

Moving to subscriptions: service growth through business model innovation in consumer and business markets

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Abstract

Purpose – Subscription offerings are being hailed as the next service growth engine for companies in both business-to-consumer (B2C) and business-to-business (B2B) markets. The study analyzes how a manufacturing firm can develop and implement a scalable service-based subscription business model for B2C and B2B customers alongside its existing product-centric model.

Design/methodology/approach – A longitudinal case study is conducted, drawing on 25 in-depth interviews with company executives and dealers in key European markets.

Findings – The study outlines an iterative process model for subscription business model innovation. It reveals key events and decisions taken in developing, implementing, and scaling the new business model and how internal and external tensions involving intermediaries arose and were mitigated during the four stages of the process.

Research limitations/implications – The findings highlight the dynamics of business model innovation processes and underscore the importance of organizational learning, collaborative relationships with channel partners, and strategic talent acquisition during business model innovation.

Practical implications – The findings suggest how product-centric firms can implement new service business models alongside existing product models and what this means for partner and customer journey management.

Originality/value – While servitization research predominantly concerns B2B manufacturers, B2C research focuses on digital subscription contexts. The study bridges this divide by investigating the move to subscriptions in both markets.

Keywords Business model innovation, Subscriptions, Servitization, Dual business model, Dealer management, Customer journey management

Paper type Research paper

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1. Introduction

Manufacturers across diverse industries are increasingly expanding beyond conventional product-centric approaches to novel service business models that enhance customer outcomes (Gebauer *et al.*, 2017; Heirati *et al.*, 2023; Kowalkowski *et al.*, 2022). This transformation, known as *servitization*, is pervasive across both business-to-business (B2B) and business-to-consumer (B2C) markets (Vandermerwe and Erixon, 2023). It can be conceptualized as a *business model innovation* that alters the logic of value creation and capture (Björkdahl *et al.*, 2022), where the service business serves as a growth engine (Raddats *et al.*, 2019).

While servitization can take many forms, subscription business models are being hailed as the next service growth engine in many product-centric industries (Burger *et al.*, 2023; Kowalkowski and Ulaga, 2024). Subscription services already predominate in utilities, software, and digital media enterprises (e.g. Danaher, 2002; Guo and Dan, 2018), but prior service and marketing research provides limited guidance regarding how manufacturers can adopt such a business model (Kowalkowski and Ulaga, 2024). Unlike digital subscriptions, the business models of many manufacturers rely on intermediaries, such as dealers and resellers, for sales and service activities (Nordin *et al.*, 2013; Reim *et al.*, 2019). Moving to subscription business models, therefore, bears an inherent potential for triggering conflict in traditional channel relationships (Kowalkowski and Ulaga, 2024), making it crucial to understand how to manage these relationships. However, several research gaps remain open on how manufacturers can develop subscription business models that not only align with their existing product businesses but also with the value creation and capture of their channel partners.

First, the prevailing body of subscription research generally treats subscription business models as a mere context, with primary attention directed toward other areas of interest. For instance, marketing research has mainly explored topics such as free-trial promotions (Foubert and Gijsbrechts, 2016), price menu optimization for online dating (Tian and Feinberg, 2020), and effects on market value (McCarthy *et al.*, 2017). Hence, there is a lack of insights into the associated business model innovation processes.

Second, there is a lack of in-depth research on subscriptions in product-centric firms. Extant research focuses on service providers with subscriptions as their primary business model or software firms transitioning from perpetual software licensing in favor of software-as-a-service models (Guo and Dan, 2018). Manufacturers moving to subscriptions, on the other hand, need to manage a shift from a business model centered on the sale of physical goods to a *dual business model* that also includes services, which denotes the concurrent operation of two distinct business models within the same market space. Such business model innovation is generally challenging due to the inherent tensions between the product and service-centric models (Visnjic *et al.*, 2022).

Third, there is a limited understanding of the role of intermediaries, which play a significant role in product markets (Cui *et al.*, 2021; Nordin *et al.*, 2013). Not only does subscription research omit their potential role, but until recently, servitization research did not pay much attention to the role of channel partners for successful service business model innovation more broadly (Raddats *et al.*, 2019). As Kowalkowski and Ulaga (2024) show, manufacturers need to manage fundamental changes in how they work with such intermediaries when implementing subscriptions.

Against this backdrop, the present study addresses a matter of increasing significance: analyzing how product-centric manufacturing firms can expand their business by developing and implementing a scalable service-based subscription model. More specifically, we investigate the process and challenges of business model innovation that manufacturers encounter as they shift to a dual business model.

We do this through a longitudinal study of a subscription-based business model innovation initiative in both B2C and B2B markets. Through this approach, our research

makes three key contributions to the literature on business model innovation within servitization. First, we develop a framework grounded in empirical evidence that highlights the critical factors associated with subscription-based servitization. Through this, we underscore the necessity of embracing the iterative nature of business model innovation supported by organizational learning. This suggests that organizations can improve their innovation outcomes by actively fostering a culture of ongoing learning and adaptation. Second, we shed light on the potential for value creation inherent in subscription business models. By expanding value propositions beyond traditional product offerings, such models allow manufacturers to target previously untapped customer segments, yielding benefits such as recurring revenue streams, enhanced price transparency, and digitalized customer journeys. Finally, our research highlights key challenges in value co-creation between manufacturers and channel intermediaries, particularly in the realms of service development and the scaling of services. These findings underline the importance of alignment and integration for navigating the complexities that arise within service networks during the servitization process.

The remainder of the paper is structured as follows. After outlining the conceptual background and reviewing the existing research on business model innovation and subscriptions, we provide a detailed account of data collection and analysis. We then describe the case, highlighting key events in the business model innovation process. The paper concludes by discussing the theoretical and practical implications of our findings, the study's limitations, and directions for future research.

2. Theoretical background

To understand how manufacturing firms can develop and implement a subscription service in parallel to their traditional product-centric businesses, we adopt a business model perspective, which focuses on how a company can generate revenue while facilitating value creation for its customers and partners. Next, we present extant findings from research on dual business models, the role of intermediaries for servitization, and subscription offerings, which serve as the conceptual foundation for our study.

2.1 Transitioning to dual business models through servitization

At the heart of *business model innovation* (BMI) lies the reconfiguration of an existing model or the creation of a new one (Massa and Tucci, 2013), fundamentally altering the mechanisms of value creation and capture (Björkdahl *et al.*, 2022). This process typically demands the development and deployment of new capabilities and revenue models, organizational restructuring, and the alteration of the roles and responsibilities of firms and their channel partners (Amit and Zott, 2012; Parida *et al.*, 2019).

BMI enables companies to adapt to ongoing changes in their industry by identifying and harnessing underutilized or untapped sources of future value (Amit and Zott, 2012) while also empowering them to shape and manage the evolution of markets (Nenonen *et al.*, 2019), thus demonstrating its capacity for both proactive and reactive responses. The process is often less challenging for younger firms; incumbents are more likely to encounter internal and external resistance and inertia, prompting rigid adherence to existing practices and competencies and inhibiting adaptation to changing circumstances and the seizing of market opportunities (Leonard-Barton, 1992). The imperative for BMI through servitization becomes clear as market shifts—driven by digital innovations, new types of competitors, and regulatory changes—threaten to render traditional business models obsolete (Kindström and Kowalkowski, 2015).

In the pursuit of servitization, companies often shift from a business model centered on the sale of physical goods to a *dual business model* that encompasses services (Visnjic *et al.*, 2022).

The term dual business model, rooted in management and organization theory, denotes the concurrent operation of two distinct business models within the same market space (Markides and Charitou, 2004; Markides, 2013; Visnjic *et al.*, 2022). While some organizations, like social enterprises, inherently operate with a dual focus (Battilana and Lee, 2014), the transition for product-centric firms is fraught with challenges, often stymied in their efforts to scale their service business (Markfort *et al.*, 2021; Sjödin *et al.*, 2020; Story *et al.*, 2017; Visnjic *et al.*, 2022).

For manufacturers, adopting a service-based business model signifies a profound shift in value propositions and revenue streams. They need to balance the traditional capital expenditure (Capex) model, based on product sales, with an operating expenditure (Opex) model, which delivers service outcomes for a recurring fee (Renault *et al.*, 2010). These changes ripple out to partner firms like dealerships, requiring them to adapt to new roles and revenue streams (Sjödin *et al.*, 2020). Therefore, manufacturers transitioning to a dual orientation need to articulate a compelling service value proposition to their customers and mitigate any adverse impacts on the existing business models of their channel partners (Kowalkowski *et al.*, 2016). However, the effects of the shift to a dual business model on partner relationships remain an area ripe for exploration.

