Reconciling resource integration and value propositions – the dynamics of value co-creation

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Abstract

The progress of service-dominant logic and service science, and their expanding theoretical basis, has created ambiguities in relation to understanding the micro-foundations of value co-creation. Based on a conceptual analysis of resource integration and value proposing as the foundational practices of value co-creation, this article portrays value propositions as the co-created forms of shared resources and understanding, which constitutes service systems. This view is inherently socially constructed and perceives value propositions as institutionalized, taken-for-granted social structures that influence local instances of resource integration within and between service systems. Because of the idiosyncratic local contexts for resource integration, however, value propositions do not completely govern resource integration. Instead, they are reproduced and transformed through the local interactions they influence. This mutually constituting nature between value propositions and resource integration affects our understanding of stability and change, creating novel avenues for studying innovation on the basis of service science.

1. Introduction

Recent advances in service science and service-dominant logic provide a relational, service centered view to understanding value and value creation, in which value is co-created by actors collaboratively engaging in service-for-service exchange [1]. Thus, service is the fundamental unit of exchange, understood as the application of (mostly operant) resources for the benefit of another actor [see also 2, 3, 4]. This understanding also provides the basis for service science, seeking to develop a theory of services for better understanding innovation, efficiency and quality in service-centered economies [5, 6].

The micro-foundations of value co-creation are thus built on the application of operant resources for the benefit of other actors in the shared service system. Moreover, it is argued that value propositions link actors together [7], in a way that allows service systems, or actors, connect resources to co-create value with the service systems (actors) participating in the interactions [8]. At the same time, value propositions are considered entities actors can unilaterally create and offer, as opposed to value which is always co-created within and between service systems [1, 2].

These principles emphasize the interaction between service systems constituting on one hand of value propositions, and on the other, of sharing, applying, connecting, or integrating resources for reciprocal benefit. Although a growing body of research is contributing to our understanding of this micro-dynamics shared between service science and service-dominant logic, ambiguity exists in the ways these concepts are applied in the literature to understand the dynamics of value co-creation. For instance, some treat value propositions as more or less static promises offered by firms, which are either accepted or rejected by customers [6]. At the same time, others understand value propositions as co-created understandings that align actors’ contributions in a given network or system [9, 10]. Moreover, the recent developments toward social theories and structuration of markets mean that new theoretical ideas are entering the conceptual landscape within which service-dominant logic and service science operate [3, 11-13]. This calls for conceptual clarification on just what value propositions are, how they are created, how resource integration fits in and how these together constitute models of value co-creation that fit together with our empirical observations.

To this end, this article conceptually discusses value proposition and resource integration in the context of value co-creation, seeking to develop a consistent way of understanding these practices in between institutionalized structures of service.
ecosystems and the localized, subjective experiences of value-in-use (or value-in-context). As a result, the current work seeks to unify aspects of micro-level theorizing on service-dominant logic and service science to keep it in parallel with the advancing macro-level theorizing, and to allow understanding of both service provision and innovation through a shared, service-dominant logic lens.

2. Resources, resource integration and value co-creation

Service systems are dynamic value co-creation configurations of resources, including people, technology, organizations, and shared information, connected to each other internally and externally by value propositions [7]. As dynamic network structures, service systems are conceptualized as open systems capable of improving the state of another system through sharing or applying its resources, and reciprocally, capable of improving its own state by acquiring external resources [6]. Thus, “the normative function of service systems is to connect resources through value propositions with the aim of co-creating value for the service systems participating in the exchange of resources within and across systems” [8].

This basic understanding of service systems shares foundations and lexicon with service-dominant logic, which is considered as “philosophical foundation of service science” [5]. Expressed in 10 foundational premises, Vargo and Lusch [2] lay down their understanding of value co-creation and economic exchange. For understanding resource integration and value propositions, four fundamental premises are particularly relevant. First, firms (and any other actors) can only offer value propositions (FP7), meaning that any actor, or service system, cannot create value alone. Instead, they can only propose value co-creation opportunities for other actors, that is, offer their resources for value co-creation. In this sense, all value-proposing actors are resource integrators (FP9) [3]. Further, each actor determines his/her/its experience of value subjectively as value-in-context (FP10). Thus, actors or service systems (used interchangeably throughout this article) are interconnected in service systems in which value is always co-created (FP6), as actors access at least some of the necessary resources through these networks [see also 8].

Together, these definitions depict actors, or service systems, as entities that can create value only in interaction with others, whether direct or indirect. This value co-creation is based on the integration of resources, in which service systems apply their operant resources (i.e., knowledge and skills), and possible operand resources, for the benefit of others, and reciprocally access resources valuable to them through these interactions. Value propositions connect actors to integrating resources and creating new resources (and value). These interacting service systems are further connected to form a shared (eco)system, through which it is possible to understand how the creation of new resources constantly changes the context for subsequent resource integration [3, 11]. The reference to open systems in service science [6] captures this; service systems are not bound to (eco)systems of indefinite repetition, but because of their loosely coupled nature [3, 14], constantly evolve as a result of ongoing resource integration.

