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# From business models for public actors to public service provision models: Extending the business model concept to the public sector

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ABSTRACT

Every organization, knowingly or unknowingly, operates a business model. However, while private actors frequently make use of the business model concept to actively manage their service provision, public organizations struggle with adopting it. This has led to a separate literature stream in which public management scholars developed public sector adaptations of the business model concept. As the business model conceptualizations in the general and public management literatures diverge, insight transfer between both streams is becoming increasingly difficult. Building on the need for more conceptual alignment in business model research, this article explores how the divergent conceptualizations of business models in the general and public management literatures can be reintegrated. It first presents the results of a focused literature review to illustrate their commonalities and differences. The article then introduces an integrated business model framework for the private and public sectors to merge the findings of both streams as well as to provide a common language for public-private business model realization. By advocating an integrated approach, we aim to bridge the emerging gap between the general and public management business model literatures, thereby seeking to counteract the gap's adverse implications for business model research as well as practice.

## 1. Introduction

Every organization exists to create, deliver, and capture value (Chesbrough, 2007; Teece, 2010). The business model concept provides integrated descriptions and conceptual abstractions of how organizations accomplish these objectives (Foss and Saebi, 2018). Thus, every organization, knowingly or unknowingly, has a business model. Nevertheless, private and public organizations do not equally rely on the business model concept to actively manage their service provision (Wiprächtiger et al., 2019). Profit-oriented companies widely acknowledge that clearly defining their business model, along with actively managing and innovating its core components, can lead to competitive advantage and improved financial performance (Kaplan, 2011; Snihur and Eisenhardt, 2022). Consequently, business model thinking is commonplace among profit-seeking firms (Saebi et al., 2017). However, public organizations must also manage their provision of public services (Appio et al., 2019; Shu et al., 2023), regardless of whether they provide them alone or in collaboration with private actors (Schiavone et al., 2019). Since the service provision needs to be orchestrated and financed in either case, public organizations also benefit from a business model perspective to actively manage how they create, deliver, and capture value (Battisti, 2019; Díaz-Díaz et al., 2017b; Timeus et al., 2020). Nevertheless, while the mere existence of public organizations to provide public services determines that they have a business model, public actors struggle to employ the concept to actively design and modify components of their business models (Schedler, 2023; Timeus et al., 2020; Wirtz et al., 2023b). This prevents them from benefiting from the full potential of the business model concept while facing increasing pressure to become more efficient and effective in their public service provision (Appio et al., 2019; Timeus et al., 2020).

To promote the adoption of this helpful concept among public actors, public management scholars started to adapt it to public sector needs (Schedler, 2023; Wirtz et al., 2021). In this process, they developed new labels for the concept, its components, and related tools because some public actors took issue with the designation "business models",

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associating it with profit maximization and fearing the commercial exploitation of public services (Timeus et al., 2020). For instance, Osterwalder and Pigneur's (2010) "Business Model Canvas" became the "City Model Canvas" (Timeus et al., 2020), the "Public Governance Canvas" (Martins et al., 2019), "the Service Model Canvas" (Schedler and Guenduez, 2024) and the "Smart City Business Model Canvas" (Giourka et al., 2019). These adaptations were elaborated in public management journals and other outlets that few business model scholars tend to follow closely. Consequently, the general management business model literature and the conceptually related stream within the public management literature drifted apart and developed somewhat independently from one another. Hence, although the transfer of the business model concept to the public sector is not problematic per se, the potential misalignments resulting from the increasing divergence in conceptualization and lack of reintegration into the business model literature are worrisome (Foss and Saebi, 2018; Zott et al., 2011). They cause several detrimental effects: First, business model scholars may underestimate the quantity and progress of existing work on "business models for public actors". Recognizing the usefulness of the business model concept for these parties, they may thus attempt to "reinvent the wheel" instead of using their resources to advance the state-of-the-art of what is already known about business models for public actors (Knight et al., 2020; Pfeffer, 1993; Yg, 1989). Hence, the somewhat siloed development of the corresponding general and public management literatures and their increasingly divergent conceptualizations can impede cumulativeness in business model research (Foss and Saebi, 2018; Zott et al., 2011). Second, public actors might fail to identify relevant literature when using keyword searches. As both research streams employ different nomenclature when describing business model components, public actors may forego the benefits of business model work that has not yet been "translated" into the alternative nomenclature (Knight et al., 2020; Wirtz et al., 2023b). Third, public actors' reservations against the business model concept can impede public-private partnerships, which are common vehicles for providing public services (Qi and Shen, 2019; Sandulli et al., 2017; Timeus et al., 2020). Previous research has linked successful public-private collaboration to the partners' ability to jointly "foresee, design and implement an appropriate business model" (Villani et al., 2017, p. 900). Divergent terminology, incongruous conceptualizations, and misaligned business models, in turn, can impede joint value creation, delivery, and capture (Stadtler and Probst, 2012; Velter et al., 2020). Consequently, if public and private actors remain unaware of the commonalities and differences of their respective business model conceptualizations, this may hinder their mutual understanding and alignment, which is a prerequisite for the successful realization of joint business models (Koppenjan, 2005; Stadtler and Probst, 2012).

The purpose of this article is to mitigate these adverse implications. For this, it explores the following research question: *How can the divergent conceptualizations of business models in the general and public management literatures be reintegrated*? The paper starts by clarifying that the usefulness of the business model concept is not dependent on profit maximization and explains why even non-profit organizations in the public sector might find it helpful. It subsequently outlines commonalities and differences between the conventional business model concept in the general management literature and its adaptations in the public management literature. To this end, it presents the results of a focused review of the public management literature that adapted the business model concept for the public sector (23 relevant articles). While this review did not seek to be exhaustive, it allows us to illustrate the divergence of the literature streams as well as to identify the most prominent adaptations made to the business model concept by public management researchers. Ultimately, this article proposes a framework to facilitate the reintegration of the findings of the business model literature across the general and public management domains.

Our article makes the following contributions to management research and practice. First, by bridging the emerging gap between the general and public management business model literature streams, our article fuels cross-fertilization between the two domains. More extensive cross-fertilization means fewer redundancies and may facilitate cumulativeness of knowledge in business model research (Foss and Saebi, 2018; Zott et al., 2011). Second, our article hopes to connect the audiences of general and public management business model research. By highlighting the underlying commonalities of their conceptualizations, this article aims to make the findings intended for one audience more accessible to the other (Knight et al., 2020; Pfeffer, 1993). Finally, it supports the exchange between public-sector actors and their private-sector counterparts by proposing an integrated framework that can serve as a common ground, thus helping them achieve collaboration success (Koppenjan, 2005; Stadtler and Probst, 2012).

## 2. Conceptual background and problem statement

### 2.1. Clarifying the business model concept

Since its emergence in the 1990s, the business model concept has undisputedly shaped management research and practice (Wirtz et al., 2016; Zott et al., 2011). Business models gained prominence at a time characterized by what would later be called the "dotcom boom" (Bencsik et al., 2023, p. 2). The emergence of the internet and e-commerce had disruptive implications for existing firms, leading to the rise of new firms that fundamentally challenged their way of doing business (Teece, 2010). While the business model concept first gained relevance in practice (Chesbrough and Rosenbloom, 2002), it has, to date, been applied in various research fields. According to Zott et al. (2011), three main streams can be distinguished in business model research. The first stream is closely related to the origins of the business model concept and evolves around e-business models (cf. Chesbrough and Rosenbloom, 2002; Palmié et al., 2022). The second stream explores the concept in connection with business strategy to explain firm performance and related outcomes (cf. Morris et al., 2005; Zott and Amit, 2007). Lastly, the third stream is situated in the innovation and technology management domain. It investigates how technological innovation can enable new business models as well as how existing business models can be innovated (cf. Ancillai et al., 2023; Sjödin et al., 2021).

