Manufacturers' Service Innovation Efforts: From Customer Projects to Business Models and Beyond

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1 Introduction

The role of services in manufacturing firms is growing in importance for businesses and national economies (Raddats et al., 2019). Servitization, the process of adding services to an existing portfolio of offerings, is argued to be crucial for manufacturing firms seeking differentiation and competitive advantage (Burton et al., 2017; Rabetino et al., 2015). This has driven increased attention to service innovation research and new service development (NSD) processes (Witell et al., 2016). However, this literature remains fragmented; is mainly project-level research (Biemans & Griffin, 2018), service success rates are not encouraging (Storey et al., 2016), and

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the reported firm-level performance outcomes of service innovation activity are often equivocal. This appears exacerbated for servitizing firms, grappling with transitioning from being product-centric to service-centric (Baines et al., 2009; Burton et al., 2017). Service innovation research highlights that service context matters (Biemans et al., 2016), as does the type of innovation (Jaakkola & Hallin, 2018; Storey et al., 2016). Studies also suggest that the level at which we study innovation matters because the competencies and success factors for individual service innovations can clash with competencies and approaches at the firm or ecosystem levels.

Servitization is typically described as an organizational transformation process, where a manufacturer moves away from a product-oriented focus to having a service-oriented focus (Rabetino et al., 2018; Raddats et al., 2019). The literature is developing in terms of the 'big picture', such as understanding barriers and enablers (Burton et al., 2017) and the project-level picture in terms of single innovation projects (Bustinza et al., 2019), and how they can offer value to groups of customers (Johansson et al., 2019), literature on service innovation in servitizing firms remains sparse (Johansson et al., 2019) and performance outcomes equivocal. Despite the recognition that some firms build successful portfolios of innovative service offerings that deliver competitive advantage and profit (Baines et al., 2020), there is less work on how firms can develop strong offering portfolios or how they can achieve the desired performance outcomes.

NSD literature has extensively explored success factors (e.g. Storey et al., 2016), what Pettigrew (1987) term the 'content' aspects (i.e. what has changed). While servitization work has studied the 'what', 'why', and 'how' at different points (Baines et al., 2020), research is fragmented and does not typically take a more holistic view of the interplay between content, context, and process aspects. Furthermore, the process of developing a portfolio of new service value propositions within servitizing firms (Skålén et al., 2015), which would come under the 'content' and 'process' aspects (i.e. what have manufacturers have changed and how did, or should, change occur) (Baines et al., 2020), and the macro-level interactions occurring within servitizing firms (the 'context' aspect) receive limited attention.

Negative performance outcomes are typically attributed to the challenges of implementing service-oriented business models (Visnjic Kastalli & Van Looy, 2013), but might also be due to variation in the type of service innovation introduced, the nature and size of the service portfolio, and difficulties related to implementing servitization at the firm and ecosystem level. Therefore, servitization researchers need to better understand how service innovation efforts can deliver positive performance outcomes beyond the

project level, adopting the view that change is multi-level, made up of an interplay between content, context, and process (Pettigrew, 1987).

The wealth of literature that already exists on service innovation (e.g. Biemans et al., 2016; Snyder et al., 2016), alongside the developing service innovation-focused servitization literature, provides useful insights for theorizing about service innovation practices in servitizing firms, and forms the basis of our theoretical development. Theory building is critical to the development of a research field because it provides the foundation upon which knowledge can be built, resulting in a deeper, richer understanding of organizational behavior (Klein et al., 1999; Witell et al., 2016). In adopting a multilevel theory building approach, we respond to calls for greater variety and depth when theorizing about the servitization-innovation performance relationship (Martinez et al., 2017), by offering a research framework that will enable a clearer picture to be built with regard to different types of servitization efforts and their outcomes.

Service innovation is considered on a continuum from incremental to radical (Witell et al., 2016) and manufacturers often seek radical service innovations to achieve improved performance, yet many service innovations are incremental improvements on existing offerings (Johansson et al., 2019). This is further complicated by the fact that service innovations are considered at different levels in terms of the innovation system: individual service innovation projects, offering portfolio (the mix of base, intermediate, and advanced services offered (Baines & Lightfoot, 2013), business model, ecosystem, industry and beyond. However, few papers discuss how service innovations diffuse across innovation levels. The chapter proposes a research framework that brings together innovation 'newness' (incremental to radical), the firm's service strategy (product-focused, hybrid and service-focused), and the 'innovation level' (project, offering portfolio, business model, etc.), as a means of classifying and understanding the linkages between three key service innovation dimensions. In doing so, we more holistically represent the potential interactions between service innovation efforts and choices made by servitizing firms, which, if studied systematically, should allow for a better understanding of how performance outcomes can be achieved.

