer and Singh 1998). Consequently, understanding and optimizing value co-creation in an interfirm network does not necessarily increase the focal firm's market performance – value capture has to be considered along with value co-creation (Bowman and Ambrosini 2000). As a rule of thumb, however, an increase in value co-creation leads to a better initial position for value capture. This relation is stronger, the better the focal firm's bargaining position vis-à-vis co-creation partners (Bowman and Ambrosini 2000). The differentiation of value co-creation and value capture can be crucial in situations where value is successfully co-created but a participant struggles to capture a sufficient share. For example, suppliers in the automotive industry nowadays play an important role in creating innovation together with the car manufacturers. Due to the strong market positions of the manufacturers, suppliers are in a difficult bargaining position to capture their share of the value created by the innovation (Prahalad and Ramaswamy 2000). Furthermore, there are situations in which value is co-created but some actors do not aim at capturing value as for example in open source communities (Shah 2006) or in non-profit organizations (Schreieck et al. 2017).

According to IS research, IT plays a crucial role in value creation of firms. In particular in today's complex interfirm networks, IT has become a central element of digital business strategies that include value co-creation within interfirm networks and value capture of different actors in the network (Bharadwaj et al. 2013). Thereby, IT as part of a digital business strategy can alter existing mechanisms of value co-creation and capture and introduce completely new mechanisms (Chen et al. 2010; Venkatraman et al. 2014). However, as digital products and services merge with the underlying IT infrastructure (Bharadwaj et al. 2013; El Sawy 2003), it becomes more difficult to identify the mechanisms of value creation and to distinguish between value co-creation and value capture as constituent parts of value creation. Similar to Lepak et al. (2007) in management research, Bharadwaj et al. (2013) state that differentiating value co-creation and value capture while considering their interplay will potentially bring our understanding of digital business strategies and their impact on the performance of IT platforms forward.

Value Capture in IT Platforms

Implementing IT platforms represents a digital business strategy enabled by new technological means such as cloud computing or in-memory databases (Bharadwaj et al. 2013). We define IT platforms as "the extensible codebase of a software-based system that provides core functionality shared by the applications that interoperate with it and the interfaces through which they interoperate" (Tiwana et al. 2010, p. 676). Due to their extensible nature, IT platforms enable the platform owner to collaborate with partners to "unlock" the potential of a broader ecosystem of complementors for value co-creation (Kuk and Janssen 2013; Ondrus et al. 2015; Zittrain 2006). Thereby, IT platforms facilitate a multisided business model that brings together complementors on the one side and end-users on the other side. Taken together, we refer to the IT platform, its interfaces and complementary applications, and the platform's stakeholder as platform ecosystem. The terminology related to IT platforms that represents our understanding in this study is summarized in Table 1.

| Term	Definition	Sources
IT platform	"[T]he extensible codebase of a software-based system that provides core functionality shared by the applications that interoperate with it and the interfaces through which they interoperate."	Tiwana et al. (2010, p. 676); see also Baldwin and Woodard (2008)
Application (app)	An add-on software subsystem or service that connects to the platform to add functionality to it. Also referred to as a module, extension, plug-in, or add-on.	Parker et al. (2017); Tiwana (2014)
Interfaces	Specifications and design rules that describe how the platform and applications interact and exchange information.	Tiwana (2014)
Platform owner	An individual or organization representing the legal entity that owns the platform.	Tiwana (2014); Evans et al. (2006)
Complementor	Individuals or organizations that develop one or more applications for the IT platform (also referred to as third-party developers).	
End-user	Individuals or organizations that use the applications available on the IT platform.	
Platform ecosystem	The platform and the applications specific to it as well as the stakeholders of the platform. Also referred to as platform-based software ecosystem, or software ecosystem.	Cusumano and Gawer (2002); Tiwana (2014)

Table 1. Definition of Key Terms in the Context of IT Platforms

Existing research on IT platforms has predominantly aimed at explaining how IT platforms enable value co-creation between the platform owner and the complementors (Schreieck et al. 2016). For example, it has been found that boundary resources, that is, resources the platform owner provides to facilitate the development of complementary applications, stimulate value co-creation (Eaton et al. 2015; Ghazawneh and Henfridsson 2013). A balance of openness and control is required to optimize value co-creation (Boudreau 2010; Ghazawneh and Henfridsson 2013; Hein et al. 2016). However, value co-creation and value capture need to be combined in a cross-pollinating way to bring an IT platform forward (Ceccagnoli et al. 2012). The provision of boundary resources can be costly and thus impede value capture despite its positive effect on value co-creation. Similarly, increasing openness of a platform ecosystem can spark value co-creation but may also weaken the position of the platform owner to capture value. To understand how a digital business strategy such as implementing an IT platform is successful, it is necessary to identify and understand mechanisms of value capture as well as interaction effects between value capture and value co-creation.

To complicate matters, the notion of value capture in IT platforms differs from the more general strategic management interpretation of value capture as appropriating value from a market (Lepak et al. 2007; Lippman and Rumelt 2003). In the context of IT platforms, value capture refers to appropriating value from the overall value that is co-created in the collaboration of the platform owner with the platform's complementors (Huang et al. 2012). As a result, insights from management research that revolve around "isolating mechanisms" are not applicable for value capture within IT platforms. Isolating mechanisms represent barriers to imitation that preserve profits in the face of competition. While these mechanisms might be relevant in competition between different IT platforms, they do not address the challenge of capturing value from the interfirm relationships within the platform ecosystem.

More recently, research on IT platforms has acknowledged the importance of value capture and provides first insights on how platform owners can maximize value capture. Considerations on pricing (Hagiu 2006; Tiwana 2014) and bargaining (Oh et al. 2015) help platform owners to configure revenue sharing with complementors in their favor. However, value capture in IT platforms goes beyond cashing a certain percentage of the complementors' revenue. For example, the absorption of complementary solutions (Eisenmann et al. 2009; Parker et al. 2017) or the investment in selected complementary products (Rietveld et al. 2016) have been laid out as possible mechanism of value capture. With the notable exception of (Rietveld et al. 2016), we lack empirical understanding of the mechanisms of value capture, as most results are derived from idealized models of large-scale platforms. Some IT platforms such as Google's Android come close to these models but the majority of IT platforms, particularly in the B2B context, are more heterogeneous and complex, changing also the context for value capture. For example, it remains unclear, how the degree of openness – a key decision to be made when implementing an IT platform (Ondrus et al. 2015) – is related to value capture.