Over time, adopting the business model perspective in various domains has led to the development of different conceptualizations (Zott et al., 2011). The term "conceptualization" refers to a way of understanding an abstract idea, construct, or phenomenon (cf. Aguinis et al., 2014; Colquitt and Zapata-Phelan, 2007; Kożuch and Jabłoński, 2017). A conceptualization typically encompasses defining the focal concept and its key components (Knight et al., 2020; MacKenzie, 2003; Pfeffer, 1993). Typically, multiple conceptualizations of the same idea, construct, or phenomenon emerge in the academic discourse (Colquitt and Zapata-Phelan, 2007). This multiplicity occurs because an idea, construct, or phenomenon can be analyzed and described from different perspectives (Colquitt and Zapata-Phelan, 2007; Yg, 1989). The identification, comparison, and discussion of different conceptualizations are seen as an integral part of the ongoing development of the academic discourse (Bamberger, 2008; Colquitt and Zapata-Phelan, 2007; Yg, 1989). However, if divergent conceptualizations are not reintegrated from time to time, the resulting lack of conceptual consensus can hinder cumulativeness (Foss and Saebi, 2018; Zott et al., 2011) and, thus, impede the systematic development of the research field (Knight et al., 2020; Pfeffer, 1993; Yg, 1989). In this regard, many authors (e.g., Chesbrough and Rosenbloom, 2002; Foss and Saebi, 2018; Ritter and Lettl, 2018; Wirtz et al., 2016; Zott et al., 2011) have argued that the lack of conceptual alignment and the resulting siloed development of the business model literature have contributed to its struggle to advance as a field.

While to date, there is no consensus on the definition of the business model concept (Wirtz et al., 2016; Zott et al., 2011), conceptualizations encompassing three or four components are common in the general

management business model literature (Bencsik et al., 2023; Palmié et al., 2022). These conceptualizations typically encompass (1) the value the company proposes to offer its target customers (value proposition), (2) the value creation and delivery mechanisms with which the company aims to create and deliver this value proposition, and (3) the way that the company tries to capture value out of these activities (value capture) (cf. Saebi et al., 2017; Teece, 2010; Zott and Amit, 2010). Some scholars also include the target customer as a fourth element in their definitions (cf. Gassmann et al., 2014). In contrast to these three- and four-component conceptualizations frequently adopted by business model researchers, practitioners typically adopt a more fine-grained view of the business model concept and distinguish more components (Palmié et al., 2021). To facilitate the transfer of insights from the vast body of research on business models to practice, Osterwalder and Pigneur (2010) developed the so-called Business Model Canvas. They distinguish nine business model building blocks, and their tool has been applied by companies operating in diverse industries (Sort and Nielsen, 2018). While we acknowledge the value of these more detailed approaches, especially in practice settings (Bencsik et al., 2023), we follow the three-component conceptualization of value proposition, value creation and delivery, and value capture. Using this conceptualization of business models to describe how organizations create, deliver, and capture value has proven helpful in research and practice (Palmié et al., 2022). However, business models are neither tools that an organization *can* make use of nor does an organization only have a business model when it explicitly refers to it. Instead, the mere existence of an organization implies that it has a business model (Chesbrough, 2007; Teece, 2010). Some organizations make their business models explicit and use the business model concept as a "conceptual abstraction" (Foss and Saebi, 2018, p. 10) of their business models for "planning, structuring, communicating, and analyzing" their business (Palmié et al., 2022, p. 2). Other organizations, in contrast, tacitly operate business models (Morris et al., 2005).

The business model concept is rooted in corporate firms aiming to generate profit (Teece, 2018) and operating in competitive environments (Ranerup et al., 2016). It is, however, not limited to for-profit private companies (Osterwalder and Pigneur, 2010). As value creation, delivery, and capture by orchestrating services is not exclusively dealt with by profit-seeking firms alone, scholars as well as practitioners have recognized its usefulness for not-for-profit endeavors along with public organizations (Kaplan, 2011; Osterwalder and Pigneur, 2010; Wiprächtiger et al., 2019). Hence, the concept can guide the service provision of different kinds of organization as it is not per se limited to a specific type of organizational setting (Kaplan, 2011; Massa and Tucci, 2013). The concept's appeal lies precisely in its applicability to different types of organization, regardless of whether they are public, private, or a combination of both, or whether they are profit oriented or not (Osterwalder and Pigneur, 2010).

### 2.2. Business models for public service provision

Public institutions are increasingly under pressure to improve the effectiveness as well as the efficiency of their public service provision (Appio et al., 2019). Given budget constraints along with a lack of in-house competencies (Bencsik et al., 2023), they need to come up with new ways to provide and scale public services (Micheli et al., 2012). In this regard, they also frequently collaborate with private actors (e.g., in the form of public-private partnerships) (Katsigiannis et al., 2015; Qi and Shen, 2019; Sandulli et al., 2017). Regardless of whether public actors, private firms, or a combination of both lead the efforts to provide effective and efficient public services, the basic need to orchestrate and finance this service provision calls for a business model perspective (Battisti, 2019; Díaz-Díaz et al., 2017b; Timeus et al., 2020). Against this backdrop, the public sector has recognized business models as a promising concept to guide its efforts to implement and scale these public services (Díaz-Díaz et al., 2017a; Katsigiannis et al., 2015; Schiavone et al., 2019).

Consequently, the business model concept has gained popularity in the public sector (Ranerup et al., 2016; Walravens, 2015). However, public actors tend to struggle to work with the conventional business model concept as they do not see the operating mode of the public sector reflected in it (Giourka et al., 2019; Timeus et al., 2020; Wirtz et al., 2023b). While the central elements of value creation, delivery, and capture can be transferred to the public sector, the manifestations of these elements in public institutions differ substantially from those of private bodies, making it difficult for public actors to work with the concept (Walravens and Ballon, 2013). The conventional business model conceptualizations from the general management literature tend to rely on terms such as profit, for example (Teece, 2018). As public organizations usually operate by following strict non-profit goals (Anthopoulos et al., 2007; Bernier and Hafsi, 2007), they might misinterpret the business model concept "as a profit-driven or cost-driven logic" (Timeus et al., 2020, p. 729). Thus, public actors might fear that adopting the business model concept will put profit considerations instead of public value provision at the center (Hollands, 2015; Timeus et al., 2020). On the one hand, this might indicate that these organizations are not aware that their mere existence to create, deliver, and capture (public) value implies that they have a business model. More importantly, however, this might reflect that their struggle to use the business model concept to actively manage how they create, deliver, and capture value is not exclusively a result of the nomenclature employed. Instead, they might be irritated by what the prominence of terms such as profit, revenue, or cost implies and what this could mean for their operation as a public institution (Timeus et al., 2020).

