Who Does What? Evolving Division of Responsibilities in a B2B Platform

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Abstract. To remain vital, a digital platform ecosystem requires governance. In the extant literature a platform ecosystem typically has a single focal actor who is responsible for the governance. We conducted a case study in heavy industry to understand how the responsibilities of a focal actor in governing a business-to-business platform ecosystem are shared and how they change. We observe the division of responsibilities and their changes as configurations. We conclude that the focal actor's responsibilities in a platform ecosystem are more multifaceted than the established view where a single actor has a stable set of responsibilities. The division of responsibilities in an ecosystem is subject to actor strategies and their positions in the supply chain. Thus, the strategic moves in an ecosystem are not made by a single actor but by multiple focal actors with multiple strategies.

Keywords: digital platforms · business-to-business · configurations · division of responsibilities

1 Introduction

Digital platforms are based on digital technologies and connectivity to utilize resources across company boundaries [1]. Different types of actors with varying degree of influence form a multi-sided market, a network where the actors are joined by contracts or other types of mutual dependencies [2]. A platform ecosystem is formed when the actors are organized around a platform [3]. This arrangement of actors requires governance: who has the power, who can make and what kind of decisions [4].

Most if not all this decision making is typically reserved for a single focal actor. This actor is referred as a platform owner [5], an orchestrator [6], or a keystone actor [7]. It has power over the ecosystem, especially the complementors that act in a certain niche within the ecosystem by extending the functionality of the platform [8, 9]. Ecosystems can also be decentralized in the sense that they have no single focal actor, such as in blockchain-based ecosystems [10]. However, we know little about the spectrum between these two extremes; how the governance responsibilities are given or taken in an ecosystem that is neither binary nor decentralized. This is especially relevant in business-to-business (B2B) platform ecosystems, where the relationships between the actors are different from the business-to-consumer context [11].

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To fill this gap in research, we conducted a case study of a B2B platform ecosystem and its actors in a heavy industry with the following research question: *How are the responsibilities of a focal actor in a platform ecosystem shared?* To understand the division of responsibilities we interviewed different stakeholders and applied a configurational approach [12].

Our findings show that the division of responsibilities can be more multifaceted than the archetypical view presented in the platform literature. The focal actor's responsibilities are configurations and thus not stable but evolve over time, following actor relationships and interactions. The configurations reveal how the responsibilities of the focal actor in our case are divided between two actors. This increases our understanding of digital platform ecosystems especially in the B2B context that is more complex in terms of functionality [13] and stakeholders [14].

The rest of this paper is organized as follows. In Sect. 2 we present the responsibilities of a focal actor in a platform ecosystem and how they can be observed with a configurational approach. Section 3 describes our method. Our findings are in Sect. 4 and they are further discussed in Sect. 5. Finally, Sect. 6 concludes our work.

2 Background

2.1 Responsibilities of a Focal Actor in B2B Context

The responsibilities of an actor are linked with status and power. In a platform ecosystem the focal actor governs an ecosystem. Depending on the perspective this actor is recognized as a platform owner [1, 15, 16], leader [17], or an orchestrator [6, 18]. In our research we will use the term focal actor to refer to the central actor in the platform ecosystem.

The extant literature on the ecosystem actors and governance is vast. As our objective was to understand the responsibilities of a focal actor in a B2B context, we focused on the responsibilities that portray the characteristics of B2B platforms. Overall, the business models in B2B platforms are different compared to B2C [19]. They are manifested in different power relationships [11, 20] between the actors and in the responsibilities of the focal actor. The B2B context is considered more complex in terms of stakeholders [14] and supply chains [20]. The complexity is reflected in how the rules of a platform ecosystem are defined [21]. Typically the focal actor controls an ecosystem, by defining the rules in general [8, 15, 18] and also in respect to what the partners are allowed to do [1, 22]. However, the different business models of B2B can have an effect also on the defining of rules [19].

Platform creation requires laying the foundations for a nascent ecosystem [16]. It is the task of the focal actor to provide these foundations that the other actors build upon [6, 9]. This involves both technological decisions and architectural policies [23] suited for the B2B context, where the information systems are more complex [13].