2.2 Role of intermediaries in servitization

Servitization is not an isolated process; rather, it requires careful consideration and preparation for the anticipated responses of other actors within a firm's network (Burton *et al.*, 2016; Lin *et al.*, 2016). In particular, manufacturers need to achieve alignment with their channel partners. Traditionally, many companies rely on their dealers for product sales, service activities, and relationships with end-users. However, many in leadership neglect how deep the service strategy decisions go in terms of redefining the dealer relationships. As argued by Reim *et al.* (2019), the success or failure of servitization initiatives significantly hinges on the role played by intermediaries. If the channel partner is not aligned, the company can hence jeopardize its servitization initiative (Kowalkowski *et al.*, 2016; Renault *et al.*, 2010; Story *et al.*, 2017).

Furthermore, intermediaries may play a crucial role in facilitating knowledge transfer between manufacturers and users and provide avenues for mutual learning, stimulating the generation of new knowledge while concurrently supporting the manufacturer's innovation capability (Lin *et al.*, 2016). However, the co-dependence on intermediaries often breeds tensions, especially when manufacturers assume responsibilities for processes previously handled by other actors in the supply chain (Burton *et al.*, 2016; Renault *et al.*, 2010).

A summary review of servitization research investigating relationships with intermediaries demonstrates the dominant focus on B2B markets and cross-sectional design (see Appendix 1). While our review is not exhaustive, given the multitude of studies exploring these relationships (e.g. Renault *et al.*, 2010; Vaattinen *et al.*, 2019), there is a scarcity of longitudinal studies examining the evolution of business models and intermediary relationships over time. Notable exceptions include the work of Kowalkowski *et al.* (2016), which underscores the importance of triadic value propositions in industrial contexts for achieving growth driven by services. Similarly, Huikkola *et al.* (2020) shed light on the transformative impact of servitization on firm boundaries, illustrating how it enhances manufacturers' capacity to integrate technology with customer value by shifting their focus from technology to customers. Additionally, Visnjic *et al.* (2022) suggest a sequence and pace to be followed by manufacturing firms and their intermediaries during their transitioning processes from single to dual orientation.

The review also reveals that prior studies generally focus on servitization initiatives that do not fundamentally alter the established business model (exceptions include Sjödin *et al.* (2020)

2.3 Subscription business models

Traditionally dominated by companies within the media, utilities, and telecommunications sectors, subscription business models have emerged as potential growth engines also for traditional product-centric manufacturers (Kowalkowski and Ulaga, 2024). A subscription is an agreement between a firm and a customer governing recurring purchases of a product or service (Baxter, 2015). Subscription business models gained popularity with the rise of digital services in the early 2000s. Since then, they have expanded to encompass physical goods (Fosker and Cheung, 2021; Rudolph *et al.*, 2017). These models offer convenient and flexible offerings, allowing customers to choose whether to commit to a long-term contract (Andonova *et al.*, 2021; Chen *et al.*, 2018). For providers, subscriptions enable a consistent and steady revenue stream (Andonova *et al.*, 2021) and increased customer engagement, yielding valuable data that can then be leveraged to enhance the customer experience and potentially improve customer retention (Kowalkowski and Ulaga, 2024; McCarthy *et al.*, 2017).

While most studies have focused on sectors like media streaming (Foubert and Gijbrecchts, 2016), software (Brecko, 2023), and telecommunications (Desai *et al.*, 2018), subscription models are also gaining traction in product-centric settings (Burger *et al.*, 2023; Umashankar *et al.*, 2023). Increasingly, manufacturers are developing subscriptions based on direct-to-customer channels to expand their customer base, potentially leading to more complex relationships with intermediaries to attract and retain customers (Pasirayi and Fennell, 2021). For manufacturers, establishing these direct channels may increase transaction and administration costs related to marketing, customer education, and support activities that are typically handled by intermediaries. Therefore, the profitability of introducing a subscription model hinges on whether it generates increased sales that outweigh these additional costs (Iyengar *et al.*, 2022). Hence, the shift to a dual product-subscription business model underscores the need to manage fundamental changes in how manufacturers work with channel intermediaries (Kowalkowski and Ulaga, 2024).

Furthermore, today's subscription models generate data-driven insights that enable a company to diversify its revenue structure based on flexible pricing models such as pay-per-use and pay-per-period (Vandermerwe and Erixon, 2023). The flexibility and continuity of subscriptions allow customers and providers to adjust according to changing needs. To that extent, subscriptions differ from other services that generate recurring revenues, such as operational leasing, a longstanding practice among manufacturers (McNeill, 1944). While leasing can be understood as a commercial instrument (Merrill, 2020) or transactional marketing tool (McNeill, 1944), subscription models with their direct online customer links are fundamentally distinct (Kowalkowski and Ulaga, 2024), and further research is needed to explore how manufacturing firms can effectively harness such BMI.

3. Research method

3.1 Research design

This research seeks to contribute to and extend existing servitization research by analyzing the shift to a dual product-subscription business model in both consumer and business markets. To add to existing knowledge, we chose to investigate the process and implications of BMI in the automotive sector. The sector, currently undergoing disruptive changes such as electrification and “softwarization,” has encountered market saturation and challenging economic conditions. Spurred by environmental concerns and the belief in “peak car,” where consumers seek access to and usage of products rather than buying and owning them, a

plethora of service-based business models have been launched. However, many of these initiatives have faced commercial failure. Notably, amid the rise of the sharing economy (Eckhardt *et al.*, 2019), carsharing garnered significant attention from analysts and scholars alike. Yet, despite substantial investments in ambitious market expansions, manufacturers such as BMW and Mercedes-Benz have either closed or significantly downsized their carsharing operations (Nansubuga and Kowalkowski, 2021).

Considering these developments and inherent challenges, our aim was to better understand BMI by analyzing how a product-centric manufacturing firm can successfully expand its business by developing and implementing a scalable service-based subscription model. As the case company, we selected a European automotive manufacturer with operations in several parts of the world (hereafter referred to as the OEM), which relies on both the B2B and B2C segments for its sales. The company was pursuing servitization by adopting a new subscription business model alongside its traditional product-centric model, which relies on product sales and operational leasing.

We opted for a longitudinal case study approach as the most suitable method for gaining in-depth insights into the phenomenon within its real-world context and for observing changes and effects over time (Creswell and Creswell, 2017). Consistent with other similar investigations (e.g. Huikkola *et al.*, 2022), the methodology was rooted in grounded theory development, as described by Gioia *et al.* (2013). Appendix 2 outlines the steps involved in this research process.

3.2 Data collection and analysis

The study is based on primary and secondary data collected over a three-year period (spring 2020–spring 2023). Primary data were gathered through semi-structured interviews with informants from central business functions, four sales companies, and four independent dealerships. The interview method was chosen because it allowed for a comprehensive understanding of the innovation process, particularly in the absence of direct observation; interviewees could provide historical information and explain decisions made during the process. In addition to the interviews, secondary data were collected from the company's annual reports, press releases, newspaper articles, and social media channels. Collecting secondary data was relevant to supplement the primary data and minimize potential informant bias by offering an independent perspective (Solarino and Aguinis, 2021).

The interviewees were selected primarily based on their knowledge of and involvement in the innovation process (Zeithaml *et al.*, 2020). Additional informants were recruited through snowball sampling (Gioia *et al.*, 2013); after each interview, we asked for potential referrals to other decision-makers who might further our understanding of how the subscription business model evolved (Solarino and Aguinis, 2021).

The interview guide (see Appendix 3) was created to gain a thorough understanding of the growth and progression of the subscription business model. While specific questions were tailored to each participant's role and expertise, the focus was on the interviewee's experience of change and its management within the company and across the dealer network. The guide included questions about the involvement of different organizational units and their internal and external partners in the innovation initiative. Interviewees could also offer additional information that they considered relevant.

When discussing current events, we also asked retrospective questions to facilitate comparison over time. To minimize bias, the interview questions were open-ended (Creswell and Creswell, 2017). We ensured that the interview protocol was sufficiently flexible to accommodate adjustments (Gioia *et al.*, 2013); for example, depending on the informant's involvement and area of expertise, different follow-up questions were asked to prompt deeper discussion.

