

Please note! This is a self-archived version of the original article.

Huom! Tämä on rinnakkaistallenne.

To cite this Article / Käytä viittauksessa alkuperäistä lähdettä:

Heikinheimo, M., Hautamäki, P., Julkunen, S. & Koponen, J. (2024) B2B service sales on a digital multi-sided platform: Transformation from value chains to value networks. Industrial marketing management, 2024, vol. 116, s. 26-39.

URL: https://doi.org/10.1016/j.indmarman.2023.11.006

Contents lists available at ScienceDirect



Industrial Marketing Management

journal homepage: www.elsevier.com/locate/indmarman





INDUSTRIAL MARKETING MANAGEMENT

Minna Heikinheimo^{a,*}, Pia Hautamäki^b, Saara Julkunen^c, Jonna Koponen^d

^a Faculty of Social Sciences and Business Studies, Business School, University of Eastern Finland, Box 1627, FI-70211 Kuopio, Finland

^b Applied Research Center, Tampere University of Applied Sciences, TAMK, Kuntokatu 3, FI-33520 TAMPERE, Finland

^c International Sales, Department of Business, University of Eastern Finland, Box 1627, 70211 Kuopio, Finland

ARTICLE INFO

Keywords: Digital multi-sided platform Sales strategy Sales structure Customer relationships Emerging B2B platforms Value orchestration

ABSTRACT

Business-to-business (B2B) service suppliers mobilize a platform approach to enhance their competitive advantage, service selling, and long-term relationships. These emerging platforms in established value chains have been insufficiently studied on a strategic level, especially regarding value orchestration. The aim of this article is to examine how digital multi-sided platforms (DMSPs) change platform owners' value chains toward joint value creation from a sales approach, including sales strategy, sales structure, and customer relationships. Our longitudinal multiple case study was conducted on four platform owners adopting a DMSP as part of their service selling. The findings show how the transition from value chain toward value orchestration in a network shifts the platform owner's focus to develop a common sales strategy with strategic network actors. The restructuring of sales with platform resources allows platform owners to manage larger networks with fewer propositions and a framework to illustrate the interdependence of the value chain changes under examination. Additionally, this study offers various managerial implications for companies when utilizing platforms and provides avenues for further research.

1. Introduction

Emerging business-to-business (B2B) platforms, such as digital multisided platforms (DMSPs), are providing new forms of value creation and gaining interest (Loux, Aubry, Tranc, & Baudoin, 2020; Wallbach, Coleman, Elbert, & Benlian, 2019). A number of industry sectors, including B2B services, are reinventing themselves as extensive platform-based digital networks, which are expected to account for over \$60 trillion in revenue by 2025 (McKinsey, 2020). For B2B service firms, DMSPs provide new opportunities to match their competencies to customers' needs. Global platforms, such as Upwork (www.upwork.com) and Fiverr (www.fiverr.com), connect experts, such as software developers, to customer projects, providing a common digital place to build relationships. However, little is known academically of such a distributed constellation of value creation in orchestrated service value networks (see Belhadi, Kamble, Benkhati, Gupta, & Mangla, 2023; He & Zhang, 2022; Loux et al., 2020). Therefore, this study investigates such platform-driven transition in value creation through the lens of a platform owner, from a sales perspective.

In this study, a DMSP constitutes a digital system orchestrated by the platform owner, in which more than two actor groups, such as partners, customers, and experts, are connected to the platform and interact for business purposes (Alt & Zimmermann, 2014; Wallbach et al., 2019). As shown in earlier research, the platform owner has a vital role in orchestrating the value creation—specifically in generating and capturing value by structuring, organizing, and connecting actors and activities on the platform (Hinterhuber, 2022; Perks, Kowalkowski, Witell, & Gustafsson, 2017). A solid understanding of platform-based value constellations is critical for the platform owner to get a critical mass of users onto the platform and solve the chicken and egg paradox (McIntyre, Srinivasan, Afuah, Gawer, & Kretschmer, 2021; Trabucchi, 2020). Users seek platforms that offer value, but this value emerges from an increased user base, presenting the chicken and egg paradox for platform owners (Wallbach et al., 2019). Such platforms challenge the

* Corresponding author.

https://doi.org/10.1016/j.indmarman.2023.11.006

Received 1 July 2022; Received in revised form 17 November 2023; Accepted 17 November 2023 Available online 30 November 2023

0019-8501/© 2023 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

^d Service Management and Communication, Department of Business, University of Eastern Finland, Box 1627, 70211 Kuopio, Finland

E-mail addresses: minna.heikinheimo@uef.fi (M. Heikinheimo), pia.hautamaki@tuni.fi (P. Hautamäki), saara.julkunen@uef.fi (S. Julkunen), jonnapauliina. koponen@uef.fi (J. Koponen).

established pipeline logic of value creation consisting of linear sales activities in chains (Hahn, 2020; He & Zhang, 2022; Peppard & Rylander, 2006). Even though there is a turn in the literature toward platforms as enablers of building value and networks (Cavallo, Burgers, Ghezzi, & Van de Vrande, 2022; Perks et al., 2017), the current literature only partially captures such value creation and the platform owner's role in digital B2B environments (Corsaro & Anzivino, 2021).

Regarding value orchestration on platforms, previous strategic-level investigations have largely focused on business models and pricing (Liu, Liu, & Gu, 2021; Loux et al., 2020; Maucuer, Renaud, Ronteau, & Muzellec, 2022), even though researchers (Good, Pullins, & Rouziou, 2022; Rapp & Beeler, 2021) consider strategic-level investigations of sales strategy and structure as critical to the sense-making of emerging technologies and channels. At the center of this strategic change is a new type of sales strategy with a focus on sales structuring and the reconfiguration of relationships that accomplish new forms of value creation (Panagopoulos & Avlonitis, 2010; Perks et al., 2017; Thaichon, Surachartkumtonkun, Quach, Weaven, & Palmatier, 2018). As firms show growing interest in utilizing platforms to boost their sales (De Oliveira & Cortimiglia, 2017) and platforms are becoming an amplified global trend (Li, Pan, Yang, & Tse, 2022), it is imperative to provide theoretical and managerial guidance on how sales firms engage in value orchestration in DMSP (Hagiu, 2014; Ritala & Jovanovic, 2024). Especially relevant is to understand how this powerful transition in value constellation occurs in established value chains (He & Zhang, 2022; Sharma, Rangarajan, & Paesbrugghe, 2020; Tian, Vanderstraeten, Matthyssens, & Shen, 2021). In this study, we therefore address the following research question: How do DMSPs change B2B companies' value chains via the dimensions of sales strategies, sales structures, and customer relationships from the perspective of platform owners?

To answer this question, we adopt a longitudinal multiple case study (Gehman et al., 2018) and an in-depth investigation of four service suppliers as platform owners selling expert services, from the platform introduction in 2019 to the platform leveraging in 2022. We focus on firms with established value chains but for whom the platform represents a new positioning as value orchestrators, which only a few studies partially focus on (e.g., Hahn, 2020; Tian et al., 2021).

This research makes several contributions to the B2B platform and marketing literature. As a first contribution, we answer the call for more sales-related research on platform-oriented transformation on supply chains at the organizational strategy level (e.g., Cron, 2017; Rapp & Beeler, 2021). Second, we extend the current literature on platformbased value orchestration (Perks et al., 2017; Tian et al., 2021) by providing a framework with three propositions involving the perspectives of sales strategy, structure, and customer relationships. The framework and the propositions illustrate the value chain change toward joint value creation in the DMSP. Third, we enhance the existing platform discussion (Trabucchi, 2020; Trabucchi & Buganza, 2020; Veile, Schmidt, & Voigt, 2022; Wallbach et al., 2019) on how to get users onto the B2B platform (the chicken and egg paradox; Trabucchi, 2020) and reach the critical mass of users, by suggesting that platform owners need to establish strategic partnerships and involve partners utilizing platform resources, as they simultaneously bring customers to the platform. Furthermore, this study offers several managerial implications of how platform owners can scale their service networks and clarify their strategy toward continuous service flow and enhanced profitability.

2. Theoretical background

To present the theoretical underpinnings of our study, we approach the literature from two directions. The first part of the literature focuses on the DMSP as an emerging B2B platform, the platform-driven change in value creation, and value orchestration by platform owners. The second stream shows a sales approach (sales strategy, sales structure, and customer relationships) related to platforms. As far as we know, there is a lack of research focusing on the transition from linear value chains to joint value creation in a network through a sales approach. Additionally, no previous studies have methodologically focused on an in-depth qualitative inquiry of established knowledge-intensive service value chains, as the majority of existing qualitative case studies focus on product-based value chains within the manufacturing industry. Table 1 illustrates key existing studies and the positioning of our study compared to those.

2.1. DMSP-driven change toward a value network

In the studies included in Table 1, DMSPs are a form of B2B platform and, with their tangible and intangible resources, they create value by matching platform users and allowing transactions to occur more openly (He & Zhang, 2022; Park, Van Alstyne, & Choudary, 2017; Rana, Kar, Gupta, Pappas, & Papadopoulos, 2023). DMSPs have a unique operational setting, making it a challenging business environment for platform owners (Belhadi et al., 2023; Wallbach et al., 2019). A challenge arises from platform's changing value capture mechanisms as the participating actors and their roles vary, positioning platform owners as orchestrators of value creation (Perks et al., 2017; Ritala & Jovanovic, 2024). This essential role of value orchestrator has been noted within the existing research, especially from a network orchestration perspective (Perks et al., 2017; Tian et al., 2021) and on platform governance (Cavallo et al., 2022). Attracting at least two groups of actors is a prerequisite for value creation, as the matchmaking fails otherwise (Trabucchi, 2020). Users are only willing to enter onto platforms that provide value, but the value is created as a result of the increased number of users, producing a chicken and egg paradox for platform owners (Trabucchi, 2020; Wallbach et al., 2019). Therefore, the existing literature focuses largely on understanding and conceptualizing the platform value associated with functional value (e.g., customer selfservice), cost value (e.g., reliable services and efficiency), and contextual value (e.g., tailored solution proposals generated by algorithms) (Corsaro & Anzivino, 2021; He & Zhang, 2022). Additionally, existing research on DMSPs focuses on the network effects as the value for existing platform users increases when more users enter onto the platform (Wallbach et al., 2019). Positive network effects appear when a critical mass of users is achieved, leading to a significant growth of platform users, or, alternatively, a failure of the platform (He & Zhang, 2022; Wallbach et al., 2019).