2 Theory Development

The Service Innovation Concept

Several articles offer detailed explanations of what service innovation is (e.g. Lusch & Nambisan, 2015), arguing that in order to move theory forward, clear conceptual definitions are required (Witell et al., 2016). For example, Skålén et al. (2015: 137) define service innovation as "*the creation of new value propositions by means of developing existing or creating new practices and resources in new ways*". Such a definition highlights several key characteristics of service innovations, three of which link back to the work of Schumpeter (1934), that: (1) to be classified as an innovation, an invention must be launched or 'put into practice'; (2) there has to be an element of 'newness' (but services can be incremental revisions, line extensions, or radically new, including both re-combinative innovations [new combinations of existing characteristics into a new offering], or new to the world); and (3) there is a distinction between process (New Service Development—NSD) and output (service innovation). In terms of (3), however, there is less consistency. Many studies use them interchangeably, but, in line with Snyder et al. (2016), we argue that it is important to distinguish between the process (also recognizing the importance of 'context' and 'content' in this) and the 'output' (new services), which then drive performance outcomes.

Some definitions also explore service innovations from a value perspective and articulate value creation from the perspective of one or more actors (Ostrom et al., 2010). Thus, the perspective of 'value for whom' is also important when examining service innovation. Furthermore, Witell et al. (2016: 2871) note a key difficulty for firms in balancing innovation efforts across different types, "*making trade-offs between exploitation and exploration or incremental and radical innovation if they are to survive, let alone prosper*". Thus, our framework needs to consider different types of innovations and recognize the unique elements of these different types.

Service Innovation Categorizations

In reviewing categories of service innovation, Snyder et al. (2016) highlight four distinct aspects for categorizing service innovations: (1) degree of change (incremental—radical)—conceptualized as 'newness' in some studies; (2) type of change (product vs process); (3) newness, conceptualized as who the service is new for (the firm or the market), and thus, distinct from aspect (1); and (4) means of provision (technology vs people). Work often focuses on differences

and similarities between service types to build a clearer understanding of what drives success in service innovation efforts (Biemans et al., 2016). However, Snyder et al. (2016) note that categories are frequently neither exhaustive nor mutually exclusive, with some seen as continuums, with blurred boundaries between types. The categorization process is also complicated by service innovations being explored at different levels (the individual project, the firm-level, or the ecosystem level).

That said, of the four Snyder et al., (2016) identified, a widely accepted distinction is the radical and incremental categorization (Witell et al., 2016). Innovation is often portrayed as a continuum from incremental to radical, with the term, newness, applied at a product/service level (Chester Goduscheit & Faullant, 2018), portfolio-level (Heimonen & Kohtamäki, 2019), firm-level (Story et al., 2015), industry-level (Dolfsma & Van der Velde, 2014), and country-level (Tellis et al., 2009). Services with minor changes to characteristics are typically categorized as incremental, whereas services that have a totally new set of characteristics are categorized as radical (Witell et al., 2016).[1] However, even when we know the degree of change, where an innovation sits on the continuum is not always clear, making it difficult to offer meaningful analysis of service innovation outcomes (Storey et al., 2016).

Within servitization literature, researchers also highlight different innovation levels. Figure 1 outlines the product-level categorizations articulated in extant research, which all view services from the perspective of whether they are more product-focused or more service-focused. Some offer reasonably comparable categories, while others cover a broader range of services. Thus, Fig. 1 shows these categories across a continuum.

What is clear from Fig. 1 is that consensus for categorizing service innovations has not been reached, despite the importance of this for understanding how service innovation occurs in servitizing firms. Only once research can be positioned within a clear, consistent categorization framework, will performance outcomes of different approaches become clear. In looking to draw from the long-standing service innovation literature and the servitization literature, our work returns to the notion of 'newness', in terms of how new these service innovations are. Some servitization researchers directly articulate this notion. For instance, at one end of the continuum, Kowalkowski et al. (2012) focus on 'agile incrementalism' as firms seek to continually adapt services to changing market opportunities. On the other, Johansson et al. (2019) call for manufacturers to develop radical service innovations.

[1] Biemans et al. (2016) provide a comprehensive review of service innovation typologies.