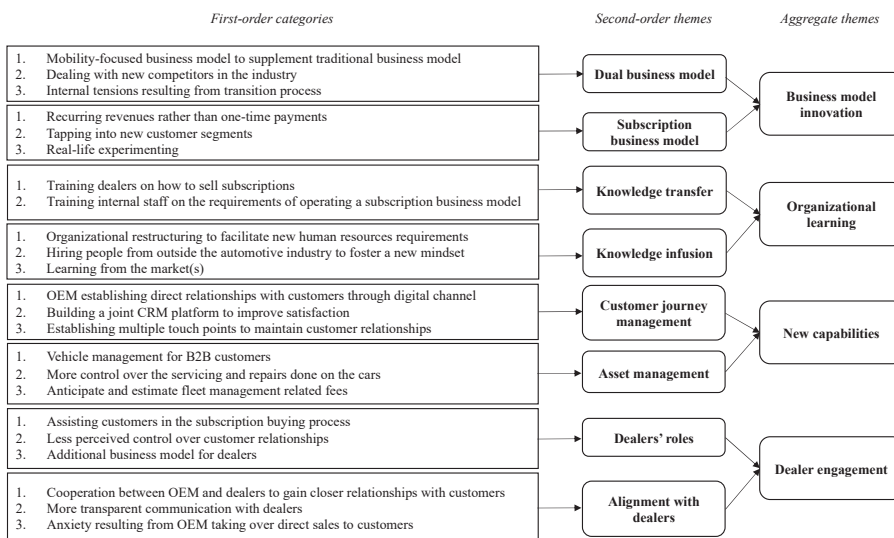
Over the course of three and a half years, 25 semi-structured interviews were conducted at different stages of the implementation process (see Appendix 4). Of these, twenty informants

worked at the OEM, and five worked at various dealerships. All informants occupied managerial positions and were involved to varying degrees in developing or implementing the new business model. The interviews were conducted either online or in person, each lasting an average of 55 min. With the informants' permission, all interviews were recorded for subsequent transcription (Creswell and Creswell, 2017).

We used the Nvivo software package to support the data analysis—a meticulous process that proceeded from detailed coding of the initial data to the development of higher-level theoretical themes, culminating in the formation of aggregate dimensions. This process comprised three stages; the first of these involved an in-depth exploration of the data based on a line-by-line reading of the interview transcripts and secondary data sources. This granular examination, which enabled us to develop a close understanding of the material and to identify any information of immediate relevance, generated almost three hundred coded items from the interviews and secondary data. These items were then refined in an iterative procedure of comparison and pattern recognition, condensing the coded items into 23 first-order categories that aligned with the informants' use of language and terminology as specified by Gioia *et al.* (2013).

The second stage was more conceptual, involving a comparative analysis of the 23 first-order categories with the existing literature (focusing primarily on servitization and business model innovation). The aim was to develop theory-centric second-order themes at a higher level of abstraction than the first-order categories. This was to identify overarching ideas that adequately captured the observed phenomena and to assign appropriate labels to these themes. This process of theory building and theme extraction was a collaborative and iterative process that culminated in the identification of eight second-order categories.

In the third and final stage, the second-order categories were organized and grouped into aggregate dimensions to provide a structured framework for making sense of the relationships and patterns in the data. In this way, we were able to distill and interpret the data to gain a deeper understanding of the target phenomena. The final coding structure is shown in Figure 1.



Source(s): The above figure was created by the authors

Figure 1. Data structure and coding process

4. Findings

The case study yielded insights into how a product-centric manufacturer has innovatively developed a mobility subscription model, running parallel to its conventional product business model. The study tracked the process from its inception, analyzing the accompanying changes and how they were managed at each stage. While the OEM caters to both B2B and B2C segments, the majority of its sales are attributed to the B2B segment. Traditionally, the company has relied heavily on a product-centric model, with an extensive network of external dealers responsible for car sales. Customers, in turn, bore the costs related to ownership, such as maintenance and repairs. However, disruptive changes, such as electrification and the growing significance of software, have compelled the automotive industry to devise innovative mobility solutions and services. In response to the increasing customer demand for comfort and flexibility, the company aimed to expand its customer base. It did so by developing a flexible subscription model, designed to complement its traditional product business.

4.1 Phase 1: initiation

Initially, the company introduced a three-year mobility service package for B2C customers in Market 1. This marked a significant departure from its traditional business model, as the OEM retained ownership of the car. This initial phase served as a pilot trial to explore a non-ownership model and gather customer feedback before making further investments in the subscription model. The offering was subsequently fine-tuned for greater flexibility, providing customers with the option to return the car after one year (subject to an additional cost) or after two years (without any additional cost). This formed the basis for the current subscription model. However, given the extent and time required to incorporate all the necessary elements for a successful subscription model, the implementation has been gradual. As such, only a subset of services was available at the outset:

We have been rolling out the subscription model in different phases, and the first phase was about defining what the offer would look like. (Offer Development Manager)

4.2 Phase 2: testing

During the second phase, the OEM continued to run the refined service offering in Market 1 while simultaneously piloting a pure subscription model in Market 2. This second market was chosen as a testing ground because of its size and importance. Despite intense competition in the product domain, none of the company's competitors were offering a subscription model. Furthermore, the high level of digital literacy among potential customers (e.g. familiarity with online platforms) made Market 2 a suitable testing ground, as it would generate learnings that could be extrapolated and applied in other markets.

The subscription model was developed as an all-inclusive offer; customers paid a ready-negotiated monthly fee covering costs such as insurance, service, and repairs, and roadside assistance. The key idea of the subscription model was to eliminate the price haggling between dealers and customers that characterized the traditional product model by offering customers a flexible means of accessing cars without owning them. In other words, customers would pay for the comfort and flexibility of using a car without signing up for a fixed period of two or three years (as is typical of other non-ownership services like leasing). One key selling point was the car's ready availability and delivery within one week of subscribing. [Table 1](#) highlights the key differences between the product and subscription models.

As depicted in [Table 1](#), the implementation of this subscription model significantly impacted the OEM's relationships with both dealers and customers. For customers, the subscription model offered a clear understanding of monthly costs, and the comprehensive

Business model component	Product model	Subscription model
Value propositions	<ul style="list-style-type: none"> - New car with warranty and service for the first year - Customer owns the car indefinitely 	Flexible access <ul style="list-style-type: none"> - Price transparency - All-inclusive offer - No ownership-related responsibilities
Customer relationships	No direct contact with final customer	Direct relationship with customer through digital and physical touchpoints
Revenue model	<ul style="list-style-type: none"> - Up-front payment - Transfer of ownership 	Recurring monthly payments
Sales channels	Sales through dealerships	Direct online sales
Key competencies	<ul style="list-style-type: none"> - Manufacturing 	<ul style="list-style-type: none"> - Customer journey management - Fleet management
Dealers' roles	<ul style="list-style-type: none"> - Buying cars from the manufacturer and selling to customers - Managing customer journeys and relationships - Setting competitive car prices 	<ul style="list-style-type: none"> - Assisting customers with subscription processes

Table 1.
Differences between traditional and subscription business models

Source(s): The above table was created by the authors

package absolved them of ownership-related responsibilities, thereby enhancing the customer experience. For dealers, the subscription model represented a major change to the traditional automotive sales model and hence transformed their role. Instead of being retailers who purchased cars from the OEM and sold them to customers at competitive prices, they evolved into agents. Their new role involved assisting customers and selling subscriptions on behalf of the OEM.

Importantly, the subscription model afforded opportunities for the OEM to reach new customer segments that would not be interested in buying and owning its cars. According to several managers in customer-facing positions, emerging customer mobility needs could be addressed in part through direct market channels, with less reliance on physical dealerships. As the subscription model reached customers mainly through digital channels (e.g. the company's online platform), new competencies and processes were needed to manage these digital touchpoints before moving to the next phase.

4.3 Phase 3: ramping up

Having established that the subscription model was well received in Market 2, the third phase involved successive rollouts in Markets 1, 3, and 4. Market selection was based on a similar range of factors, including market size and share and digital literacy. The service was essentially the same as the piloted version but varied slightly across markets to comply with differing local regulations, which affected insurance contracts and the length of the subscription period.