Consequently, public management literature started to adapt the conventional business model concept to better reflect the operating mode of the public sector (Timeus et al., 2020; Wirtz et al., 2023b). Eventually, this led to the coining of the terms "public business model" (Kożuch and Jabłoński, 2017; Wirtz and Daiser, 2015), "public service provision model" (Mattsson and Andersson, 2019), "public service model" (Schedler and Guenduez, 2024) and similar terminologies to serve as public sector alternatives to the conventional business model term. Unsurprisingly, as with the business model term, a universal definition for public-sector business models does not exist to date, and the corresponding research is fragmented (Croci and Molteni, 2021; Wirtz et al., 2023b). Table 1 illustrates this heterogeneity around the emerging research stream on "business models adapted for the public sector". For the remainder of this article, we follow Mattsson and Andersson (2019) and refer to these models as "public service provision models" to overcome any reservations rooted in the profit-seeking connotation of the term "business model." Table 1 includes different definitions provided by the public management literature to offer an alternative to the conventional business model concept for the public sector. As can be seen in Table 1, the definitions vary in their scope. Some conceptualizations of business models for the public sector focus on how the city or the city government can actively drive public value creation, delivery, and capture through the provision of public services (cf. Timeus et al., 2020; Timeus et al., 2017). On the other hand, conceptualizations exist that put the services themselves into the focus of attention. They frame business models for the public sector as a representation of services, activities, or solutions and focus on their role in creating, delivering, and capturing value (cf. Croci and Molteni, 2021; Wirtz and Daiser, 2015).

Besides coining alternative terminology for the overall concept, the public management literature has also started to adapt existing frameworks and tools, such as the Business Model Canvas (Osterwalder and Pigneur, 2010) for the public sector. This led to the creation of new and revised frameworks along with tools such as the "City Model Canvas" (Timeus et al., 2020), the "Public Governance Canvas" (Martins et al., 2019), or the "Smart City Business Model Canvas" (Giourka et al., 2019). Katsigiannis et al. (2015) developed the "business model framework for public service innovation", which the authors state is "designed

**Table 1**
Public sector variations and alternatives to the "business model" term.

| Term | Definitions |
|---|---|
| Public Business Model | "A public business model is a simplified and aggregated representation of the relevant services, processes, and activities of a public sector organization that describes how information, products, and services that create additional value for society are developed and managed, while also considering strategic and processual as well as user and public demand components to support sustainable public value creation for society and the public service remit." (Wirtz and Daiser, 2015, p. 93)<br>"The authors define a public business model as the configuration of external and internal factors constituting a key tool for strategic management to ensure the provision of public services in view of the rising expectations of citizens, taking into account the needs of other stakeholders, which has resulted in the social and public rate of return." (Kożuch and Jabłoński, 2017, p. 27) |
| Public Service Provision Model | "We introduce a corresponding concept 'public service provision model' for the public actors' efforts to provide services efficiently and effectively." (Mattsson and Andersson, 2019, p. 1106)<br>"Our concept refers to what guides the public buyer, not only with reference to public procurement as a buying counterpart to a seller but also how public actors provide the service to the citizens/beneficiaries of the service." (Mattsson and Andersson, 2019, p. 1107) |
| City Business Model | "In this context, the City Business Model is defined as the logic of how a city can create and deliver value through the development of smart services that are economically and socially viable, while reducing the city's overall environmental footprint." (Timeus et al., 2017, p. 10)<br>"The city business model, articulated through the City Model Canvas (...), explains how the municipality plans to install EV charging stations in the city in a way that is economically viable, socially inclusive, and environmentally sustainable, with the aim of reducing pollution and improving public wellbeing as part of its public value delivery." (Pardo-Bosch et al., 2021, p. 5) |
| Smart City Business Model | "In this article, we define the 'smart city business model' as the way in which a city government organizes its services to create and deliver value for its citizens in a way that is economically viable, socially inclusive and environmentally sustainable." (Timeus et al., 2020, p. 727)<br>"In this context, the concept of smart city business model can be interpreted as the mechanisms through which a specific smart city solution (or a combination of interrelated solutions) is able to 'create, deliver and capture' private and public (economic, social, environmental) value to society, consistently with the smart city strategy and goals of the local government. A specific feature of a smart city business model is that the city government has a role, either direct (e.g. involvement in the design/provision/delivery of the solution), or indirect (e.g. setting the regulatory framework for the solution) in the value network. In fact, a smart city solution can be managed by the city authority itself, or by a different actor (e.g. public or private company)." (Croci and Molteni, 2021, p. 96) |

specifically for decision makers in the public sector" (p. 751), and Schedler and Guenduez (2024) published a "Service Model Navigator" for the public sector. In general, we observe that public management research aiming to tailor the business model concept to the operating mode of the public sector continues to gain traction. At the same time, besides being relatively new compared to the comprehensive body of work on business models in the commercial sector, the literature on public service provision models is becoming increasingly heterogeneous (Wirtz et al., 2023b).

### 2.3. Diverging literature streams impede insight transfer

With a growing number of publications focusing on translating the business model concept for the public sector, these efforts formed a separate stream of literature. Although private firms often collaborate with public actors to implement and scale business models for public service provision (Katsigiannis et al., 2015; Qi and Shen, 2019; Sandulli et al., 2017), conventional business model research falls short of considering the different operating modes of the public sector (Giourka et al., 2019; Timeus et al., 2020). Consequently, the business model literature and the related public service provision model stream within the public management literature are increasingly drifting apart. While both streams contribute essential insights for their target audience, this growing divergence has problematic implications for research and practice.

In the context of research, the divergence might have impeding effects on insight transfer between both literature streams for three reasons. First, as business model scholars might not follow the public management literature closely, they may not be aware of potential contributions to the business model concept made by public management scholars while transferring the concept to the public sector. Hence, they may neglect these important contributions to the business model concept, which they could otherwise build upon (Knight et al., 2020; Pfeffer, 1993; Yg, 1989). Second, when transferring the business model concept to the public sector, the public management literature tends to introduce new conceptualizations, including new terminology, labels, and components. Although the emergence of different conceptualizations and terminologies is inherent to the academic discourse (Bamberger, 2008; Colquitt and Zapata-Phelan, 2007; Yg, 1989), it creates a challenge of reintegrating the contributions of business model literature from the general and public management domains (Knight et al., 2020; Kuhn, 1970). Even business model researchers from the general management domain explicitly seeking to follow the related public management literature may find it increasingly difficult to comprehend this dialogue and draw insights from it back to their field (Ritter and Lettl, 2018; Zott et al., 2011). Third, public management scholars may find it difficult to keep up with translating new insights generated by business model research to the public sector while, at the same time, further developing the adaptations they had previously made (Pfeffer, 1993). Hence, their work risks falling short of the depth of the conventional business model literature. In sum, further parallel development of these two literature streams over a more extended period might result in the representatives of the other stream being gradually less able to benefit from the progress made by the other instead of fostering a mutually enriching dialogue (Foss and Saebi, 2018; Zott et al., 2011). This may further impede the systematic development of both streams (Knight et al., 2020; Kuhn, 1970; Ritter and Lettl, 2018).