Less research (Hahn, 2020; Ritala & Jovanovic, 2024; Tian et al., 2021) focuses on the transformation from the traditional value chain into the value creation in DMSPs. Traditionally, value chains focus on controlling a linear series of vertically managed activities along the customer's buying journey, which changes drastically in the platform environment (Belhadi et al., 2023; Hahn, 2020). In platform logic, the main challenges relate to the orchestration of value creation to diverse user groups and the dynamic nature of platforms in value creation (Hahn, 2020; Ritala & Jovanovic, 2024). Therefore, such a radical change journey from the established value chain to a DMSP requires more attention, especially from the platform owner perspective. To orchestrate value in the DMSP, the platform owner needs to have an understanding of strategies, structures, and relationships (Loux et al., 2020; Mourtzis, Angelopoulos, & Panopoulos, 2020), which should lead to increased sales volume and efficiency. However, earlier research lacks such a sales approach.

2.2. Sales strategy in emerging DMSPs

In traditional value chains, the firm-level sales strategy provides direction on how to connect and interact with customers within an appropriate segment to reach the firm-level targets and develop long-term customer relationships (Ingram, LaForge, & Leigh, 2002; Panagopoulos & Avlonitis, 2010). Such a strategy works well with the pipeline logic of value creation (Ingram et al., 2002; Zoltners, Sinha, & Lorimer, 2008) but poorly with collaborative value creation for multiple

Table 1

Positioning of our study with key literature.

Reference	Key approach/findings	Methodology	DMSP-driven change toward value network			DMSP-driven sales approach		
			DMSP as an emerging B2B platform	Platform- based change in value creation	Value orchestration by platform owner	Sales strategy	Sales structure	Customer relationships
Hahn, 2020	Presents technological change (e.g., platforms) in industrial value chains	quantitative	✓	1	-	-	-	-
Belhadi et al., 2023	Reveals that digital technologies decrease customer loyalty in the context of B2B sharing platforms	quantitative	1	-	-	-	-	1
Ritala & Jovanovic, 2024	Presents platform-based business models, such as ecosystem orchestrator	conceptual	1	1	1	-	-	-
Tian et al., 2021	Explores traditional value chain change toward platform-based logic in manufacturing industry	qualitative	1	1	1	-	-	1
Perks et al., 2017	Presents four network orchestration mechanisms in the value platform development context	qualitative	1	-	1	-	-	1
He & Zhang, 2022	Conceptualizes functional and cost, and contextual value as enhancing platform value, platform engagement, loyalty and customer	quantitative	1	-	-	J	-	1
Bongers, Schumann, & Schmitz, 2021	Reveals challenges and contextual boundary conditions in the introduction of digital sales channels	qualitative	-	-	-	1	1	1
Corsaro, 2022	Outlines sales transformation as a change process in institutional alignment affecting value co- creation in service ecosystem	qualitative	-	1	-	1	1	1
Cuevas, 2018	Presents strategic alternatives for managing future sales organizations for maintaining growth and sales	qualitative	1	-	-	1	1	1
Thaichon	Conceptualizes hybrid sales	conceptual	-	-	-	1	1	1
Our study	Investigates transition from pipeline logic of value creation into a distributed constellation of value creation from sales approach and platform owner's perspective in	qualitative	1	1	1	J	J	/

platform users. As suggested by the current literature (Bongers et al., 2021; Veile et al., 2022), platforms initiate change in existing customer segments and channels, but taking a more holistic perspective, the current understanding of the sales strategy conflicts with platform logic in several ways, which the current sales literature leaves almost untouched (see Table 1). First, current sales strategy understanding is intended for guiding salespeople, not sales conducted in many ways as platforms enhance customers' self-operability and other non-salesforcedriven actions (Cuevas, 2018). Second, the platform owner is required to serve diverse platform users to promote the network effects (Trabucchi, 2020). Third, contrasting with traditional value chains, platforms enable joint value creation and competitive advantage for both the platform owner and other platform actors (Perks et al., 2017). Therefore, a DMSP creates a whole new expectation for a sales strategy to guide platform owners' value orchestration for all platform actors (De Oliveira & Cortimiglia, 2017; Ritala & Jovanovic, 2024).

complex service selling

Even though sales research (Cuevas, 2018; Syam & Sharma, 2018) has started to notice these emerging platforms, the needed sales strategies and practices of platform owners is little understood. Discussion on such platforms and their implications for sales has merely focused on online channels, leaving the investigations on holistic strategic change limited (Bongers et al., 2021; Cuevas, 2018). This is surprising, since besides the business model, the sales strategy is one of the key constructs in understanding the means of creating and delivering value (Ricciotti,

2020).

2.3. Sales structure in emerging DMSPs

Guided by a sales strategy's targets, structuring sales is vital for ensuring the optimal usage of varied sales models to achieve sales effectiveness, develop customer relationships, and meet value creation objectives (Rapp, Beitelspacher, Schillewaert, & Baker, 2012; Zoltners et al., 2008). As illustrated by the existing literature (Table 1), established sales structures in traditional value chains have depended heavily on outside selling, a situation in which members of the salesforce travel to meet customers face-to-face (Bongers et al., 2021; Thaichon et al., 2018). Such sales structures fail to support the demands in emerging platform environments (Corsaro, 2022; Thaichon et al., 2018). Therefore, the recent research has introduced new ways of structuring sales, combining digital and in-person activities and including knowledge storage and processes that provide sales teams with unrestricted access to necessary information (ibid.). Such hybrid sales structures enhance customers' self-operability, which the current research has mainly reported on occasional online channel usage, as the digitalization of noncomplex activities is much easier (Bongers et al., 2021; Cuevas, 2018). In complex B2B platform environments, there are fewer examples of engaging customers in joint value creation for gaining a platform's full benefit (De Oliveira & Cortimiglia, 2017; Ritala & Jovanovic, 2024).

The adoption of a DMSP requires structuring sales to advance the platform owner's target to reach an adequate number of users and critical mass for the platform (Leong, Pan, Leidner, & Huang, 2019; Perks et al., 2017). Reaching critical mass is a requirement for a platform gaining network effects and, ultimately, sales efficiency. Furthermore, a DMSP, with its various resources, allows one-sided resource links that enable users to navigate from one platform to another and, thus, the sales structure should enhance user engagement (He & Zhang, 2022; Maucuer et al., 2022; McIntyre et al., 2021). In the DMSP environment, processes are dynamic and non-linear compared to traditional contract-based value chains, reflecting flexibility and possible changes in the sales structure before gaining critical mass. (Broekhuizen et al., 2021; Tian et al., 2021; Veile et al., 2022). Therefore, more knowledge is needed on structuring the sales in DMSP for promoting platform leverage.

2.4. Customer relationships in emerging DMSPs

In the earlier sales research, the relationship value has been emphasized in the buyer-seller relationships (Hohenschwert & Geiger, 2015; Jolson, 1997; Sharma, Iyer, & Evanschitzky, 2008) alongside the product or service transaction. Therefore, a salesforce building the necessary relationships has been regarded as a firm's most important resource in the value chain (Palmatier, Dant, Grewal, & Evans, 2006). However, recently, platforms have also evolved into long-lasting relationships (Belhadi et al., 2023; Bongers et al., 2021). Allowing new types of interactions and relationships to occur, the digital, interconnected networks (Ricciotti, 2020) contradict traditional relationship development in dyadic buyer-seller interactions (Arli, Bauer, & Palmatier, 2018; Maucuer et al., 2022). A single selling actor influencing a customer's decision-making has changed into a more complex network in which different actors exchange knowledge and may form mutually beneficial relationships (Hartmann, Wieland, & Vargo, 2018; Veile et al., 2022). For establishing such network and building commitment among actors, platform owners may rely on previous relationships in the value chain (He and Zhang, 2022; Trabucchi, 2020).

Platform-based relationships are threefold, where the platform acts as a mediator between multidirectional, dynamic interactions between different actors (Corsaro, 2022; He & Zhang, 2022). Through various efforts, the platform owner as value orchestrator should provide ways to encourage interaction on the platform to foster relationship-building (Perks et al., 2017). Indeed, DMSPs increase the complexity of relationships, as platform owners should understand various actors' (such as partners and customers) needs and their journeys to the platform (Arli et al., 2018; Belhadi et al., 2023; Chakravarty, Kumar, & Grewal, 2014). As different actors require various value propositions (Ritala & Jovanovic, 2024; Trabucchi, Muzellec, Ronteau, & Buganza, 2022), the customer centricity relies on the platform owner defining each actor's role in the value constellation and interactions (Ekman, Raggio, & Thompson, 2016; Tiwana, 2014). This could open the possibilities for actors such as partners to build direct relationships with customers (Leong et al., 2019). However, as earlier research (Belhadi et al., 2023) implies, it is not evident that relationships develop only positively on a platform, as excessive use of digital technologies, such as AI, may result in distrust and lower their value in the customer's eyes. Therefore, it is imperative to know how relationship commitment advancing joint value creation is built in the DMSP environment.

2.5. The framework of this study

To summarize, the shortage of research in the field of value orchestration in DMSPs has led to calls for in-depth scholarly analysis in the context of established value chains and their evolution into platformbased networks (Hahn, 2020). This research gap led us to investigate this transition toward the distributed constellation of value creation within the network from the sales approach, including sales strategy, structure, and customer relationships, from the perspective of the platform owner. In Fig. 1, we introduce the conceptual framework that is utilized in the data analysis. Our research method is presented more in detail in the next section.