4.3.1 New revenue model and customer segments. Unlike the traditional product model's upfront payment for capital expenditure, a subscription secures recurring monthly fees throughout the contract period. The head of finance explained why this has both positive and negative implications for the OEM. On the one hand, this revenue model affords opportunities to attract and retain new customers by tapping into segments that would otherwise be captured by other brands. According to business development managers, millennials were initially identified as the primary target customers because their expectations, consumption patterns, and attitudes to car ownership differ from those of previous generations. As one manager explained, because millennials have grown up with the mobile internet and are

comfortable with digital interaction, they place greater value on experiences and convenience than on car ownership. Contrary to initial expectations, most of the subscription customers were not millennials; however, as described by one of the managers, the model attracted a younger segment (average age 43–45 years) than the traditional customer (average age 55–65 years):

When we started this journey, we had an image of subscription customers as young urbans. But the more I look at our sales, I realize that our average customer is not a 25-year-old. Rather, they are in their 40s [...] seventy to ninety percent of our subscription customers are new customers. (Business Development Support Manager)

On the other hand, as subscription fees are paid monthly, this business model means a more extended payback period for the OEM, and income is deferred for longer. It becomes harder to calculate profits than in the case of the traditional product model, where the company produces the cars—on a build-to-order basis—and sells them to the dealers. This affects the company's financial statements, as the cars remain on the balance sheet until they are sold on the secondhand market.

4.3.2 Customer journey management. With the implementation of the subscription model, the OEM encountered challenges stemming from new customer requirements and expectations. These included the need for swifter responses to inquiries and support requests. This sentiment was echoed by one of the sales managers, who articulated it as follows:

Nowadays, the customer expects to be able to go online, find the car they want, and pay for it in their preferred way. And if they need help with the shopping process, they should be able to reach the company directly or go to a dealership and talk to somebody there. The customer wants to be in the driver's seat, and we should be able to respond rapidly to their needs and wants. (Sales Manager, Market 1)

As the business model was rolled out, it also imposed new demands on the company's capabilities. In particular, the managers responsible for the different stages of subscription development highlighted customer journey management as a new requirement. Historically, dealers have acted as intermediaries, and the OEM has had limited insight into customers' preferences, product usage, and overall service experience. However, as all new vehicles allow customers to access connected services and functions through an app, the OEM could now access product usage data directly. The subscription model also meant that the primary relationship was no longer between the customer and the dealer; instead, the online signup process established a direct link between the customer and the OEM.

The subscription model can be seen as a deliberate attempt from the OEM to foster closer links with its customers, facilitating a deeper understanding of their needs and providing enhanced support. It required the acquisition of new skills to comprehend and manage the customer's journey at every stage and touchpoint. As one of the customer journey managers explained, the process typically commences with a salesperson conducting an individual needs assessment for each customer. This involves understanding the customer's travel patterns, behaviors, and budget to assist them in selecting an appropriate subscription package and vehicle. While the traditional model delegated this role to the dealer, the subscription model has transformed it into a new internal competency. The customer journey manager articulated this shift as follows:

It is important to know the customer and to be there for them, and making the effort to implement the requisite digital backbone is crucial [...]. We did not have to handle customer relationships in the past [...] but we are evolving into a customer-oriented and customer relationship company, which is a huge change from when the retailers performed that role. These are the company's biggest challenges—how to ensure that we give customers a great experience and maintain that connection with them. (Customer Journey Manager)

Several managers stressed the importance of new digital systems for data extraction and visualization to keep track of customer behaviors and needs. The need to integrate the necessary systems and functionality to generate, capture, and analyze the relevant data involved a significant initial effort. Once these digital platforms were up and running, the OEM could provide timely customer support when problems arose, as well as offer advice about the vehicle and receive feedback. The new systems afforded better access to customer data, enabling customer journey management teams to gain a fuller understanding of customer usage patterns.

In addition, the OEM introduced a shared customer relationship management (CRM) platform to coordinate efficient marketing, administration, and customer support with its dealers. However, adapting to the new system proved challenging in the beginning, as some dealers found it difficult to work with. The transition was especially challenging for those who were accustomed to using the old CRM system and the traditional product sales-monitoring model. Some dealers struggled with the new CRM system's categorization of repairs and services, and difficulties with registering assisted subscription sales resulted in lost revenues.

In the beginning, working with the new system was unfamiliar and difficult; nothing worked the way we were used to. But as we saw more business coming in and how easy it was to make a sale, we quickly learned how to use the program, and it became an integral part of daily activities for our sales personnel. (Sales Manager, Dealership 3)

4.3.3 Organizational restructuring to facilitate new capabilities. Beyond customer journey management and the switch to direct sales, the dual business model expanded the OEM's user base. While this expansion was positive from a market perspective, a dual business model with two fundamentally distinct revenue structures also presented challenges. The subscription model demanded solutions for new challenges like vehicle maintenance, as the company retained vehicle ownership throughout the subscription period. Meeting these demands initially led to internal tensions, as the new business model was not easy to fully implement within the existing organization. While some employees were optimistic about the changes, others were skeptical or viewed the subscription model as a threat because they feared it would cannibalize the traditional product business. One of the sales managers expressed this as follows:

[. . .] This change process takes time, and not everybody was happy about it. The most difficult part was figuring out how to align [the changes] with the company culture, the different products, and the existing stakeholders. (Online Sales Manager, Market 3)

For the dealers, too, selling subscriptions imposed requirements that differed from the traditional model, as sales personnel had to adopt a different mindset and familiarize themselves with new pricing models and sales processes. During the interviews, some dealers reported that sales personnel initially struggled to guide customers who were interested in the subscription model, as they lacked confidence in their ability to do so.

With the traditional model, we know exactly what to do, but subscriptions are still new to us, so there has been a lot to learn: new systems and processes, how to book customer deliveries, and so on. I think we still need to improve on those things. (Sales Manager, Dealership 2)

To cope with these demands, the company organized workshops for employees who were directly responsible for the subscription model and dealerships in the different markets to ensure that they understood and accepted the new requirements.

About a third of employees were thinking, "Wow! This is big! How do I do this?" We need to work with those employees to upskill them and to ensure that they have the right competencies and skill set. And then probably another third will say, "I cannot see this working. This is not for me." And if

that is the case, we educate them and explain why they need to upskill. However, if someone is unwilling to adapt, then I suppose we need to look at our options. (Online Sales Manager, Market 4)

In addition, the company established a new organizational unit to facilitate the subscription model rollout, including support for dealers and new subscription customers. The new unit recruited employees with complementary skill sets from within and outside the automotive industry (e.g. banking, e-commerce, retail, private leasing), as management realized that software engineering and retail management competencies would be needed to drive the continued expansion of the subscription model. As one head of sales explained, it was important to break away from traditional ways of thinking within the company and industry:

For decades, we have been employing people with experience in the automotive industry. With this recent shift, we're suddenly hiring people from retail. We hired a customer loyalty manager who has designed loyalty programs for several airlines. Clearly, we realize that the competencies we need come from a much wider range of industries than before. (Sales Manager, Market 1)

4.3.4 Changing roles for dealers. The subscription model also changed the dealers' roles in several ways. OEM informants and dealers explained that although the digital channels allow customers to sign up directly for subscriptions, many still prefer to visit their local dealerships to experience the cars and to speak with someone face-to-face before making a purchase decision.