Value co-creation and capture are in the heart of platform ecosystems, yet the mechanisms in the B2B context can be different from the B2C [16]. The focal actor not only seeks to extract value from the ecosystem, but it also shares value and resources [7]. This way, a focal actor is creating niches for the complementors [3, 7, 24]. The complementors add diversity and variability to the ecosystem by providing additional solutions

[1]. Their main incentive is the access to the customers of the platform provided by the focal actor [3]. This enables investments to a common future for the focal actor and its complementors [15, 17].

As the largest group of actors the end-users are the source of the financial value in platform ecosystems [3, 6]. In addition to creating niches, the focal actor is in charge of attracting end-users and facilitating interactions between the complementors and the end-users [15, 25]. It is the focal actor that provides the complementors with access to the customer base of the platform ecosystem [3, 7, 24]. The key responsibilities of a focal actor are summarized in Table 1 below.

Table 1. Summary of the focal actor's responsibilities.

Key Responsibilities	Literature
Defining the rules: who can participate and what the participants are allowed to do	Cenamor, 2021; Manikas & Hansen, 2013; Tiwana, 2013; Gawer, 2020; Ruippo et al., 2023; Ritala & Jovanovic, 2024
Laying foundations: technological and / or architectural principles	Ghazawneh & Henfridsson, 2013; Jansen, 2020; Hodapp et al., 2019; Karhu et al., 2020; Foerderer, 2019
Niche creation for complementors by sharing resources and value	Iansiti & Levien, 2004; Jacobides et al., 2018; Williamson & De Meyer, 2012; Hodapp et al., 2019; Moore, 1993; Cenamor, 2021
Attraction: both end-users and complementors	Cenamor, 2021; Eisenmann et al., 2009; Pauli et al., 2021
Access granting: complementors to the customer base	Jacobides et al., 2018; Moore, 1993; Iansiti & Levien, 2004; Williamson & De Meyer, 2012

2.2 Configurational Approach to Responsibilities

In the existing research the focal actor is depicted as a single entity that is exclusively responsible for its own key tasks; respectively, the complementors are solely responsible for their tasks [1, 3, 8]. These responsibilities are presented rather stable, there is very little or no room for variance or dynamics. However, the complexity and specifics of the B2B context [11, 19] call for a broader perspective. Viewing the focal actor's responsibilities as a configuration can extend our understanding of B2B platform ecosystems. A configuration consists of characteristics or elements that occur together and align into patterns [12, 26]. The elements of a configuration are interdependent and an orchestrating theme connects them [27]. Importantly, a configuration is dynamic, it can change over time [27].

Configurations have been applied in analyzing the adoption of inter-organizational information systems [28], where the configuration consists of five elements: organizing vision, key functionality, structure, mode of interaction, and mode of appropriation. There are configurational studies also in platform research, for instance [29]. However,

it has not been used extensively although the features of configurational approach such as emergence and equifinality [26] make it suitable for this purpose.

Configurations emerge from the strategies the actor implements [26]. In the platform context Eisenmann et al. [25] portray two types of strategies for a focal actor. A horizontal strategy allows other actors to participate in the commercialization and technical development of the platform, even broadening the sponsorship to other actors by giving them access to the development of the core technology. A vertical strategy on the other hand contains decisions for example on the extent of complementor access to the platform and make-or-buy decisions: whether the focal actor should include functionality provided by complementors into the platform core. Another way to view the strategies of a focal actor is with a keystone or a dominator perspective [7]. In a keystone strategy an actor focuses on the external resources and occupies only a limited number of nodes in an ecosystem. A dominator strategy is opposite in the sense that it aims at both value creation and capture, thwarting the creation of alternative solutions by other companies. We focus on the configuration of the responsibilities of a focal actor in the B2B context, and the strategies they are based on.

3 Research Method

We conducted a case study to investigate the responsibilities of a focal actor in a B2B platform ecosystem. Aiming to understand a contemporary phenomenon in its real-life environment with a "how" question justified our selection of the research method [30]. A case study should offer something new and a basis for analytic generalization by shedding "empirical light on some theoretical concepts or principles" [30]. We selected wood supply in Finland as our case because it presented a combination of maturity and novelty. A digital platform connects groups of heterogenous actors and their information systems, forming an ecosystem. There are competing wood buyer companies that purchase timber from the forest owners and outsource the harvesting operations to smaller contractor companies. In their operations the contractors utilize forest machines provided by machine manufacturers. Both the wood buyers and the contractors rely heavily on information systems provided by different vendors. The introduction of the platform transformed the information systems landscape. This setting provides a novel view to focal actors in a B2B context: not a single incumbent company but neither a completely decentralized ecosystem. Using the configurational approach that explores holistically the "why" and "how" aspects guided us in understanding the context [27].