In practice, further divergence between both streams may limit their usefulness for both public and private actors. For public actors, this potentially means that they cannot take full advantage of the rapidly evolving insights of conventional business model literature as long as these insights have not been translated to their conceptualizations by public management scholars. Moreover, this divergence is problematic because it neglects the reality that to implement and scale public services, public and private actors frequently have to join forces and collaborate in ecosystems (Katsigiannis et al., 2015; Qi and Shen, 2019; Sandulli et al., 2017). In this regard, the joint development and realization of business models is seen as crucial to successful public-private collaboration (Villani et al., 2017). A lack of alignment on what a business model is and what its critical components are, however, hinders these multi-actor efforts (Stadtler and Probst, 2012). Previous research has already raised attention to the potentially detrimental effects of public and private actors insisting on their "way of doing things" and making "no effort to understand the other partner" (Stadtler and Probst, 2012, p. 40). However, instead of looking into how business models can be used as a unifying concept guiding public and private actors' efforts to jointly implement public services, both research streams tailor the business model concept to their audiences. The associated introduction of different nomenclature can further accentuate this problem of public-private misalignment when it comes to the business model concept as it stresses the differences rather than the commonalities of public and private actor business models (Koppenjan, 2005; Stadtler and Probst,

2012). The prevailing skepticism of public actors against the business model concept may thus be aggravated further and result in a self-fulfilling prophecy, creating the very dogma that these actors are afraid of. If every organization that does not seek to maximize profit shies away from the business model concept, business model researchers may be tempted to focus exclusively on profit-maximizing firms. This, in turn, would lead to a less diverse business model literature.

To mitigate these adverse effects, this article works toward reintegrating the increasingly divergent general and public management literature streams on business models. As a first step in this direction, the remainder of this article synthesizes the adjustments made to make the business model concept more appealing to the public sector. Specifically, it reviews the descriptions of the business model components in the public service provision model literature and compares them to the ones found in the general management literature. Based on this comparison and contrast, an integrated business model framework seeking to connect both perspectives is presented.

## 3. Methodology

To outline the commonalities as well as the differences between the business model conceptualizations in the general and public management domains, we reviewed the relevant literature. Our review did not seek exhaustiveness but aimed at identifying the most prominent adaptations of the business model concept to transfer it to the public sector. Consequently, the method of a focused literature review was chosen (Bell et al., 2018; Rockmann and Northcraft, 2018). The subsequent comparison of the public management adaptations identified through this focused literature review with the general management business model conceptualizations allows us to illustrate the divergence of both streams. Moreover, the results of the focused literature review constitute the basis for the integrated framework proposed in this article.

To identify the relevant literature that transferred the business model concept to the public sector, the following search query was employed in a topic search: "*business model**" *AND* ("*public management*" *OR* "*public sector*" *OR* "*public value*" *OR* "*smart city*"). The search was performed using the Web of Science Core Collection, a widely used database known for its high-quality standard (Merigó et al., 2015; Zhang et al., 2019). Hence, as we did not aim for exhaustiveness but sought to identify high-quality publications, Web of Science was a viable choice. No limitations regarding publication year or type were set. This led to an initial number of 387 results. Subsequently, the abstracts of these 387 articles were analyzed and assessed regarding their relevance to the focal topic.

To minimize the subjectivity that might accompany the selection process, two researchers independently assessed the articles' relevance based on predefined exclusion criteria. Applying the following exclusion criteria to evaluate the abstracts ensured that only relevant articles were included in the subsequent analysis: (1) Articles that did not focus on business models: While a considerable amount of the 387 abstracts analyzed included the term "business model", the vast majority only mentioned it in a passing note (e.g., Rycnwaiska et al., 2021; Schiller, 2016). Thus, these articles did not center around the business model concept or public sector business model adaptations and were excluded from further analysis. (2) Articles without reference to the public sector: Since the focused literature review aimed to analyze the adaptations made to the business model concept for transferring it to the public sector, articles that made no reference to the public sector were excluded as well (e.g., Datta and Mohanty, 2013; Wu et al., 2022). (3) Articles that did not transfer the business model concept to the public sector: The initial search result also included articles that focused on how private companies can realize business models in the context of public infrastructure, for example (e.g., Brady et al., 2005; Saragih et al., 2021). Thus, these articles centered around business models and referenced the public sector. However, due to the thematic focus of the literature review on articles that adapted the business model concept for actors from the public sector, these articles were also excluded. Generally, papers were included in case of doubt or divergent assessment of their relevance by the researchers based on the abstract analysis.

After screening the abstracts, a full-text review was performed based on the criteria outlined above. This approach yielded 17 relevant articles for the subsequent analysis of how the business model concept has been adapted for the public sector. Table 2 provides an overview of the 17 articles. During the analysis, six additional articles emerged that were not part of the initial search result but also adapted the business model concept for the public sector. As they, therefore, fell within the thematic scope of the focused literature review, they were also included in the further analysis. These six articles are listed in Table 2 and marked with an asterisk (*).

The selected articles were analyzed with regard to how they adapted the business model concept for the public sector. Since the adapted conceptualizations differ in the granularity and terminology of the dimensions they distinguish, their respective dimensions had to be clustered first. While Croci and Molteni (2021) employ the terms "value creation and delivery", Bockshecker et al. (2019) label this dimension "value chain", and Fatima et al. (2022) refer to it as "public value logic layer", for example. Consequently, clustering the respective dimensions was a necessary preparatory step for the subsequent elaboration of the commonalities as well as the differences between these public service provision model conceptualizations and those of conventional business models. For the clustering, the different dimensions distinguished in the public service provision models were allocated to the three established business model dimensions: Value proposition, value creation and delivery, and value capture (Teece, 2010). Previous research has demonstrated that, even if business model conceptualizations feature a greater number of elements (e.g., Osterwalder and Pigneur, 2010), each of their elements can typically be assigned to one of these three dimensions (cf. Miehé et al., 2023). Moreover, these dimensions underlie public sector adaptations of the business model concept, even though different terminology may be used (Ranerup et al., 2016; Wirtz et al., 2023b). Therefore, they constitute a suitable structural framework to cluster the dimensions distinguished in the different public service provision model conceptualizations (Croci and Molteni, 2021; Walravens and Ballon, 2013). The clustering was again carried out by two researchers. In cases where their allocations of the dimensions distinguished in the articles to value proposition, value creation and delivery, and value capture did not match, a third researcher was consulted to reach a conclusion. With the exception of the article by Hecham and Alioua (2023), all three dimensions of value proposition, value creation and delivery, and value capture were found to be reflected in the dimensions distinguished in the introduced public service provision model conceptualizations. In contrast, the dimensions introduced in the article by Hecham and Alioua (2023) could only be allocated to the dimensions of value proposition, and value creation and delivery. Overall, however, the three dimensions turned out to be suitable for the clustering.

Following the clustering of the dimensions, the papers were analyzed in detail with regard to how they specified these dimensions in their adapted conceptualizations. For this, we went through the three clusters and analyzed how exactly the dimensions were described in the public service provision model conceptualizations as well as how this compares to the conventional business model conceptualizations. The findings of this analysis are presented cluster by cluster in Section 5. First, the commonalities and differences between conventional business model and public service provision model conceptualizations regarding their value propositions are presented. Second, the findings for value creation and delivery mechanisms are outlined. Ultimately, the commonalities and differences related to value capture mechanisms are described.