The subscription model meant that dealers could no longer compete on price by purchasing cars from OEMs and selling them at a discount. Dealers noted that the subscription pricing model made interactions with the customer more transparent, eliminating the room for price negotiations. This shift allowed them to concentrate on value-adding activities such as assisting subscription sign-ups and cultivating customer relationships:

We have the same price here, and everywhere [. . .] Most customers prefer to avoid any hassle; when the salesman sets the price, it can be "whatever," and they wonder, "Have I got a good deal, or has this salesman tricked me?" But now they can feel completely secure. (Sales Manager, Dealership 4)

The dealers offered test drives, prepared the cars for delivery, and performed service and repairs as they have always done without addressing the price element. Instead, dealers earned a fixed handling fee and commission on assisted sales for the services provided, basing their remuneration on activity rather than volume. On the other hand, the online option meant that some customers may not visit a dealership for advice or a test drive before signing up. As dealers aimed to build and maintain customer relationships from the consultation stage onward, some felt that the new model gave them less control. In many cases, dealers expressed that they only meet subscription customers for the first time at the point of delivery:

We first meet some subscription customers only when we deliver their car. Normally, we are used to meeting the customer much sooner, so beginning to build relationships at that stage is one thing that requires a new way of thinking. (Sales Manager, Dealership 3)

4.3.5 Dealer management. As the dealer's role changed, so did their relationship with the OEM. Even in the case of long-standing relationships, the introduction of the subscription model was not friction-free. Dealers in various markets expressed their anxiety that the OEM was absorbing their customers, and some felt that they might soon be driven out of business:

[. . .] there has been some turbulence in the stakeholder network, especially among dealers, but we want to maintain that symbiosis because we depend on each other. We must be able to offer them enough service business to enable them to survive [. . .] (Damage and Repair Manager)

Undeniably, the OEM's expanded role in online sales and digital touchpoints granted it a higher degree of customer control compared to the traditional model. However, given the pivotal role that dealers play in the delivery and servicing of vehicles, it was imperative for the company to address these issues in the interests of continued collaboration:

One of the mistakes we made was that we initiated certain changes without consulting the dealers and only involved them at a later stage. One important learning was that we should have engaged with them from the start. (Online Sales Manager, Market 3)

In order to secure dealer buy-in and foster trust, the OEM found it necessary to sign new contracts and enhance transparency in communication to overcome any potential resistance. To tackle these challenges, a revised remuneration scale was introduced to reflect the dealers' new roles and service activities. Additionally, an upgraded CRM system was implemented to facilitate the sharing of customer information.

4.4 Phase 4: market extension and turbulence

The fourth phase (ongoing) has involved further adjustments to the subscription model and additional actions informed by the OEM's experiences of market expansion.

4.4.1 Revised subscription offer. The company has continued to refine the subscription offer based on contract duration, churn, and usage data. Customers are now presented with two options: a flexible offer that allows them to terminate the subscription or switch their car with just three months' notice, and a fixed offer that entails keeping the same car for a minimum of three years. The business development managers interviewed explained that the fixed offer was designed to bolster customer loyalty by catering to long-term customers. Conversely, the flexible offer serves as a significant tool for drawing in new customers due to the lower initial commitment it requires. The company's preliminary analyses indicated that the majority of customers opting for the flexible offer were newcomers to the brand. Despite the option to leave after three months, most have chosen to stay considerably longer, leading managers to conclude that the two subscription types effectively complement each other by appealing to different customer demographics.

4.4.2 Business-to-business subscriptions. Up until the third phase, the subscription model was primarily tailored to the B2C segment. Nevertheless, the OEM identified an opportunity for further growth and initiated the implementation of the subscription model in the B2B segment, primarily targeting small and medium-sized enterprises with fleets of up to fifty cars. The subscription pricing in the B2B segment is structured based on fleet size, offering higher discount levels for larger fleets, thereby eliminating the need for price negotiations. Interestingly, the introduction of B2B subscriptions has underscored the importance of maintaining robust relationships with the dealers, who are adept at forging personal connections with decision-makers within customer organizations. To tap into these customers, the OEM relies on the dealers and the relationships they have cultivated. The B2B sales manager reflected on the significance of dealers as follows:

These business customers are often the dealer's relations or friends. If you go to a certain location, the dealer or some sales guy may know some smaller business guys, and there is a relationship. So, it's good that the dealers maintain that relationship with our B2B customers going forward, as they can help to sign them up for the B2B subscription. (B2B Sales Manager)

The B2B subscription offer also foregrounded the need to develop an additional competence: asset management. For B2B customers, especially those with large fleets, the OEM needed new fleet administration services to facilitate vehicle management. Unlike individual consumers with single-car subscriptions, these professional buyers expect digital access to fleet management information, such as usage, cost comparison, and fuel management. In the B2B space, the OEM found itself in competition with leasing firms that offer comprehensive fleet management services. This necessitated the development of these competencies and features.

Unfortunately, the implementation of the subscription model in the B2B segment was hindered by external factors—notably the global COVID-19 pandemic, which led to a

shortage of critical production materials such as semiconductors, forcing the company to scale back production. The ensuing slower production times derailed one of the subscription model's key selling points—rapid car delivery—and channels based on upfront payments, as in the traditional product model, gained priority over subscriptions:

There have been headwinds in the overall business. It has been tough; selling by subscription spreads that revenue over a longer period compared to cash sales, where you sell the car immediately. At a certain point, it becomes very tempting to sell the car directly instead, and to some extent, that has happened, as other sales channels have been prioritized because of the low inventory. (Sales Analyst)

In addition, the global economic recession, marked by inflation and escalating interest rates, impacted both car sales and subscriptions by substantially increasing monthly fees. As observed by some dealers, customers have become more prudent with their expenditures. B2C subscriptions have been more adversely affected than B2B, largely because B2B customers often need the vehicles for daily operations and may not be able to delay purchases without causing business disruptions. Conversely, many B2C customers have the option to explore alternative mobility solutions.

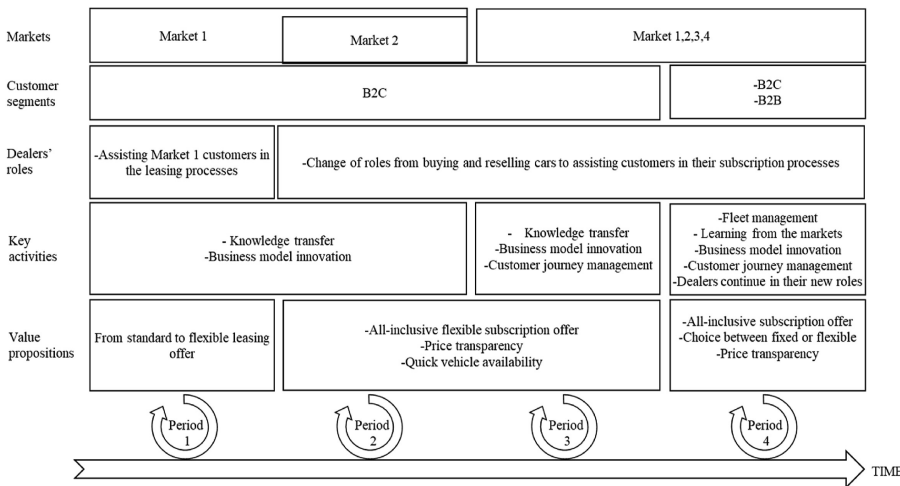
4.4.3 Learning from the markets. As the subscription model has been gradually rolled out across various markets, the OEM has learned from its initial approach and has consistently made substantial modifications for new markets. According to multiple informants, the most recent implementation of the subscription model has thus far proven to be the most successful.

Market 4 has had the best development so far, and I think there are many reasons for that. [. . .]By the time we came to Market 4, we had learned. What we did in Market 1 was trial and error. We did not have all the operational parts in place [. . .]. (Finance Manager)

Prior to venturing into Market 4, the subscription business model had been trialed in three distinct markets, enabling the OEM to fine-tune its operational processes based on the feedback received. The invaluable insights gleaned from previous dealer negotiations facilitated alignment with dealers and the creation of new digital touchpoints. Observing the subscription model in other markets provided reassurance to dealers in Market 4, and managers are of the belief that this contributed to a more seamless implementation process, coupled with the company's enhanced competencies in areas such as customer journey management. In essence, the OEM learned from past missteps and refined its approach by implementing proven strategies. By the end of 2022, approximately thirty-five percent of total sales in Market 4 were subscription-based, despite the recent implementation. Looking ahead, the company is committed to ongoing learning from existing markets and further refining its approach to effectively address the tensions inherent in the dual business model. [Figure 2](#) illustrates the various stages of the subscription model development process.