The information systems in wood supply were in two categories: the enterprise resource planning (ERP) systems of the wood buyers and the control systems in the forest machines. The control systems depend on the data provided by the ERP systems, and they send the data about performed work back to the ERP systems. Previously the two types of systems had been connected directly to each other. In 2013 three large wood buyer companies (Founders from here on) started a joint effort. Instead of company-specific development they chose to implement a digital platform that would cover a share of functionality that had been in the ERP systems. This forestry platform (FPF) and its functionality were aimed mostly at the contractors. The Founders selected a software company (SoftwareCo from here on) and outsourced the implementation and

operation of the FPF to it. FPF went operational in 2016 and by 2019 the Founders had all their operations on the platform.

Our case study protocol was designed in early 2021, including the data sources, informed consent, interview questions, and a timeline for the research [30]. In the beginning, the extant literature gave us the first frame of reference for a focal actor's responsibilities [2, 3, 9]. Our primary data source consisted of 31 interviews conducted by the first author in 2021. The interviewees were selected to cover the variety of actors in the FPF ecosystem: decision makers and subject matter experts working in wood buyer companies, different types of contractor companies, machine manufacturers, and representatives of SoftwareCo. In reaching out to the interviewees we relied partially on the first author's prior working experience in SoftwareCo, which helped establish contacts and provided a common language. The interviewees, their organizations and roles are described in Table 2.

Table 2. List of interviewed companies and persons.

Organization	Interviewees and their roles
Consultancy services for the founders	Project Manager (9)
Contractor 1	Account Manager (2)
Contractor 2	Manager (11)
Contractor 3	Manager (12)
Contractor 4	CEO (13)
Contractor 5	CEO (14)
Contractor 6	CEO (16)
Contractor 7	CEO (19)
Educational Institution	Teacher, Harvesting (20)
Global Machine Manufacturer A	Technical Customer Support Manager (22)
Global Machine Manufacturer B	Product Group Manager (31)
SoftwareCo operating the platform and providing enterprise systems	Product Owner (17); Service Manager (21); Service Manager (23); Product Owner (25); General Manager (26); Key Account Manager (27)
State-funded organization for forestry	Specialist (30)
Wood Buyer A: Founder	Senior Vice President, Development (3); ICT Solution Designer (10)
Wood Buyer B: Joined later	System Specialist (4)
Wood Buyer C: Founder	Development Manager (5); Development Specialist (6); Team Lead, Information Management (8)

(*continued*)

Table 2. (*continued*)

Organization	Interviewees and their roles
Wood Buyer D: Founder	SVP, Innovation and Development (7); Solution Architect (15); Development Manager, Harvesting (28); Operations Manager (29)
Wood Buyer E: Joined later	Manager (18)
Wood Buyer F: Joined later	Manager (24)
Wood supply R&D company	CEO (1)

The interview questions were grouped into four themes: the beginning and the idea behind FPF, day-to-day operation, development, and the community around FPF. The interview questions are available at https://bit.ly/40q6Q5X. The first author conducted the interviews remotely. The interviews were recorded and transcribed, and the Atlas.TI software was used in the analysis of the transcripts. We analyzed the interview data by the principles of grounded theory [31]. We started with initial codes that identified the responsibilities of each actor in the ecosystem as perceived by the interviewees. During the analysis the position and responsibilities of a focal actor were quite often attributed to the Founders and the SoftwareCo. Thus, we strived to get a comprehensive data set from these actors.

When no new responsibilities emerged from the data, we had reached conceptual saturation and continued the analysis by looking at the context and process [31]. There was a pattern in how the responsibilities of each actor were perceived – by an actor itself but also by others. This pattern deviated from the established view in platform literature. Also, the emerging pattern clearly changed over time: first the Founders were perceived to be the focal actor, but later the responsibilities of the focal actor became shared. We then returned to seminal works on the responsibilities of the focal actor to compare our findings with the literature. The concept of configuration [12] helped us in understanding the patterns in the division of responsibilities and their development, rooted in different types of strategies.