3. Methodology

Since previous studies have scarcely studied how DMSPs change the value creation in such emerging platforms, we were interested in exploring multiple empirical cases (Perks et al., 2017). We followed an established approach of utilizing a multiple case study to contribute to theory development on the value chain transformation (Eisenhardt, 1989; Gehman et al., 2018). A multiple case study with a moderate number of cases allowed us to investigate each case in-depth to understand its characteristics within the value chain transformation and to compare cases in order to identify more pervasive patterns (Eisenhardt, 1989). With this longitudinal multiple case study (Eisenhardt & Graebner, 2007; Gehman et al., 2018), we aimed for the enhancement of the theory that consists of building propositions based on our empirical evidence (Eisenhardt, 1989; Gehman et al., 2018). To gain an in-depth understanding on how DMSPs change value chains in case firms over time, we collected data over many years, following the example by Tian et al. (2021). The analysis enabled us to understand how practices related to sales strategy, sales structure, and customer relationships are interrelated in the DMSP and change over time (see Perks et al., 2017). The analysis of the study proceeded from the DMSP introduction in 2019 to the platform leverage in 2022 in the case firms. Our epistemological assumptions were tied to subjectivism, as we sought to increase the understanding and explanation of value chain change through interaction with researchers and interviewees (Guba & Lincoln, 1994; Langley & Abdallah, 2011).

3.1. Building the pre-understanding of the phenomenon

As shown in Fig. 2, we began our empirical research process by organizing focus group discussions (n = 9) with the platform owners to form a pre-understanding of the platform introduction as part of their B2B service sales. This phase was important due to a lack of previous indepth knowledge regarding B2B platforms and their relation to service sales and to the exploratory nature of this research. Focus groups are widely used in marketing research, as they allow researchers to identify prominent research topics (Eriksson & Kovalainen, 2016). Furthermore, they have been applied to developing research questions and a structured interview guide with semi-structured interview questions (Eriksson & Kovalainen, 2016). In addition to the focus groups, secondary



Fig. 1. Framework of the study.

M. Heikinheimo et al.



Fig. 2. Research process, data, and sources.

data, such as the DMSP project plans, the firms' websites, and sales process charts, helped us to build an understanding of the nature of the case firms' service businesses and their motives for the platform introduction. Furthermore, in addition to the focus group discussions, we conducted a review of the relevant literature to identify the existing gaps in the literature and to gain confirmation regarding the research question.

3.2. Sampling and case selection

For data collection, we applied convenience sampling logic, which refers to a nonrandom sampling method where the data are easily accessible (Croucher & Cronn-Mills, 2014). The cases were selected during gaining a pre-understanding of the research phenomenon. Case firms were selected based on the following criteria: (1) they were B2B service companies geographically close to the researchers, (2) they had just started to apply DMSPs in their sales, (3) they were willing to participate in the study, and (4) they allowed the researchers to collect longitudinal data both within the companies and from their customers. Four case firms (Alpha, Beta, Gamma, and Delta) fulfilled the selection criteria and are introduced in Table 2.

3.3. Data gathering

Our primary data collection began in November of 2019. We conducted interviews (n = 28) in the four case companies with participants who held senior-level executive positions, such as CEOs and sales executives, and were thus able to share their diverse and extensive experiences in business activities and the processes inherent in their value chain changes. Using the snowballing technique, the interviewees suggested further interviewees (Wilkinson & Young, 2004); the customer interviews (n = 7) were conducted in the spring of 2020 to obtain rich data from multiple sources.

During the interviews in 2019, the interviewees were asked to

illustrate how service selling was changing in the DMSP. They described the participating actors on the platform and clarified the value chain overall. After establishing the broader context of a DMSP's role in service selling, the interviews focused on platform-driven change in value chain from sales approach. The interviews consisted of questions such as: "How would you illustrate the sales strategy of your firm?", "How does the platform connect to service sales?", and "What kinds of interactions occur on the platform?" Follow-up questions were asked when clarification was needed (Miles & Huberman, 1994). In 2020, the customers were asked additional questions such as: "How would you illustrate the role of the digital platform in expert services?" and "How do you see relationship-building on a digital platform?" In the autumn of 2022, the authors returned to the case firm interviewees (n = 10) to understand how the leverage of DMSPs had developed and what kind of changes the platform owners had made to secure value creation on a DMSP. The interviews included questions such as: "How has the platform changed your previous value chain?", "How would you illustrate the structuring of the sales in DMSP?", and "How would you illustrate the customer relationships in platform?" All the interviews were recorded and transcribed verbatim.

3.4. Data analysis

Our data analysis proceeded iteratively through the longitudinal data collection and the analysis and comparison of the case data. Following the example of Hochstein, Chaker, Rangarajan, Nagel, and Hartmann (2021), to gain a deep understanding of the value chain change, we included multiple units of analysis (sales strategy, sales structure, and customer relationships) within a single unit of analysis (a sales organization as a platform owner adopting a DMSP). In the analysis, we followed the thematic process employed by Braun and Clarke (2006). First, we familiarized ourselves with our data by reading the transcriptions several times. The transcribed interviews and secondary data were collated into a case study database as four ATLAS.ti

Table 2

Alpha

Beta

Descriptions of the case firms.

Trigger to initiate

finding expertise and making matches" A multi-sided platform to increase sales efficiency for placing experts optimally on customers' assignments.

Experts can build

with customers. Transparency and

sales forecasting

situational

available

resources

A multi-sided platform for selling

expert work,

securing faster service delivery and committing to a growing partner network. Manual sales tasks and data flow are automated.

Streamlining of the

existing value chain in expert

"A platform for

building project

A multi-sided

platform through

which extensive

building projects

can be managed,

including network

orchestration and building

information

Manages

management.

awareness of

gaining closer

makers.

project'

information and situational

multiple projects

and actors. Targets

relationships with important decision-

"A platform gluing

together working for same customer

various experts

A multi-sided

the platform

platform that is

used for connecting

management'

sales.

Gamma

awareness of experts' skills and

direct relationships

platform data make

easier and increase

"An expert in 30 s"

digital multi-

sided platform (DMSP) in 2019 "A mechanism for Staff

membe

500-750

30-50

10-29

10 - 29

Computer

software

consulting

Information

services for

construction

software

projects

management,

development, and

Other management

consulting

hardware and

Company

turnovei

(MEUR)

60-65

15 - 25

< 5

< 5

		Table 2 (continued)				
rs	Industry	Trigger to initiate digital multi- sided platform (DMSP) in 2019	Company turnover (MEUR)			
)	Software design, development, and consulting services	owners and partner experts and freelancers for digital marketing and digital sales consulting projects for customers. All relevant processes, such as service transactions, customer negotiations, contracts, and				

projects, are

platform-based.

Integration into a larger international

service ecosystem

international sales.

Helps in building the offering for

productized digital

possible, further

increasing

services.

projects—one for each case firm. We then wrote initial case descriptions
to outline each organizational setting as a within-case analysis (Gehman
et al., 2018). At the beginning of the coding work, we created 205 initial
codes based on the entire interview dataset by connecting the relevant
data in each code. Inductive coding allowed the examination of the di-
versity of the value chain dimensions and increased creativity in finding
patterns within the exploratory research (Gehman et al., 2018).

Next, we collated the initial codes into 23 relevant subcodes, excluded the redundant codes and, through the reviewing and refining of our subcodes and themes, we connected the subcodes into 8 topcodes and, ultimately, into 3 main themes (Braun & Clarke, 2006) (see our coding structure and flow of analysis in Appendix A). The names of the three themes were "sales strategy in DMSP," "sales structure in DMSP," and "customer relationships in DMSP," based on existing research (Gehman et al., 2018). Within these themes and topcodes, we analyzed each case separately as within-case analyses. In the within-cases analysis, we reveal how the value chain developed following the platform logic for each case firm from a sales perspective and how the platform owner ensured the value chain transition by trying to overcome the related challenges in platform logic and activities. These results are shown in Fig. 3. We also conducted a cross-case analysis (see Appendix B), investigating all the cases holistically to detect convergences and differences and to produce valid information-rich results at both a macro- and individual firm-level.

To improve our research validity, reliability, and trustworthiness, we utilized several well-established measures in our qualitative research process. We carefully gathered the data and created a case database; case firms were given a chance to comment on the research results to enhance analytical understanding and the validity of our findings (Piekkari, Plakoyinnaki, & Welch, 2010). By collecting data from different informants (case firm representatives and customers) and secondary sources during different time spans along the platform adoption process, we increased the data and source triangulation. The researchers collected, coded, and analyzed the data, as well as compared the findings to the theory. Then, the researchers discussed the analysis and findings in research meetings confirming the researcher triangulation and, consequently, the trustworthiness of the results. Additionally, our multiple case study design provided us with unit triangulation by

D	ച	ta
ν	\mathbf{c}	ιa

Industry

Staff

members



In 2022, value was created jointly among 1,200 own, partners, and subsidiaries' domestic and international experts. <u>Sales strategy</u> is based on strategic partnerships with continuous service selling of bigger entities fostering international growth. Sales volume increased by 28% and profit by 8%¹s. <u>Sales structure</u> utilizes DMSP resources, such as AI and data, and enables cost-effective scaling of the network toward 5,000 platform users. Platform technology and data enable varied interactions for anyone to build and strengthen long-term <u>gustomer relationships</u>.

In 2022, Beta with its platform orchestrated value among 7,000 network actors, the majority being partners and their experts. <u>Sales strategy</u> is based on platform utilization enhancing international growth, stronger partnerships, and constant service selling. Interestingly, sales volume decreased by 38% but profit increased by 78%. '<u>Sales structure</u>: DMSP data and technology-assisted actor matching enables sales efficiency and an increase in profit. Ongoing platform technology development and data utilization targets increase customers' self-service buying and more direct interactions between platform actors. <u>Customer relationships</u>: Partners are treated equally and considered as customers with similar expert needs as customers, generating duality in relationships.