In sum, IS research provides us with a good understanding of value co-creation in IT platforms, but lacks insights on mechanisms that enable value capture along with their interaction effect on value co-creation. Figure 1 locates value capture in IT platform ecosystems alongside value co-creation and Figure 2 illustrates the focus of our study based on our theoretical pre-understanding of value capture in IT platforms:

Figure 1. Value Co-Creation and Value Capture in IT Platform Ecosystems

Figure 2. Theoretical Pre-Understanding of Value Capture in IT Platforms
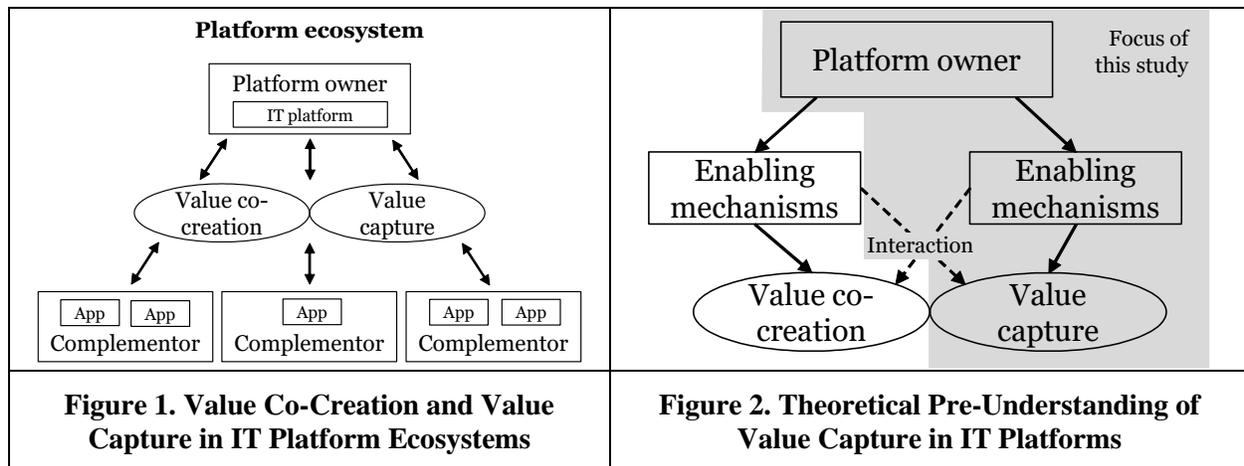
Research Design

In this section, we describe our case organization and the explorative case study approach we adopted. An exploratory case study is suitable for several reasons. First, the subject of our study, firms that engage in IT platforms as digital business strategy, is complex and dynamically evolving. It is thus advisable to study this phenomenon in its context with an iterative interplay of data collection and analysis. Second, the theory gap of value capture we identified is worthwhile to be researched with an explorative, inductive approach. Due to the heterogeneous and young field of platform theories, developing a theoretical framework and formulating hypothesis upfront is hardly feasible (Urquhart et al. 2010).

Case Description

IS-Corp is a multinational software company focusing on enterprise software solutions. In this study, we focus on one of *IS-Corp's* core products, an enterprise software used in various industries and companies of different sizes. To develop and market this software, *IS-Corp* collaborates with a large network of partners. As customers expect the software to be an end-to-end solution that covers all relevant business processes, *IS-Corp* faces a merely infinite number of heterogeneous requirements across industries and countries. The software needs to consider characteristics of industry-specific processes as well as country-specific regulations such as fiscal laws. Consequently, *IS-Corp*, just as most enterprise software vendors, relies on partners that fill white spaces in the product portfolio, localize products, or support global sales activities (Leech and Schmidt 2011; Sarker et al. 2012). Thus, *IS-Corp* collaborates with various other software companies, IT providers, and IT consultancies. With the latest version of the enterprise software

product that we analyze in this study, *IS-Corp* aims at opening the software to a large number of third-party developers by establishing an IT platform for third-party extensions (we refer to this platform as the "*IS-Corp* platform").

With its platform strategy, *IS-Corp* leverages the possibilities created by the advance of cloud computing. Cloud computing refers to the rapid provisioning of on-demand access to a pool of configurable computing resources such as networks, servers, storage, applications, and services (Mell and Grance 2011). As the performance of networks, servers, storages, and database technologies has increased continuously over the last years, it is now possible to provide larger enterprise software solutions via cloud computing. For example, large amounts of business data can nowadays be processed in real-time with in-memory database technologies. *IS-Corp* leverages cloud computing not only to make its own software more flexible and powerful, but also to facilitate the development of third-party applications. With its cloud-based *IS-Corp* platform, it provides application programming interfaces (APIs) that grant developers access to functions such as production data analysis. Third-party developers can utilize these APIs and the accompanying software development kit (SDK) to extend the business applications provided by *IS-Corp* or to develop new ones. As a result, an ecosystem of extensions to *IS-Corp's* enterprise software solution arises (see Gawer 2014 and Tiwana et al. 2010). Customers can download these extensions via a marketplace and deploy them rapidly, even during run-time.

The case of the *IS-Corp* platform is of particular interest for our study of value capture in IT platforms for several reasons. First, *IS-Corp* has experimented in the past with IT platforms and includes its lessons learned on value co-creation and capture in the current IT platform setup. Second, the project of the IT platform is central to *IS-Corp's* strategy. The firm is committed to the project and assigned sufficient resources. Finally, the *IS-Corp* platform represents a business-to-business (B2B) IT platform: both third-party developers and end-users represent firms. Analyzing this case allows us therefore to extend our understanding of value capture that, up to now, has been derived from business-to-consumer (B2C) IT platforms such as Google's Android that have a much larger base of end-users (e.g., Boudreau 2012; Ghazawneh and Henfridsson 2013; Goldbach and Benlian 2014).