Author(s)	Product-focused---------- Continuum ----------Service-focused		
Mathieu (2001)	SSPs (e.g. after-sales services/ repairs and maintenance)	SSCs (e.g. R&D Services - reward sharing contracts)	
Tukker (2004)	Product-oriented	Use-oriented	Results-oriented
Baines and Lightfoot (2013)	Base (e.g. installation)	Intermediate (e.g. maintenance, technical support)	Advanced (e.g. risk and reward sharing contracts)
Cusumano, Kahl and Suarez, (2015)	Smoothing services: facilitate product sale/usage	Adapting services: enhance product use	Substitution services: replace product purchase
Ulaga and Reinartz (2011)	Hybrid offerings: made up of innovative product and service combinations		
Jaakkola & Hallin, 2018 & Kohtamäki et al., 2019	Productized or smart solutions: bundles of products, services, expertise, and software		

Fig. 1 Servitization classifications on a continuum from product-focused to service-focused

Firm Service Strategy Categorizations

Innovation research more generally (e.g. Storey et al., 2016), and servitization research (e.g. Burton et al., 2017; Coreynen et al., 2020) recognizes the need for a firm-level understanding of service innovation activities. At the firm-level, servitization strategies are discussed in terms of firms being more product- or service-focused (Baines et al., 2009). Product-centric firms have portfolios of services directly coupled to their products, where products are foregrounded in decision-making. Service-centric firms focus more on aligning services to customers' processes. In many studies, product-level categorizations are used as proxies for service strategies (Raddats et al., 2019); however, these do not easily capture the 'strategic intent of the firm', where firms may have a range of offerings, but the overall balance of these will be driven by the firm's strategy. In this work we are not attempting to explore the specifics of *how* products and services are combined, we are instead interested in combining several of the firm-level strategies concepts to suggest a continuum from product-centric strategic intent through a hybrid strategic intent where neither dominates, through to a service-centric strategic intent, with the premise being that different firm-level strategies are likely to have different performance outcomes and boundary conditions.

Innovation Levels

Innovation is studied at different levels: project, portfolio, organization, ecosystem, sector, and economy. Previous research largely focused on examining service innovations at one level; for example, the project level (de Brentani, 1989), the team level (Lievens & Moenaert, 2000), or the organizational level (Jaakkola & Hallin, 2018). However, most services are not developed and delivered in isolation, but include portfolio- and organization-level considerations. The organizational arrangements for service innovation are more complex, ranging from temporary ad hoc structures for individual projects to more enduring complex business models and/or industry structures. Organizational structures can create stability and a focus on long-term visions (Jaakkola & Hallin, 2018), but they are also known to constrain (Heracleous et al., 2017). Nor are services developed in isolation, often relying on interactions with other ecosystem actors (Sjödin et al., 2019).

Furthermore, only limited work exists on the differences between the commercial success of individual service innovations and how these innovations contribute to longer-term firm-level performance outcomes. For example, Storey et al. (2016) examined the difference between the short-term commercial success of a single innovation and achieving firm-level Strategic Competitive Advantage (SCA), identifying unique critical success factors for each. Exploring service innovation efforts across the different levels should help to elucidate how the activities that occur at each level combine to contribute to or reduce performance outcomes.

The use of multilevel theory has been highlighted as a means of bridging gaps in theory development through a recognition of the multilevel systems involved in complex organizational research contexts (Turner, 2005), such as servitization, by focusing on three different levels of influencers, which are nested within one another, and evolve and change over time (Vargo et al., 2015), namely: macro-level (industry-wide and beyond) factors, meso-level (firm business model and portfolio) factors, and micro-level (individual projects) factors. Thus, adopting an ecosystem-level, multilayered perspective is needed to understand how resources are integrated at the various system levels (i.e. micro, meso, and macro) (Edvardsson et al., 2011). The literature on the key issues at the three levels will now be summarized.

There are several reviews of micro-level service innovation providing a detailed examination of current project-level thinking (e.g. Biemans et al., 2016), exploring such aspects as: the topics studied; research design focus; and data sources. Within this literature, a key debate is still around whether products and services are different when it comes to innovation efforts.

However, the applicability of traditional distinctions in contemporary service contexts is questioned and some recommend a single framework for studying product and service innovation activities, rather than seeing them as distinct (Storey et al., 2016). While there is limited work in the servitization literature examining service innovation at a project level, Rabetino et al. (2017) demonstrate how manufacturers can work with customers to co-develop new project-based solutions. Meanwhile, Lightfoot and Gebauer's (2011) study of service innovation highlighted heterogeneity in the innovation success determinants (e.g. importance of different NSD phases) across 24 projects. Here, again, there is debate around the interplay between product and service innovation, primarily because services typically compete with more established product development activities for limited resources and often remain inextricably linked to products (Burton et al., 2017).

