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Service-dominant logic

Foundations and applications

Stephen L. Vargo, Kaisa Koskela-Huotari, and Josina Vink

Introduction

Over the last several decades, there has been an explosion of interest in *services*. This has resulted in both an exponential increase in services-oriented, academic literature and a growing number of firms reorienting themselves toward services rather than manufacturing. It is sometimes assumed that this shift to a ‘services economy’ is also the motivation for the research stream known as service-dominant (S-D) logic (Vargo & Lusch, 2004, 2008, 2016, 2018). However, as noted by Lusch and Vargo (2018), S-D logic is not about explaining the emergence of the services economy; in fact, it is not even about services in the traditional sense that would equate services with intangible goods. Instead, S-D logic offers a metatheoretical framework that identifies *service* (singular)—the process of using one’s resources for the benefit of another actor (or oneself)—rather than goods, as the fundamental basis of economic and social exchange (Vargo & Lusch, 2004, 2017). In other words, S-D logic argues for a processual view, through which exchange in preindustrialized, industrialized, and post-industrialized economies, can best be understood in terms of *service-for-service exchange*. What varies is the extent to which service exchange is direct—i.e., an actor applies their resources for the benefit of another actor in person—or indirect—i.e., an actor applies their resources for the benefit of another actor through, for example, a good, which acts as a vehicle for service delivery.

In this way, S-D logic uses *service as a perspective* to understand the *nature* of exchange throughout all sectors and contexts, rather than limiting the relevance of service to those settings in which the exchange outputs are distinguished by the archetypical services characteristics of intangibility, inseparability, heterogeneity, and perishability (Zeithaml, Parasuraman & Berry, 1985). This view reveals that service has a far more pervasive role in society than is generally recognized. Service has been important since well before the industrial revolution and its presence extends beyond what is now considered the ‘services economy.’ By shifting the understanding regarding the nature of service, S-D logic helps to open up the field of service research toward wider applicability as will be discussed later in this chapter.

Furthermore, understanding exchange as a process also brings forth additional insights about the *purpose* of exchange. It becomes clear that the aim of exchange is not to move around products or other exchange objects, but to share applied knowledge and skills with other actors to support what they are trying to accomplish. In other words, the purpose of

exchange is to enable reciprocal value creation. As this is possible only through collaboration and exchange with a large number of actors, S-D logic calls this process *value co-creation* (Lusch & Vargo, 2006; Vargo, Maglio & Akaka, 2008) and the collectives, among which value co-creation occurs, *service ecosystems* (Lusch & Vargo, 2014; Vargo & Lusch, 2011). Recent developments within S-D logic involve the inclusion of the sociological concept of *institutions* as the coordination mechanism enabling and constraining value co-creation within service ecosystems (Lusch & Vargo, 2018; Vargo & Lusch, 2016). Hence, from the initial focus of trying to overcome the goods-versus-services division of exchange outputs, S-D logic has developed into a metatheoretical framework that can be used to explain individual, dyadic, 'market,' or societal level value co-creation. This development builds a foundation for enhancing and extending the impact of some of the core insights from service research.

In this chapter, first an overview of S-D logic is provided. This is done by describing the key developmental periods of S-D logic and the resulting metatheoretical framework, which can be crystalized into five axioms that represent the core ideas of S-D logic. Second, the similarities and differences between S-D logic and related approaches, including 'service logic,' 'customer-dominant logic,' and 'service science,' are discussed to aid scholars in distinguishing these alternative approaches from one another. Then, the applicability and implications of S-D logic are discussed through a synthesis of how S-D logic has been employed within service research, marketing, and other disciplines. Interwoven within this discussion are promising opportunities for future research.

S-D logic as an evolving metatheoretical framework

Over the past 15 years, S-D logic has gone through several evolutionary periods, starting from the initial article that revealed the preoccupation of academic marketing with a dominant logic based on the exchange of manufactured outputs, that is "goods," (Vargo & Lusch, 2004) and expanding to the current narrative of institutionally coordinated value co-creating service ecosystems such as the building blocks of societies (Vargo & Lusch, 2016). This section gives an overview of the evolution of S-D logic by highlighting its central developments and expanding aim.

Challenging goods-dominant logic

S-D logic resulted from an analysis of over four decades of shifting industry practices and pioneering work by scholars who observed that traditional approaches to marketing largely mischaracterized services as a type of market offerings without goods-like qualities (Lusch & Vargo, 2018). This mischaracterization fostered the belief that services were somehow inferior to goods as they could not be easily stored, homogenized, or separated from customer processes. The initial S-D logic article (Vargo & Lusch, 2004) suggested that this underlying mind-set prevailing in traditional marketing theory should be called goods-dominant (G-D) logic, as it sees value as embedded in tangible manufactured outputs and views the distribution of these outputs as the purpose of exchange. The article highlighted several developments, primarily in sub-disciplines of marketing, which were challenging and reframing the assumptions of this dominant worldview. One of the important sub-disciplines on which the initial ideas of S-D logic were built was services marketing. Services marketing and other emerging perspectives within marketing at the time shared an implied logic that placed more emphasis on the exchange of intangible resources over tangible resources, collaboration over competition, and relationships over transactions.

The main argument in Vargo and Lusch (2004) and subsequent work is that these emerging perspectives, together with other transformations taking place outside of marketing, were converging on a potentially transcending perspective, now known as ‘service-dominant (S-D) logic.’ Hence, initially S-D logic was, at least in part, a response to several calls emphasizing the fragmented nature of academic marketing and the need for a paradigm shift (see e.g. Achrol & Kotler, 1999; Parvatiyar & Sheth, 2000). Vargo and Lusch proposed that marketing thought was not so much fragmented but evolving toward a new dominant logic that integrates goods with service(s) and provides a richer foundation for the development of marketing thought and practice.

During the first years of S-D logic’s development, its focus was mainly on tracing the historical unfolding of events that led to the development of the narrow, goods-based model of economic thought (e.g. Vargo & Lusch, 2004; Vargo & Morgan, 2005). The authors noted that G-D logic, which prevailed in much of the academic marketing literature at the time, frames exchange in terms of tangible units of output (i.e., goods) and views the production and exchange of goods as the core of business and economics (Vargo & Lusch, 2004; Vargo et al., 2008). This logic is closely aligned with neoclassical economics, which views actors as rational, profit- and utility-maximizing economic entities among whom information and resources flow easily within equilibrium-seeking markets. Others have referred to G-D logic, for example, as “manufacturing logic” (Normann, 2001) and “company-centric, efficiency-driven view of value creation” (Prahalad & Ramaswamy, 2004). S-D logic’s main purpose was to develop an alternative logic of exchange and value creation that broke free from the conventional G-D logic as thoroughly as possible.