Exploratory Case Study

To close the theory gap of value capture in IT platforms, we conducted an exploratory case study (Walsham 1995; Yin 2013). Taking on an interpretivist stance (Conboy et al. 2012; Goldkuhl 2012), we collected qualitative interview data and adopted a grounded theory approach (Glaser and Strauss 1998; Urquhart 2013) for coding and interpreting the data. As described below, we followed the grounded theory methodology procedures for data collection and analysis as summarized by Wiesche et al. (2017).

The selection of our case and our interview partners followed theoretical sampling considerations (Urquhart et al. 2010). Our case company needed to have an established way of co-creation value with partners on an IT platform, which it uses to capture value through different mechanisms, both being the case for *IS-Corp*. We started selecting interview partners that could describe the process of value co-creation and iteratively chose new interview partners to shed more light on value capture processes (Walsham 1995). We conducted semi-structured interviews with employees and externals involved in the *IS-Corp* platform project in different positions following the guidelines by Gläser and Laudel (2009). In total, we conducted 27 interviews with 29 interview partners between February 2016 and February 2017. The interviews lasted 58 minutes on average. The interview questions covered the history of the platform project, the processes of value co-creation and capture, and the interviewees' assessment of the platform project. We provide details on the interview partners and exemplary interview questions in Table 2.

Throughout our data collection and analysis, our focus was on discovery of concepts and relationships in the context of value co-creation and value capture (Urquhart and Fernandez). We did not aim at deductively testing relationships between value co-creation and value capture that authors have discussed in prior literature. The theoretical background we provided above rather helped us to contour our research project and to motivate our study.

IS-Corp (19 interviews; 21 interview partners)	
Interview partners ▪ High level managers responsible for the *IS-Corp* platform (e.g., project lead, chief architect, product owner) ▪ Employees that worked with the same software product before the introduction of the *IS-Corp* platform and could thus report on the changes inflicted by the platform strategy ▪ Relatively new employees that had gathered experience in platform projects at other companies	*Exemplary interview questions* ▪ "What are the core features of the *IS-Corp* platform?" ▪ "Can you describe the history of the *IS-Corp* platform project?" ▪ "In what ways are third parties involved in the *IS-Corp* platform?" ▪ "What is *IS-Corp's* business model behind the platform?"
Partners (8 interviews)	
Interview partners High level counterparts of *IS-Corp* within three different partner companies that offer specialized extensions of the *IS-Corp* platform: ▪ A software vendor (> 1,000 employees) with a focus on lifecycle management and go-to-market analyses ▪ An IT service provider (> 5,000 employees) with a focus on the financial industry ▪ A software vendor (> 10,000 employees) with a focus on solutions for enterprise content management	*Exemplary interview questions* ▪ "What is your company's motivation to contribute to the *IS-Corp* platform ecosystem?" ▪ "Can you describe the collaboration with *IS-Corp*?" ▪ "What resources does *IS-Corp* provide to support your development of complementary applications?" ▪ "What is your company's business model behind the collaboration with *IS-Corp*?"

Table 2. Details on Interview Partners and Interview Questions

For the coding process we followed the Glaserian approach (Glaser and Strauss 1998; Urquhart 2013). We illustrate our coding scheme in Table 3. We started with open coding and created 502 codes associated with 703 interview quotes. In axial coding, we identified 42 subcategories that summarized open codes related to the same aspect of value capture or to a positive or negative consequence of value capture. We clustered these subcategories to 12 categories that describe different manifestations of value capture as well as interaction effects on value co-creation. Subsequently, we conducted selective coding to relate the categories to specific mechanisms of value capture and to link those to our theoretical pre-understanding. Following the principle of constant comparison (Urquhart et al. 2010), we returned to the data whenever a relationship emerged in the selective coding to verify its grounding in the data. By using 24 memos in the process of coding, we captured ideas on concepts and their relationships early in the analysis (see Gregory et al. 2015).

Interview statement and <u>open coded sections</u>	Subcategories	Categories
"<u>We paid attention that the [acquired solution] can be easily integrated in our platform.[1]</u> There are often scenarios, <u>when a customer or a partner says, [the acquired solution] is great, but there is a certain piece missing. […] then you need some kind of platform that allows them to fill this gap[2]</u>. <u>This is always our biggest selling point, that we can say we have integrated [the acquired solution], with our platform, you can use it in an easier way.[3]</u>"	1) Integration of acquired solutions 3) Benefit of acquiring solutions	Acquisition
	2) Customer adding functionality to the software 3) Platform facilitates additions by customers	Customer enablement
"[…] <u>we continue to be the developer of the application, but it is marketed as [IS-Corp-]branded product[4]</u>. [IS-Corp] sells the software not as [third-party application], but just as if it was an [IS-Corp] software. […] <u>Since this is happening, revenues with [IS-Corp] have increased steadily.[5]</u>"	4) Marketing third-party product under *IS-Corp* brand	Branding
	5) Partner revenue increase	Positive effect on value co-creation

Table 3: Illustration of the Coding Scheme

Findings and Interpretation

The analysis and interpretation of our interview data helped us, first, to confirm that the *IS-Corp* platform contributes to value co-creation and capture. Second, we analyze the interview partners' views on value capture. Combining and interpreting these views leads to the emergence of three mechanisms of value

capture implemented on the platform. Third, we are able to further interpret the interaction effect of the value capture mechanisms on value co-creation.

IT Platform Supporting Interfirm Collaboration

Our findings first confirm that collaboration with partners on the IT platform is key to *IS-Corp's* business. The enterprise software product we focus on is extended by various applications developed by partners. This collaboration is a *"win-win situation"* for both *IS-Corp* and its partners, as interview partners form both sides confirmed. Partners help *IS-Corp* to offer end-to-end solutions for customers across industries and countries. Specialized third parties can provide offerings that require specific knowhow or address a relatively small niche market in a more efficient way.