Sales strategy: In 2022, the transition to platform-based value creation has advanced strongly, with over 3,000 platform users. The platform has enabled Gamma to rise from the bottom of the value chain closer to important decision-makers, such as building site owners. Uncertainty in European business markets (due to the war and increased construction material costs) has negatively affected international growth and direction to the European market. Due to the minimal number of projects in the domestic market, further domestic growth is limited and, therefore, has lowered the sales volume by 6% and profit by 151%. Sales structure: Reconfiguration of the sales structure to be more efficient and have enough technical expertise. <u>Customer relationships</u>: Active interactions have created commitment in relationships, but relationship equality has not advanced in similar ways to other case firms.

<u>Sales strategy</u>: In 2022, value is orchestrated with domestic and international partners and their experts. Platform integration into the larger App Market enables selling own services and solutions in the global market. Uncertain business markets (due to COVID-19) negatively affected sales volume, which decreased by 48%, but profit improved by 133% <u>Sales</u> <u>structure</u>; Nearly everything in the sales process is digital and based on the platform, and sales has given up its physical office facilities. Also, international customers are gained due to platforms based on digital leads. <u>Customer relationships</u>; Shared projects with several partners have changed the power dynamic in relationships. In 2022, the case firms' value chains have changed toward an increasingly digitized value network, where DMSP forms a core for continuous service flow and the value orchestration of the network. Case firms as platform owners have succeeded in positioning themselves at the core of this emerging value network. DMSP's AI and data-assisted interaction help to engage platform actors and promote long-term customer relationships.

¹ The KPIs are based on the researchers' analysis based on the figures for 2020–2022 obtained from the national database of Asiakastieto Oy (https://www.asiakastieto.fi/web/en/).

¹ The KPIs are based on the researchers' analysis based on the figures for 2020–2022 obtained from the national database of Asiakastieto Oy (https://www.asiakastieto.fi/web/en/).

Fig. 3. Summary of the findings.

converging the findings from four longitudinal cases (see Farquhar, Michels, & Robson, 2020).

4. Findings

In the study, we asked how DMSPs change B2B companies' value chains. Our findings reveal that DMSPs significantly transform service firms' linear value chains toward a platform-based value creation in a network. All examined sales dimensions are subject to changes, and the results were confirmed with relevant KPIs, such as profit. Fig. 3 illustrates value chain change for the individual case firms and the similarities and differences across the cases.

4.1. Sales strategy in a DMSP

In 2019, the case firms were seeking competitive advantage by investing in platform development to attract platform users for joint value creation. The firms had succeeded well in fulfilling their positions in the linear value chains by providing expert service (see Fig. 3), but their desire was to commit more strongly to larger customers and produce more value by orchestrating a growing network of various experts. By 2022, the case firms had managed to attract more actors (customers, complementary service providers, and experts) to joint value creation in the DMSP. That is, the firms had moved from linear value delivery toward *value orchestration* of the emerging network, and the potential for joint value creation was increasing. Our findings indicate that the sales strategy needs to support this transition by accepting a platform owner's role as a value orchestrator and identifying suitable actors to strengthen the value networks in expert selling. For Alpha and Beta, especially, such value creation change raised concerns in the platform introduction, but

clearly the acceptance of this new position has advanced, as the following quote illustrates:

We have the advantage that [the digital multi-sided platform] really connects the different actors and we are able to genuinely offer value, as we know the network and how to pick out the experts from there, if the match is not completely obvious, or has not been found directly. This is where we can help in between. (Beta, chief network officer, 2022).

By adopting a position as a value orchestrator, the platform owners' strategic aim has been clarified as advancing the matchmaking of experts and knowledge. Previously strategic direction was somewhat unclear, especially with Alpha and Gamma. This clarification of strategy and value orchestration appears, as all case firms now seem to focus on continuous service flow in a network instead of one-time sales of single services. This was a rather unconscious goal in the beginning of the DMSP adoption in 2019, but now the growing network has provided growth in sales volume, especially for Alpha. Such a shared strategy presents further opportunities to increase sales volumes for all firms and has helped most of the firms (Alpha, Beta, and Delta) to improve their profitability drastically. This change in strategy is illustrated below:

We don't try to gain quick profits from sales, even though we always have pressure to assign experts to [billable customer assignments] [...] And customers want to buy more than individual experts from [us] [...] So, this [continuous service sales] has clearly developed on both sides. (Alpha, growth marketing lead, 2022).

Besides this value orchestration, we identified two other factors that indicated value chain change from a sales strategy perspective: *complexity in segmentation* and focusing on *strategic partnerships*. For value orchestration, it is essential for platform owners to first get the complementary service providers onboard, otherwise the value creation fails. Therefore, our data reveal that partners were first segmented as a primary customer group in sales strategy, which was especially evident with Alpha and Beta. As the platform leveraging proceeds, it is also prominent that the partners wish to extend their existing teams' competences with the platform's experts, making the partners also a prominent group of customers in the future and thus creating complexity in segmentation. Some case firms, such as Beta, even actively encourage their partners to announce their expert needs on the platform:

We have 600 network partner companies, so a big focus area in our [sales strategy] is to convert an increased number of these partners into customers. There are a lot of them already, but it could still be made more efficient ... as our partners can post [service] requests for other partners there [on the platform]. (Beta, head of sales, 2022).

Such indistinct roles that contradict with clear, fixed customer and partner roles in the traditional value chain make segmentation even more complex, as customers may also offer their own experts for assignments on the platform. Therefore, for the platform owner, it may be more relevant to find customers and partners with similar strategic fit, requiring the openness of strategic targets. Attracting such network actors that are willing to share the strategic goals may require great effort, unless the platform owner is able to utilize the existing value chain, as has been the case especially with Beta with its partners and with Alpha and its existing customers. Also, Delta reports conducting service development and strategic planning with key customers. This reliance on strategic partnerships and common goals by utilizing fast and flexible platform entries and network resources was also identified in our customer interviews, even though it somewhat contradicts the platform logic aiming at actor equality. Yet, all firms emphasize that they have been able to move closer to the most important decisionmakers. This quote illustrates the involvement of strategic partnerships:

Customers' goals are common with us ... or we make them as the same targets ... that is, we don't get there instantly but with little steps by gaining trust and being able to offer value through practical projects and through daily work ..., that's the goal, that strategic partnership is the goal. (Alpha, head of digital sales, 2022).

From a sales strategy perspective, aligning with customers' goals and strategic partnerships is crucial because, from a platform owner's viewpoint, the value of orchestration on the platform signifies a longterm commitment and is dependent on getting at least these two user groups onto the platform.

4.2. Sales structure in a DMSP

In 2019, the sales firms as platform owners shared a common interest in gaining increased sales efficiency using the DMSP and, thus, the firms were beginning to structure their sales around the platform (see Fig. 3). This platform-based sales structure was intended to bring transparency to the partners, enabling the direct detection of customer needs, removing old links in the value chain, and building new ones among the platform actors. In a DMSP, the sales structure needs especially to support the platform owner's goal to achieve critical mass-in other words, an adequate number of users on the platform. This is an antecedent to sales efficiency and to the network effects, and to the platform turning into a central place where expert and knowledge matching is conducted. In 2022, the sales structures of the case firms have evolved from a firmoriented, salesperson-based structure into a new platform-based structure, enabling network actors to work tightly in collaboration. We found that hybrid sales models and platform resources are the factors that advance the achievement of an adequate number of platform users by organizing sales accordingly.

From the perspective of sales structure, the adoption of the DMSP has initiated hybridity in sales by all the firms by bringing location and time independence and self-operability into expert selling, as customers may now release new assignments directly anytime and anywhere, to the network's benefit. This increases the flexibility in the DMSP as platform owners, partners, and experts may instantly see available assignments, which reduces the time spent when experts lack customer projects. There has been a gradual increase in customer self-service buying due to the complexity of service transactions. Based on our interviews in 2022, this approach was initially piloted by Alpha and was implemented on a smaller scale for customers by Beta and is still in development with Gamma. Delta has increased customer self-service by adding the possibility for customers to initiate simple services, such as website capability testing, themselves. Firms envision the customer self-service buying becoming more common in the near future, thereby increasing the value of the platform significantly. Now, some service assignments still spread into various channels and, therefore, managing a growing network and simultaneously maintaining flexibility may cause challenges:

We are clearly still in a small transition phase. You could say that. Some [expert requests] still come according to the old model, including contacts directly to email. There is a small negative side that they are now in two places [in email and on the platform]. (Beta, account manager, 2022).

As an important platform resource, data storage and transparency, such as expert competence profiles, help other non-sales experts, such as project managers, to quickly verify the available offering based on detected customer need. Gamma's former sales team lacked technical competence, as their customers now expect a deep knowledge of the platform system and its technical features; thus, they have involved their product managers in selling. The restructuring of sales has helped Gamma to gain new customers, even though the sales volume has decreased due to the difficult market situation. Thus, the platform resources help firms to manage a larger expert network with fewer human resources. All case firms have started to utilize fewer human-based and more platform-based resources; for instance, technology-assisted actormatching is utilized to automate manual sales tasks:

We haven't had to hire or train new resource managers who would manually look for them [experts]. Now the platform does quite a lot of that ... We have been able to scale cost effectively. (Alpha, sales director, 2022).

Artificial intelligence (AI) is slowly starting to understand better which technologies are related to each other. For example, in the case of a JavaScript expert, the AI will suggest a suitable person based on the existing data [on technologies and skills] ... Therefore, the person looking for an expert does not need to understand this. (Beta, head of sales, 2022).