There are several problems with G-D logic, but some of the most important ones relate to where it focuses attention. As the name implies, G-D logic fosters goods-centricity. This means that tangible outputs such as goods are viewed as superior to any other form of exchange. G-D logic also places the firm as the central and only active actor in value creation. In other words, it posits that value is something that is produced by the firm and embedded in physical goods during the firm-controlled manufacturing processes and then distributed through the market to the value-destroying ‘consumers.’ Given this linear and firm-centric view on value creation, G-D logic is also preoccupied with the importance of what something is worth, usually in monetary terms, when exchanged. G-D logic’s over-emphasis on goods, firms, and monetary value has led to several deeply ingrained dichotomies that constrain the development of a broader, more general view on economic and social exchange.

In contrast, in S-D logic the purpose of exchange is *value co-creation, which is facilitated through the exchange of service*, that is, the application of specialized resources for the benefit of other actors (and themselves), rather than goods, which are only occasionally used in the transmission of this service. This shift in how exchange is understood also implies a radical change in the meaning of value. G-D logic views value as something determined and produced by the producer that can be embedded in goods and defined in terms of its ‘exchange value.’ Alternatively, Vargo and Lusch (2004) proposed that value is actually determined by the beneficiary on the basis of the “value in use” that results from the beneficial application of the resources (e.g. knowledge and skills) exchanged. This explicit, foundational idea of S-D logic is built on a shift that has been implicitly highlighted previously by a number of scholars. For example, Kotler (1977, p. 8) noted that the “importance of physical products lies not so much in owning them as in obtaining the services they render.” Echoing these views, Normann and Ramírez (1993) argued that tangible goods can be viewed as embodied knowledge or activities, and Coombs and Miles (2000, p. 97) stated that “material products

themselves are only physical embodiments of the services they deliver, or tools for the production of final services.”

Building on these alternative perspectives, S-D logic articulates an integrated framework for thinking about value co-creation as a reciprocal process perspective on exchange (Vargo & Lusch, 2004). The framework also strengthens and expands the declaration made by Bastiat (1848/1995) 150 years prior stating that “services are exchanged for services.” In other words, S-D logic was grounded in an alternative logic of value creation, which argues that exchange is best understood in terms of *service-for-service exchange*, rather than exchange in terms of goods-for-goods or goods-for-money. This means that, in dyadic exchange, what the ‘customer’ provides back to the ‘producer’ in return for the service received can also be understood in terms of service exchange, albeit often as an indirect form of service exchange. In other words, the money that the ‘customer’ uses to ‘pay’ the ‘producer’ for the service, comes from earlier service exchanges between the ‘customer’ (then as a service provider) and the ‘customer’s customer.’ The producer can then use this money to acquire a service from another ‘producer.’ Hence, the foundational basis of exchange is always service, although in industrialized economies it is often masked by indirect forms of exchange (e.g. goods and money).

When highlighting S-D logic as an alternative to G-D logic, it is important to emphasize that the argument is not so much that G-D logic is wrong, but that it limits understanding by focusing on special cases of exchange and value creation (e.g. goods-for-money), rather than the general case (service-for-service). Hence, Lusch and Vargo (2014) argue that, rather than seeing G-D logic and S-D logic as binary alternatives, G-D logic (or at least ‘goods logic’) should be seen as a special case nested within S-D logic, rather than replaced by it. In other words, the more general theory of S-D logic can explain the existence of G-D logic as a special case.

Moving beyond firm or customer-centricity

The initial S-D logic article (Vargo & Lusch, 2004) concentrated on how value creation needed to be reframed for understanding of dyadic exchanges (i.e., between a firm and a customer). However, the discussion soon evolved toward emphasizing that value co-creation takes place within and among multiple actors (e.g. Lusch & Vargo, 2006; Vargo & Lusch, 2008). Aligned with S-D logic, Gummesson (2008) claimed that the “marketing concept” and “customer-centricity” are too limited as a foundation for marketing and urged marketing scholars and educators to accept the complexity of marketing by moving toward a network-based stakeholder approach and balanced centricity. Similarly, S-D logic recognizes that the venue of value creation is value configurations—economic and social actors interacting and exchanging across and through networks.

To remove the restrictive nature of pre-assigned labels and allow a higher-level abstraction of actors that are part of value co-creation, traditional designations such as ‘buyers,’ ‘sellers,’ ‘consumers,’ ‘producers,’ ‘suppliers,’ ‘middlemen,’ and many other role specific terms are avoided in S-D logic, unless they are being referenced in conjunction with the traditional literature. Instead, all actors are referred to as just that, ‘actors,’ which are seen as being similarly characterized in terms of resource integration and service exchange (Vargo & Lusch, 2011). This means that all actors provide service—applying resources for another’s benefit—to receive similar service from others. In this way, S-D logic problematizes the taken-for-granted ‘producer-consumer’ divide in which humans are separated into active, value-creating actors and passive, value-destroying actors.

Vargo and Lusch (2011) have argued that business-to-business (B2B), rather than the traditional business-to-consumer (B2C) orientation of mainstream marketing, offers a better exemplar of the general actor-to-actor (A2A) orientation. This is because in B2B there are no actors that

are strictly producers or consumers but, rather, all actors are considered to be enterprises, working to benefit their own existence by benefiting the existence of other enterprises. In this way, all B2B is service-for-service exchange—either directly or indirectly. However, according to Vargo and Lusch (2016), the A2A orientation and its generic actor designation should not be confused with a position that all actors are identical. Indeed, it is intended to do just the opposite, by dissociating actors from predesignated roles (e.g. consumers) and setting the stage for characterizing them in terms of distinctly constituted identities.

Furthermore, S-D logic zooms out beyond the traditional dyadic focus of firm and customer to a wider, more comprehensive configuration of actors in its perspective of value co-creation (Vargo & Lusch, 2011, 2016). S-D logic argues that value creation occurs at the intersections of activities of providers, beneficiaries, and other actors. It is recognized that actors continually integrate resources from multiple sources (Lusch & Vargo, 2014; Vargo & Lusch, 2011), including: ‘private’ (e.g. family, friends), ‘market-facing’ (e.g. firms and other ‘market’ actors), and ‘public’ sources (e.g. communal and governmental actors). Hence, value is created through the integration of resources by multiple actors in a specific context, rather than manufactured and then delivered (Vargo et al., 2008).

S-D logic also implies that the beneficiary is always an active participant in its own value-creation process—that is, a co-creator of value (Lusch & Vargo, 2006). In other words, for value to be perceived by the beneficiary and, thus, value creation to occur, the beneficiary’s (e.g. customer) operant resources must also be integrated. Consider, for example, having dinner in a restaurant. Although the food is prepared and served by others, the diner must integrate her knowledge of the use of the cutlery, chewing, and so on with the provided meal for value-in-use to be perceived. However, it is important to note here, that the generic actor (or A2A) orientation makes all actors simultaneously providers and beneficiaries through direct and indirect service-for-service exchange (Vargo & Lusch, 2011). The beneficiary role in value determination should not be seen as implying that S-D logic is solely ‘customer-centric,’ as it also sees service providers as beneficiaries who determine value outcomes for themselves.