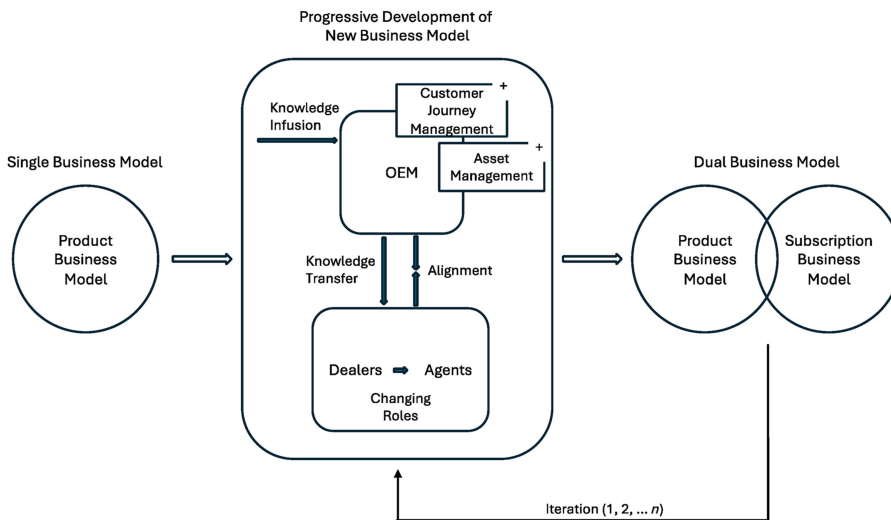
5. Discussion

This section brings together our findings to present a process model for navigating the transition to a dual orientation through servitization, as illustrated in [Figure 3](#). The framework encompasses four overarching themes—business model innovation, acquisition of new capabilities, dealer engagement, and organizational learning—which collectively underscore the pivotal considerations inherent in this transformative journey. In essence, the model describes the iterative process of shifting from a product to a product-subscription business model. This approach means that companies focus their attention on progressively developing and implementing the new business model through gradual rollout and refinement rather than pursuing big-bang, everything-at-once deployments, which are



Source(s): The above figure was created by the authors

Figure 2. Subscription business model development: an incremental and iterative process



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Figure 3. Business model innovation framework illustrating key aspects in the evolution of the subscription business model

generally much harder (Rigby *et al.*, 2018). In our case, rather than completely discarding the product model, the company opted to operate both models concurrently.

The BMI process engaged two key stakeholders—the OEM and its network of dealers. Knowledge infusion was a pivotal element throughout this journey. The company strategically onboarded new talent, particularly employees from outside the industry who were not constrained by established assumptions, to infuse novel skills and perspectives. At the same time, organizational restructuring enabled the adaptation of human resources to the evolving business model. As the subscription model evolved through successive iterations, it broadened its reach to cater to a diverse range of customer segments.

To effectively manage this expanded scope, the development of new capabilities such as customer journey management and asset management became imperative. Importantly, shifting to a dual orientation necessitates substantial adjustments for dealers whose roles underwent a shift, causing a temporary misalignment with the OEM. Knowledge transfer initiatives, such as training sessions, were needed to counteract these tensions and ensure alignment and smooth operation across all stages of the customer subscription journey.

5.1 Managing transformation through business model innovation

While many manufacturers pursue servitization to protect their product business—a defensive stance that would not constitute BMI (Markides, 2006)—our case company viewed the subscription model as an opportunity to attract new customers. The company did not pioneer mobility services as such, but it innovated by introducing a novel subscription service that offered customers a flexible and convenient mobility experience. As reported in other qualitative studies of the transition to a dual product-service business model (e.g. Renault *et al.*, 2010; Visnjic *et al.*, 2022), this initiative prompted some internal tensions. Specifically, transitioning companies need to find a way to reconcile the business logics of the two distinct models. In our case, this integration was achieved by framing the subscription offer as complementing rather than replacing the existing product business. While other heavily promoted service initiatives in the industry have struggled or failed, this initiative gained traction because it was perceived as strengthening the overall market position and brand of the company, which could also benefit the product business model in the long run by attracting new customers that would not have considered buying the brand in the first place. This perception helped to gain internal acceptance.

For manufacturers, service revenues (including spare parts) are critical to the profitability of the product business. Subscriptions shift the company's revenue logic beyond one-time upfront payments and discrete service and parts sales to recurring service revenues. Servitization has been around for a long time (Vandermerwe and Erixon, 2023) and is generally seen as a means of stabilizing manufacturing businesses in turbulent times (Rapaccini *et al.*, 2020). The disruptive escalation in interest rates in most developed economies after years of record lows impacted the operating costs of asset-heavy services like car subscriptions, as customers must pay higher fees. In this environment, the OEM lost many price-sensitive consumers. However, the loss was partly offset by the B2B segment, where many customers are better positioned to manage such turbulence. This dynamic underscored the benefits of operating in both segments. It also highlighted the importance of market sensing, real-life experimentation, and trial-and-error learning (Sosna *et al.*, 2010; Visnjic *et al.*, 2022) to adapt the business model as market conditions change continuously. The OEM used these approaches to develop, ramp up, launch, and calibrate its subscription offering as needed.

5.2 Embracing organizational learning

As the subscription business model was entirely new to most employees, those directly involved had to learn how its requirements differed from the traditional approach. To proceed, the OEM could not rely solely on in-house expertise and, therefore, recruited individuals from outside the industry to introduce the necessary skills. Ayala *et al.* (2017) argue that to facilitate BMI driven by servitization, manufacturers should seek knowledge from external providers, whether external organizations or other business units within the same company. While this issue has been highlighted in recent studies of digitalization and servitization (e.g. Tronvoll *et al.*, 2020), the servitization literature devotes little attention to the alignment of human resource management with strategic intent. For instance, "people issues" are often viewed merely as obstacles to be overcome (Raja *et al.*, 2010).

In the present case, the company established a new organizational unit to foster a service-centric mindset and to harness the new expertise. This unit played a vital role in acquiring in-depth customer knowledge and learning from local markets by leveraging vehicle data and connectivity. It allowed the OEM to continuously calibrate, adapt, and refine the content and prices of its service packages, enabling a deeper exploration of customers' willingness to pay and local market preferences. This approach aligns with the principles of organizational learning literature (e.g. [Levitt and March, 1988](#)), which highlights the importance of learning by doing in order to enhance organizational competencies and performance.

5.3 The role of new capabilities

Knowledge acquisition and organizational learning were instrumental in enabling the company to cultivate the new capabilities required for proficient service provision across B2C and B2B markets. During the rollout phase, the OEM recognized the significance of customer journey management as a pivotal capability in this evolving business landscape. This entails the strategic delivery of superior customer value throughout the customer journey, achieved by establishing new touchpoints characterized by consistent resource utilization across internal organizational boundaries and ongoing monitoring of value creation ([Homburg and Tischer, 2023](#)). Special attention was given to digitalizing the overall process and specific touchpoints, either by replacing physical touchpoints or introducing new ones (cf., [Lundin and Kindström, 2023](#)).

To begin, the OEM needed to grasp the intricacies of the B2C customer journey and tailor their management approach accordingly. Subsequently, as it ventured into the B2B segment, business developers and managers had to discern the nuances that distinguish these customer journeys. Typically, B2B journeys are characterized by their extended duration and complexity, involving multiple stakeholders across various departments and more touchpoints that must adhere to contractual stipulations ([Homburg and Tischer, 2023](#); [Witell et al., 2020](#)). In this case, B2B subscriptions encompassed fleets consisting of numerous vehicles, often numbering up to fifty per customer. Managing multi-fleet subscriptions posed additional challenges, necessitating the development of new capabilities. While these fleet sizes may be smaller compared to those in the trucking industry, managers still needed to anticipate and estimate fees associated with fleet management.

Importantly, unlike B2C subscriptions, pricing for most B2B subscriptions is not fixed but rather determined by a predetermined discount rate contingent upon fleet size. While effective negotiation tactics may aid in securing deals or finalizing contracts, such an approach also carries inherent risks, as individual sales representatives or teams may inadvertently compromise the overall profitability of the agreement (cf. [Renault et al., 2010](#)). Consequently, the OEM had to closely monitor and analyze the performance of individual accounts and entire fleets, overseeing servicing and repairs to ensure operational efficiency.

5.4 The relevance of dealer engagement

The shift to a dual business model also brought about significant changes in the role of dealers and their relationship with the OEM. [Reim et al. \(2019\)](#) underscore the importance of manufacturers approaching servitization with a deep understanding of the nuanced adjustments required from channel partners, particularly concerning their operational procedures within the service network. Understandably, the decision to directly sell subscriptions online caused apprehension among dealers, who were concerned about the potential loss of independence and control over customer relationships. Such tensions among stakeholders can lead to overlapping, duplication, or redundancy in BMI processes and activities ([Burton et al., 2016](#)). For example, [Parida and Jovanovic \(2022\)](#) associate these challenges in the market channel with the concept of role ambiguity, emphasizing the need to

align roles with normative guidelines to address and accommodate challenges in value creation and capture. Therefore, securing the support of dealers was crucial for the successful implementation of the subscription offer, as they continue to serve as primary delivery points and service centers and play a vital role in facilitating subscription sign-ups. To reassure dealers, alongside training initiatives, the OEM fostered closer dialogue and more transparent communication channels.