Thus, as actors engage in reciprocal exchange or integration of resources, they contribute to the density of other service systems [8]. Density, as defined by Normann [15], links to understanding value co-creation as a process of “unbundling, liquefying, and re(bundling)” existing resources in order to configure them for use by other service systems [8]. In this sense, density is a measure of “optimal” combination of resources integrated in a particular situation between particular service systems, which resonates with understanding value not only as value-in-use or value-in-context for a specific actor [2], but also as an improvement in the well-being of the system, potentially measurable in terms of the adaptiveness or fit of the system in its environment [6, 16].

In the light of this knowledge, resource integration captures the broad range of interactive behaviors in which an actor or a service system applies knowledge and skills, in conjunction with other available operant and operand resources, to improve the state of others, and reciprocally, the state of oneself. Verbs such as to apply, share, connect, integrate, and provide all capture parts of its essence, as expressed in previous paragraphs. In other words, by interacting actors can make each other better off if their resources leverage the outcomes of the resources of others [17]. Because of the dynamically evolving systems, the resources that become integrated are always defined by the context [11]. That is, the idiosyncratic situations in which resources are brought together, and the way their uses and limitations are understood, affect their “value” in that interaction.

3. Co-creating value propositions

Although resources are constructed by, and themselves construct contexts [11], the integration of
resources appears relatively straightforward – by interacting actors integrate resources with the potential of leveraging each others’ resources to co-create value. However, much more ambiguity surrounds the concept of value propositions. While they are perceived as a kind of glue that holds actors together in a social system, little in these definitions speaks of their qualities or of the internal dynamics that connect them to evolving systems that co-create value. For example, Maglio and colleagues [6: 400] suggest three main activities for value co-creation: (1) proposal (i.e., proposing a value co-creation interaction to another service system); (2) agreement (i.e., agreeing to the proposal); and (3) realization (i.e., realizing the proposal collaboratively). While the authors agree that proposals and agreements can be both formal and informal, and either defined, “singular” events or less defined collaborative processes, the model does not convey exactly how the value propositions link service systems together and constitute relationships between actors in a dynamic process. Instead, there appears to be an implicit tendency toward explaining static, exchange- or transaction-centered cases through the service-dominant or service science lens, which may be one reason for the lack of attention for the underlying dynamics of these interactions.

This emphasis may be due to the historical use and understanding of value propositions as a concept for understanding communication between firms and customers in marketing contexts. Even before the emergence of the service-dominant logic and its 7th foundational premise, research had considered value propositions important for firms in articulating the features and value of their offering both to their customers and themselves [e.g., 18]. After the emergence of service-dominant logic, however, two lines of thought have extended theorizing on value propositions from static to more dynamic and co-created entities: On the one hand, the context of value propositions expanded from the firm-customer dyad to a broader context of stakeholder networks that surround (focal) actors [9, 19]. On the other hand, value propositions transformed from static promises presented by some, and accepted or rejected by others, into dynamic concepts inherently co-created by involved actors [9, 10, 20, 21].

With regard to the first, Frow and Payne [9] see value propositions as mechanisms that align value in the network of actors and balance value co-creation opportunities within it. They suggest a model of five overlapping, interacting and iterative processes, through which actors are able to align value through the creation of value propositions. These five processes consist of (1) identifying stakeholders, (2) determining core values, (3) facilitating dialogue and knowledge sharing, (4) identifying value co-creation opportunities, and (5) co-creating (stakeholder) value propositions (ibid., p. 233).

While the element of interactivity is present in this model (the third process), and while the authors explicitly draw attention to its centrality in the co-creation of value propositions, their definition still captures a somewhat unilateral version of value propositions as “setting expectations of value-in-use” [9]. In other words, there is a strong element of aligning interests by becoming aware of your own interests and becoming able to communicate them to others, that is embedded in the concept. Thus, it echoes a dyadic negotiation of an agreement on the basis of which resources can be integrated (more efficiently/effectively), and lacks the systems dimension that allows us to understand value co-creation as the improvement in the viability of the system [6].

This brings us to the second advance in the literature. Central to understanding value propositions as co-creation processes is to understand social and economic activity as an ongoing process of “becoming”, in which actors come to realize the complementarity of their means, goals and interests in interaction with each other. In other words, as they integrate resources, actors or service systems come to share resources that include the rules for joint value co-creation. This process is inherently based on open and dialogue interaction, defined by Ballantyne and Varey [20] as one that enables learning or adapting together, as opposed to informative or communicative interactions that actors use to inform others (and become informed themselves). This dialogical view is thus naturally aligned with the relational view of service-dominant logic, providing grounds for portraying value propositions as constantly evolving, co-created constituents of network relationships. During these processes, actors develop new means, aims, and interests alongside the evolving relationship that enable improvements in the system beyond what is within the reach of informational, or exchange-centered value propositions [see also 22].