As actors, over time, specialize in applying certain kinds of knowledge and skills for one another, they become less self-sufficient and more dependent on one another (Vargo & Lusch, 2004; cf., Normann, 2001; Ridley, 2010). S-D logic’s A2A orientation revealed several other insights that led to the increasing realization of the complexity and dynamics of value co-creation. First, this orientation confirms that value co-creation takes place in networks, because it implies that the resources used in service provision typically, at least in part, come from other actors (Vargo & Lusch, 2011). Second, it suggests a dynamic component to these networks, because each integration or application of resources changes the nature of the network in some way (Chandler & Vargo, 2011). This knowledge, in turn, highlights that a network view alone is inadequate and that a more dynamic systems orientation is necessary (Vargo & Lusch, 2011; Wieland, Polese, Vargo & Lusch, 2012).

Embracing the systemic and institutional nature of value co-creation

In the numerous elaborations and extensions of S-D logic, one of the most important has been a general *zooming out* to allow a more holistic, dynamic, and realistic perspective of value creation, through exchange, among a wider configuration of actors (Vargo & Lusch, 2016). S-D logic is based on an understanding of the interwoven fabric of individuals and organizations, brought together into networks and societies, specializing in and exchanging service to create value in the context of their everyday lives (Chandler & Vargo, 2011; Lusch & Vargo, 2014). It highlights the dynamic and complex nature of value co-creation by arguing that actors

continually integrate, apply, and exchange available resources from multiple sources, for value co-creation (Vargo & Lusch, 2011). This zooming out to understand value creation has resulted in a major turn toward a systems orientation in S-D logic (Chandler & Vargo, 2011; Vargo & Lusch, 2011). It also made apparent the need to articulate more clearly the mechanisms—institutions—that enable and constrain the often massive-scale coordination involved in systems of value co-creation (Vargo & Lusch, 2016).

Institutions should not be confused with the more everyday use of the word referring to firms, governmental agencies, or any such organizations. Instead, institutions in a sociological sense, as used here, consist of formalized rules and less formalized norms defining appropriate behavior, as well as cultural beliefs and cognitive models, frames, and schemas encapsulating the often taken-for-granted assumptions and beliefs fundamental to guiding social action in different situations (Scott, 2014). In other words, *institutional arrangements*—sets of interrelated institutions—represent the structure of social systems that lend them their systemic form (Giddens, 1984). In a slightly narrower sense, institutional arrangements can be thought of as the “rules of the game” in a society (North, 1990), which enable and constrain the way resources are integrated and how value is both co-created and determined (Vargo & Akaka, 2012; Vargo & Lusch, 2016; Wieland, Koskela-Huotari & Vargo, 2016).

The metatheoretical framework of S-D logic not only accommodates institutional arrangements; their coordinating role is essential for a deeper understanding of the value co-creating processes. Both the systemic and institutional orientation of S-D logic are encapsulated in the concept of *service ecosystems*, defined as “relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange” (Vargo & Lusch, 2016, pp. 10–11). The term ecosystem in the service ecosystems perspective is used because it denotes actor–environmental interaction and energy flow (Vargo & Lusch, 2016). In *service ecosystems* this energy flow is understood in terms of reciprocal service provision. A society can be seen as a service ecosystem or, more finely grained, as comprising nested and overlapping service ecosystems (Lusch & Vargo, 2014; Vargo & Lusch, 2011, 2016), which in turn are composed of assemblages and sub-assemblages of resource-integrating, service-exchanging actors that constrain and coordinate themselves through institutional arrangements (Vargo & Lusch, 2016).

For analytical purposes, these structural assemblages can be viewed at various levels of aggregation (Vargo & Lusch, 2017), sometimes identified as “micro,” “meso,” and “macro” (Chandler & Vargo, 2011). Previous S-D logic research tends to place individual and dyadic structures and activities at the micro level; midrange structures and activities, such as an industry and a brand community, at the meso level; and broader structures and activities, such as states, at the macro level (Chandler & Vargo, 2011; Lusch & Vargo, 2014). However, it should be understood that ‘levels’ connote relative perspectives, rather than absolute associations. One advantage of having a multilevel (of aggregation) systemic understanding of value co-creation is that one can take advantage of “oscillating foci” (Chandler & Vargo, 2011), which facilitates understanding of the connectedness and contextualization of value co-creation, in a manner that is not otherwise possible.

The five axioms of S-D logic

As discussed, S-D logic offers a framework of value co-creation that is applicable at all levels of aggregation. In terms of its level of abstraction, this framework can be described as metatheoretical; that is, it resides at a rather high level of abstraction (see Vargo & Lusch, 2017 for a more detailed discussion of levels of abstraction). Although there is recent and

ongoing work in this research stream targeted at more specific midrange theoretical developments (e.g. Storbacka, Brodie, Böhmman, Maglio & Nenonen, 2016), the primary focus of S-D logic to date has been to build its metatheoretical framework (Vargo & Lusch, 2016). This framework is captured in five axioms, some of which are implied in the above discussion, that are elaborated in the following sections.

Axiom 1: service is the fundamental basis of exchange

To understand the meaning of Axiom 1 ‘Service is the fundamental basis of exchange,’ it is important to recognize that S-D logic represents a shift in the *underlying logic of exchange*, rather than a shift in the emphasis of the type of output that is under investigation. This shift of logic is achieved by introducing a processual conceptualization of *service* (singular)—the application of resources for the benefit of another—as the basis of exchange (Vargo & Lusch, 2004, 2008). In other words, the concept of service focuses on the *process of serving* rather than on a type of output, such as “services” (plural) or intangible goods. Consequently, S-D logic is not about making services more important than goods, but rather about transcending the two types of outputs through a common denominator—service, a process.

With the help of this processual conceptualization of the basis of exchange, exchange can be understood as actors applying their competencies to provide service for others and reciprocally receiving a similar kind of service (others’ applied competencies or money as ‘rights’ for future competencies) in return. However, direct service exchange is often masked by indirect service exchange, which refers to providing service not in person but through a good (i.e., vehicle for service provision) or monetary currency (i.e., rights for future service). These indirect forms of service exchange are also part of the processual understanding of exchange as service and, therefore, the concept of service exchange in S-D logic is not tied to the distinct moments of direct physical interaction among people (Vargo, 2008) as is the case in the conventional literature on services (Lovelock, 1983; Zeithaml, Parasuraman & Berry, 1985).

Axiom 2: value is co-created by multiple actors, always including the beneficiary

As discussed, S-D logic not only reframes the nature of exchange, but also its purpose. Whereas G-D logic would consider the purpose of exchange to be firm profit, S-D logic argues that the purpose is value co-creation. When S-D logic talks about *value*, it does not refer to profit or the worth of something. Instead, value is broadly defined as “an emergent, positively or negatively valenced change in the well-being or viability of a particular system/actor” (Vargo & Lusch, 2018, p. 740).