Such platform resources have enabled firms to redirect their human resources into roles supporting network growth, such as with Beta's chief network officer, who focuses on the strategic development of the value network. The extensive use of AI on the platforms is still ongoing, but, currently, it generates data, such as the most-requested expert roles and skills and their development, besides predicting the invoicing rates of the experts. In addition, Gamma and Delta are utilizing platform resources, such as chatbots, besides sellers to serve their customers and partners more effectively and reduce the amount of time spent on routine work that is now automated. The new sales structure has become more efficient, causing an increase in profit and enabling further investments, such as advancing international sales with all case firms, except Gamma. Gamma is lagging behind the other case firms with platform leveraging, as indicated with this quote:

M. Heikinheimo et al.

We have noticed that selling in this platform transition [as a metaphor to running] is not a sprint, it is at most a medium distance, probably a long distance, or even an ultra-long running distance. (Gamma, CEO, 2022).

In addition to the difficult market situation in the construction business, Gamma's domestic market is saturated and provides them with limited growth. However, with the platform-based sales structure, they may enter new markets more easily when the market situation recovers, as the platform offers sales resources that work for the benefit of all the network actors. Through boundary resources, such as the application programming interface (API) (see, e.g., Hein et al., 2019), platforms could be integrated into the relevant sales technologies, such as customer relationship management (CRM), enterprise resource planning, and social media networks, to provide additional resources and transparency and even access to the larger App Marketplace, as with Delta, to sell their services.

4.3. Customer relationships in a DMSP

In 2019, the relationships on the DMSP constituted a limited number of activities among a delimited number of actors (see Fig. 3). Selling was still largely based on dyadic buyer–seller interactions outside the platform, in which a salesperson facilitated the relationship. The expectation was that the platform would bring the actors together and automate some parts of their interactions, such as automatic entry of the expert's profile onto the platform. It was still unclear how the versatile interactions would occur on the platform, but they were regarded as important, as this customer expressed as an expectation to a platform owner:

Many [service suppliers] have very efficient CV collection platforms ... But there's a lack of ... that kind of personal part. Experts don't know for which they're being offered. I don't really like that. (Customer A, CEO, 2020).

In 2022, the DMSP was described as enabling the improvement of the interaction among the various actors and enabled a movement toward stronger and more committed relationships among the network actors, which the interviewees highlighted as a prerequisite for a long-term value network. This was especially evident with Alpha, Beta, and Delta. Regarding value chain change caused by DMSP from a customer relationship perspective, we identified three key factors: *constant data transactions, relationship equality*, and *duality in relationships*. When it comes to constant data transactions, the DMSP has centralized part of the communication on the platform, but, despite the expectations, not all communication happens there yet. However, according to the interviewees from all case firms, the increased direct interaction on the platform has been regarded as a key benefit as it enables the establishment of new relationships and the maintenance of existing ones, regardless of time and place.

Customers and partners who enter onto the platform might not have previously established a relationship with the platform owner, nor might they necessarily do so in the foreseeable future. Commitment into the network appears through constant data transactions, but it also requires activities such as information sharing from all the actors. This includes experts and partners, who should actively update and generate better situational data of themselves and their projects onto the platform. As Gamma notes, a lack of activity on the platform reveals to the platform owner that the platform is not being used and potentially lacks value creation. However, the findings suggest that there are still some insecurities as to whether constant data sharing on the platform is adequate for relationship commitment:

[Constant] data transactions, in a way, create commitment in a completely different way than if we were in a traditional buyer–supplier type of relationship. (Customer B, CEO, 2020).

[On the platform], it doesn't matter that people change, that is, [an expert] who does advertising changes or someone who does content, it's not essential ... because [the customer] doesn't get attached to them, but they get attached to who sold [the project] and to that project manager and that strategist. If [those people] change, then the customer will probably change as well.

(Delta, CEO, 2022)

Therefore, in 2022, DMSPs still required both platform-human and human-human interactions in the network because the platform was being adopted into a complex service selling environment and was still evolving. When it comes to increasing relationship equality, platform owners have been seeking the means to encourage more direct interactions with the other actors and to reduce their own roles in interactions. In 2022, customer assignments were divided into platform networks, and partners and experts got the same information simultaneously. This equality is a prerequisite for platform governance and partners' commitment to the platform, as anyone can take the initiative in a relationship, as is especially evident with Alpha and Beta. However, platform owners may need to balance such equality and business targets by, for instance, favoring certain actors. Nevertheless, data on previous projects, teams, and proposals helps all actors to better understand customers' needs and develop expert competences based on those needs. This is especially evident with Alpha, Beta, and Delta, as Gamma still has less partners involved. According to Delta, it may sometimes be unclear who controls the customer relationship, as in such joint value creation there may be several partners involved, pulling it in their own directions, leaving the question of ownership and the power balance of the relationship unresolved. Regarding duality in relationships, the indistinct roles of a partner and customer are taken into account in a DMSP allowing several roles for users:

We have implemented dynamic roles for users [on the platform]. We do not have any limits on how many or what kinds of roles one user can have. We have a certain set of defaults, like salesperson, expert, team leader, but they can also be modified. (Beta, chief information officer, 2019).

However, from a relationship development perspective, this may cause complexity for the platform owner, as it may be unclear whether the relationship should be developed toward the partner or customer relationship.

5. Discussion

In this research, we investigated how DMSPs change B2B companies' value chains from a sales approach, with its interlinked dimensions of sales strategy, structure, and customer relationships into a value network, from the perspective of a platform owner. This study answers the call for more sales-related research on platform-oriented transformation at the organizational strategy level (Cron, 2017; Rapp & Beeler, 2021). In our findings, the sales approach has been shown to be vital for platform owners advancing firms' competitive advantage, with DMSPs' leverage requiring a suitable strategy, structuring sales to attract platform users and building commitment in the platform network. Thus, our findings contribute to the current literature on B2B platforms (e.g., Veile et al., 2022; Wallbach et al., 2019), involving a framework with three propositions that highlight platform-based change in value chains from a sales approach (Fig. 4). The propositions compress what is essential in the value chain change together with sales dimensions, which are illustrated in the introduction and in the leveraging phase of a DMSP. Additionally, the arrows in Fig. 4 illustrate the linkages between sales dimensions in value chain and the changes the platform logic produces in these linkages.



Fig. 4. The framework for a value chain transformation into a value network.

5.1. Sales strategy supporting transition to value orchestration

Our findings indicate that the leveraging of a DMSP contributes to the case firms' transition toward strategic partnerships, with various key actors having a common strategy. Such value orchestration in a DMSP is manifested with the case firm's strategic movement toward continuous service flow. Previous studies imply that DMSPs bring higher sales growth (Perks et al., 2017; Veile et al., 2022), but we show that this is not so evident, whereas higher profit was evident with three of the four case firms strengthening the platform owner's competitive advantage. Our findings generate new knowledge by showing that DMSPs promote the service firms' tighter linkages to customers, enhancing the knowledge of multi-sided platforms connected to sales firms' strategic choices (Cuevas, 2018; Hartmann et al., 2018; Thaichon et al., 2018). With our findings, we enhance the current research of value orchestration that has focused largely on network management or business models (e.g., Perks et al., 2017; Ritala & Jovanovic, 2024). Value orchestration in a DMSPbased network requires understanding how the customer is defined in essence. We demonstrate the complexity of customer concept in platform-centric logic and, as such, enhance the current literature (e.g., Perks et al., 2017; Trabucchi, 2020). We specifically contribute to the B2B platform literature by addressing the chicken and egg paradox (e.g., Trabucchi, 2020) of how two actor groups are attracted to the platform to generate value. Our findings indicate that by bringing partners on board, the presence of customers on the platform increases simultaneously, and customers further engage with the platform through strategic partnerships. The existing research focusing on value chain transformation (Tian et al., 2021) connecting various actors equally has not highlighted such a platform owners' reliance on partnerships in forming a value network. From this, we formulated our first proposition:

P1. The transition from value chain toward value orchestration in a network shifts the platform owner's focus to developing a common sales strategy with strategic network actors.

5.2. Sales structure supports sales efficiency and gaining critical mass of actors in a DMSP

The adoption of a DMSP engenders a major restructuring in sales through the utilization of platform resources by case firms whose sales structures were previously based on personal selling conducted by the salesforce. Our findings offer a novel understanding of multi-sided platforms by creating structure for the operational environment and enhancing the existing limited knowledge on emerging B2B platforms connected to sales (e.g., Bongers et al., 2021; Cavallo et al., 2022; Maucuer et al., 2022). A DMSP provides enhanced ways to sell expert services (e.g., self-service buying) and supports the platform owner's ability to serve a growing number of customers and partners. Such flexibility in the form of time and place dependency has made it possible for most of the case firms to reach foreign actors. Thus, the network actors can collaborate more closely, regardless of time and place, facilitated by data storage and transparency.

While sales efficiency has previously mainly been the salesforce's responsibility (Ingram et al., 2002; Zoltners et al., 2008), in a platform environment, it is driven by the platform resources. DMSP resources, such as technology-assisted actor matching and open interfaces and integrations enable more efficient scaling and management of a larger network. This allows sales firms to enhance expert-selling by serving a greater number of customers and partners, including those across borders. DMSP resources may be used for the benefit of the whole network and, thus, we extend the current knowledge (He & Zhang, 2022; Perks et al., 2017) by illustrating the importance of platform resources, such as AI-driven matchmaking, in advancing joint value creation. Our findings indicate that a DMSP's data and resources help in increasing the number of platform users but are also reported to improve sales efficiency, which is shown in improved results, such as profit. However, larger networks are also more difficult to manage and, at some point, may result in a loss of flexibility. The B2B platform literature has disregarded such a sales

efficiency perspective, as the focus has been merely on antecedents of sales efficiency, such as achieving a critical mass of platform users and the subsequent network effects (He & Zhang, 2022; Wallbach et al., 2019). To date, the case firms in this study are still in the process of leveraging their platform, but for most of the firms such renewed sales structures enable increased profit and support their goal of reaching critical mass on the platform. Therefore, our second proposition is presented as follows:

P2. Transitioning from a value chain to a value network requires the restructuring of sales, enabling platform owners to manage a larger network more efficiently with fewer resources and reach a critical mass of platform users.