## 4. Findings

### 4.1. Value propositions in business and public service provision models

By definition, value propositions aim to address the needs of a

**Table 2**
Results of the focused literature review.

| Authors (year) | Title | Journal/outlet | Research context |
|---|---|---|---|
| Anthopoulos and Janssen (2022) | Business Model Canvas for Big and Open Linked Data in Smart and Circular Cities: Findings from Europe | Computer | Smart and circular cities |
| Bockshecker et al. (2019) | Adaptation of the Business Model Approach for Public Enterprises | 25th Americas Conference on Information Systems | Public sector business models |
| Croci and Molteni (2021)* | Business Models for Smart City Solutions: An Overview of Main Archetypes | International Journal of Urban Planning and Smart Cities | Energy, mobility, information and communications technology (ICT) |
| Díaz-Díaz et al. (2017a) | The Business Model Evaluation Tool for Smart Cities: Application to SmartSantander Use Cases | Energies | Internet of Things (IoT) technology |
| Díaz-Díaz et al. (2017b) | Business Model Analysis of Public Services Operating in the Smart City Ecosystem: The Case of SmartSantander | Future Generation Computer Systems | IoT technology |
| Ditmore and Miller (2021) | Mobility as a Service Operating Model to Enable Public Policy | Transportation Research Record | Mobility as a service |
| Fatima et al. (2022) | Public AI Canvas for AI-enabled Public Value: A Design Science Approach | Government Information Quarterly | Artificial intelligence |
| Giourka et al. (2019) | The Smart City Business Model Canvas—A Smart City Business Modeling Framework and Practical Tool | Energies | Public sector business models |
| Hecham and Alioua (2023) | Business Models as a Decision Support Tool for City Management: Translation from Generalized Qualitative to Adapted Quantitative: Case Study of Jijel and Naples | Prostor | Public sector business models |
| Katsigiannis et al. (2015)* | Business Model Approach to Public Service Innovation | The Handbook of Service Innovation (Book) | Service innovation |
| Kożuch and Jabłoński (2017) | Adopting the Concept of Business Models in Public Management | Public Sector Entrepreneurship and the Integration of Innovative Business Models (Book) | Public sector business models |
| Martins et al. (2019)* | Business Models in the Public Domain: The Public Governance Canvas | Cad. EBAPE.BR | Public sector business models |
| Mattsson and Andersson (2019)* | Private-public Interaction in Public Service Innovation Processes - Business Model Challenges for a Start-up EdTech Firm | Journal of Business & Industrial Marketing | Public education |
| Osborne et al. (2015) | The SERVICE Framework: A Public-service-dominant Approach to Sustainable Public Services | British Journal of Management | Public service organizations |
| Ranerup et al. (2016) | An Analysis of Business Models in Public Service Platforms | Government Information Quarterly | Public service platforms |
| Schiavone et al. (2019) | Business Model Innovation for Urban Smartization | Technological Forecasting and Social Change | Urban smartization |
| Timeus et al. (2020) | Creating Business Models for Smart Cities: A Practical Framework | Public Management Review | ICT platforms |
| Walravens (2013) | Validating a Business Model Framework for Smart City Services: The Case of FixMyStreet | 27th IEEE International Conference on Advanced Information Networking and Applications Workshops | Mobile services |
| Walravens (2015) | Qualitative Indicators for Smart City Business Models: The Case of Mobile Services and Applications | Telecommunications Policy | Mobile services and applications |
| Walravens and Ballon (2013) | Platform Business Models for Smart Cities: From Control and Value to Governance and Public Value | IEEE Communications Magazine | Mobile services |
| Wirtz and Daiser (2015)* | E-government: Strategy Process Instruments. Textbook for the Digital Society | E-government: strategy process instruments. Textbook for the Digital Society (Book) | E-government |
| Wirtz et al. (2023a) | Business Model Innovation in the Public Sector: An Integrative Framework | Public Management Review | Business model innovation |
| Wirtz et al. (2023b)* | Public Business Model Management: A Literature Review-Based Integrated Framework | International Journal of Public Sector Performance Management | Public sector business models |

Note to this table: articles marked with an asterisk (*) were added by the researchers during the analysis process.

selected circle of actors and thereby create value for them (Heikka et al., 2018). The conventional business model concept is not per se limited to value propositions for the private sector (Laasch, 2018). Instead, business models can be built around value propositions for a diverse circle of actors including citizens and public institutions (Geissdoerfer et al., 2018). Therefore, despite an overwhelming part of the work on business models evolving around value propositions for private individuals or firms (Teece, 2010), value propositions proposed by conventional business models and public service provision models do not differ by the recipient of these value propositions per se. Companies and individuals can be addressees of both private services in the private realm and public services in the public realm (Croci and Molteni, 2021; Wirtz et al., 2023a). This means that the target group of public value propositions can also be the same as the one for private value propositions. Consequently, the value propositions of business and public service provision models do not necessarily differ by the distinct target groups they address. However, in practice, value propositions of private sector business models tend to center around providing value for a more narrowly defined target customer group that can remunerate these offerings financially (Bockshecker et al., 2019; Ditmore and Miller, 2021). On the other hand, the addressees of public value propositions repeatedly include citizens who cannot pay for the services provided (Croci and Molteni, 2021; Ditmore and Miller, 2021). As value propositions of public service provision models often address the society as a whole, they tend to target a broader circle of addressees (Anthopoulos and Janssen, 2022; Díaz-Díaz et al., 2017a; Kożuch and Jabłoński, 2017).

Business and public service provision model conceptualizations tend to differ in the character of the needs expressed by their target audience (Teece, 2010; Wirtz et al., 2023a). Public management scholars have viewed public value as underrepresented in value propositions of the conventional business model concept (Walravens and Ballon, 2013; Wirtz et al., 2023b). They argue that value propositions of business models tend to neglect the existence of public needs in a society that go beyond the private needs of single individuals or firms (Timeus et al., 2020). These public needs have to be met and can be addressed through public service provision, which is a task that is rarely taken over by private sector firms and their business models (Walravens, 2013). To address this gap, public service provision models repeatedly focus on value propositions centered around public needs and public value (cf. Walravens, 2015; Walravens and Ballon, 2013; Wirtz et al., 2023a). Specifically, value propositions of public service provision models are often framed around intangible factors such as increasing citizens' quality of life or their trust toward public institutions by making public service provision more transparent (Walravens, 2015; Wirtz et al., 2023a). However, public value propositions can also center around more tangible goals, such as improved efficiency in public service provision (Fatima et al., 2022). Providing these kinds of public value propositions is the central goal of public service provision models (Timeus et al., 2020; Wirtz et al., 2023b). In sum, while public service provision models center around fulfilling public needs, such as setting the basis for a high-quality life for every citizen, and propose public value by delivering public services, conventional business models often focus on offering value propositions for private needs.

### *4.2. Value creation and delivery in business and public service provision models*

By comparing conventional business and public service provision models, we identified that both conceptualizations differ regarding the actor who creates and delivers the value. Business models tend to adopt a firm-centric perspective on value creation and delivery, meaning that they usually focus on the activities, resources, and channels through which a private sector actor – for example, a firm – realizes the value proposition (Saebi et al., 2017; Zott et al., 2011). On the other hand, public service provision models center around public actors and how they create and deliver value (Wirtz et al., 2023a). Timeus et al. (2017), for example, focus their conceptualization of business models for the public sector on "the logic of how a city can create and deliver value" (p. 10). Similarly, Timeus et al. (2020) see the city government as the actor leading value creation and delivery. Wirtz and Daiser (2015) adopt a broader perspective and focus on how "services, processes, and activities of a public sector organization" (p. 93) can be employed for public value creation and delivery. These public sector conceptualizations of business models are united in that they see some public actors leading value creation and delivery to realize the value proposition. Hence, while the conventional business model literature stream evolves around privately-led value creation and delivery (cf. Saebi et al., 2017; Zott et al., 2011), the emerging literature stream on public service provision models emphasizes publicly-led value creation and delivery (cf. Timeus et al., 2020; Walravens, 2015; Wirtz and Daiser, 2015).