S-D logic’s conceptualization of the process of value creation also significantly differs from the linear and sequential creation and destruction of value emphasized in G-D logic (Wieland et al., 2016). Rather than placing the firm as the primary value creator and focusing on the value-contributing activities among two actors (usually a firm and a customer), S-D logic argues for the existence of more complex and dynamic exchange systems within which value co-creation occurs at the intersections of activities of providers, beneficiaries, and other actors (Vargo & Lusch, 2011; Wieland et al., 2012). In this view, for value co-creation to occur, there must be integration of the beneficiary actor’s resources with those applied by the service provider and others. All of this, in turn, implies that every time value emerges as a result of resource integration, it is always co-created by multiple actors.

To conceptualize the configurations of actors involved in value co-creation, the concept of *service ecosystem* was introduced in S-D logic (Lusch & Vargo, 2014; Vargo & Lusch, 2011). The service ecosystems perspective is a systemic view on value co-creation in which the activities of resource-integrating actors, preceding a specific instance of value determination by an actor, are seen as part of the value co-creation process. In other words, the service ecosystem perspective emphasizes that value creation does not just take place through the activities of a single actor (e.g. customer) or between a firm and its customers, but that value unfolds over time among a whole host of actors.

Axiom 3: all social and economic actors are resource integrators

As explained, S-D logic argues that all actors provide service (apply resources for the benefit of others) to receive similar service from others (other actors applying their resources) in the process of co-creating value (Vargo & Lusch, 2011). This means that all actors are both providers and beneficiaries of service and that the activities and characteristics of actors are not fundamentally dichotomous, as implied by the conceptual division of economic actors into producers and consumers. Hence, Axiom 3 'All social and economic actors are resource integrators,' with Axiom 1, implies the unrestricted, A2A orientation as previously discussed.

In addition to reframing the actors taking part in resource integration, S-D logic also implies changes in the way resources are understood. Resources, in S-D logic, are viewed "as anything, tangible or intangible, internal or external, operand or operant, an actor can draw on for increased viability" (Lusch & Vargo, 2014, p. 121, emphasis in original). The literature regarding resources in S-D logic recognizes that two broad types of resources are being integrated (Vargo & Lusch, 2004). *Operand resources*, such as natural resources, require action taken upon them to be valuable. *Operant resources*, such as knowledge and skills, are capable of acting on other resources to contribute to value creation. Aligned with many of the resource-based views (Barney, 1991; Penrose, 2009), S-D logic emphasizes the primacy of operant resources over operand resources in value co-creation. In other words, although operand resources often contribute to the co-creation of value, without the application of operant resources, such as knowledge, skills, and competencies, value co-creation does not occur (Vargo & Lusch, 2004).

It is important to understand that, in S-D logic, potential resources are realized in the context and through the application of other resources. In other words, *resources are not, they become* (De Gregori, 1987; Vargo & Lusch, 2004). This means that resources such as knowledge and skills, and the availability of other resources, determine the *resourceness* of potential resources (Koskela-Huotari & Vargo, 2016; Lusch & Vargo, 2014). Consider, for example, fire: the resourceness of fire only became available for humans once the knowledge and skills to control and apply fire for specific purposes were developed. Hence, potential resources become resources, when appraised and acted on through integration with other potential resources.

Axiom 4: value is always uniquely and phenomenologically determined by the beneficiary

As stated in S-D logic, value is considered to be an emergent outcome of the resource integration that maintains or increases the well-being of a particular actor. This value is phenomenologically determined by each actor in their (social) context (Chandler & Vargo, 2011; Edvardsson, Tronvoll & Gruber, 2011; Vargo & Lusch, 2008). This means that value is

perceived experientially and differently by diverse actors in varying contexts, and that each instance of value co-creation can have multiple possible assessments, including negatively valenced ones (Vargo, Akaka & Vaughan, 2017).

The contextual and phenomenological nature of value determination should not, however, be confused with randomness or naive subjectivism. Instead, S-D logic argues that value determination, like value co-creation, is guided by social structure and the complex constellations of institutional arrangements influencing actors (Sitaloppi, Koskela-Huotari & Vargo, 2016; Vargo & Lusch, 2016). In other words, “value-in-context suggests that value is not only always cocreated; it is contingent on the integration of other resources and actors” (Lusch & Vargo, 2014, p. 23). The systemic and institutional conceptualization of value enables the reconciliation of value-in-use and value-in-exchange because it provides the means for considering how various aspects of value are informed by institutional arrangements both in use and in exchange (cf., Vargo et al., 2017).

Axiom 5: value co-creation is coordinated through actor-generated institutions and institutional arrangements

The need to articulate more clearly the mechanisms that enable and constrain the often massive-scale cooperation involved in value co-creation was made apparent by S-D logic’s movement toward a systems orientation and, more specifically, the introduction of the service ecosystems perspective discussed earlier in this chapter (Vargo & Lusch, 2011, 2016). Hence, Axiom 5, ‘value co-creation is coordinated through actor-generated institutions and institutional arrangements,’ was added to emphasize the importance of institutions. Institutions are the “regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (Scott, 2014, p. 56). They play a central role in value co-creation as they enable actors to accomplish an ever-increasing level of collaboration under time and cognitive constraints (Vargo & Lusch, 2016). This is because institutions allow actors to perform important operations without thinking about them (Simon, 1996; Whitehead, 1911). When shared, institutions result in a network effect that enables growing returns as the potential coordination benefit to all actors increases.

Within the value co-creation narrative of S-D logic, institutions take on an expanded role and provide the building blocks for the increasingly complex and interrelated resource-integration activities in nested and overlapping ecosystems organized around shared purposes (Vargo & Lusch, 2016). Hence, value in S-D logic is informed by the institutional arrangements guiding actors’ resource-integration processes. This view on value draws on the studies viewing value as an experience (Prahalad & Ramaswamy, 2004), but extends the understanding of the context of experience to consider the contributions and influence of multiple actors and other resources involved in deriving and determining value (Akaka, Vargo & Lusch, 2013). Institutional arrangements not only coordinate the process of value co-creation among multiple actors, but also provide criteria for value determination (cf., Friedland & Alford, 1991).

S-D logic and related perspectives: similarities and differences

As S-D logic has evolved, a few seemingly similar perspectives have also been proffered. Among them are *service logic*, *customer-dominant logic*, and *service science*. All of these perspectives share common goals of exposing the limitations of G-D logic and the desire to capture the underlying logic of exchange and value creation. At first glance, they might seem very similar, and some scholars have even used them interchangeably. They do, however, have

significant differences in their foundational assumptions and focus. Therefore, it is important to understand how S-D logic is different from these related perspectives.