5.3. From dyadic customer relationships toward multi-sided network relationships

The value chain change toward value orchestration in a network enhances the current understanding of multi-sided platforms in longlasting relationships (Belhadi et al., 2023; Perks et al., 2017). Even though DMSP aims to reach a larger group of actors with more diverse and varied roles, the value in our study's platforms culminates in an opportunity to develop close relationships that create commitment within the value network. We have demonstrated that a DMSP, with its data and AI applications, transforms traditional dyadic buyer-seller relationships toward network relationships involving the various actors in parallel, while continuous data transactions help in building those relationships. Since not all relationships can develop as close and longterm ones, the platform owner needs to identify the most critical ones. Here, the platform's technology, including AI, produces triggers for interaction and helps the platform owner engage platform actors in versatile interactions. Only a few studies have examined the platforms that enhance customer relationships via humans and technologies interacting with each other (Belhadi et al., 2023; Murray, Rhymer, & Sirmon, 2021). With the help of data storage, anyone can take the initiative to form relationships, empowering other network actors to work as one sales team, as suggested by Sharma et al. (2020). By allowing the establishment of various direct relationships and transparent information flow to all network actors, a DMSP may increase relationship equality, contrasting with the fixed-term, contractual-based relationships in traditional value chains.

Our findings suggest that a platform owner's role in controlling the B2B relationships on a platform gradually decreases as the value network positions take shape. However, a service platform environment is complex, and this transition occurs over a long period, requiring sales firms to relinquish control in relationships, which, according to our findings, is ongoing. Such equality in relationships is linked with shared strategic targets and strategic partnerships in the sales strategy. Our research enhances earlier findings regarding the equality of platform actors (Rana et al., 2023) by suggesting that, besides equality, the changing roles of actors may produce duality in relationships, as an actor can be both partner and customer, making it more complex for the platform owner in regard to relationship management (Ritala & Jovanovic, 2024; Trabucchi et al., 2022). Thus, we contribute to the existing research regarding relationships on platforms (e.g., Belhadi et al., 2023) by suggesting that platform owners need to advance relationship equality, but at the same time the platform's actors having many roles may make the development of relationship strategies difficult for platform owners. We formulated our third proposition as follows:

P3. DMSP shifts the value creation in customer relationships from dyadic buyer–seller commitments to networked relationships that are committed to data exchange and equality in relationships.

6. Conclusions

In this study we have demonstrated that a DMSP not only supports

the various actors' economic changes and relationship-building in service supply chains but is also an instrument to rearrange value creation and support the platform owners' strategic move from one-time service sales toward continuous service flow. Such a long-term change is coupled with choices that platform owners need to address when managing the value chain transformation toward value orchestration in the DMSP. First, our findings reveal that platform owners need to address aspects related to sales strategy, sales structure, and customer relationships. For attracting actors onto a platform, the platform owners in our study have been relying on strategic partnerships, even though the platform logic aims for joint value creation for a larger group of equal actors. Second, when structuring sales, platform owners need to consider the means to find enough actors to reach critical mass on the platform but still maintain flexible and efficient governance with the growing network. Platform resources and various sales models bring flexibility and the ability to manage larger networks with fewer resources. Third, the platform owner needs to advance the relationship commitment by balancing equality among platform actors and, at the same time, secure their own business targets. This relates to the question of whether the platform owner is inevitably prepared to diminish their own role in the relationships by allowing relationships to form freely in the network or whether their own business targets weigh more in decision-making. Lastly, the DMSP-driven value chain transformation toward value orchestration in B2B service selling is holistic and evolves over time, involving a high degree of complexity; we have tried to capture this complexity from the sales perspective by capturing part of this transformation process.

6.1. Managerial implications

This study has several implications for managers regarding DMSPs and how they can be utilized to strengthen firms' competitive advantage in the value chain. Specifically, we pinpoint how platform owners can scale their service networks and advance joint value creation in the form of these new platform networks, leading to enhanced profitability. First, firms that introduce a DMPS for joint value creation on platforms and take the lead position as value orchestrator may gain a clarified sales strategy and transition toward continuous service flow. As attracting a critical number of like-minded actors onto the newly established platform is complex, we encourage managers to consider strategic partnerships based on previous value chain relationships as well to thoroughly investigate customer needs, as the roles familiar from the fixed value chain become blurred, making segmentation more difficult.

Second, managers should be aware that the platform resources are in a key position, enabling constant information exchange and flexibility and providing the platform owner the possibility to reach a critical mass of users on the platform. Utilizing customers' self-service as well as AI's possibilities, for instance in actor matching, gives the platform owner the ability to scale the network cost effectively and also across country borders. With our case firms, this resulted in a profit increase for most of the firms as routine sales tasks were transferred to the platform and freed time for key personnel (such as salespeople and experts) to focus on the strategic development of the network.

Third, it is essential to consider how constant data transactions could advance the commitment in the platform network and how the platform owner can transparently promote interactions and increase relationship equality. DMSPs offer various means to interact with customers, as customers today have varied expectations regarding business relationships. We encourage managers to investigate and utilize the platforms' possibilities to build network engagement and target long-term relationships in international markets. Our framework and results could provide managers with a starting point from which they can gain a new understanding of the implications of DMSPs in a B2B context and the strategic decisions that platform owners need to consider when optimizing platform governance.

6.2. Limitations and recommendations for future research

Despite the in-depth knowledge of the examined phenomenon, we acknowledge that this research has its limitations. We critically reflected on our conclusions at each research phase and maintained a constant dialog among the co-authors. However, this research is based on the researchers' interpretations of the studied phenomenon through the evidence gathered from the case study data and literature. We chose the four service companies by utilizing a non-randomized, convenience sampling approach, as they shared a similar motive for initiating DMSPs to develop their value chains. Thus, we favored the context of professional services as a focus to build on theoretical contribution. Based on the expert services in selected industries and depending on the similarity of the business purposes, our findings may be extended to other B2B service contexts. However, we encourage further examination of B2B platforms in different industries. As more examples of B2B platforms are emerging, closer investigation into the platform's importance in advancing firms' performance and productivity is needed, for which this research provides just a starting point.

We formulated three propositions that we did not test. Instead, we offer the opportunity for future research utilizing, for instance, quantitative investigation. We suggest future researchers utilize our framework as a basis for forming future research questions in investigating the increasing phenomenon of B2B platforms. Furthermore, future research could investigate more in depth the challenges that are related to platform owners' decision-making to advance the success of B2B platforms. As we did not specifically investigate the leadership perspective in DMSPs, future research could focus on this perspective, such as on capabilities that platform owners need to manage the network. As a DMSP provides a digital place where individual experts can engage with the community and offer their services for the benefit of the network, future research could focus on the digitized value network from different actors' perspectives and how DMSPs promote, for instance, entrepreneurship of the various platform actors.

Funding

This research is part of the ROBINS research project funded by Business Finland 2019–2022 [document number 7802/31/2018]. We also thank Jenny and Antti Wihuri Foundation for supporting Heikinheimo's work [grant number 00210063].

CRediT authorship contribution statement

Minna Heikinheimo: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Validation, Visualization, Writing – original draft, Writing – review & editing. Pia Hautamäki: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Validation, Visualization, Writing – review & editing. Saara Julkunen: Conceptualization, Formal analysis, Funding acquisition, Resources, Software, Supervision, Validation, Writing – review & editing. Jonna Koponen: Conceptualization, Data curation, Formal analysis, Methodology, Supervision, Validation, Writing – review & editing.

Declaration of Competing Interest

none.

Data availability

The data that has been used is confidential.