Another prominent recurring theme regarding value creation and delivery can be identified in the literature on public service provision models. Budget constraints, as well as a lack of in-house competencies, tend to impede public actors' efforts to provide and scale public services (Bencsik et al., 2023; Wirtz and Daiser, 2015). To overcome these barriers, public actors frequently collaborate with private actors to jointly create and deliver public services – for instance, in the form of public-private partnerships (Katsigiannis et al., 2015; Martins et al., 2019; Schiavone et al., 2019). Consequently, while public bodies are often seen as responsible for value creation and delivery in public service provision models, public management scholars have recognized that this is frequently not realized by these actors alone (Osborne et al., 2015; Wirtz et al., 2023b). In this regard, these scholars highlight the significance of public value creation and delivery in so-called value networks. Describing the importance of multi-actor collaborations for public service provision, Ranerup et al. (2016) emphasize the relevance of public-private partnerships or other forms of collaboration between private actors, public organizations, and citizens. Similarly, Wirtz et al. (2023b) illustrate that value creation and delivery in public service provision models can result in interactions between diverse actors ranging from governments to public and private organizations. Moreover, Giourka et al. (2019) emphasize "that it is the network of actors – and not the city or one venture alone – that creates, delivers, and captures value" (p. 8). Also, Walravens and Ballon (2013) describe value networks as central elements in public sector value creation and delivery. Such a network, they argue, can consist of a large variety of public and private actors and take the form of different legal entities (Walravens and Ballon, 2013). The public service provision model introduced by Mattsson and Andersson (2019) also highlights the importance of adopting a network-based view of public value creation. As public service provision frequently takes place in what they call "complex public actor networks", individual public actors may be limited in their autonomy in value creation and delivery (Mattsson and Andersson, 2019, p. 1107). This differs from the rather firm-centric view predominant in conventional business model conceptualizations, which traditionally focuses primarily on value creation and delivery by independent private actors (Zott et al., 2011). More recently, however, general management scholars have also recognized that value creation and delivery are often realized together with other actors (Adner, 2017). Consequently, business models have increasingly been examined in complex multi-actor settings, such as ecosystems, which require joint efforts by various actors to create and deliver value (Linde et al., 2021). In sum, business model scholars in the general and public management domains have recognized the potential of multi-actor networks and ecosystems for creating as well as delivering value.

Operating in these multi-actor constellations to realize business and public service provision models, both private and public organizations are confronted with the multi-rationality of the different actors involved (Díaz-Díaz et al., 2017b; Schedler, 2022; Tsujimoto et al., 2018). According to Schedler (2022), public institutions must unite legal, political, financial, and public management rationalities when creating and delivering value. Similarly, private organizations can be confronted with

**Table 3**
Commonalities and differences between business and public service provision models.

| Element | Aspect | Commonalities | Differences |
|---|---|---|---|
| Value proposition | Addressees<br>Needs served | • Business models (BMs) and public service provision models (PSPMs) can address the same target groups. | • Circle of addressees tends to be broader with PSPMs.<br>• BMs address private needs, whereas PSPMs address public needs.<br>• Value propositions of PSPMs often include intangible aspects. |
| Value creation and delivery | Leading actor | • The way value is created and delivered is influenced by the rationalities of the respective leading actors (public vs. private) in BMs as well as PSPMs. | • BMs typically revolve around private actors leading value creation and delivery, whereas PSPMs typically revolve around public actors leading value creation and delivery.<br>• Privately led BMs tend to be characterized by a pronounced economic rationality of maximizing profit, whereas publicly led PSPMs tend to be characterized by rationalities guided by public service, equity, and social welfare. |
| | Multi-actor collaboration | • Value creation and delivery are increasingly realized in collaboration with other actors, e.g., public-private partnerships, value networks, or ecosystems.<br>• Multi-actor collaboration for value creation and delivery typically encompasses actors characterized by different rationalities. | |
| | Approach to scaling | • The rationalities of public and private actors guide their distinct approaches to scaling BMs as well as PSPMs. | • Scalability is a core factor for BMs but to date still of rather limited importance for PSPMs.<br>• BMs are typically scaled in parallel across multiple locations to realize economies of scale, whereas PSPMs tend to be rolled out sequentially to other locations. |
| Value capture | Triple bottom line | • Both BMs and PSPMs enable the capture of economic, environmental, and social value.<br>• Social value capture is underrepresented in both conceptualizations. | • Private-sector BMs are traditionally associated with capturing economic value, while capturing environmental as well as social value has been paramount for PSPMs from the beginning. |
| | Value-cost model | • Financing mechanisms need to be considered for both PSPMs and BMs.<br>• Although it is often not their focus, PSPMs can also generate revenues to balance the costs of public service provision. | • PSPMs tend to emphasize different value capture instruments compared to conventional BMs (e.g., taxes or funding from the European Commission), while downplaying revenues. |

a multitude of rationalities in ecosystems in which very different actors with distinct rationalities (e.g., industry incumbents, startups, public institutions, and universities) collaborate (Adner, 2017; Tsujimoto et al., 2018). In addition to being confronted with the different rationalities of the other players in their ecosystems or value networks, the rationalities of public and private actors differ fundamentally from one another. This, in turn, influences how value is created and delivered in business and public service provision models. Public institutions are primarily driven by serving the public interest and well-being of the citizens they represent (Kumar et al., 2020). In contrast, private organizations – if not non-profit oriented – are driven mainly by economic rationality, seeking an optimal balance between input and outcome (Schedler, 2022). They often aim to maximize profits and generate financial returns for their shareholders or investors (Teece, 2010). As they usually operate their business model in a competitive market, they strive to differentiate themselves from competitors to attract customers and capture market share (Laasch, 2018). They emphasize innovation, efficiency, and agility to remain competitive and adapt to changing market conditions (Laasch, 2018; Saebi et al., 2017). Thus, while public organizations are guided by the principles of public service, equity, and social welfare (Kumar et al., 2020), private organizations are frequently driven by the pursuit of profit, customer satisfaction, and market success (Laasch, 2018; Teece, 2010).

The effects of these different rationalities of public and private actors are also reflected in their distinct approaches to scaling business and public service provision models (Van Winden and van den Buuse, 2017; Walravens, 2015). For conventional business models, the scalability of the value creation and delivery mechanisms often represents a core factor (Tidhar and Eisenhardt, 2021). Scaling "describes an increase in the size of a focal subject that is accompanied by a larger-than-proportional increase in the performance resulting from the said subject" (Palmié et al., 2023, p. 2). Profit-seeking firms typically seek to ensure from the beginning that their business models' value creation and delivery mechanisms can be replicated simultaneously across multiple locations (Tidhar and Eisenhardt, 2021). They tend to follow parallel steps for rollout while envisioning high market scalability at a particular time. For instance, micro-mobility providers, such as Tier, Lime, and Voi, have constantly improved their service offerings by implementing the business model across regional boundaries instead of operating only in one location.