Most notably, the perspectives differ in terms of how they conceptualize value and which actors are taken as the focal actors under study. All of the four perspectives significantly differ from G-D logic, which conceptualizes the outcome of value creation primarily in terms of value-in-exchange (i.e., the price of something) and considers the firm as the single active actor in the value-creation process. However, the four perspectives differ from each other in terms of whether they conceptualize the outcome of the value-creation process as value-in-use or value-in-context¹ and whether they view one, two, or more actors as 'central' in the value-creation process. Figure 1.1 shows the varying scope of these perspectives, S-D logic being the most expansive and holistic in that it accommodates all of the conceptualizations of value and different focal actors in value co-creation, incorporating the other perspectives as special, restricted perspectives.

As discussed, S-D logic's metatheoretical framework has evolved into a narrative explaining how the co-creation value-in-context occurs in multi-actor configurations conceptualized as service ecosystems. According to this narrative, each actor participating in the focal

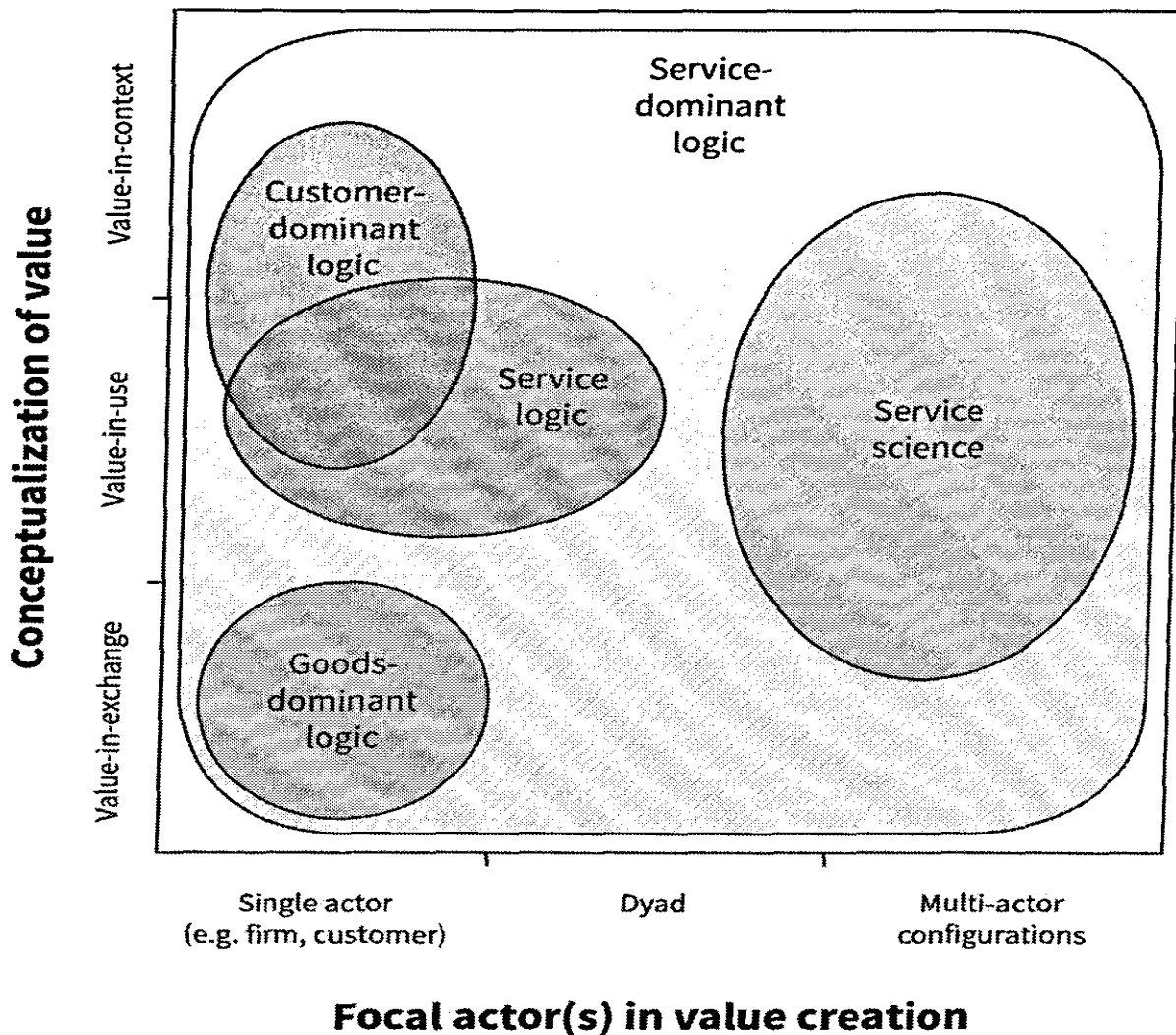


Figure 1.1 Comparing the conceptualization of value and focal actors of S-D logic and related perspectives.

exchange system creates and experiences value (positive or negative) guided by (partially) shared institutional arrangements that make up the context for joint value creation. Within this systemic understanding of value co-creation, perspectives such as service logic and customer-dominant logic, in which the views of the focal actors are more limited, can be seen as special, restricted cases of the more general S-D logic narrative. In other words, it is possible to *zoom in* to examine specific actors and their institutionalized roles and activities within value creation. However, S-D logic also advocates the importance of zooming out to understand the roles of other actors, as well as the institutional contexts of their actions. By elaborating the role of goods as an indirect form of service exchange, S-D logic can also accommodate something like a ‘goods logic’ to the extent that tangible outputs as service vehicles are included in exchange as a special case, but not seen as the foundational and therefore dominant basis of exchange.

Furthermore, the generalizable conceptualization of value-in-context in S-D logic makes it possible to *zoom in* to focus on specific institutionalized ways of determining value, such as value-in-exchange in which actors try to make sense of the (potential) value outcomes by giving monetary labels to them, or value-in-use in which the (potential) value outcomes are expressed in terms of the nature of the benefits that result as resources are integrated to accomplish a specific desired end. In other words, other perspectives using either a value-in-exchange and value-in-use conceptualization of value can be seen as special cases of S-D logic, which employs a more generalizable value-in-context conceptualization. Against this backdrop, the differences between S-D logic and service logic, customer-dominant logic and service science are discussed in more detail below.