As the revenue model shifted from Capex to Opex, collaboration and the exchange of data between the OEM and its dealers became even more important for consistent and cost-efficient service provision (see also [Kowalkowski et al., 2016](#)). As the dealers now had to manage two distinct revenue models, the OEM had to ensure the adequacy of CRM systems and information exchange, and this closer collaboration also helped the OEM develop closer customer relationships. The dealers play a key role in the B2B sales process, as they can leverage established relationships with decision-makers to generate sales leads and promote the B2B subscription offer. In the traditional model, the OEM would pass sales leads on to the local dealer; in the subscription model, however, the OEM relies on sales leads from the dealers. By fostering strong relationships and leveraging dealers' expertise, the OEM navigated the complexities of the dual business model to establish a solid foundation for the introduction of subscriptions through closer alignment of interests and operations.

6. Implications, limitations, and further research

6.1 Theoretical implications

This study makes three contributions to the servitization and service strategy literature. First, we devise an empirically grounded framework for subscription-based servitization. By adopting subscriptions, manufacturers can engage more deeply with their customers' value-creation processes compared to traditional non-ownership business models like leasing and rental. While this raises expectations and places additional demands on providers, it also affords opportunities to develop closer customer relationships. Our findings affirm that subscriptions offer a viable non-ownership-based alternative for manufacturing firms seeking to generate recurring revenue.

The framework also underscores the importance of embracing the iterative nature of BMI, underpinned by organizational learning. This entails actively promoting a culture of continuous learning and adaptation, as described by [Argyris \(1991\)](#). Such an approach enhances an organization's ability to identify novel opportunities, experiment with new business models, respond to changing market dynamics and customer needs, and sustain its competitive advantage in unpredictable business environments. The subscription BMI process illustrates the importance of testing and experimentation. Although the B2B segment was traditionally our case company's primary target segment, the first phase of innovation focused on the B2C segment before progressively introducing the B2B subscription. This strategy served two purposes: expanding the customer base by venturing into new segments and experimenting with the new model in a distinct customer segment without disrupting the primary business. Adopting a trial-and-error approach, the company exploited these learning opportunities to improve the subscription business model before implementing it in the primary customer segment. This approach aligns with incremental approaches to BMI ([Chesbrough, 2010](#)) and agile development ([Rigby et al., 2018](#)), in which organizations view failures and setbacks as valuable learning experiences ([Edmondson, 2011](#)). Even when successful, ongoing experimentation is encouraged to push the boundaries, testing assumptions and theories in pursuit of higher performance ([Gino and Pisano, 2011](#)). By recognizing that BMI is iterative and learning-driven, organizations can actively promote experimentation, knowledge acquisition, and knowledge integration for successful innovation.

Second, this study contributes by advancing our understanding of the dynamics and value-creation potential of subscription business models for manufacturing firms. Although subscription models have become a strategic priority for many companies, most of the research to date has focused on digital consumer services (Kowalkowski and Ulaga, 2024). The present study, therefore, addresses a significant knowledge gap by describing how a manufacturer can develop and implement a subscription model that serves both B2B and B2C markets. More specifically, a subscription model enables a manufacturing firm to target and serve previously untapped customer segments by providing service-related benefits beyond its traditional product offering. In this way, manufacturers can extend their value propositions by offering recurring payments, price transparency, and a digitalized customer journey.

In addition to demonstrating the potential of subscription business models to expand the customer base and enhance the value proposition through servitization, our study contributes to servitization research by illustrating how manufacturers can leverage new services to diversify beyond their established product-centric business (Salonen *et al.*, 2017). Despite the growing interest in subscriptions, few previous studies have addressed how manufacturers can successfully integrate this model into their operations. Aside from some studies of service development in manufacturing firms (e.g. Huikkola *et al.*, 2022), little is known about how such servitization processes unfold. Here, our study responds to Sjödin *et al.*'s (2019) call for more relevant longitudinal case research, describing the key stages in the implementation process, highlighting challenges, and discussing how these were managed.

Third, this study contributes by shedding light on the critical role of managing dealer relationships during the transition to subscription-based models. Recognizing the concerns of dealers and anticipating potential tensions stemming from the extensive changes required becomes paramount. Even highly innovative firms with extensive internal capabilities cannot execute all innovation activities independently (Lin *et al.*, 2016) or perform all service activities themselves (Reim *et al.*, 2019). While servitization offers inherent value to manufacturers and their service network partners, the relationships involved can be complex, limiting their full potential (Kamalaldin *et al.*, 2020). Our research delves into key challenges in value co-creation between manufacturers and channel partners, such as support and training, IT systems, incentive alignment, and issues related to scaling services. These aspects have received limited attention in previous studies (Parida and Jovanovic, 2022). Consequently, large-scale servitization initiatives like subscription business models may have broader implications for stakeholders than similar digital initiatives (e.g. software-as-a-service). Given the reliance on channel partners such as dealers, their engagement becomes a pivotal factor for successful BMI. To conclude, such alignment is necessary to preserve longstanding relationships and jointly respond to the new requirements arising from the digitized customer subscription journey.

6.2 Managerial implications

Subscription models can help manufacturing firms to successfully integrate new business logics into existing operations and to overcome the challenges associated with traditional approaches to servitization. To do so, the firm must navigate a range of internal and external changes. Internally, roles, competencies, and operations must be adapted to align with the demands of the new business model. Externally, market channel changes include redefined roles, new digital infrastructure, and a review of partner firms.

Our findings offer two main learning points to guide managers when implementing new business models in product firms. First, implementing a subscription model in a product-centric setting may necessitate the acquisition of new competencies (see also Renault *et al.*, 2010) and the development of specialized skill sets, such as customer journey management, which is a

crucial prerequisite for successful BMI. Since a service business model entails a distinct value creation logic compared to the traditional one, managers might need to look beyond traditional industry boundaries when recruiting expertise. For a product-centric firm, it appears crucial to actively foster a service-centric mindset and to harness appropriate new digital expertise. A subscription model facilitates real-time experimentation but also demands continuous adaptation and calibration of the service offering and customer touchpoints. This may be particularly important for a company operating in both the B2B and B2C markets, as the former requires significant investment in sales, onboarding, and fleet management.

Second, the implementation of a new business model often triggers adjustments within existing partnerships, demanding adaptation to remain relevant in the restructured market channel. Effective collaboration becomes paramount for successful BMI. As the orchestrator of the service network, the manufacturer needs to foster transparent communication, close dialogue, and collaboration with dealers and other partners to address anxieties, build trust, and ensure consistent and cost-efficient service provision. Facilitating these adaptations requires the leading firm to actively share knowledge, exchange information, and engage in joint problem-solving with partners (Burger *et al.*, 2023). Such collaborative efforts enable partners to develop new roles, skills, and systems that align with the requirements of the new business model. By nurturing this collaborative and adaptive approach, managers can enhance the firm's ability to navigate implementation challenges and support partners in adapting to the reconfigured market channel.

6.3 Limitations and further research

As in any study, the limitations of this research highlight avenues for future work. First, since this was a single-case study, future research should compare our findings with other service ventures in the automotive industry and subscription-based business models in other product industries to deepen insights and assess generalizability. Second, the present study tracked the case company during the initial stages of BMI. While we have done our best to capture the critical events at different points in that process, BMI is known to be iterative, and future changes are bound to determine further development. As more firms adopt subscription business models, future studies should compare processes and outcomes over more extended periods to assess the generalizability of our findings. Finally, to provide a more comprehensive account of the overall value creation system, a better understanding of the perceptions, activities, and roles of the various service ecosystem actors is needed. In particular, it would be fruitful to compare subscription models and more established access-based services such as rental in terms of relevant drivers and barriers.