Appendix A

Representative quotes	Subcode	Topcode	Main theme
"If the partners have everything in order in [the platform], they can offer an expert to [work on a customer's] assignment by pressing two buttons and if they [the partners] have a need, they can also acquire knowledge [from the platform]." <i>Beta, head of sales, 2022</i> "In the value cosystem the focus is a total leasily on optimization and automation and not kinking account that a doe nature of value formation that we sometimes play different roles and actually attract our customers even more to that shared value creation." <i>Alpha, Director, International basinesse event</i> , 2019 "Partner and customers lifter our lises] stratery about how we corrained uscrifts that of of decisions we make to offer exstomers what they want in their	Partners as a first customer group Partners buying expertise Customers provide expertise	Complexity of segmentation	
strategic decision-making We make our own strategic decisions accordingly, so that we are allowed to make the customer's strategy together [with the customer]." <i>Alpha Head of quidat sdates</i> , 2022 "[With Beta] we are, in a way, climbing up [in a strategic sense, and why not the similar ones abroad as well." <i>Customer B, CEO</i> , 2020 "I are [the patient besides software, as a jointly developed operating model. That [platform-based] operating model has been developed and as it further develops it "a teg [the platform] besides software, as a jointly developed operating model. That [platform-based] operating model has been developed and as it further develops it	Getting closer to decision-makers Common goals Strategic compatibility	Strategic partnerships	Sales strategy in DMSP
has a greater vance (man the partorm technology (tset)]. <i>Commut, Constitutin</i> , 2019 We want those big customers, to serve them particularly well. From selling things occasionally, it has turned into such a continuous [flow] of transaction. The sales process is blurred in the sense that it is no longer sales but [more like a] service." Alpha, Director, digital services, 2019 "The [patform] does not necessarily them juit intrins value, but the finding of [customer] assignments it's our desire, to get those matches made, after all, that's what our business is all about." <i>Beta, Chief network officer</i> , 2022	Clarified strategic direction Platform owner enhancing matchmaking Continuous service flow	Value orchestration	
"Of course, [the increased self-service] raised some prejudices in [the network], for it is now that they have to do more work and bandle everything as a self-service, without lack of pressmal service. Such worries we hear to some extent, but surprisingly little, considering the changes in operating methods." <i>Beta, Chief Network Officer</i> , 2022. "[The platform] brings an additional sales channel, a digital sales channel that is open 24/7." <i>Beta, CEO</i> , 2022.	Automatization of sales tasks Customers' self-service Time and place independency	Hybrid sales models	Sales structure in DMSP
Inst nun of orynamism and nexotury is optimat for the citent. Appna, numers read, 2019 "If we can use the [platform] to integrate ind different [customer's] procurement systems, then we will be able to integrate [even more deeply] into the customer's processes, which would open the door for us for getting even bigger customers." Beta, Resource manager, 2019	Technology-assisted actor matching Open interfaces and integration	Platform resources	
"[Platform data] has increased tremendously our know-how of customer's implementations, because they are always quite complicated, and you have to delve deeply into the customer's processes and understand what they actually do and why they do things the way they do." Gamma, Partner, innovation management, 2020	Data storage and transparency		
"Salespeople input the [customer] needs directly [onto the platform] and our [resource manager] is freed up for network development and activities that produce more value. On the other hand, the salespeople can directly see [on the platform] what's going on with [the customer] and are online [on the platform] all the time, as are our partners". <i>Beat, CO, 2022</i>	New network-supporting roles		
"Read-immed data is in one place on [be platform]. Even though (extentions) are on the platform, where they can see their own situation, they still want to be told how things are going (with constant communication). <i>Plock (CZD, 2022</i> "Well, of course chabtost and others immediately come to mind [for a change in interaction], but, for example, the necessary status data and reports come automatically [<i>Plock, CZD, 2022</i> "Well, of course chabtost and others immediately come to mind [for a change in interaction], but, for example, the necessary status data and reports come automatically " <i>Plock, CLD, 2022</i> "Well, of course chabtost and others immediately come to mind [for a change in interaction], but, for example, the necessary status data and reports come automated, in which case the salesperson's technical role in that process will be reduced." <i>Plact, Chairman of the board, 2019</i> "Perhaps the most important thing [on the platform] is the improvement of communication, which is of course a perceptisite for networking to be possible. After all, networking is communication [nucleics] and in a network, you can send a message to anyone, but it requires that you dare to do it." <i>Customer A, CEO, 2020</i>	Enhancement of interaction Salespersons' closeness to customer and partner Active actor interactions	Constant data transactions	Customer relationships in DMSP
"It is a principle that we treat [all the partners] the same way and everyone has the same opportunities to respond to [customer] assignments." <i>Beta, Chief operating officer, 2022</i> "That information in the platform can be found there, and it accumulates. Anyone, like an employee of a firm, can extract that information and utilize that valuable information for the benefit of the customer." <i>Alpha, Head of digital sales, 2022</i>	Partners in equal position Anyone can take initiative	Relationship equality	
"In these nyond projects] where there are several attreem actors, and we are one partner, then there is a digital marketing partner and a content marketing partner, for example that russ an interesting question of power, who is ultimately on top of everything. It is should be the customer, but very rarely it is, when a situation arises where there is no responsibility anywhere and everyone palls it in their own direction." <i>Delta, CEO, 2022</i> "With [Beta-type of partners] we share things as if we were from the same company. We don't have a traditional buyer-supplier relationship, but we have this kind of one-team prespective, where everyone gets their salary, but at the end of the day, we don't have a traditional buyer. <i>BCD, 2020</i>	Power balance in relationships changes Changing roles in relationships	Duality in relationships	

Value chain change in 2019–2022	Alpha	Beta	Gamma	Delta
Sales strategy in DMSP				
Complexity in segmentation	х	х		x
Partners as a first customer group	x	х		x
Partners buying expertise	x	х		
Customers provide expertise	x	х	x	
Strategic partnerships	x	х	x	x
Getting closer to decision-makers	х	x	x	x
Common goals	х	x	x	x
Strategic compatibility	х	x	x	x
Value orchestration	x	х	x	x
Clarified strategic direction	x	х	x	
Platform owner enhancing matchmaking	x	х	x	x
Continuous service flow	х	х	x	x
Sales structure in DMSP				
Hybrid sales models	x	x	x	x
Automatization of sales tasks	x	x	x	x
Customers' self-service	x	x		
Time and place independency	x	x	x	x
Platform resources	x	x	x	x
Technology-assisted actor matching	x	x	x	
Open interfaces and integration	x	x	x	x
Data storage and transparency	x	x	x	x
New network-supporting roles		x	x	
Customer relationships in DMSP				
Constant data transactions	x	x	x	x
Enhancement of interaction	x	x	x	x
Salespersons' closeness to customer and partner	x	x		x
Active actor interactions	х	x	x	x
Relationship equality	x	x		x
Partners in equal position	x	x		x
Anyone can take initiative	x	x		x
Power-balance in relationships changes		х	х	x
Duality in relationships	х	х		
Changing roles in relationships	x	x		

References

- Alt, R., & Zimmermann, H.-D. (2014). Electronic markets and general research. Electronic Markets, 24(3), 161–164. https://doi.org/10.1007/s12525-014-0163-9
- Arli, D., Bauer, C., & Palmatier, R. W. (2018). Relational selling: Past, present and future. Industrial Marketing Management, 69, 169–184. https://doi.org/10.1016/j. indmarman.2017.07.018
- Belhadi, A., Kamble, S., Benkhati, I., Gupta, S., & Mangla, S. K. (2023). Does strategic management of digital technologies influence electronic word-of-mouth (eWOM) and customer loyalty? Empirical insights from B2B platform economy. *Journal of Business Research*, 156, Article 113548. https://doi.org/10.1016/j. ibusres.2022.113548
- Bongers, F. M., Schumann, J. H., & Schmitz, C. (2021). How the introduction of digital sales channels affects salespeople in business-to-business contexts: A qualitative inquiry. *Journal of Personal Selling & Sales Management*, 41(2), 150–166. https://doi. org/10.1080/08853134.2021.1906260
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.
- Broekhuizen, T. L. J., Emrich, O., Gijsenberg, M. J., Broekhuis, M., Donkers, B., & Sloot, L. M. (2021). Digital platform openness: Drivers, dimensions and outcomes. *Journal of Business Research*, 122, 902–914. https://doi.org/10.1016/j. jbusres.2019.07.001
- Cavallo, A., Burgers, H., Ghezzi, A., & Van de Vrande, V. (2022). The evolving nature of open innovation governance: A study of a digital platform development in collaboration with a big science Centre. *Technovation*, 116, Article 102370. https:// doi.org/10.1016/j.technovation.2021.102370
- Chakravarty, A., Kumar, A., & Grewal, R. (2014). Customer orientation structure for internet-based business-to-business platform firms. *Journal of Marketing*, 78(5), 1–23. https://doi.org/10.1509/jm.12.0442
- Corsaro, D. (2022). Explaining the sales transformation through an institutional lens. Journal of Business Research, 142, 1106–1124. https://doi.org/10.1016/j. jbusres.2021.12.009
- Corsaro, D., & Anzivino, A. (2021). Understanding value creation in digital context: An empirical investigation of B2B. *Marketing Theory*, 21(3), 317–349. https://doi.org/ 10.1177/14705931211001542
- Cron, W. L. (2017). Macro sales force research. Journal of Personal Selling & Sales Management, 37(3), 188–197. https://doi.org/10.1080/08853134.2017.1352449
- Croucher, S. M., & Cronn-Mills, D. (2014). Understanding communication research methods: A theoretical and practical approach (1st ed.). Routledge. https://doi.org/10.4324/ 9780203495735

- Cuevas, J. (2018). The transformation of professional selling: Implications for leading the modern sales organization. *Industrial Marketing Management*, 69, 198–208. https:// doi.org/10.1016/j.indmarman.2017.12.017
- De Oliveira, D. T., & Cortimiglia, M. N. (2017). Value co-creation in web-based multisided platforms: A conceptual framework and implications for business model design. Business Horizons, 60, 747–758. https://doi.org/10.1016/j. bushor.2017.07.002
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532–550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. Academy of Management Journal, 50(1), 25–32, 2007.
- Ekman, P., Raggio, R. D., & Thompson, S. M. (2016). Service network value co-creation: Defining the roles of the generic actor. *Industrial Marketing Management*, 56, 51–62. https://doi.org/10.1016/j.indmarman.2016.03.002
- Eriksson, P., & Kovalainen, A. (2016). Qualitative methods in business research (2nd ed.). London: Sage Publications.
- Farquhar, J., Michels, N., & Robson, J. (2020). Triangulation in industrial qualitative case study research: Widening the scope. *Industrial Marketing Management*, 87, 160–170. https://doi.org/10.1016/j.indmarman.2020.02.001
- Gehman, J., Glaser, V. L., Eisenhardt, K. M., Gioia, D., Langley, A., & Corley, K. G. (2018). Finding theory-method fit: A comparison of three qualitative approaches to theory building. *Journal of Management Inquiry*, *27*(3), 284–300.
- Good, V., Pullins, E. B., & Rouziou, M. (2022). Persisting changes in sales due to global pandemic challenges. *Journal of Personal Selling & Sales Management*, 42(4), 317–323. https://doi.org/10.1080/08853134.2022.2132399
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In Handbook of qualitative research (pp. 105–117).
- Hagiu, A. (2014). Strategic decisions for multisided platforms. MIT Sloan Management Review, 55(2), 71–80.
- Hahn, G. J. (2020). Industry 4.0: A supply chain innovation perspective. International Journal of Production Research, 58(5), 1425–1441. https://doi.org/10.1080/ 00207543.2019.1641642
- Hartmann, N. N., Wieland, H., & Vargo, S. L. (2018). Converging on a new theoretical foundation for selling. *Journal of Marketing*, 82, 1–18. https://doi.org/10.1509/ jm.16.0268
- He, J., & Zhang, S. (2022). How digitalized interactive platforms create new value for customers by integrating B2B and B2C models? An empirical study in China. *Journal* of Business Research, 142, 694–706. https://doi.org/10.1016/j.jbusres.2022.01.004
- Hein, A., Weking, J., Schreieck, M., Wiesche, M., Böhm, M., & Krcmar, H. (2019). Value co-creation practices in business-to-business platform ecosystems. *Electronic Markets*, 29, 503–518. https://doi.org/10.1007/s12525-019-00337-y