Service logic

Service logic is discussed in a stream of literature that has stemmed from the criticism of Christian Grönroos (2008) toward S-D logic; he argues that S-D logic does not fully support an understanding of value creation and co-creation in a way that is meaningful for theoretical development and decision-making in business and marketing practice. Similar to the initial developments in S-D logic, service logic builds on the value-in-use conceptualization of value, which implies that value unfolds as customers use resources that they have purchased (Grönroos, 2008, 2011). Whereas S-D logic more explicitly advocates balanced centrality (Gummesson, 2008) and builds a contextual conception of value, service logic maintains the view of value as utility experienced by the customer. More specifically, service logic argues that “value is created by the user for the user” and that “the customer as the user and integrator of resources is a value creator” (Grönroos, 2011, p. 288). As the locus of value creation is viewed at the customer’s end, the role of the service provider in service logic is not that of a value co-creator as S-D logic would argue, but rather that of a “value facilitator” (Grönroos, 2008, p. 307) with value solely created by the customer. Service logic views value as co-created only in select instances, specifically those in which there is direct, personal interaction between the provider and the beneficiary (Grönroos & Voima, 2013). Thus, although service logic theorizes about value creation between two actors (i.e., a dyad), the default position is more restricted, because the firm-centric view on value creation inherent in G-D logic is essentially replaced by one in which the customer is the sole, central actor. In doing so, service logic effectively replaces one central actor, the firm, with another, the customer.

Due to the strong focus on the dyad of the firm and the customer to conceptualize value creation, service logic has criticized S-D logic’s systemic conceptualization of value co-creation on the grounds that it has overstated the extent of value co-creation (see e.g. Grönroos, 2011;

Grönroos & Voima, 2013). However, one could argue that, even in Grönroos and Voima's (2013) view of value creation, multiple actors are needed to enable each other's value-creation processes and, therefore, 'sole' value creation is not possible without narrowing the analysis of the process to only the activities performed by the customer. To break free from both of these restricted models, S-D logic argues that value creation does not simply take place through the activities of a single actor (e.g. customer) or between a firm and its customers but among a whole host of actors. Hence, in S-D logic, value is conceptualized as unfolding and influenced, over time, by a host of activities of various resource-integrating actors, both prior to and during a specific instance of value determination. In other words, interactions between actors separated by time and space are as much part of the systemic understanding of value co-creation as interactions occurring in person at one particular point in time and space. As stated, S-D logic therefore encourages zooming out to see the related, direct and indirect, activities of a full range of actors, as well as zooming in to see the activities of single actors in context. From this perspective, the conceptual difference between 'co-create' and 'facilitate' emphasized in service logic becomes questionable (Vargo & Lusch, 2016). The limited focus on one or two actors (customer and firm) can be seen as a very restricted view of the more general, systemic understanding of value co-creation.

Customer-dominant logic

Around the same time that the first service logic articles were published, another perspective was brought forward that was positioned as a customer-based approach to service (Heinonen et al., 2010; Heinonen, Strandvik & Voima, 2013). More specifically, this resulting perspective, called customer-dominant logic, "is a marketing and business perspective dominated by customer-related aspects instead of products, service, systems, costs or growth" (Heinonen & Strandvik, 2015, p. 472). Customer-dominant logic focuses on "value formation," by which customers interpret an offering (what a provider sells) in use in their everyday lives (Heinonen et al., 2013) coming rather close to the initial S-D logic understanding of value-in-context (Vargo et al., 2008), albeit with a single-actor interpretation. However, although customer-dominant logic recognizes two distinct processes of value formation, the customer's and the provider's, it emphasizes that the customer is in control in service situations and that managers should work to see through the lens of the customer (Heinonen & Strandvik, 2015).

In the initial customer-dominant logic article, Heinonen et al. (2010, p. 532) argued that even though S-D logic had widened the scope of marketing, it was still very production focused and "service provider-dominant" rather than "customer-dominant." This view has been maintained, more recently, by Heinonen and Strandvik (2015). The justification for this interpretation seems to be the S-D logic starting point, which includes the service provider in the value-creation equation. However, it ignores that S-D logic also recognizes, in any given value (co)creation occasion, that the beneficiary (e.g. customer) is the primary resource-integrating actor (Lusch, Vargo & O'Brien, 2007) and always the focal actor in value determination (Vargo & Lusch, 2008, 2016). Even more generally, it ignores the reciprocal nature of service provision in exchange (Vargo & Lusch, 2004) as well as the A2A orientation (Vargo & Lusch, 2011) of S-D logic, which sees all actors, simultaneously, as both service providers and beneficiaries. This means that, although the beneficiary's role in value determination is highlighted, it does not make S-D logic customer-centric (or provider-centric), as all actors are beneficiaries that determine value outcomes for themselves. Calling out one actor as "central" is not aligned with the systemic view of value co-creation within S-D logic. In short, S-D logic is inclusive of all actors involved in value co-creation, rather than limited by a more restricted view of the activities of a single party that

determines value in a specific context. Arguably, it is also difficult to see what customer-dominant logic adds that is not already present in the market orientation and similar customer-focused orientations (e.g. Deshpande, Farley & Webster, 1993; Kohli & Jaworski, 1990).

Service science

A third related perspective to S-D logic is service science. Service science is “the study of service systems, which are dynamic value co-creation configurations of resources (people, technology, organizations and shared information)” (Maglio & Spohrer, 2008, p. 18). It differs from the other two perspectives discussed in that its philosophical underpinnings are directly drawn from S-D logic (Maglio & Spohrer, 2008; Maglio, Vargo, Caswell & Spohrer, 2009) and therefore it is much more closely aligned with S-D logic in terms of the two dimensions highlighted in Figure 1.1.

The connection between S-D logic and service science has been further extended as the concept of a service ecosystem was introduced to S-D logic (Vargo & Lusch, 2011). A service system in service science is defined as “a configuration of people, technologies and other resources that interact with other service systems to create mutual value” (Maglio et al., 2009). In other words, the unit of analysis in value creation according to service science is multi-actor configurations similar to those in S-D logic.

In its service ecosystems perspective, S-D logic advances the understanding of how socially constructed institutions, such as norms and meanings, mediate value co-creation (Vargo & Akaka, 2012; Vargo & Lusch, 2016). Spohrer and Maglio (2010, p. 159), on the other hand, emphasize the importance of socially constructed meaning in service systems and highlight the way in which “symbols guide both internal behavior and mediate interactions with other entities.” As such, service science is closely aligned with S-D logic’s institutional turn in understanding how value co-creation and the determination of value-in-context is coordinated. Recently, works drawing on the service ecosystems view have highlighted the importance of institutions as central drivers of the actions and interactions that enable innovation (Siltaloppi et al., 2016; Vargo, Wieland & Akaka, 2015). As innovation is one of the focal phenomena service science aims to further explain, an institutional turn opens up many opportunities for advancing service science and extending its conceptualization of value(-in-context) (Akaka, Koskela-Huotari & Vargo, 2019). Generally, however, the differences between S-D logic and service science should be seen in terms of emphasis rather than underlying philosophy. Thus, even the apparent differences are typically easily reconciled.