In addition, the partners benefit from collaborating with *IS-Corp* on the IT platform, by gaining access to the large market that *IS-Corp* has been addressing with its enterprise software. Application partners do not need to set up worldwide sales channels; they can directly market their application to *IS-Corp's* installed base and to new customers via the *established* sales channels. Thereby, they also benefit from *IS-Corp's* positive image for reliable software solutions. On the technological layer, the collaboration of *IS-Corp* and its partners is enabled by an increasingly open architecture that provides APIs and is based on common programming languages. One interview partner of *IS-Corp* states:

> *"[IS-Corp] attracts partners relatively easy. As of today, we have several hundred partner applications running – probably even more – [developed by] application providers from different segments. This is a relatively steep growth curve, [the number of] our partners. This is also related, for example, to our shift from a solution that was coded in [proprietary language] and now is designed much more open with Java. Deploying and integrating your applications with Java is significantly easier now."*

Thus, while in earlier versions of the software product few strategic partners developed deeply integrated extensions to the core system, with the new *IS-Corp* platform, numerous platform partners can develop extensions with significantly less effort. The product manager refers to the platform as the *"innovation layer for the traditional, rather slow ticking systems of [IS-Corp]."* He further describes that *IS-Corp* had initially focused on value co-creation, aiming at enlarging the network of third-party developers and the number of available solutions:

> *"You have to make the pie bigger by bringing more partners on the platform and by thinking about new use cases, scenarios, or applications that are not covered yet."*

However, it is not just the size of the pie that determines the success of the platform project, but also the share of the pie that *IS-Corp* can claim. Whether an organization is successful with a digital business strategy such as the implementation of an IT platform depends on both a flourishing ecosystem for value co-creation and a suitable approach for value capture. In the context of the *IS-Corp* platform, there are no longer contractual agreements on value sharing as it was the case in dyadic partnerships. Value co-creation is not automatically associated with value capture. Consequently, the product manager sees a deficit despite an increasing number of third-party extensions: *"If you also consider the revenue [of the IS-Corp platform], we lack behind. We should have come further. Are there initiatives [to improve that]? Yes."* We discuss the initiatives that *IS-Corp* has taken to improve the value captured from its platform in the next section.

Mechanisms of Value Capture

In the course of the analysis and interpretation of the interview partners' views on value capture, three mechanisms of value capture emerged: (1) absorption, (2) co-selling, and (3) verticalization. Each mechanism becomes manifest in different actions of value capture as summarized in Table 4. While these manifestations directly result from the analysis of the interviews, the three mechanisms are a result of our interpretation of the findings.

Mechanism	Description	Manifestations
Absorption	The platform owner extends the product portfolio by providing complementary applications or functionalities that formerly were offered by third parties.	• Acquisition of third-party applications or the firms behind the applications • Imitation of third-party applications • Extension of the platform's core offering covering functionalities previously provided by third parties
Co-selling	The platform owner engages in joint activities with third-party developers to support them in selling their applications.	• Bundling of third-party applications and platform • Branding & certification of third-party applications • Customer enablement to support customers in marketing applications they developed for their own use
Verticalization	The platform owner defines and, together with partners, implements dedicated vertical use cases on the platform.	• Industry verticals to address specific industries with a pre-defined set of platform functionalities and third-party applications • Front-runners to illustrate the platform's potential in industry verticals early on

Table 4. Mechanisms of Value Capture

The mechanism **(1) absorption** refers to activities *IS-Corp* engaged in to directly offer complementary applications to end-users that previously had been provided by third-party developers. As *IS-Corp* absorbs these applications, it can claim the full revenue resulting from the applications' sales, instead of sharing the revenue with third-party developers. The mechanisms of absorption emerged from our data, as our interview partners mentioned diverse actions related to absorbing complementary applications. We grouped these actions into three main manifestations, which we describe in more detail below: acquiring third-party applications (or the firms developing the applications), imitating other third-party applications or extending the core of the platform with functionality previously provided by third-party applications.

IS-Corp has acquired a number of firms whose products it now offers as complementary applications on the *IS-Corp* platform. These firms did not necessarily have a complementary application on the platform before the acquisition, but they had products *IS-Corp* could transform into complementary applications. For example, *IS-Corp* bought a firm that offers solutions for human resource management. By acquiring the firm and moving the solutions on the *IS-Corp* platform, *IS-Corp* increased the number and variety of applications available on its platform. The absorption of these applications therefore has a direct and an indirect effect on value capture. The direct effect results from the applications' sales on the platform that accrue to *IS-Corp* entirely. The indirect effect results from an increased number of innovative applications that make the platform more attractive. The project lead of the platform project illustrates the potential of carefully chosen acquisitions that *IS-Corp* subsequently makes available on the platform:

"We paid attention that the [acquired solution] can be easily integrated in our platform. There are often scenarios, when a customer or a partner says, [the acquired solution] is great, but there is a certain piece missing. [...] then you need some kind of platform that allows them to fill this gap. This is always our biggest selling point, that we can say we have integrated [the acquired solution] with our platform, you can use it in an easier way."

From *IS-Corp's* experience, it is easier to acquire a firm that provides a complementary application on the platform than a firm whose product is going to be integrated into *IS-Corp*'s core product. The firm with a complementary application can run relatively autonomously after the acquisition, acting like an independent third-party developer. This reduces typical frictional losses that occur when the new parent company quickly integrates acquired firms.

"Usually, you let [the acquired firms] run autonomously for a certain time. [...] Otherwise, you destroy all the advantages you gain from acquisitions. Just as [anonymized company]. They are still quite autonomous and they have been with us for several years – and still have high degrees of freedom."

Besides acquiring complementary applications, we identified two less explicit strategies of absorption: imitating existing applications and integrating parts of their functionality in the platform's core offering. Similarly to acquisition, both actions affect value capture directly, by generating revenue that does not need to be shared and indirectly by strengthening *IS-Corp's* position in the competition. One of *IS-Corp's* partner managers states the importance of the own core offering on the platform:

"Internally, it is fact that innovative and promising applications on the [IS-Corp platform] often are generated by us."