At the meso-level, authors highlight the importance of considering service innovation efforts at the portfolio-level, recommending that firms adopt a more strategic approach to servitization portfolios (Burton et al. 2017; Heimonen & Kohtamäki, 2019). This is also supported by work highlighting the importance of economies of scope and scale in relation to achieving an advantage (Teece, 2007; Visnjic Kastalli & Van Looy, 2013). Nordin et al. (2011) discuss strategies for service provision based on customization, bundling, and widening ranges of offerings. Other work highlights modularity as a viable approach for managing complexity and building productivity gains (Gremyr et al., 2019). Kowalkowski et al. (2015) highlight the importance of balancing service expansion and standardization activities, and that services perform different roles, creating a complementary co-existence between offerings that need to be managed. Thus, in the same way that product research highlights that different products offer different advantages to a firm, we know that service innovations can bring different advantages (Heimonen & Kohtamäki, 2019). Work also highlights that different types of services are more prominent under particular industry conditions or under different stages of an industry's lifecycle (Cusumano et al., 2015), and can be driven by diverse customer needs (Johnstone et al., 2008). Other work highlights that servitization can result in short-term performance sacrifices for longer-term benefits, noting that service revenues should not be judged at the individual level, because this may not capture such things as portfolio-level cannibalization effects (Visnjic Kastalli & Van Looy, 2013), or at only one point in time, because of the temporal nature of innovation performance outcomes. Thus, for many firms, service innovation activities are a complex process of taking a portfolio-level approach to balancing customization and standardization (Matthyssens & Vandenbempt, 2010).

At the meso-level again, research has begun to foreground the role of business models in servitization, and how the design and management of new service-oriented business models are key to firms' servitization efforts (Kowalkowski et al., 2017). The business model level offers the opportunity to analyze bundles of practices related to revenue models, structures, and transactions (Baines et al., 2020). Business model transformation is seen as key to the servitization process (Kowalkowski et al., 2017), but research also suggests that firms must often manage multiple parallel business models (Kowalkowski et al., 2015), which often compete for dominance, creating tensions (Burton et al., 2016; Palo et al., 2019).

At a macro-level, business ecosystems are "*a relatively self-contained, self-adjusting system of mostly loosely coupled social and economic (resource integrating) actors*" (Lusch & Nambisan, 2015: 161) existing at industry or wider levels. Ecosystems have gained currency in describing collaborative efforts in developing and delivering service innovation (Koskela-Huotari et al., 2016) and for servitization (Bustinza et al., 2019), because they offer a holistic, multi-actor lens and enable examination of systemic, dynamic, and contextual aspects surrounding actor activities (Sklyar et al., 2019). When they operate effectively, ecosystems allow firms to deliver value that no one organization could create in isolation (e.g. Adner, 2006). However, ecosystem structures may vary for different service offerings and delivery modes, and for different firm service strategies, with actors in a service ecosystem depending on one another in different ways (Story et al., 2020).

An Integrative Framework of Service Innovation Activities

Organizations, and the ecosystems in which they operate, are inherently multilevel systems, and how companies integrate complex product and service innovation strategies requires a broader, multilevel perspective (Chester Goduscheit & Faullant, 2018), that enables a more integrated understanding of explored phenomena (Klein et al., 1999). Given that many firms struggle to transition to service strategies that deliver positive performance outcomes (Burton et al., 2017), a central question then relates to how service innovation knowledge, skills, and capabilities diffuse from individual customer projects to business models and beyond; how firms can achieve the right balance between incremental and radical innovations; and how a firm's service strategy affects these choices.