Such dialogical interaction can only evolve over a process that starts with actors proposing value co-creation informationally, that is, on the basis of value propositions they have developed unilaterally [10]. However, only dialogical interactions enable the evolution of the relationship (and the development of mutual trust) between actors, as it facilitates the sharing and creation of new knowledge interactively [20]. Following Vargo and Lusch [3], resource integration does not only create new resources, or
experiences of value in a functional sense, but also changes the underlying structure of the system (or relationship) itself. Using the concept of value alignment [9], the evolving relationship thus represents “better” alignment of resources (i.e., knowledge, skills, understanding, and operand resources) between the actors in the system, enabling them to address the shared problems or interests more efficiently or effectively [23-25]. What differentiates evolving relationships based on dialogue of interactions from those with static, unilateral value propositions is their reflexivity, which means that based on their experiences (of “value-in-use”) from each resource integration, actors are collaboratively able to envision and implement alternative courses of action that may improve the system [26].

Thus, the co-creation of value propositions can be understood as a gradual, inherently relational process during which the alignment between actors, or the value proposition, evolves and adapts to the contexts in which the actors integrate resources. This alignment, and value propositions therefore, can be understood as the measure of “potential” of the service system to co-create “optimal” value understood as the viability of the system [6, 16]. From the ecosystems perspective, this understanding of value propositions translates into a spatially and temporally expanding process over the course of which actors come to share (mostly operant) resources – as rules and resources – in ways that make the system as a whole, from the specific perspective of the particular action or solution in question, “better off” [3].

Our understanding of value propositions arrives at a point in which it becomes increasingly less meaningful to consider value proposing as only the unilateral starting points for value co-creation proposed by actors. While they may be locally conceptualized as the “agreed-upon” terms and conditions for a specific resource integration event, as is common to the earlier scholarly work, at the network level, their evolution and adaptation to the surrounding systems signifies much more relevant feature in considering the viability of the system [20]. Combined with the contextual nature of resources [11], it is also possible to argue that value propositions do not exist separately of the interactions that enact the shared resources that at locally contribute to co-creation of value.

4. Value propositions, service ecosystems and institutions

This increasingly networked view thus perceives value propositions as constantly shaped by actors engaging in resource integrations. From this perspective, the co-created value propositions form the conditions for the local, “here and now” resource integration that further shapes the value proposition, (itself an operant resource actors share in their interaction) in the specific context. Because each actor brings unique resources to value co-creation, and constantly integrates resources with those of others, service systems or contexts evolve dynamically, which subsequently shape future interactions [11].

Although this dynamic view appears to provide satisfying systems based understanding of value co-creation, it does not as such explain the routinization and stabilization of these systems and the value propositions that define them. In other words, the question we have not yet addressed is why there is so much observable stability in the value propositions and service systems that surround us? While an engineer would account much of this to constraints of natural laws and boundaries of human rationality (i.e., it becomes physically harder and harder to improve), the systems perspective evoked here also calls for understanding the social forces that habitualize behaviors and tie actors to the social rules and resources that are themselves the creations of repeated resource integrations in the network [12].

Considering value propositions as stabilized forms of behaviors and related mental models created and reproduced by local interactions can be best understood through the lens of social constructivism [12]. The fundamental idea is that the ways in which we behave in social situations, and interpret these situations, depends on our socialization into these systems and to their taken-for-granted cultures, norms and laws. In other words, what we understand, know and do are all contingent upon the systems that has produced these behaviors, and only make sense within them [27]. Systems themselves are also creations of social processes in which actors form mental models of each others’ behavior, which gradually habitualize into reciprocal expectations and patterns of behavior that govern and guide (inter)action in social situations. Thus, actors develop consensus of appropriate behaviors and attached meanings by interacting within a shared system. These institutionalized schemas or meanings – or value propositions understood from the perspective of social systems – then influence local interactions and value co-creation in the system. This is why Vargo and Lusch [3] define ecosystems as loosely coupled entities of shared institutional logics; actors constitute a system only through the resources or value propositions they share, giving resources and
value propositions an inherently socially constructed meaning.

Although institutional structures are often perceived as coercive forces that limit “free” agency, they are not to be considered as totalitarian forces under the influence of which human agency disappears. The loose coupling between service systems in the ecosystems view means that the feedback loops between structures and enacted behaviors are not closed but open to variation and evolution. Thus, although local actions are predisposed to reproducing the social rules and resources that govern the behavior [28], local interactions can also transform these governing structures [12]. From the ecosystems perspective, there are always transformational forces in play in the local interactions within and between service systems that have the potential to initiate and mediate system-level changes [29-32].