Applications and implications of S-D logic

As discussed throughout this chapter, S-D logic is evolving toward a general theory of value co-creation as the purpose of society (Vargo & Lusch, 2017), not simply for a particular subset of social activities studied by marketing or service scholars. Rather, S-D logic’s metatheoretical framework offers a transcendent perspective that is broadly applicable across sectors, contexts, and disciplines. This section first gives an overview of vectors of ‘diffusion’ in service, marketing, and other research streams according to S-D logic, to highlight its applicability to a broad range of phenomena and disciplinary interests. Second, the chapter discusses how S-D logic and its service ecosystem view can contribute to advancing and expanding the scope of service research by outlining three characteristics of the metatheoretical framework and examples of their implications.

Applications of S-D logic

Along with the development of a more robust narrative, the axioms of S-D logic have been widely applied across a broad range of research streams and disciplines. For a more detailed description of vectors of diffusion in S-D logic, see Vargo and Lusch (2017). In the following section, examples of application areas of S-D logic in service, marketing, and other research streams are highlighted.

Service research

As a service-centered perspective on exchange, S-D logic has direct applicability across the areas of service research. Through the evolution of its overarching framework, S-D logic has helped to advance the conceptualization of a number of concepts and discussions in service research, such as *service innovation* (e.g. Lusch & Nambisan, 2015; Michel, Brown & Gallan, 2008), *service design* (e.g. Kimbell, 2011; Wetter-Edman, Vink & Blomkvist, 2018), *servicescape* (Akaka & Vargo, 2015; Nilsson & Ballantyne, 2014), and *customer engagement* (e.g. Brodie, Hollebeek, Juric & Ilic, 2011; Hollebeek, Srivastava & Chen, 2019). More generally, highlighting S-D logic's transcending view of service as a perspective, rather than focusing on services as a context of direct exchange, significantly extends the scope of service research from a narrow focus on business contexts where intangible outputs are sold, to exploring value co-creation processes in a variety of contexts in which exchange, regardless of the type of the exchange output, occurs. By elevating service research from something defined by an economic sector or specialized context, S-D logic also enhances the relevance of service research for marketing and many other disciplines.

Marketing

The metatheoretical framework of S-D logic has been used to inform a variety of research areas within marketing and is increasingly helping to guide the development of a general theory of the market. S-D logic has been taken up across many sub-disciplines of marketing, including *branding* (e.g. Halliday, 2016; Merz, He & Vargo, 2009), *supply chains* (Flint & Mentzer, 2006; Tokman & Beitelspacher, 2011), *consumer culture* (e.g. Arnould, 2007; Schau, Muñiz & Arnould, 2009), and *social marketing* (e.g. Luca, Hibbert & McDonald, 2015; Russell-Bennett, Wood & Previte, 2013). The most recent application areas also include *business models* (Wieland, Hartmann & Vargo, 2017) and *sales* (Hartmann, Wieland & Vargo, 2018). Traditionally, marketing has been understood as a small sub-domain of economics and business, focused narrowly on the techniques of the marketing department of a firm. S-D logic suggests, instead, that marketing should be understood as the study of value co-creation through markets, broadly applicable to economics, business, and society at large.

Other disciplines and research streams

S-D logic is evolving toward a general theory of value co-creation as the purpose of society, not simply for a particular subset of social activities (Vargo & Lusch, 2017). As it evolves, S-D logic is building a unified lexicon and systemic understanding of value co-creation that is broadly applicable across sectors and contexts. Already, S-D logic has informed and supported theorization in many disciplines and research streams outside of the traditional boundaries of service research and marketing, including: *engineering* (e.g. Isaksson, Larsson & Rönnbäck, 2009; Meier, Völker & Funke, 2011), *information systems* (e.g. Alter, 2010; Yan, Ye, Wang & Hua, 2010),

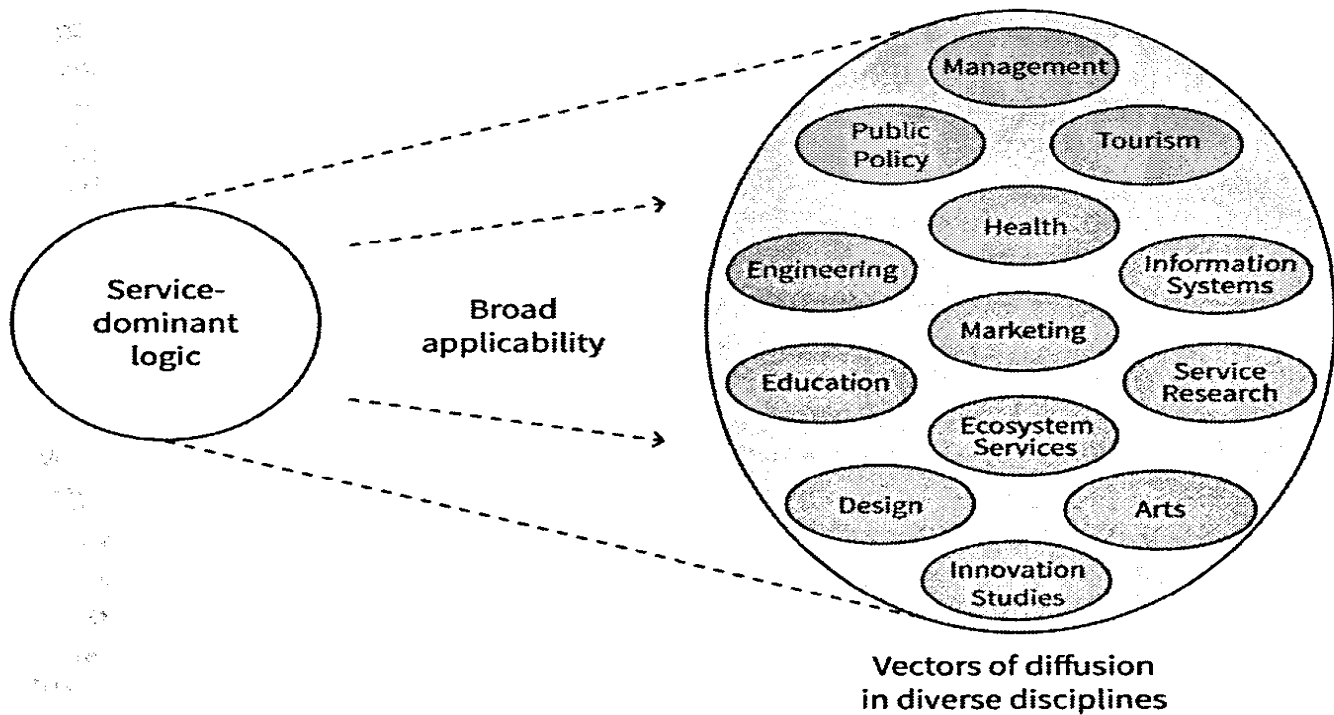


Figure 1.2 The broad applicability of S-D logic and existing vectors of diffusion in diverse disciplines.

tourism (e.g. FitzPatrick, Davey, Muller & Davey, 2013; Shaw, Bailey & Williams, 2011), *management* (e.g. Pels, 2012; Subramony & Pugh, 2015), *health* (e.g. Hardyman, Daunt & Kitchener, 2015; Rehman, Dean & Pires, 2012), *arts philosophy and creative industries* (e.g. Boorsma, 2006; Hearn, Roodhouse & Blakey, 2007), *design* (e.g. Chen & Vargo, 2010; Kimbell, 2011), *ecosystem services* (Matthies et al., 2016), *innovation studies* (e.g. Michel et al., 2008; Vargo et al., 2015), *public policy and administration* (e.g. Osborne, Radnor & Nasi, 2013), and *education* (e.g. Jarvis, Halvorson, Sadeque & Johnston, 2014). Figure 1.2 shows the broad applicability of S-D logic and existing vectors of diffusion within these different disciplines (for more details, see Vargo & Lusch, 2017). The application of S-D logic brings a unifying service perspective that enables the development of novel insights about the co-creation of value and supporting systems within these diverse research streams.