While scaling has also started to become a recurring topic of discussion in public service provision models (Giourka et al., 2019; Timeus et al., 2017), its role in value creation and delivery diverges from conventional business models. Public organizations primarily operate in a local environment, aiming to implement public services serving local stakeholders or citizens (Anthopoulos and Janssen, 2022). This can often be explained by their limited scope of action or responsibility, typically confined to certain local or regional boundaries. This geographical confinement affects how they seek to incorporate scalability into their public service provision models' value creation and delivery mechanisms. Public organizations tend to tailor the activities, resource setups, and channels to the locations of the pilot or testing site (Van Winden and van den Buuse, 2017). If the pilots are later deemed successful, they may be rolled out sequentially to other locations. This rollout, however, still tends to be limited to a local or regional expansion, which impedes public institutions from profiting from economies of scale from these public service provision models (Bundgaard and Borrás, 2021). As the rationality of the public actors is more concerned with increasing social welfare as well as the quality of life of citizens without taking high risks than with expanding market reach, small-scale rollouts of public service provision models are often still considered a big success (Bundgaard and Borrás, 2021; Van Winden and van den Buuse, 2017).

### 4.3. Value capture in business and public service provision models

While capturing economic value for the private sector has been a central element in most of the work on business models (Zott et al., 2011), business models can also center around environmental and social value capture (Broccardo et al., 2023; Stubbs and Cocklin, 2008). The rise of research on sustainable business models has put environmental as well as social value and costs at the center of value-capture discussions following economic value and costs (Croci and Molteni, 2021; Geissdoerfer et al., 2018). In public service provision models, environmental as well as social value and costs resulting from public service provision have been paramount from the beginning (cf. Croci and Molteni, 2021; Giourka et al., 2019; Wirtz et al., 2023a). Public service provision models tend to prioritize capturing social and environmental value over capturing economic value. They seek to ensure that the value captured exceeds any potentially resulting environmental or social costs (Díaz-Díaz et al., 2017a; Timeus et al., 2020). Moreover, in public service provision models, public actors usually aim to capture value not only for themselves as a public organization but also to benefit the broader community and reduce social inequalities (Anthopoulos and Janssen, 2022; Ditmore and Miller, 2021; Kożuch and Jabłoński, 2017). They aim to provide equitable access to essential services, resources, and opportunities for all citizens, regardless of their socioeconomic status (Gassmann et al., 2019). Consequently, public service provision models typically seek to maximize social and/or environmental value capture while considering the budget and cost structure (Croci and Molteni, 2021; Timeus et al., 2020). In principle, both business and public service provision models can serve as adequate instruments to capture social and/or environmental value while ideally capturing a specific economic value for the respective service provision (Geissdoerfer et al., 2018; Giourka et al., 2019). However, recent research shows that most business and public service provision models focus on either capturing social or environmental value instead of simultaneously capturing both types of value (Bencsik et al., 2023). In particular, social value capture is underrepresented, and public and business actors struggle to provide social services that comprise such elements as inclusivity, community well-being, public safety, or cultural enrichment in an economically viable way (Bencsik et al., 2023).

Notably, even public actors who do not pursue economic value capture as a primary goal must eventually consider financing mechanisms to ensure the long-term sustainability of their service provision (Schedler, 2023). To adapt the business model concept for the public sector, public management scholars introduced distinct termini to describe value capture mechanisms and repeatedly avoid the term "revenue mechanisms", which is a central component of private sector business models (cf. Hecham and Alioua, 2023; Osborne et al., 2015; Wirtz et al., 2023a; Wirtz et al., 2023b). Instead, public service provision models frequently emphasize value capture instruments that play minor roles (if any) in conventional business model conceptualizations (Mattsson and Andersson, 2019). Specifically, these financing instruments encompass taxes or funding from institutions such as the European Commission (Croci and Molteni, 2021; Mattsson and Andersson, 2019). Moreover, public sector scholars have recently explored the applicability of innovative financing mechanisms, such as performance-based contracts and impact investing for public service provision models (Schedler, 2023). Nevertheless, the provision of public services can also generate revenue – for example, by charging service fees (Bockshecker et al., 2019; Wiprächtiger et al., 2019). Even in the absence of a profit motive, generating revenues can help balance the costs of public service provision alongside taxes, for example.

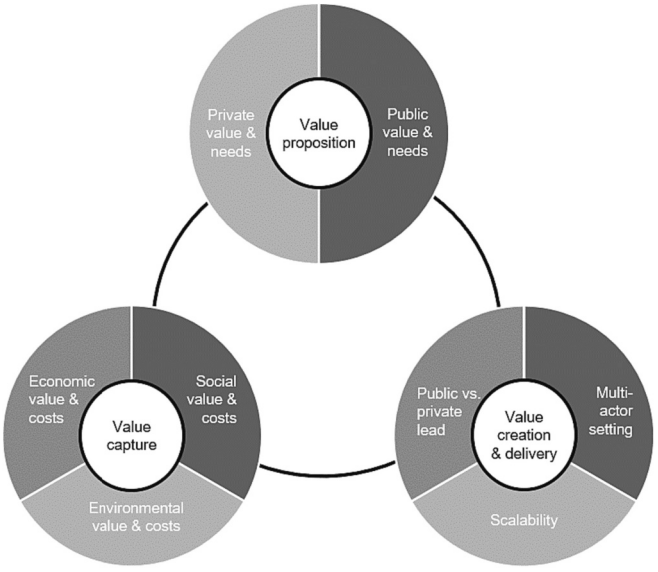


**Fig. 1.** Integrated business model framework for the private and public sectors.

## 5. Discussion

### 5.1. Proposing an integrated business model framework for the private and public sectors

Public management scholars adapted the business model concept to transfer it to the public sector. This article worked toward reintegrating the divergent conceptualizations of business models in the general and public management literatures. To provide an overview of our findings, Table 3 summarizes the key commonalities as well as differences identified between conventional business models and public service provision models.

Based on the findings summarized in Table 3, we propose to reintegrate the conventional business model concept and the public-sector adaptations made to it in a manner that accounts for the operating modes of public and private actors. We believe that such reintegration stimulates progress in both the public management and the general management literatures (Knight et al., 2020; Pfeffer, 1993). Moreover, reintegrating the divergent business model conceptualizations may support public and private actors in entering mutually beneficial collaborations by fostering a joint understanding of the concept (Koppenjan, 2005; Stadtler and Probst, 2012). Seeking to reunite the different conceptualizations, we developed the integrated business model framework for the private and public sectors, shown in Fig. 1.

The basic structure of our integrated framework follows the logic of value proposition, value creation and delivery, and value capture as these elements must be combined meaningfully for business and public service provision models (Ranerup et al., 2016; Teece, 2010). To include the public sector perspective, our integrated framework distinguishes between public and private value in its value proposition dimension (Wirtz et al., 2023a). It is, therefore, neither limited to value propositions addressing private needs nor to those addressing public needs. Encompassing both public and private value propositions in a single framework allows private actors to inquire if they could also fulfill public needs and public actors to inquire if they could also fulfill private needs. It, therefore, encourages both private and public actors to think outside their territory.

The value-creation-and-delivery dimension of our framework covers three different elements. First, since we identified that value creation and delivery in business and public service provision models can be led by different actors (cf. Saebi et al., 2017; Timeus et al., 2020; Wirtz and Daiser, 2015; Zott et al., 2011), we distinguish between publicly led and

privately led value creation and delivery. Second, our framework acknowledges that value creation and value delivery in private and public sectors often occur in multi-actor settings – for instance, ecosystems (e.g., Adner, 2017) or value networks (e.g., Ranerup et al., 2016). This element invites public and private actors to clarify who is involved in their multi-actor business models along with who oversees which aspect of value creation and delivery. This, in turn, can prompt considerations about what the rationalities and goals of the involved parties are and where these may differ from one another. Third, our integrated framework identifies scaling as another central element influencing the design of value creation and delivery mechanisms. The comparison of the business model and public service provision model conceptualizations revealed differences when it comes to scaling (cf. Giourka et al., 2019; Tidhar and Eisenhardt, 2021). Therefore, questions on how to scale value creation and delivery mechanisms or whether these mechanisms should be configured in a scalable way in the first place are relevant for both public and private actors when designing their business models.