By engaging in **(2) co-selling**, *IS-Corp* collaborates with third-party developers in joint sales activities. This collaboration goes further than just offering the third-party applications on the app store of the platform. The goal of joint sales activities is that *IS-Corp* helps to increase the third-party applications' sales and, in turn, claims a larger share of the revenue. Therefore, co-selling activities potentially increase *IS-Corp's* value captured from the platform ecosystem. Interview partners from both *IS-Corp* and partners highlighted the benefit of joint sales activities. We grouped the specific actions taken to leverage joint sales activities for value capture into three facets of co-selling: bundling, branding and certification, and customer enablement.

Bundling refers to deals in which end-users purchase a bundle consisting of the platform and one or several applications. Bundling is particular important in a B2B context. Most sales deals are closed because of direct interaction between the sales team and the end-user – despite most applications being available in the platform's app store. As the platform alone is not relevant for most customers, *IS-Corp* needs to suggest a suitable combination of platform and apps to the customers:

"There are always these cross-selling and bundle deals where we sell some kind of standard product which generates considerable revenue for the sales guy. We realized that with regard to the [IS-Corp platform]: in the beginning, we did not tell the [platform] story right. We did have a marketplace and all, but that just didn't work for our company, just because our customers do not buy on an online marketplace. Instead, they have their person of trust in our sales team, whom they have confidence in, whom they buy bundles from. [...] There's our sales guy saying `dear [customer], I offer you these three packages and if you take the fourth, it's 50% off.´ That's how our deals are closed."

Most third-party developers would not be able to sell their applications as much, if it was not for *IS-Corp* and its sales teams. As a result, *IS-Corp* can claim a substantial share from the revenue generated through third-party applications in such bundle deals, increasing its value captured form the platform ecosystem.

As further facet of co-selling, branding and certification sparked our interest. By branding, we refer to complementary applications of the platform that were developed by third parties but are marketed under the *IS-Corp* brand. Branding does not entail that third-party developers did subcontracted development for *IS-Corp*. Instead, once the third-party developers approached *IS-Corp* for marketing their applications, both concluded that marketing the application under the *IS-Corp* brand is most beneficial. The reason could be that the third-party developers need endorsement by the *IS-Corp* brand, as not all end-users know them. At the same time, *IS-Corp* sees the advantage of remaining visible to the end-user as provider of the front-end functionality. By marketing applications under its own brand, *IS-Corp* guards against being seen as pure technology provider while others offer the innovative applications on top of the technology.

Certification is similar to branding but does not go as far. Instead of rebranding the third-party applications, *IS-Corp* certifies them and labels them accordingly. Again, the motivation for third-party developers is to benefit from *IS-Corp's* image and from its extended support in sales activities for certified applications. *IS-Corp* can increase its value capture through certification in a twofold way. First, third-party developers pay for being certified, creating direct revenue for *IS-Corp*. Second, certified applications are increasing the overall sales of applications as end-users are more likely to trust them. Therefore, the value captured through revenue share also increases for *IS-Corp*.

A third facet of co-selling we observed is customer enablement. By customer enablement, we understand supporting customers to develop and subsequently market an application that the customers need for their own use. Many firms that are end-users of *IS-Corp's* enterprise software use the platform to develop applications for their own purposes, for example, to analyze data sets that only result from processes in a specific industry and have specific characteristics. The product owner of the *IS-Corp* platform illustrates:

"One of our largest and dearest customers by now has developed four applications on [our platform]. They built a CRM application, on [our platform], they built a call center application, on [our platform] - as extensions to their on-premises system. They were one of the firsts to do so."

IS-Corp does a lot to enable these customers to develop the applications they need. For example, *IS-Corp* offers trainings on how to use the platform to develop individual applications or consults customers on specific projects. *IS-Corp* has started to evaluate whether some of these applications developed by

customers were relevant for other customers as well and could thus be marketed on the platform. To do so, *IS-Corp* needs to enable the customer to develop the application in a generic way so that it can be white-labelled and sold to others. *IS-Corp* would increase its value captured beyond the fees the customer pays for using the platform by generating additional revenue through white-labelled customer applications.

(3) Verticalization refers to the platform owner defining and implementing dedicated vertical use cases on the platform to increase the platform's acceptance among customers. The *IS-Corp* platform is of horizontal nature, following the basic idea of a platform to support applications for various use cases. However, in a B2B context, generating solutions for specific use cases based on a horizontal platform is challenging. For example, in equipment manufacturing, a heterogeneous machine outfit combined with complex processes leads to specific requirements for the platform and its extensions. It is unlikely that generic applications designed for the horizontal platform will fulfill these requirements.

To address this challenge, *IS-Corp* defines specific industry use cases, i.e., "industry verticals" that bring together the stakeholders involved in such complex processes. For example, *IS-Corp* connects the manufacturers of the machines used at the customer sites for production as well as application partners that are able to provide suitable analytics applications. *IS-Corp* consults the stakeholders of the industry verticals on how they can leverage the platform to develop applications useful for the specific industry. The project lead of the platform describes one particular initiative for an industry vertical:

> „At [our customer] we have an application, [our customer] is using it, it analyzes vibration of machinery, meaning, the different machines are connected via [our platform], provide measurement data and, based on this data, conduct vibration analyses to anticipate outages of the machines. And then you can schedule maintenance even before the outages occur, that's an easy way to reduce costs, minimize maintenance costs and minimize downtime"

By creating dedicated industry verticals, *IS-Corp* unlocks new markets for its platform that are considered too specialized to benefit from a horizontal platform. As *IS-Corp* is initiating these industry verticals, it is in a good position to claim a considerable share of the revenue generated from the applications within the verticals. While creating a vertical requires some upfront investments, selling them to several end-users will soon lead to profits due to economies of scale.

Closely related to the manifestation of industry verticals are front-runners. Front-runners are third-party developers that provide complementary applications as early as the start of the IT platform or of a dedicated industry vertical. On the one hand, those front-runners can be existing strategic partners of *IS-Corp*. Ideally, these strategic partners are reputable in their respective industry and thus incentivize others to also contribute applications to *IS-Corp* platform. One external partner of *IS-Corp* describes this signaling effect:

> "[...] just like Netflix when, at the time, they used Amazon for their [streaming service]. It is important that there are other companies, renowned firms, that use the service, that illustrate the use case."