4 Findings

4.1 Actors in Forestry Platform

The FPF ecosystem has five groups of actors: the wood buyers, the companies that provide ERP systems for the wood buyers, contractors, machine manufacturers, and SoftwareCo that implements and operates FPF. The actors are shown in Fig. 1. SoftwareCo has formal agreements on the use of FPF with the contractors and wood buyers. Machine manufacturers provide the forest machines and the control systems to the contractors, and respectively the ERP providers provide the enterprise systems for the wood buyers. SoftwareCo competes to some extent with both the machine manufacturers and ERP providers. Although no formal agreements exist between the machine manufacturers and wood buyers, the relationship is important to both actors.

In its core FPF contains applications for forestry operations and interfaces for the wood buyer ERP systems and the control systems in the forest machines. When a wood buyer purchases wood from a forest owner, the ERP system of the wood buyer provides the data to a specific contractor, via FPF core. The contractor then plans the harvesting operations: when and by which machine. This planning takes place in the application belonging into FPF core. Once the planning is completed, the data for the working sites is transferred to the forest machine and into the control system. During and after the harvesting operations the control system provides data about the amount and quality of the wood harvested. This data travels via FPF core back to the ERP system of the wood buyer.

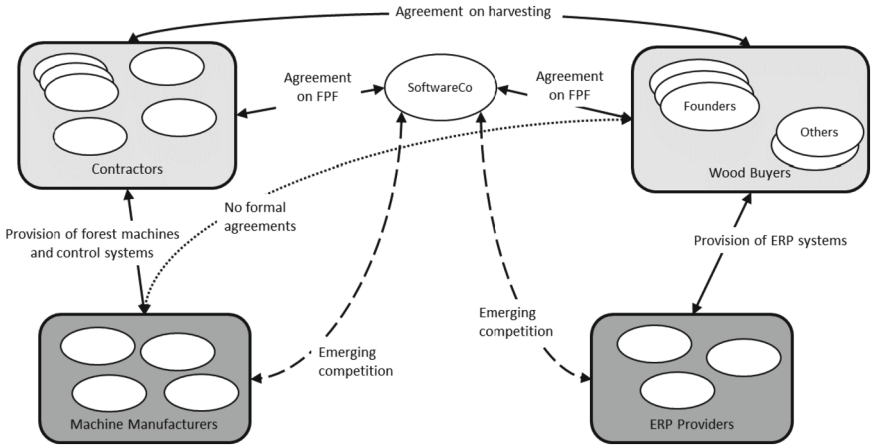

Fig. 1. Actors in FPF ecosystem.

The wood buyers' main objective is to secure a stable flow of the raw material. They purchase wood from the forest owners and outsource the harvesting operations to their contractors. A contractor has an agreement with one or more wood buyers, and the wood buyers have substantial negotiating power over their contractors. Using FPF is obligatory for the contractors. SoftwareCo is an actor with considerable amount of power and a strong presence in the ecosystem. In addition to running and developing FPF core SoftwareCo also provides ERP systems for one of the Founders and other wood buyers that joined FPF later.

4.2 From Common Problem Scope to Assembly Configuration

In what follows we show the development of the division of responsibilities through two different configurations. First, the *Assembly* configuration refers to the design and creation of FPF, where the Founders have the key responsibilities. It is followed by the *Established* configuration, where the responsibilities are shared. The overall change is described in Fig. 2.

The Founders shared a need for major renewal of their enterprise systems. This problem was not merely about a major upgrade to information systems but about developing

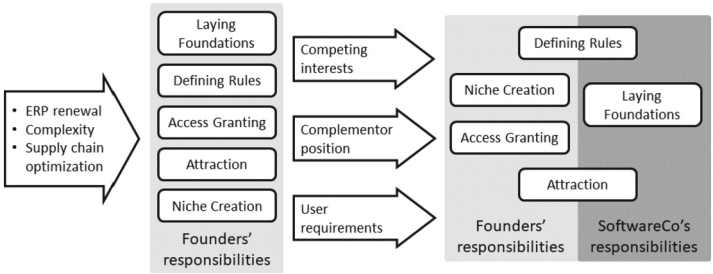

Fig. 2. The overall development of the focal actors' responsibilities.

new solutions to common problems. Although competing, they found a common area of interest in collective supply chain optimization: *"we have to find a common tool across firm boundaries for steering and planning the [contractor] work for multiple wood buyers"* (interviewee #7). The effects of having to use multiple, company-specific information systems had affected the contractors the most: *"each [wood buyer] company had their dedicated systems and if a contractor worked for more than one wood buyer, then there were multiple parallel systems in a single forest machine"* (interviewee #3). Also, the machine manufacturers suffered from the complexity of the situation: "*whenever we delivered a new or used machine, there was a maximum of 14 different [wood buyer] systems to install"* (interviewee #22).