Concerning value capture, our integrated framework highlights the triple bottom line (Elkington, 1994, 2018) as a primary source of potential divergence or convergence among private and public actors. On the one hand, capturing social or environmental value in addition to economic value has become increasingly relevant for private-sector business models (Geissdoerfer et al., 2018). Concurrently, the public sector has realized that, to capture environmental and social value in the long term, it has to find economically viable ways to do so (Schedler, 2023). Therefore, our integrated framework of business models for the private and public sectors includes economic, environmental, and social value along with the same three types of costs in its value capture dimension.

### 5.2. Theoretical contributions and practical implications

Our article contributes to the business model literature in two ways. First, by highlighting public management scholars' adaptations to the business model concept, we illustrate the divergence between general management and public management business model conceptualizations. Public management scholars introduced new labels and terminology to transfer the business model concept to the public sector (e.g., Martins et al., 2019; Timeus et al., 2020). Without understanding the adaptations, it is difficult for general management scholars to draw insights from the public management discourse on business models back to their field (Ritter and Lettl, 2018; Zott et al., 2011). Moreover, unresolved divergence impedes progress in developing the literature on public service provision models because insights from conventional business model research have to be translated first (Pfeffer, 1993). Previously, scholars have repeatedly linked the missing reintegration of divergent conceptualizations with the prevailing lack of cumulativeness in business model research and called for greater alignment (cf. Foss and Saebi, 2018; Zott et al., 2011). In the words of Ritter and Lettl (2018, p. 7), there is a need for "a common language, generally accepted definitions, and a shared understanding of the concepts." Following these calls, we seek to contribute to reintegrating the divergent business model conceptualizations. We compared the general and public management conceptualizations to develop an integrated business model framework. Thus, we reintegrate the findings of the emergent public management stream into general management business model research and propose a joint business model conceptualization. We thereby contribute to the development of greater conceptual consensus necessary to advance the field (Pfeffer, 1993). In this regard, we hope that reintegrating public management findings into the business model literature helps to move toward the cumulativeness needed in business model research (Foss and Saebi, 2018; Zott et al., 2011). Specifically, the integrated business model conceptualization for the public and private sectors proposed in this article may help scholars from both fields to use their resources to build on the findings already generated by their respective counterparts (Knight et al., 2020; Pfeffer, 1993; Yg, 1989).

Second, we show general and public management scholars how they can make their findings more readily accessible to the audience of the respective streams of their counterparts. Previously, both general and public management scholars tailored the business model concept to their target audiences. While general management scholars focused predominantly on the private sector (Teece, 2010), public management researchers adapted the concept to public sector needs (Giourka et al., 2019; Timeus et al., 2020). In contrast, we highlight not only the differences between the general management business model concept and its public sector adaptations but also their commonalities. By taking the distinct operating mode and rationality of the public sector into account, we propose a perspective on the business model concept that can reach both the general management and the public management audiences. Since our integrated framework addresses both public and private sector perspectives, we hope to connect both audiences by bridging the emerging gap between both literature streams (Knight et al., 2020; Pfeffer, 1993).

For business model practice, the integrated framework offers public and commercial actors a common ground for the collaborative provision of public services and for further public-private partnerships. In these multi-actor efforts to realize business models, a shared understanding of business models pivotal (Stadtler and Probst, 2012; Villani et al., 2017). Disparities in the understanding of the business model concept between public and private sectors can lead to miscommunication and inefficiencies, hindering the formation and the operation of these multi-actor endeavors (Koppenjan, 2005; Stadtler and Probst, 2012). Consequently, by raising awareness of the commonalities along with the differences between the partners' perspectives on business models, our integrated framework provides a foundation for the successful co-development and joint implementation of business models (Stadtler and Probst, 2012).

### 5.3. Limitations and future research agenda

Although our work contributes a first step toward reintegrating the diverging literature streams on business and public service provision models, it is not without limitations. First, while the focused literature review provides a foundation for our arguments, it is not a substitute for more exhaustive reviews. The focused literature review reported in this article was restricted to identifying public management literature that adapted the business model concept for the public sector. The results allowed us to outline the divergence between general and public management business model conceptualizations. Moreover, this focused review enabled us to work out both the similarities and the differences between both conceptualizations. We encourage business model scholars to conduct a broader review of the public management literature on business models. Specifically, business model research could benefit from a more systematic examination of the compatibility of public management findings with conventional business-model thinking and reintegrate them where appropriate. Second, our proposed integrated framework needs further validation in both research and practice. As the framework aims to connect the general and public management literatures on business models, research is needed to assess if it can fulfill this aim and be adopted by researchers in both fields. Moreover, the value of the framework for business model practice must also be evaluated. Specifically, its use for private and public actors needs to be validated as the framework aims to apply to both sectors. Third, in line with previous calls for more cumulative business model theorizing and conceptual alignment (cf. Foss and Saebi, 2018; Ritter and Lettl, 2018; Wirtz et al., 2016; Zott et al., 2011), we suggest that more research seeking to integrate the different existing business model conceptualizations is needed. While our proposed integrated framework is one step in this direction, its scope is limited to reintegrating the divergent public management conceptualizations. However, considering that "conceptual ambiguity" in terms of "a fragmented understanding of business models" exists even within the general management stream (Ritter and

Lettl, 2018, p. 2; Wirtz et al., 2016), work in this regard is only at the beginning, and further research effort is needed for greater conceptual alignment. Finally, we encourage general management scholars to take a broader perspective on the business model concept and explore it aside from the commercial firm perspective. This would allow them to expand their audience and produce valuable insights transferable to other organizations (e.g., public organizations), helping them benefit from the business model concept. Moreover, it would underscore the holistic, transorganizational nature of the business model concept that goes beyond private sector organizations (Kaplan, 2011; Osterwalder and Pigneur, 2010; Wiprächtiger et al., 2019).

## 6. Conclusion

Our analysis of commonalities and differences between business models and public service provision models along the dimensions of value proposition, value creation and delivery, and value capture revealed that public management scholars have made multiple adaptions in each of these elements to transfer the conventional business model concept to the public sector. At the same time, we were able to identify commonalities between both conceptualizations. Based on these findings, we developed an integrated business model framework for the private and public sectors. We propose this integrated framework to build a bridge between the scholarly communities of general and public management business model researchers. Specifically, the proposed framework not only seeks to enable scholars from each field to build on the findings already generated in the other but also to connect the audiences of both streams. Moreover, we hope that it stimulates more successful collaborations among practitioners from the public and private sectors.

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## CRediT authorship contribution statement

**Selina Lorenz:** Conceptualization, Investigation, Methodology, Project administration, Visualization, Writing – original draft, Writing – review & editing. **Barbara Heigl:** Conceptualization, Funding acquisition, Resources. **Maximilian Palmié:** Conceptualization, Funding acquisition, Supervision, Writing – review & editing. **Pejvak Oghazi:** Supervision, Writing – review & editing.

## Data availability

The data used is already available (journal publications)

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