On the other hand, large strategic partners may be relatively slow and might not come up with the most innovative solution for the start of the platform. Collaboration with smaller partners as front-runners can therefore also be beneficial, as the product owner of the platform states:

> "What you need is indeed some kind of front-runners that, in the end, influence others to copy their moves. And that's why [IS-Corp] would be ill-advised to only collaborate with large strategic partners on the platform. Instead, we also [...] conduct co-innovation with smaller partners early on."

Front-runners are therefore essential for *IS-Corp* not only at the launch of the platform but also at the launch of industry solutions such as the *IS-Corp* platform for the Internet of Things (IoT). They demonstrate the potential of the platform for others, thus *IS-Corp* is in a good position to establish a beneficial revenue sharing model already from the beginning. Taken together, verticalizing the horizontal platform has the potential to create new revenue streams from which *IS-Corp* can claim a substantial share.

Interaction Effects on Value Co-creation

The insights on the mechanisms of value capture – absorption, co-selling, and verticalization – cannot be presented without discussing their interaction effects on value co-creation. Value capture can have reinforcing and alleviating effects on value co-creation, which would then require a careful balancing

between increasing value co-creation and smothering value capture. By interpreting our findings, we suggest interaction effects of the three mechanisms with value co-creation as summarized in Table 5.

Mechanism	Interaction Effect on Value Co-Creation	Illustration
Absorption	**Negative (-):** As the platform owner absorbs complementary applications from third parties, their incentives to contribute further complementary applications are decreased.	*IS-Corp* has acquired several companies in the areas of procurement and human resource management, whose products are moved onto the platform. This restricts the potential value co-creation in those areas.
Co-selling	**Positive (+):** As the platform owner supports third-party developers in their sales activities through different facets of co-selling, their incentives to contribute further complementary applications are increased.	Several partners of *IS-Corp* have stated increasing revenues due to co-selling activities, leading to an overall positive effect on value co-creation in the ecosystem.
Verticalization	**Neutral (o):** As the platform owner creates dedicated industry verticals, new areas for value co-creation are made accessible. At the same time, the increasing specialization in verticals shrinks the target group, decreasing third parties' incentives to contribute further complementary applications.	*IS-Corp* provides industry-specific solutions, for example for the manufacturing industry. Value co-creation takes place with partners, for example for applications to manage tooling of machines. This specialization entails limited co-creation opportunities across use cases on the platform.

Table 5. Mechanisms of Value Capture and Their Interaction Effect on Value Co-creation

First, we suggest that the mechanism of absorption in general has a negative impact on value co-creation. To establish sustainable value co-creation activities on a platform, incentives for third-party developers are necessary. Commonly, the main incentive for third parties to develop applications is that they can reach a large number of platform users with far less effort compared to a situation where they would need to market their software product on their own. Even though in the case of *IS-Corp* the addressable market is smaller than in many B2C platform markets (e.g., smartphone operating systems and their mobile applications), being able to sell applications to all of *IS-Corp's* customers is a promise of high returns for many third-party developers.

However, if *IS-Corp* internalizes successful or promising third-party applications to claim the full revenue, this can negatively affect the third-party developers' motivation. In particular, if *IS-Corp* imitates third-party applications or extends the functionality of the platform core making third-party applications redundant, third-party developers incentives are decreased. While *IS-Corp* is currently in a good position to attract third-party developers due to its market penetration, increasing absorption activities may negatively affect value co-creation in the long run. For example, *IS-Corp* has acquired several companies in the areas of procurement and human resource management in the recent years, whose products have in parts been moved onto the *IS-Corp* platform. Thereby, major areas for value co-creation are restricted, reducing third-party developers opportunities and, as a result, their incentives to further contribute to the platform ecosystem.

Second, we interpret co-selling as a value capture mechanism that positively affects value co-creation. Co-selling does not only increase *IS-Corp's* potential for value capture. At the same time, the overall revenue that is generated through third-party applications increases, leading to more revenue that accrues to the third-party developers. Even if *IS-Corp* claims more of that value than without co-selling activities, there can be a positive net effect for the third-party developer that incentivizes other third-party developers to co-create value. The net effect the third-party developer benefits from is dependent on the conditions imposed by *IS-Corp*. For example, if *IS-Corp* claims an unreasonably high share for selling an application under the *IS-Corp* brand, third-party developers will not engage in co-selling. Customer enablement as further facet of co-selling creates potential for value co-creation that had not been visible before. Again, the conditions for value capture by *IS-Corp* need to be reasonable, then customer enablement will not only increase value capture but also value co-creation.

Third, we suggest that verticalization does not have a clear positive or negative interaction effect with value co-creation. On the one hand, dedicated industry verticals create new areas in which value co-creation can take place. By bringing different stakeholders of an industry vertical together, value co-creation emerges,

that would not have happened on the horizontal-only platform. On the other hand, a platform that is dominated by a number of industry verticals represents a fragmented platform that requires specialized applications for different uses cases. For third-party developers, there would be no longer a substantial difference to developing dedicated software solutions for an industry without using the platform. For example, *IS-Corp* provides industry-specific solutions for the manufacturing industry. Value co-creation takes place with partners, for example for applications to manage tooling of machines. This specialization entails limited co-creation opportunities across use cases on the platform. Consequently, *IS-Corp* aims at targeting medium-sized customers with the horizontal part of the platform with applications that are more generic and, in addition, implementing industry verticals for industries with large players. In this combined strategy, verticalization should not have an overall negative effect on value co-creation.

In sum, the mechanisms of value capture can have both positive and negative effects on value co-creation. *IS-Corp* is balancing the implementation of value capture mechanisms and their interaction effects with value capture.

Discussion and Conclusion

In this section, we provide a summary of the mechanisms of value capture we have identified to enhance our theoretical pre-understanding on value capture. We then discuss the mechanisms derived from our case study with regard to IT platforms in general. Based on this discussion, we show implications on the debates of platform openness and performance of digital business strategies.