The Founders identified the common functionality and designed it to be the core of a new platform. In 2012 they engaged in a shared sponsorship of a future platform and decided to outsource the implementation. The outsourcing to SoftwareCo acted as a value co-creation and sharing activity. The Founders designed the business model so that the revenue was to be collected by SoftwareCo: *"the agreements were made so that [SoftwareCo] owns the software and part of the business model is that the company gets compensated for providing the service"* (interviewee #3). An exclusive access to the customer base was granted for SoftwareCo. With these actions the Founders aligned interests with SoftwareCo.

The Founders defined a framework for both the architecture and the governance of the platform ecosystem. The former was materialized in the design specifications of the platform, including the principles for how the complementing solutions could and should extend the platform core. The latter, a governance framework, included rules for other organizations to join the platform, rules for the common development, and rules for the future service provider in the form of a service level agreement. There was no need to attract end-users since the wood buyers made it mandatory for their contractors to use the platform.

The Founders did not at this point create a technological core to extend, but they designed the first niche by outsourcing the technical specification and implementation to SoftwareCo. With respect to the machine manufacturers, the Founders designed a niche for them as well but left the scope vaguer. The aim was at a semi-open ecosystem, based on an international standard, but no criteria for value sharing with the manufacturers were defined. Yet due to the position of the Founders and the strategy of the manufacturers,

the interests were aligned enough, and the machine manufacturers adapted to the major market change initiated by the Founders.

The development of FPF started in 2013 and led to the first deployments in 2016. We have identified the division of responsibilities in this phase as the Assembly configuration of the platform. The Assembly configuration reflected the strong position of the Founders; they had all the key responsibilities as displayed in Table 3. They financed the design and implementation of FPF, being the only source of financial value in the ecosystem. The ERP providers and machine manufacturers were complementors. At this point SoftwareCo was positioned as a complementor instead of a focal actor. It started from a niche created by the Founders, and it had to operate by the rules defined by the Founders. Also, the Founders had the power to the grant SoftwareCo the access to all of their contractors.

4.3 Reaching the Established Configuration

By 2019 all the Founders were using the platform. As the platform gradually reached an established position in terms of installed base and the stability of operations, the initial problems were solved. The platform was a tool that served the actors in a fashion that was perceived good enough. From the wood buyer point of view, it was considered irreversible: *"the way I see it [FPF] is here to stay"* (interviewee #1).

Because the use of the platform was mandatory for contractors, whenever a new contractor started to work for a wood buyer, it also became a customer of SoftwareCo. However, these additions were relatively small, which made SoftwareCo to search for growth by bringing new wood buyers to the platform ecosystem. To reach the goal SoftwareCo bundled FPF and its deployment with enterprise systems it provided: *"[FPF] is a part of our service offering for managing the entire value chain in wood supply, … in a sense one module of the overall solution"* (interviewee #26).

In this way SoftwareCo gradually moved toward being a focal actor but at the same time held on to the complementor niche as an ERP provider. As a result of this bundling, between 2019 and 2021 several new wood buyers started the use of FPF. The installed base of the platform grew in bursts. However, this bundling based on a dominator strategy meant that the development resources of SoftwareCo were allocated in a different way compared to the previous configuration. The Founders perceived that they did not get as much development resources as was agreed. Although the interests of the two actors had been aligned, they now started to deviate.

With the platform core implemented, SoftwareCo was responsible for providing the technological and architectural foundations. The company also took part in defining the rules, especially regarding what the other actors were allowed to do. It had identified the machine manufacturers as a source of possible competition and wanted to keep them at an arms-length distance. The control system and its interaction with FPF constituted an example of how external systems extend the functionality provided by the platform core. However, the manufacturers' software offering contained also features that were competing with some of the functionality present in the platform core.

The contractors acknowledged that the platform was implemented, but not complete. In addition to interoperability with machine manufacturers' solutions, another area where significant needs for improvement prevailed was in the planning of contractor operations.