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Appendix 1

Study	Study objectives/ focus	Research method	Data collection period	Scope of innovation	Segment	Key actors analyzed	Role of intermediaries	Key findings/ outcomes
Avala <i>et al.</i> (2017)	Understand how manufacturing companies integrate knowledge from service suppliers for servitization-driven BMI	Multiple case study	Six months	Reconfigure existing products and introduce new offerings	B2B	Suppliers	Provide knowledge and expertise to the OEM	Identify the intensity of knowledge transformation in different configurations of collaboration for servitization-driven BMI
Burton <i>et al.</i> (2016)	Identify types and sources of tensions in the servitization process and explore how they might be mitigated	Interviews with key actors at servitizing firms, their customers, and intermediaries	N/A	Develop new offerings	B2B	(1) Customers (2) Distributors	Service delivery	(1) Servitization presents an opportunity for manufacturing firms to access new sources of revenue and expand their reach in the value chain. (2) Tensions are inherent in the process of servitization and can arise between organizational actors and among individual actors

(continued)

Table A1. Indicative studies in servitization with respect to business model innovation and the role of intermediaries

Study	Study objectives/ focus	Research method	Data collection period	Scope of innovation	Segment	Key actors analyzed	Role of intermediaries	Key findings/ outcomes
Hnikkola <i>et al.</i> (2020)	Demonstrate how servitization impacts the boundaries of manufacturers' firms	Multiple case study	Seventeen years	Reconfigure existing offerings	B2B	(1) Focal firm (2) Customers (3) Suppliers	Facilitate services delivery	Demonstrates how servitization influences the boundaries of firms by considering aspects such as identity, capability, power, and efficiency. It highlights the dynamic interaction among these factors and offers a managerial framework for effectively defining firm boundaries in the context of servitization
Jovanovic <i>et al.</i> (2019)	Develop service capabilities in the context of the internal service ecosystem	Multiple embedded cases in a single organization	N/A	Reconfigure existing offerings and introduce new ones	B2B	Subsidiaries	Facilitate services delivery	Reveal a complex picture of capability development across subsidiaries, emphasizing the importance of front-office capabilities and standardization

(continued)

Study	Study objectives/ focus	Research method	Data collection period	Scope of innovation	Segment	Key actors analyzed	Role of intermediaries	Key findings/ outcomes
Kowalkowski et al. (2016)	Develop and evolve context-specific value propositions in service systems	Longitudinal case study	Ten years	Introduce a new offering	B2B	(1) Manufacturer (2) Dealers (3) Users	(1) Perform maintenance (2) Optimize machine fleets	Highlight the importance of triadic value proposition in industrial contexts for successful service-led growth Highlight that ties with intermediaries positively influence innovation performance Identify value co-creation challenges in the global service network
Lin et al. (2016)	Explore how intermediaries influence innovation outcomes	Survey	Single point in time	Introduce new offerings	B2B	(1) Technology providers (2) Financial service firms	Facilitate knowledge transfer	
Parida and Jovanovic (2022)	Investigate how global manufacturers and service network partners redefine roles for advanced service provision	Multiple case study	N/A	Introduce new offerings	B2B	Front-end service network partners	(1) Support customer satisfaction (2) Specialized capabilities	
Reim et al. (2019)	Analyze the role of distributors in servitization to understand their mediation between providers and customers	Multiple case study	N/A	Reconfigure existing offerings and introduce new ones	B2B	Distributors	Facilitate communication between providers and customers	Identify major capability and market-related challenges faced by service network actors, hindering their transformation

(continued)

Table A1.

Study	Study objectives/ focus	Research method	Data collection period	Scope of innovation	Segment	Key actors analyzed	Role of intermediaries	Key findings/ outcomes
<i>Sjödin et al.</i> (2020)	Analyze BMI for outcome-based services in three phases: value proposition definition, value provision design and value-in-use delivery	Multiple case study	N/A	Introduce new offerings	B2B	(1) Customers (2) Partners	Continuously realign incentives	Present a shift in business models, examine both successful and unsuccessful cases, and provide insights into the alignment of value creation and value capture processes
<i>Sjödin et al.</i> (2022)	Understand how manufacturers orchestrate ecosystems for digital BMI	Multiple case study	N/A	Reconfigure existing offerings	B2B	Ecosystem partners	Optimize customer offerings	Emphasize the complexity and challenges of orchestrating ecosystems for digital BMI
<i>Story et al.</i> (2017)	Investigate the capabilities for successful servitization for advanced services	Interviews with actors from multiple industries	N/A	Create new offerings and reconfigure existing ones	B2B	Not specified	Provide multi-vendor technology	Identify six key business activities within which advanced services capabilities are grouped

(continued)

Study	Study objectives/ focus	Research method	Data collection period	Scope of innovation	Segment	Key actors analyzed	Role of intermediaries	Key findings/ outcomes
<i>Visnjic et al. (2022)</i>	Investigate the processes of firms shifting towards a dual orientation, delineate the practices employed, and suggest a sequence and pace of these practices as they unfold over time	Multiple case studies	Four years	Introduce new offerings	B2B	(1) Manufacturer (2) Subsidiaries	Facilitate sale of offerings	Suggest that beginning with less complex practices and gradually advancing to more sophisticated ones is an effective approach to handling a dual orientation
This study	Analyze how a manufacturing firm can implement a scalable subscription business model for B2C and B2B customers alongside its existing product-centric model	Longitudinal case study	Three years	Introduce new offerings	B2B and B2C	(1) Manufacturer (2) Dealers	Assist customers in their subscription processes and perform service activities	Affirms the importance of organizational learning, the potential for value creation through subscriptions and highlights key challenges in value co-creation between manufacturers and channel intermediaries

Source(s): The above table was created by the authors

Table A1.

Step	Key features
Research design	<ul style="list-style-type: none"> - Target phenomenon: business model transition from product-focused to services-oriented - Initial screening of literature on non-ownership, business model innovation, and subscriptions - Case study approach
Data collection	<ul style="list-style-type: none"> - Identification and selection of research setting - Identification and selection of primary and secondary data sources - Conducting and recording interviews - Transcription of interviews - Interview protocol adjustment based on informant role, responses, and stage of data collection
Data analysis	<ul style="list-style-type: none"> - Initial data coding using NVivo software, maintaining informant-centric terms - Comprehensive compendium of first-order terms, theory-centric second-order categories, and overarching aggregate themes - Data structure generation
Grounded theory articulation	<ul style="list-style-type: none"> - Identification and formulation of dynamic relationships among second-order categories - Additional literature review to refine the articulation of emergent concepts and relationships

Table A2.
Key steps in the
research procedure

Source(s): The above table was created by the authors
Based on Gioia *et al.* (2013)

Appendix 3

Interview questions

- (1) What were the reasons for introducing a subscription offer?
- (2) In comparison to the traditional product model, what benefits are derived from the subscription model (for the company and for the customer)?
- (3) What unique resources are required to operate a subscription model?
- (4) How has implementation of the subscription model affected the company's cost structures?
- (5) What determines the differences between subscription offers in different markets?
- (6) What key features attract customers to the subscription model?
- (7) What has been done to reach the desired customer segments?
- (8) How have customer relationships been handled under the subscription model?
- (9) How have dealers been affected by the subscription model changes?
- (10) Comment on sales volumes and profitability under the subscription model.
- (11) Describe the life cycle of cars supplied under the subscription model.
- (12) What challenges have arisen so far during offer development and rollout?
- (13) What lessons have been learned so far from implementation in existing markets?

	Informant	Duration (min)
	<i>Round 1 (Autumn 2020)</i>	
1	Customer Offers Manager	60
2	Former Vice President	60
3	Former Managing Director, Dealership 1	55
	<i>Round 2 (Spring 2021)</i>	
4	Damage and Repairs Manager	80
5	Mobility Strategist	60
6	Service Business Manager	50
7	Offer Development Manager	60
8	Online Sales Manager, Market 2	50
9	Component Value Retention Manager	60
10	Business Sustainability Manager	60
11	Business Development Support	55
12	Sales Manager, Dealership 1	60
	<i>Round 3 (Autumn 2021)</i>	
13	Online Sales Manager, Market 3	60
14	Online Sales Manager, Market 4	20
15	Customer Journey Manager	60
	<i>Round 4 (Spring 2022)</i>	
16	Sales Manager, Market 1	60
17	Online Commercial Manager, Market 4	20
18	Former Managing Director	90
19	Finance Manager	60
20	Sales Manager, Dealership 2	45
	<i>Round 5 (Spring 2023)</i>	
21	Sales Analyst	60
22	B2B Sales Manager	50
23	Sales Manager, Dealership 3	50
24	Sales Manager, Dealership 1	90
25	Sales Manager, Dealership 4	40

Source(s): The above table was created by the authors

Table A3.
List of informants

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