Tuning Value Capture in IT Platforms

Based on the explorative case study, we identified absorption, co-selling and verticalization as mechanisms of value capture. Absorption includes measures taken by the platform owner such as acquiring third-party applications, imitating successful third-party applications, or incorporating functionality into the platform core that was previously provided by third parties. Co-selling refers to sales activities in which the complementor is involved including bundling, branding and certification or enabling customers to market applications they have developed for their own use. Verticalization includes measures taken to create industry-specific use cases together with third parties that are then marketed in the respective industry. These mechanisms of value capture can in turn affect value co-creation. While we interpret absorption to negatively affect value co-creation, we suggest that co-selling has a positive impact and verticalization does not have a clear positive or negative effect on value co-creation. Our findings are summarized in Figure 3, enhancing our theoretical pre-understanding of value capture in IT platforms.

Figure 3. Revised Theoretical Understanding of Value Capture in IT Platforms
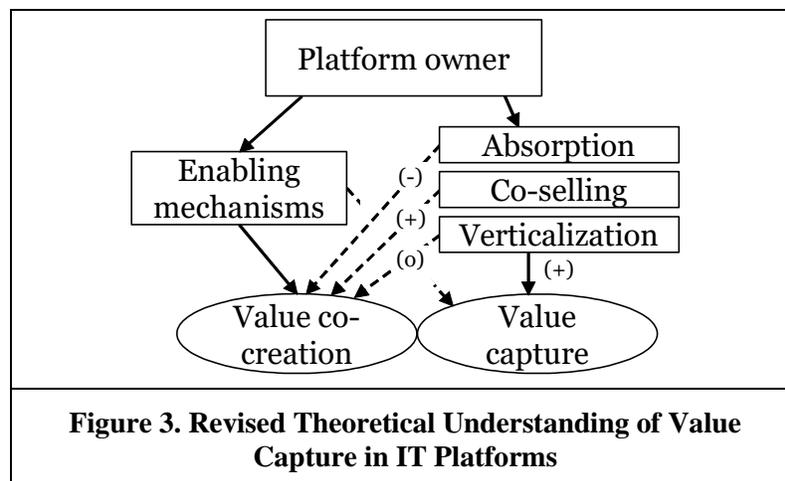
The insights on value capture that emerged in our case study contribute to our theoretical understanding of how the platform owner captures value in IT platforms. The mechanism of absorption has already been discussed in literature on B2C IT platforms. Platforms such as Microsoft's Windows have, over time, incorporated functionalities that previously had been provided by third-party developers (e.g., music player or instant messaging) (Eisenmann et al. 2009). With our findings, we not only confirm that absorption is

also relevant in a B2B context but we show different manifestations of absorption and discuss the repercussion effect on value co-creation. Our interpretations therefore make a tradeoff explicit that is implicitly visible in previous work (Eisenmann et al. 2009; Eisenmann et al. 2011): absorption has a positive effect on value capture but may have negative consequences for value co-creation. Absorption has to be applied with caution and is contingent on the platform owner's position vis-à-vis the complementors. The more attractive the platform ecosystem is the less harmful absorption activities will be.

The mechanism of co-selling integrates fragmented insights on bundling and new insights on branding, certification, and customer enablement into one concept of value capture. Bundling has been shown to help platform owners with market power to claim more from the available surplus (Eisenmann et al. 2009; Rochet and Tirole 2005). We enhance this view by showing that bundling is in fact a co-selling activity of the platform owner and complementors and thus can have a positive effect on value co-creation in addition to benefits for value capture. Branding and certifications are measures that are rooted in models of B2B partnerships that have existed before IT platforms have become prevalent (Ceccagnoli et al. 2012; Sarker et al. 2012). We show that they are also beneficial in the context of IT platforms, thus established companies may benefit from their experience in these partnership models when implementing an IT platform strategy.

The mechanism of verticalization introduces a new notion of value capture in research on IT platforms. Verticalization does not go as far as vertical integration, where the platform owner would integrate complementary applications and close off the platform (Parker et al. 2017). By applying verticalization, the platform, while remaining horizontal, is enriched with vertical use cases for specific industries. This approach is particularly useful for technologically complex platforms that comprise several layers, such as a device or machine layer, a data layer, a micro-service layer and an application layer. Many B2B IT platforms exhibit such complex architectures, for example in the area of IoT. For those platforms, the mechanisms of value co-creation and capture previously established in research are not fully applicable as the complexity impedes network effects. Verticalization is one way to nevertheless benefit from the economies of scale an IT platform can yield.

In sum, we first illustrate that value capture is a crucial element of any IT platform strategy. This finding contributes to literature on IT platforms as existing work focusses predominantly on value co-creation (e.g., Boudreau 2010; Eaton et al. 2015; Ghazawneh and Henfridsson 2013). Value capture thereby goes beyond the aspects discussed in literature such as pricing (Hagiu 2006; Tiwana 2014) and bargaining (Oh et al. 2015). To capture value, platform owners can leverage a set of diverse mechanisms and our study gives a first impression of what shape these mechanisms can take. Second, we show that understanding the interaction effect of value capture and value co-creation is crucial for the success of IT platforms. We contribute to discussions in management and IS literature on the relation of value creation and value capture (e.g., Bharadwaj et al. 2013; Lepak et al. 2007; Priem 2007) by providing examples how distinct mechanisms of value capture affect value co-creation. Considering these interaction effects helps to avoid enforcing value capture when it is harmful to co-creation or to recognize that the gains in value capture will overcompensate losses in value co-creation.

Value Capture and the Debate of Platform Openness

Results on value capture inform the debate of how open IT platforms should be designed towards complementors (vertical openness) (Benlian et al. 2015; Boudreau 2010; Ondrus et al. 2015; Thomas et al. 2014). The debate revolves around choosing the right degree of openness to balance the tradeoff between diversity and control (Benlian et al. 2015; Boudreau 2010). A high degree of openness supports a high quantity and variety of complementary applications but comes along with reduced possibilities to control the activities and outcomes in the platform ecosystem. Vice versa, strict control is implemented to ensure quality and other standards but, in turn, reduces the platform's openness and thus its generativity.