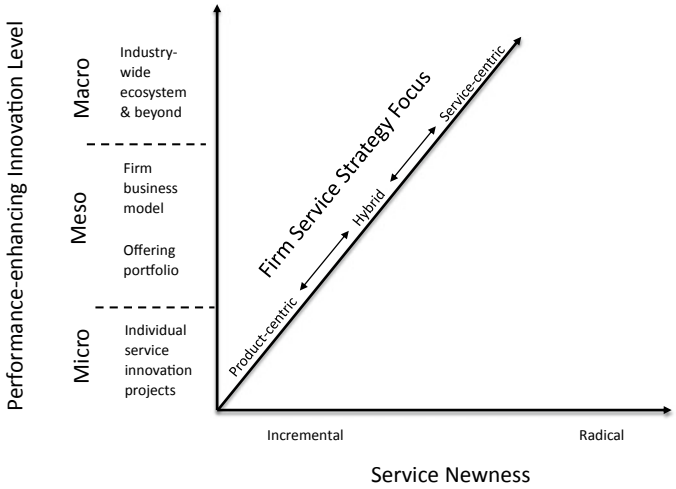

Fig. 2 Integrative research framework of service innovation activities

The research framework presented (Fig. 2) is designed as a mechanism to consider similarities, differences, and relationships between three key characteristics of service innovation in servitizing firms, so that future work can better position their study and contribution. Building on service innovation literature and the unique context of servitization, it recognizes the importance of the type of innovation, focusing on service newness of the new services, and whether the firm is more product-centric or service-centric. In doing so, the framework helps to categorize three key dimensions that need to be explored in understanding how service innovations begin at the micro-level as one-off service innovation projects, and portfolio offerings through firm business models (meso-level) to the ecosystem, industry-wide, and beyond (macro-level) and thus increase their potential to enhance performance. Key issues for each of the dimensions and their interactions are outlined below.

3 Discussion

Framework Implications

Servitization is often described as a transformational process whereby firms move from being product-centric to service-centric through developing base services, through intermediate to advanced services, with performance outcomes linked to advanced service provision (Baines et al., 2020). However, work has critiqued the presentation of servitization as a unidirectional

approach based on a manufacturer's service strategies (Burton et al., 2017). The mixed evidence in terms of the performance implications of adding services suggests that the servitization—performance relationship is likely to be complex and non-linear, moderated by a variety of factors (boundary conditions) (Sjödin et al., 2019). However, until we understand the interplay between the different aspects involved, understanding performance outcomes will be difficult. Research framework 1.2 helps to articulate these different factors in such a way as to enable the performance implications of these key characteristics to be more systematically examined and compared.

In terms of newness, radical innovation is often hailed as a key driver of firm performance, but research suggests that incremental service innovation is at least as prevalent as radical service innovation (Raddats et al., 2019). Indeed, we might expect incremental projects to diffuse up the innovation levels quicker and more easily than more radical service innovations because there is a better fit with current operations, culture, and business models, but equally, we know that radical innovations can drive business model innovations that create game-changing effects higher up the innovation levels. For many firms, understanding how to move from 'low-hanging fruit', where margins are worthwhile without significant investment or culture change, to wide-scale servitization efforts that bring positive performance through appropriate portfolio decision-making efforts, and economies of scale and scope, is hard.

We argue that part of understanding how to improve performance will be to understand how project innovation leads to portfolio-level changes that deliver cost efficiencies through standardization or offer growth potentials that will make them profitable in the longer term. Alternatively, insights may also be gained by looking at mismatches across different elements (Gebauer et al., 2010). Furthermore, it is important that we begin to understand how firms can balance incremental and radical projects. Innovation literature highlights several tensions that arise from simultaneous exploration and exploitation efforts (Heracleous et al., 2017), with some researchers advocating the structural separation of activities related to incremental and radical innovations (Witell et al., 2016) and others advocating an integrated approach. However, many manufacturing firms attempting servitization face issues in embedding radical service innovations into their portfolios (Burton et al., 2017), often due to more product-focused processes and structures (Gremyr et al., 2019), highlighting a key interaction between innovation newness and the firm's service strategy focus.

When trying to understand the performance outcomes of service innovation efforts, the level at which a service innovation is studied is likely to

matter. For instance, we need to understand what makes for a successful service innovation project, while also understanding the implications of service innovation activities at the firm-level, to support decision-making about where R&D resources are spent and how groups of offerings perform. This is important because, as the number of offerings increases, the explanatory power of a single project decreases (Story et al., 2015). Therefore, as service portfolios grow, firm, and ecosystem level decisions become more important.

Equally important then is whether macro-level factors in the ecosystem or industry stifle or support innovation efforts. Contestations at the firm and ecosystem level are likely to both drive change and create stability with regard to service innovation efforts, which, some argue, is where the main challenges and opportunities lie (Palo et al., 2019). This is likely to translate into firms needing to find a way to balance service innovation efforts across several dimensions: product versus service innovation efforts; incremental and radical service offerings; and ensuring that the right balance of base, intermediate, and advanced services are offered that match customer requirements. This is even more important for digital technologies, which support servitization efforts but also blur boundaries between actors, sectors, and markets (Coreynen et al., 2020). However, we know that these interactions are likely to bring tensions (Burton et al., 2016), not just in terms of the new and the old, or between products and services, but also between incremental and radical innovation efforts.