It is also important to understand that social structures constitute not only limiting rules, but also enabling resources for social behavior [28]. The existence of institutionalized value propositions allows us to recurrently build our daily resource integrations upon them and the common resources, or “alignment”, they represent. Thus, we are in many ways freed from the laborious processes of building trust and relationships that enable us to co-create value [20]. Furthermore, actors interact in the nexus of multiple ecosystems which provide them resources for constructing new value propositions and service systems in interaction with others. As a result, institutionalization of value propositions is central to freeing our resources and energies from day-to-day interactions for addressing current problems and aspirations by developing new value propositions that inevitably build on existing value propositions and service system configurations, but seek to improve the system beyond its current abilities.

Thus, the socially constructed nature of reality means that novelty, or innovation, is always recombinative rather than “radical” [28, 33], and constantly present in the collaborative integration of resources. At the ecosystem level, there is never “disruptive” change understood as instantaneous emergence of a new value proposition, but only diffusion of practices through local interactions in which the value propositions are shared and translated as a result of actors constantly (re)interpreting and applying them in practice [e.g., 34, 35]. This implies freedom for actors or service systems to create even in systems characterized by highly routinized behaviors [36], because the idiosyncratic contexts always introduce novelty in the enactment of situated practices that require actors to work to align their behaviors and understandings accordingly [11, 37]. This constant fluctuation in the collaborative (re)shaping of value propositions, which inherently relates to resolving the intersections of institutional logics or value propositions, creates the potential for broader, system-level changes. However, extant research in organizational theory shows how these processes are far from simple and comprehensively understood, meaning that the development of novel value propositions (i.e., innovation) is far from simple and straightforward [e.g., 31, 38, 39]

5. Summary & concluding remarks

In conclusion, this article set out to clarify the shared basis between service science and service dominant logic by conceptually exploring the central concepts of resource integration and value propositions that constitute the dynamics of value co-creation. The short conceptual analysis shows a gradual shift from exchange-based models towards relational understanding of value propositions as the social glue that defines service systems and their interactions in the context of larger ecosystems. Simultaneously, our theoretical understanding moves from models with linear processes with separate areas of value proposing and value realizing to structurated processes of co-creating value propositions. This introduces social forces into the model, which capture the institutionalization of value propositions, providing both rules and resources for value co-creation. Here, reflexive actors can contribute to changes in the social structures through their recurring resource integrations that, while being governed by, also produce, the surrounding social structures or value propositions.

Service systems co-create value propositions, and value, over sequences of local resource integration events that are by nature interactive. In other words, whenever service systems interact, they engage in resource integration. As stated by Vargo and Lusch [3]: “Service provision implies the ongoing combination of resources, through integration, and their application, driven by operant resources — the activities of actors” (p. 184). These interactions produce new resources that represent value (-in-context) in the situations they emerge, but also represent the shared value proposition between the actors understood as alignment or shared understanding, meaning and interpretation of the situation, and the resources contributing to the situation. Thus, value propositions capture not only “utilitarian” understandings of immediate “outputs” of resource integration, but (and more importantly)
also allow us to understand the “alignment” or shared meaning between actors that influences value co-creating behaviors more broadly in the system.

By combining insights from extant literature to understand resources, their integration and value propositions as constituents of value co-creation, this research offers promising avenues for advancing research on SSME and S-D logic. First, as Maglio and Spohrer [5] state, one of the core motives for service science is to develop more systematic understanding of service innovation by combining social perspectives to those of business and technology to explain the origins and growth of service systems, and to solve fundamental problems related to improving quality and efficiency. To this call, the current research provides an incremental but important notion that stability and change fundamentally stem from the same interactions in which actors share and apply resources to improve the state of others and their own [40]. Thus, every instance of integrating resource builds on preexisting value propositions (i.e., the rules and resources that constitute social structures) but simultaneously reproduces them and carries potential for transforming them [28]. What this means at a more aggregate level is that it makes little sense to seek comprehensive understanding of (service) innovation in the absence of stable and stabilizing processes inherent to service systems in question, and the social contexts that form and are formed by embedded and distributed agency [41].

Second, this article contributes to unifying some of the overlapping lexicons between SDL thought and other theories. The fundamental unit in value co-creation is resource integration, which is particularly relevant for understanding local, dyadic interactions and how value-in-context stems from the enactment of local value propositions realized in the interactive application of resources [1, 2, 4]. Over time, actors in a system co-develop these value propositions by enacting and transforming them recurrently in interaction with each other, reinforcing the structural dimension of value propositions. Empowered by the experiences from interactions, they come to understand the contexts, their resources and those of others, and the limitations and opportunities in more informed ways, which iteratively transform the value propositions and the resource integrations that stem from them.

6. References