Implications of applying S-D logic

In addition to the axioms, S-D logic offers scholars and practitioners a mind-set that can help them to create parsimony amid complexity as well as to reconceptualize traditional concepts and develop new ones (Koskela-Huotari & Vargo, 2018). The next section describes some of the characteristics of the S-D logic mind-set and their implications for areas of service research, with support from illustrative examples.

Transcendence

The application of an S-D logic mind-set involves transcendence, that is, the reconciliation of some of the tensions and paradoxes within existing ways of thinking. Transcendence often

involves creating higher-order abstractions that accommodate a broad range of specific phenomena. One central act of transcendence in S-D logic was the conceptualization of service (singular) that reconciled the dichotomy between goods and 'services' within G-D logic. Another example of this transcendent conceptualization can be found in the application of S-D logic to divergent discussions on the concept of innovation. Through the application of S-D logic, a conceptual inversion was made from a focus on innovation as output exchanged within a dyad (Michel et al., 2008), to innovation as new processes of value co-creation for multiple actors (Lusch & Nambisan, 2015). This inversion enabled the development of an overarching conceptualization of innovation as a process of changing the institutional arrangements guiding actors' integration of resources (Vargo et al., 2015). In doing so, the application of S-D logic offered a unifying perspective on innovation that includes both technical and nontechnical activities (Akaka, Vargo & Wieland, 2017). In addition, scholars have also begun applying S-D logic as a means to build a transcendent view that spans across human and natural systems (Matthies et al., 2016). In this space, S-D logic offers an alternative service-based view of ecosystems that may help to reconcile differences across living systems.

Accommodation

S-D logic is an accommodating mind-set that is capable of reconciling and synthesizing insights from various research streams. In fact, since its inception, S-D logic has built on the evolving literature across diverse research streams, as well as on shifting industry practices. As a metatheoretical framework, S-D logic is open to additional sources of input that align with its processual, systemic, and institutional orientation. Important sources of input include: institutional theory, practice theory, systems theory, complexity theory, and evolutionary theory (Vargo & Lusch, 2017). As S-D logic continues its development, it encourages input and ideas from other aligned research streams.

More generally, because of S-D logic's metatheoretical orientation and its arguably cohesive, explanatory narrative, S-D logic lends itself to simultaneous conceptual reconciliation across a wide array of other theoretical frameworks dealing with various aspects of network and system behaviors, governance, institutional processes, value creation, and similar phenomena. This, in turn, potentially affords the facilitation of cross-fertilization and interdisciplinary research, as well as practical application. For example, in discussions related to service design, a S-D logic mind-set has been used to integrate insights from design, pragmatism, and institutional theory to build a better understanding of how the embodied experiences of actors can trigger institutional work in service ecosystems (Wetter-Edman et al., 2018).

Likewise, because it is accommodating, S-D logic can also lend itself as a metatheoretical framework to interdisciplinary research areas, such as sustainability. Within S-D logic, value is understood in terms of well-being and the viability or survivability of the system (Vargo & Lusch, 2018). With that understanding, a general theory of value co-creation is of fundamental relevance to discourse about environmental and social sustainability. Through integration of other institutional and ecosystems theories, such as common resource governance (Ostrom, 1990), panarchy cycles (Gunderson & Holling, 2002), or autopoiesis (Maturana & Varela, 1980), S-D logic could aid in building a conceptual framework that supports the self-adjustment of service ecosystems in a way that acknowledges global resource limitations and the implications of climate change. Similarly, there have been preliminary links made between S-D logic and Corporate Social Responsibility (e.g. Enquist, Edvardsson & Petros Sebhatu, 2008), and there are promising opportunities for advancing this discussion through a service ecosystem view.

Transformation

Application of the S-D logic mind-set supports transformation in the sense that it allows new insights that were not previously possible. S-D logic not only provides a means of problematizing underlying assumptions within G-D logic, but also offers an alternative perspective that can help generate new and interesting conceptual and practical developments. For example, inspired by S-D logic, there is an evolving research agenda for a “public-service dominant” approach in the field of public administration (Osborne et al., 2013). Furthermore, when S-D logic’s service ecosystems perspective is applied to the domain of public policy and administration, it shifts the focus from delivering services (direct exchange) to coordinating actors’ value co-creation activities across levels of aggregation to address public concerns (Trischler & Charles, 2019).

As such, S-D logic provides a more holistic and systemic view of the role of government in shaping institutional arrangements, well beyond the traditional role of establishing legislation and providing services. Building on Scott’s (2014) three pillars of institutions—regulative, normative and cultural-cognitive – the role of governments is expanded outside the limits of existing notions of policy to include all of the informal, taken-for-granted social structures guiding actors’ integration of resources. In the case of public healthcare, for example, the application of S-D logic highlights the importance of governments shifting away from a dominant focus on contexts of direct exchanges, such as hospital services, toward shaping the institutional arrangements that influence how actors co-create well-being in their everyday lives (see e.g. Joiner & Lusch, 2016).

Conclusion

S-D logic argues that service—the process of using one’s resources for the benefit of another actor—rather than goods is the basis of exchange. This core insight has enabled the development of a metatheoretical framework that reframes both the nature of exchange and its purpose and has significant consequences to the way value creation is understood across various levels of aggregation. More specifically, S-D logic and its service ecosystems perspective offer a more holistic, dynamic, and systemic understanding of the co-creation of contextual value among a wide configuration of actors. Applying the S-D logic mind-set can help to enable transcendence, accommodation, and transformation in both practice and theory. With widespread diffusion in service research, marketing, and a growing number of other disciplines, S-D logic offers a fruitful platform for interdisciplinary research collaborations that illuminate taken-for-granted assumptions inherited from neoclassical economics and together work toward strengthening an alternative understanding of a society.

Note

- 1 ‘Value-in-context’ was originally introduced by Vargo et al. (2008) as a semantic improvement in relation to the more G-D logic-appropriate ‘value-in-use.’ However, over time, it has morphed into a more differentiated concept, emphasizing the contextual and systemic-specific nature of value.

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