The issues were rooted in the autonomy given to the contractors. It had led to a situation where the operating volumes of contractor companies had grown, sometimes causing performance issues in the platform core, as described by interviewee #11: *"now that the amount of working sites has reached thousands, the system is lagging, quite regularly"*. These issues were reported both to the wood buyers and SoftwareCo but solving them was progressing slowly.

At this point there were multiple problems: the machine manufacturers' position as complementors, addressing the emerging needs of the contractors, and serving the Founders as well as new wood buyers. The platform was no longer only an initiative of the Founders but nor was it completely governed by SoftwareCo. It was not easy to achieve an alignment among the Founders, SoftwareCo, and the other actors other. The Founders held on to the principles inscribed in the governance framework of the platform. SoftwareCo argued that it had fulfilled the obligations and as a focal actor took steps in defining the rules and attracting new users. The tensions led gradually to a new division of responsibilities, which we identified as the *Established configuration*, presented in Table 3. The bolded responsibilities indicate a change compared to the Assembly configuration.

Table 3. The division of responsibilities in the two configurations.

Key Responsibility	Responsible Actor in the Assembly Configuration	Responsible Actor in the Established Configuration
Defining rules	Founders	**Founders and SoftwareCo**
Laying foundations	Founders	**SoftwareCo**
Attraction	Founders	**Founders and SoftwareCo**
Niche creation	Founders	Founders
Access granting	Founders	Founders

A clear shift was in how the provision of technological and architectural foundations was now completely SoftwareCo's responsibility. Modifications to the platform core and to the interfaces were designed and implemented by the company. All actors recognized and accepted this.

Setting the rules was divided between the Founders and SoftwareCo. Aligning the interests in respect to machine manufacturers' position serves as an example. The manufacturers had recognized the need to strengthen their position in the ecosystem. They were interested in enriching their solutions with the data in the platform core and even using their applications instead or side by side with the core applications provided by SoftwareCo. However, SoftwareCo was reluctant to give them a bigger role and acted cautiously, avoiding any moves that would weaken its position. Instead, SoftwareCo focused on serving the Founders and attracting new wood buyers.

The discussion about exchanging data between FPF core and control systems had been going on since 2020, but with little progress. Manufacturers recognized SoftwareCo as a focal actor, but they also understood the Founders' fundamental role: *"it is a wood*

buyer solution for transferring data to and from the forest machines. I see it primarily as a wood buyer effort" (interviewee #31). Some of the larger manufacturers asked the Founders to help in the negotiations with SoftwareCo. The Founders used their power in aligning the interests of the manufacturers, SoftwareCo, and the contractors. The argument that FPF was developed primarily for the contractors was interpreted so that the obligatory use of the platform should not block the use of additional applications provided by machine manufacturers: *"if a contractor wants to buy a fit solution from a machine manufacturer, it should be allowed and [FPF] should not block it"* (interviewee #28). Furthermore, SoftwareCo was not in the position to grant or deny the manufacturers the access to the customer base, because manufacturers already had contractors as their customers.

In summary, the Founders initiated the FPF development. First, in the Assembly configuration the Founders had all the responsibilities of the focal actor. Additionally, the Founders acted also as end-users. SoftwareCo was positioned as a complementor in the ecosystem. Later, in the Established configuration the focal actor's responsibilities were shared across the Founders and SoftwareCo. The Founders' position in the supply chain gave them power over their contractors, and as the creators of FPF their views carried more weight over the other wood buyers that joined later. However, there was no single focal actor that governed the ecosystem at all times.

5 Discussion

5.1 Shared Responsibilities and Multiple Strategies

We studied the focal actors and their relationships in a platform ecosystem to understand the division of responsibilities. In the literature a focal actor is considered to have power over the ecosystem and complementors due to one-to-many structure and asymmetric dependencies [32]. We provide a new perspective in understanding the early phases of a platform development [33]. Our research shows that there is an overall division of responsibilities in an ecosystem, a configuration of actors and their responsibilities that changes over time [12]. The configurational approach has been used in information systems adoption [28] but only scarcely in the platform research [29].