- Hinterhuber, A. (2022). Digital transformation, the holy grail, and the disruption of business models: An interview with Michael Nilles. *Business Horizons*, 65(3), 261–265. https://doi.org/10.1016/j.bushor.2021.02.042
- Hochstein, B., Chaker, N. N., Rangarajan, D., Nagel, D., & Hartmann, N. N. (2021). Proactive value co-creation via structural ambidexterity: Customer success management and the modularization of frontline roles. *Journal of Service Research*, 24(4), 601–621. https://doi.org/10.1177/1094670521997565
- Hohenschwert, L., & Geiger, S. (2015). Interpersonal influence strategies in complex B2B sales and the socio-cognitive construction of relationship value. *Industrial Marketing Management*, 49, 139–150. https://doi.org/10.1016/j.indmarman.2015.05.027
- Ingram, T. N., LaForge, R. W., & Leigh, T. W. (2002). Selling in the new millennium: A joint agenda. Industrial Marketing Management, 31, 559–567. https://doi.org/ 10.1016/S0019-8501(02)00175-X
- Jolson, M. A. (1997). Broadening the scope of relationship selling. Journal of Personal Selling & Sales Management, 17(4), 75–88. https://doi.org/10.1080/ 08853134.1997.10754112
- Langley, A., & Abdallah, C. (2011). Templates and turns in qualitative studies of strategy and management. Research Methodology in Strategy and Management, 6, 201–235. https://doi.org/10.1108/S1479-8387(2011)000006007
- Leong, C., Pan, S. L., Leidner, D. E., & Huang, J.-S. (2019). Platform leadership: Managing boundaries for the network growth of digital platforms. *Journal of the Association for Information Systems*, 20(10), 1531–1565. https://doi.org/10.17705/ 1jais.00577
- Li, J., Pan, Y., Yang, Y., & Tse, C. H. (2022). Digital platform attention and international sales: An attention-based view. *Journal of International Business Studies*, 53(8), 1817–1835. https://doi.org/10.1057/s41267-022-00528-4
- Liu, A., Liu, H., & Gu, J. (2021). Linking business model design and operational performance: The mediating role of supply chain integration. *Industrial Marketing Management*, 96, 60–70. https://doi.org/10.1016/j.indmarman.2021.04.009
- Loux, P., Aubry, M., Tranc, S., & Baudoin, E. (2020). Multi-sided platforms in B2B contexts: The role of affiliation costs and interdependencies in adoption decisions. *Industrial Marketing Management, 84*, 212–223. https://doi.org/10.1016/j. indmarman.2019.07.001
- Maucuer, R., Renaud, A., Ronteau, S., & Muzellec, L. (2022). What can we learn from marketers? A bibliometric analysis of the marketing literature on business model research. *Long Range Planning*, 55. Article 102219.
- McIntyre, D., Srinivasan, A., Afuah, A., Gawer, A., & Kretschmer, T. (2021). Multisided platforms as new organizational forms. Academy of Management Perspectives, 35(4), 566–583.
- McKinsey. (2020). Ecosystem 2.0: Climbing to the next level, September 2020. access at: https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/ecosyste m-2-point-0-climbing-to-the-next-level, retrieved on November 2022.
- Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Mourtzis, D., Angelopoulos, J., & Panopoulos, N. (2020). A survey of digital B2B platforms and marketplaces for purchasing industrial product service systems: A conceptual framework. *Procedia CIRP*, 97, 331–336. https://doi.org/10.1016/j. procir.2020.05.246
- Murray, A., Rhymer, J., & Sirmon, D. G. (2021). Humans and technology: Forms of conjoined agency in organizations. Academy of Management Review, 46(3), 552–571. https://doi.org/10.5465/amr.2019.0186
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70(4), 136–153.
- Panagopoulos, N., & Avlonitis, G. J. (2010). Performance implications of sales strategy: The moderating effects of leadership and environment. *Journal of Research in Marketing*, 27, 46–57. https://doi.org/10.1016/j.ijresmar.2009.11.001
- Park, G. G., Van Alstyne, M. W., & Choudary, S. P. (2017). Platform revolution: How networked markets are transforming the economy and how to make them work for you. New York: W. W. Norton.
- Peppard, J., & Rylander, A. (2006). From value chain to value network: Insights for mobile operators. *European Management Journal*, 24(2–3), 128–141.
- Perks, H., Kowalkowski, C., Witell, L., & Gustafsson, A. (2017). Network orchestration for value platform development. *Industrial Marketing Management*, 67, 106–121. https:// doi.org/10.1016/j.indmarman.2017.08.002

- Piekkari, R., Plakoyinnaki, E., & Welch, C. (2010). "Good" case research in industrial marketing: Insights from research practice. *Industrial Marketing Management, 39*, 109–117. https://doi.org/10.1016/j.indmarman.2008.04.017
- Rana, N. P., Kar, A. K., Gupta, M., Pappas, I. O., & Papadopoulos, T. (2023). Unravelling the dark side of sharing economy-managing and sustaining B2B relationships on digital platforms. *Industrial Marketing Management*, 113, A4–A10. https://doi.org/ 10.1016/j.indmarman.2023.06.002
- Rapp, A., & Beeler, L. (2021). The state of selling & sales management research: A review and future research agenda. *Journal of Marketing Theory and Practice*, 29(1), 37–50. https://doi.org/10.1080/10696679.2020.1860680
- Rapp, A., Beitelspacher, L. S., Schillewaert, N., & Baker, T. L. (2012). The differing effects of technology on inside vs. outside sales forces to facilitate enhanced customer orientation and interfunctional coordination. *Journal of Business Research*, 65(7), 929–936. https://doi.org/10.1016/j.jbusres.2011.05.005
- Ricciotti, F. (2020). From value chain to value network: A systematic literature review. Management Review Quarterly, 70(2), 191–212. https://doi.org/10.1007/s11301-019-00164-7
- Ritala, P., & Jovanovic, M. (2024). Platformizers, orchestrators, and guardians: Three types of B2B platform business models. In A. Aagaard, & C. Nielsen (Eds.), Business model innovation: Game changers and contemporary issues. Palgrave Macmillan.
- Sharma, A., Iyer, G. R., & Evanschitzky, H. (2008). Personal selling of high-technology products: The solution-selling imperative. *Journal of Relationship Marketing*, 7(3), 287–308. https://doi.org/10.1080/1533266080240963
- Sharma, A., Rangarajan, D., & Paesbrugghe, B. (2020). Increasing resilience by creating an adaptive salesforce. *Industrial Marketing Management*, 88, 238–246. https://doi. org/10.1016/j.indmarman.2020.05.023
- Syam, N., & Sharma, A. (2018). Waiting for a sales renaissance in the fourth industrial revolution: Machine learning and artificial intelligence in sales research and practice. *Industrial Marketing Management*, 69, 135–146. https://doi.org/10.1016/j. indmarman.2017.12.019
- Thaichon, P., Surachartkumtonkun, J., Quach, S., Weaven, S., & Palmatier, R. W. (2018). Hybrid sales structures in the age of e-commerce. *Journal of Personal Selling & Sales Management*, 38(3), 277–302. https://doi.org/10.1080/08853134.2018.1441718
- Tian, J., Vanderstraeten, J., Matthyssens, P., & Shen, L. (2021). Developing and leveraging platforms in a traditional industry: An orchestration and co-creation perspective. *Industrial Marketing Management*, 92, 14–33. https://doi.org/10.1016/j. indmarman.2020.10.007
- Tiwana, A. (2014). Platform ecosystems: Aligning architecture, governance, and strategy. Burlington, MA: Morgan Kaufmann.
- Trabucchi, D. (2020). Let's get a two-sided platform started: Tactics to solve the chicken and egg paradox. Journal of Business Ecosystems, 1(1), 63–77. https://doi.org/ 10.4018/JBE.2020010104
- Trabucchi, D., & Buganza, T. (2020). Fostering digital platform innovation: From two to multi-sided platforms. *Creativity and Innovation Management*, 29(2), 345–358. https://doi.org/10.1111/caim.12320
- Trabucchi, D., Muzellec, L., Ronteau, S., & Buganza, T. (2022). The platforms' DNA: Drivers of value creation in digital two-sided platforms. *Technology Analysis & Strategic Management*, 34(8), 891–904. https://doi.org/10.1080/ 09537325_2021.1932797
- Veile, J. W., Schmidt, M.-C., & Voigt, K.-I. (2022). Toward a new era of cooperation: How industrial digital platforms transform business models in Industry 4.0. Journal of Business Research, 143, 387–405. https://doi.org/10.1016/j.jbusres.2021.11.062
- Wallbach, S., Coleman, K., Elbert, R., & Benlian, A. (2019). Multi-sided platform diffusion in competitive B2B networks: Inhibiting factors and their impact on network effects. *Electronic Markets*, 29(4), 693–710. https://doi.org/10.1007/ s12525-019-00382-7
- Wilkinson, I., & Young, L. (2004). Improvisation and adaptation in international business research interviews. In R. Marschan-Piekkari, & C. Welch (Eds.), Handbook of qualitative research methods for international business (pp. 207–223). Edward Elgar Publishing Inc: Cheltenham.
- Zoltners, A. A., Sinha, P., & Lorimer, S. E. (2008). Sales force effectiveness: A framework for researchers and practitioners. *Journal of Personal Selling & Sales Management, 28* (2), 115–131. https://doi.org/10.2753/PSS0885-3134280201