The mechanisms of value capture that we identified affect the platform's openness or at least the perceived openness from the complementors' viewpoint. For example, absorption activities will make the platform appear more closed as the platform owner restricts the degrees of freedom of the complementors. Even if the platform, on a technical basis, remains open to anyone, absorption can lead to a more restricted platform ecosystem. Capturing value through verticalization will make the group of possible complementors smaller, as more specialized complementors are to address a smaller market compared to a platform without verticalization strategy.

The decrease in perceived openness may lead to performance losses of the platform ecosystem as a whole (Benlian et al. 2015; Ondrus et al. 2015). Therefore, platform owners need to align the mechanisms of value capture they apply with their strategy regarding openness and control. For example, occasional absorption might not be harmful in large and open ecosystems. Google imitated several third-party applications on Android such as an internet browser or maps and navigation. Due to the ecosystems size and openness, this did not affect the value co-creation taking place in the ecosystem.

At the same time, implementing a strategy for openness and control needs to be viewed in front of possible effects on value capture. Boundary resources contribute to a platform's openness as they support complementors in developing applications (Eaton et al. 2015; Ghazawneh and Henfridsson 2013). They directly support value co-creation but the provision and maintenance can be costly – costs that impede value capture. Similarly, control is necessary to a certain degree to ensure the quality of complementary applications (Boudreau 2010; Goldbach and Benlian 2015). The importance of control is even bigger in B2B IT platforms as the applications can be relevant for critical business processes. However, strict control cannot only impede value co-creation, it is also costly, and thus impacts value capture negatively. In sum, the debate of openness benefits when one keeps in mind that the balance of openness and control is also impacted by the value capture strategy that the platform owner takes on.

In practice, despite the potential of IT platforms being emphasized for years (e.g., Boston Consulting Group 2016; Capgemini 2016), many firms struggle to set up an IT platform from which they capture a sufficient share of the co-created value (Bharadwaj et al. 2013; Rietveld et al. 2016). One reason might be that when designing openness and control of the platform the focus lies too much on facilitating value co-creation at the expense of value capture. Our findings help practitioners to consider their options for value capture early on and design the IT platform with the corresponding degree of openness. As we observe more and more initiatives to establish B2B IT platforms for example in the Internet of Things, we hope that these platforms in particular benefit from our considerations.

The Performance of Digital Business Strategies

We furthermore contribute to the discussion on the effect of digital business strategies on the performance of firms (Bharadwaj et al. 2013; Rai and Tang 2014). The challenge of value capture is not limited to IT platforms but arises in other digital business strategies, such as digitally integrated supply chains in manufacturing or customer-centric digital provision of services in banking (Setia et al. 2013). The basic challenge remains the same: Value is co-created in interfirm networks with partners and the focal firm needs to capture a sufficient share. While existing research acknowledges that the interplay of both value co-creation and capture determines market performance (Rai and Tang 2014), the source for value co-creation and capture are not well understood (Bharadwaj et al. 2013).

In our study, we focused on the example of IT platforms as digital business strategy but most of the digital business strategies comprise complex interfirm networks (Nalebuff and Brandenburger 1997). Thus, the mechanisms of value capture we identified can be, to a certain degree, applied in other settings. For example, absorbing products or firms that improve the IT integration capabilities within a supply chain is likely to help the focal firm to capture value from the supply chain's co-created value. In a customer-centric interfirm network for digital service provision, co-selling with network partners can be crucial for success. Without co-selling, it will be difficult to enable a seamless customer experience for heterogeneous customer groups across different platforms (Setia et al. 2013).

Our results enrich and substantiate existing general insights on value capture in digital business strategies. For example, Rai and Tang (2014) identify bundling, lock-in and barriers to imitation as mechanisms for value capture in IT-enabled business models. Our focus on value capture within the interfirm network adds to these mechanisms, which are routed in competition among firms. This broadened view on value capture is also relevant for strategic management research and its shift from the resource-based view to the relational view of the firm. As we illustrate, not only the locus of value creation has changed from firms possessing and generating inimitable resources to value co-creation within interfirm networks – also value capture has to be viewed as extracting value from a network of partners in addition to extracting value from a market.

In practice, establishing digital business strategies is an ongoing challenge across industries. While our results will not solve the challenges firms face in the digitization, they make practitioners aware that value

capture is as central element of a digital business strategy. The mechanisms of value capture we derived in the context of IT platforms provide starting points how value can be captured in other digital business strategies.

Limitations and Future Research

Our study is subject to limitations. First, we interpret value capture as claiming parts of the value that is co-created within the platform ecosystem. At the same time, value capture can be understood as extracting value from a market, i.e., disputing value from competitors (Tiwana 2015). This perspective leads to strategies such as platform envelopment (Eisenmann et al. 2011) and breaching (Ozer and Anderson 2015). We acknowledge that for a comprehensive understanding of an IT platform's success, both views on value capture need to be considered. Yet, the view on value capture within the platform ecosystem has been underrepresented in extant literature. Second, it is inherent to single case studies that generalizing the results is challenging. For example, we have derived our results from a platform in the B2B context, thus they cannot be taken for granted for large scale B2C platforms. We have taken these considerations into account when discussing the generalizability of the results.

We finally suggest two avenues for future research that have emerged during our work, which we could not address within the scope of this study. First, it would be worthwhile to analyze the application of value capture mechanisms and their interplay with value co-creation mechanisms across different platforms and over time. Within such a multiple case study, promising configurations of value capture mechanisms could be identified, contingent on the platforms' specific background (El Sawy et al. 2010; Fiss 2007). Second, during our study, themes related to the IT capabilities required to implement value capture mechanisms emerged. Analyzing empirically which IT capabilities firms need to possess or to develop in order to benefit from their IT platform would enhance our understanding of value capture in IT platforms and contribute to the ongoing discussion of IT capabilities for digital business strategies (e.g., Rai and Tang 2010).

Acknowledgements

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