Although configurations open up a space of possibilities, not all configurations are likely or even possible [27]. The view that focuses on a single focal actor with fixed responsibilities is the prevailing in the extant literature [4, 17, 18]. Our findings indicate that another configuration is possible. In a classic platform ecosystem a focal actor would solve governance issues [9, 23]. In other words, a focal actor would play the main role [34]. When the ecosystem is complex, a single focal actor can be absent [14] or an ecosystem can also be completely decentralized [10]. The FPF ecosystem presents another option where there is no single focal actor nor is the ecosystem completely decentralized. The focal actor's responsibilities in FPF ecosystem are divided between two actors, which can be viewed as an example of power dynamics in the B2B context [11]. B2B platforms include matchmaking, marketplaces, and supply chains as well [19, 20]. If a B2B company wants to succeed with a digital platform it should acknowledge that there are lessons to be learned from successful B2C companies. At the same time it is important to recognize that not all the B2C strategies are applicable to B2B network [35].

Our findings show how a platform creation can be a joint effort. In this effort, defining the responsibilities of different actors is a crucial task. Ensuring sufficient alignment of interests is a critical success factor [34].

The Founders implemented a horizontal platform strategy by allowing other wood buyers to join the platform [25]. Their approach was close to keystone strategy where an actor does not dictate an ecosystem [7]. However, this openness was directed toward other wood buyers. With respect to the contractors, the Founders did dominate. This was due to the contractual relationship and the supply chain. Joining the platform is easy for a contractor but leaving is not an option as long as it works for a wood buyer using FPF. This helped in aligning the interests of the two focal actors [34].

When the focal actor responsibilities became shared in the Established configuration, SoftwareCo started to utilize dominator strategy, aiming to occupy several niches in the ecosystem [7]. SoftwareCo bundled its offerings, providing a solution for the complete value chain [33]. Because the market was limited, SoftwareCo utilized a vertical platform or even a product strategy to search for growth [25]. The vertical strategy was utilized also with respect to the machine manufacturers. The emerging competition called for balancing the different strategies and tactics [23]. As the focal actor role was shared, there was no single owner or a focal actor that could decide the level of openness [25]. The Founders had to take a role in seeking the balance, for the overall health of the ecosystem [7]. The arrangement of two focal actors was relatively stable. However, the diversity of the complementing solutions in the ecosystem remained limited, due to limited number of complementors [19] and the tension between SoftwareCo and the machine manufacturers. Whereas the tension between a focal actor and a complementor is characterized in the literature as delicate [9], in FPF ecosystem it was overpowering, causing stagnation in the relationship between SoftwareCo and machine manufacturers.

While the literature presents a framework for decision making where focal actor decides platform strategies and complementor niches [5, 33], it can be so that the choice of strategies is not for a single actor to make. Some decisions may also require a regulator [1]. The extant literature does not include a regulator in the actors of a platform ecosystem, although the impact of regulation can be significant [36].

5.2 Limitations and Future Research

As our work was qualitative research, concerns for validity cannot be removed absolutely [31]. We briefly describe the actions taken to mitigate descriptive, interpretive, and theoretical validity. Our interviews were recorded and transcribed to improve descriptive validity. The first author was also responsible for the coding and analysis. This way the overall content of an interview, including contextual information recognized by the researcher was available. For interpretive validity, identifying the participants' perspective of events is crucial. To foster this goal, the data collection was extensive, aiming at data triangulation [30]. The first author's familiarity with the domain provided common language and mutual understanding in the interviews. Regarding theoretical validity, the configurations we identified are not likely the final ones. The configurational approach allows for the variation in order and reassessments of configurations [26, 27], thus leaving room for seeking alternative explanations [30]. By using configurational approach, we strived for utilizing a theory that would validate our research. This provides starting

points for future research in the B2B context, including the actors' responsibilities more generally, and the role of a regulator in a platform ecosystem.

6 Conclusion

We presented an alternative approach to view the division of responsibilities in a platform ecosystem, based on a case study of a B2B digital platform in a heavy industry and utilizing configurations as the theoretical framework. From the extant literature we collected responsibilities especially relevant in a B2B context that defined the archetypical division of responsibilities. Our findings suggest that the allocation of responsibilities is more multifaceted than the archetypical setting where a single focal actor has a stable set of responsibilities. There is variety in how the responsibilities are allocated – the actors' responsibilities are configurations and thus not stable but evolve over time, following actor relationships and their strategies. The configurations revealed the focal actor's role that was divided between two actors. As there was no single actor that steered the platform ecosystem, there was no single strategy but a combination of many. The shared role of a focal actor was a potential source of confusion but also a factor that stabilized the platform ecosystem.

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