A change of organizational focus to become service-centric brings with it a requirement to redesign structures, business models, and organizational processes. However, literature is still unclear as to whether the transition occurs as part of a planned strategic organizational effort or as an emergent process, focusing on the project level and then looking to scale (Luoto et al., 2017). In reality, it is likely to be a bit of both, because while individual projects often drive transformation efforts, these projects sit within an organization and their ecosystem. Furthermore, it is harder to measure the economic impact and performance of service innovations, due to intangible benefits (Gallouj & Savona, 2009).

Determining the right portfolio is not a straightforward decision, and often goes hand-in-hand with the need to transform business models (Palo et al., 2019). Not doing so can lead to a firm ending up with a mismatch between their strategic market offerings and their organizational arrangements (Gebauer et al., 2010). Research also suggests that the different levels feed up and down (Koskela-Huotari et al., 2016). For example, Mukherjee et al. (2020) articulate how macro-level planning can help to overcome

micro-level managerial myopia and help managers with decision-making at the project level, through reframing the rules in which their sense-making processes occur (e.g. Weick, 1995). By working both up and down the innovation levels, a common cognitive understanding can be built, that should support better performance outcomes for those involved. Thus, meso-level activities are important because business models can be powerful tools for framing and organizing servitization practices, but more work needs to be done to understand the activities that occur at each level and how they interact, to help firms to achieve better performance outcomes.

Theoretical Contributions

This chapter makes three important theoretical contributions. First, developing a framework of service innovation in servitizing firms should support the development of theory through enabling organization of related concepts that enable the relationships between these concepts to be articulated, allowing for classification and theory building efforts (Snow & Ketchen, 2014). In building on earlier work in both the service innovation and the servitization literature, this framework offers a mechanism for both classifying innovation efforts and developing an understanding of the interlinkages between the dimensions explored. By looking across the levels and understanding the impact of different types of innovations and the different types of firm-level strategic intent, this might help us to identify key threats related to value 'destruction' (Visnjic Kastalli & Van Looy, 2013), thereby achieving value creation for firms, customers, and the economy; from individual offerings to industry-wide impacts. In offering this framework, we seek to provide better direction to servitization researchers by moving beyond descriptive categorizations of service offerings or organizational approaches to highlight that research needs to explore issues within each level. For example, understanding key similarities and differences between incremental and radical service innovation within servitizing firms, and the implications of firm culture on these activities, as well as exploring the interactions between activities at the three different levels, to understand how innovation knowledge, skills, and capabilities diffuse between the micro, meso, and macro levels.

Second, the multilevel approach captures the embedded nature of the activities that occur at each level, and is, therefore, likely to bring greater understanding than studying them in isolation. Most work focuses on the project level, the overall firm-level (e.g. barriers and enablers), or, more recently, the ecosystem level. However, the insights outlined here, suggest

that the meso-level portfolios and business models are particularly important, and while research is developing in this area, more work is needed to understand these aspects and their interactions across the micro and macro levels in support of improved servitization outcomes.

Third, our framework looks to foreground the processes involved in servitization activities, both within and across the dimensions articulated. Exploring how servitizing firms develop in relation to their service innovation efforts responds to calls regarding building knowledge of the change processes, answering questions related to 'how does, or should, change occur' (Baines et al., 2020), so that the activities are undertaken to support a firm's transition from manufacturer to successfully achieving growth and revenue benefits.

In articulating potential interactions between three key service innovation dimensions, the framework offers a research agenda for servitization researchers that will enable knowledge to be built about the service innovation–performance relationship. Performance outcomes cannot be explained by only looking at one area, but by seeing service innovation in the context of a firm's service strategies, and how these service innovation efforts diffuse across the ecosystem. Only through a systematic development of knowledge will a fuller picture be built of how performance outcomes are affected by these intertwined decisions.

Managerial Implications

From a practitioner's perspective, it is important to highlight that servitization efforts are a balance of developing the right incremental and radical services, which match with the firm-level service strategy, and that decisions should be seen in the context of micro, meso, and macro influences. Furthermore, it is important that organizations consider the interactive nature of decisions at the individual service, portfolio, business model, and beyond, if they are to succeed in making the transformation from a manufacturer to a profitable provider of services that create value for customers, themselves, and ecosystem partners.

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