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The interface of value creation and service process: A categorization of the relevant perspectives and an integrative framework

Hannu Makkonen

Abstract: The focal study considers the variety in recent perspectives on value and value creation in service as a stimulant to explicate and organize differences to build toward integrative understanding. The purpose of the study is to provide a categorization of the perspectives on value and value creation and to propose an integrative framework that illustrates how value, value creation, and the service process relate to each other. The study presents a conceptual analysis on the value creation and service literatures and employs the activity system model to structure relevant elements into an integrative research framework. The study contributes to the current understanding by defining and organizing the underpinning elements of value creation and service processes as well as explicating their mutual interface in the context of service systems. This aims to deliver conceptual clarity and a base for further research.

Keywords: Interactive value formation · Value co-creation · Service co-production · Service-dominant logic · Customer-dominant logic · Activity system model

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Introduction

For a long time, value and value creation have received particular attention from both academics and practitioners. A large variety of perspectives concerning value have been presented within marketing and management research (e.g., Zeithaml, 1988; Lapierre, 2000; Kothandaraman & Wilson, 2001; Anderson & Narus, 2004; Lindgreen & Wynstra, 2005; Menon *et al.*, 2005; Lindgreen *et al.*, 2012; La Rocca & Snehota, 2014). In service marketing, value and value creation have long been among both the central and most ill-defined concepts (see Carú & Cova, 2003; Khalifa, 2004; Grönroos & Voima, 2013). Currently, value and value creation play a central role in perspectives such as *service-dominant logic* (Vargo & Lusch, 2008), *service science* (Spohrer *et al.*, 2008), *service logic* (Grönroos, 2011), and *customer-dominant logic* (Heinonen *et al.*, 2010). These perspectives share a highly interactional and context-bound idea of value and underline the customer's active role in value creation. However, they also place various emphases on how value relates to the service process, what value actually comprises, who creates or co-creates value, and, if created, where this is to happen (Heinonen *et al.*, 2013).

This study considers the described variety in recent perspectives on value and value creation in the service setting as a stimulant to explicate and organize differences to build toward integrative understanding. *The purpose of the study is to provide a categorization of the perspectives on value and value creation and to propose an integrative framework that illustrates how value, value creation, and the service process relate to each other.* The paper contributes to the current understanding by defining the processes of value creation and the service process and their mutual interface both on the process as well as systems level. This aims to deliver conceptual clarity and a base for further research.

It seems that the very nature of value creation and service processes has not been systematically studied by applying methods or frameworks from general theories on action. Mostly, the respective arguments in the extant service literature either build on concepts and research within this very domain or are based on inherently general philosophical reasoning. Therefore, this paper applies activity theory (Vygotsky, 1978; Leontyev, 1978; Luria, 1976) and a specific framework thereof, the activity system model (ASM) (Engeström, 1987), to further understand these processes and to clarify their interface. The ASM comprises a general framework that is applicable for furthering understanding on activities and their interplay with the psychological, cultural, and institutional contexts. Due to its general nature and ability to connect individual action in its broader context, the ASM has been widely applied in many disciplines and various kinds of research settings, of which, for example, strategy research (see e.g., Jarzabkowski, 2003), inter-organizational network and relationship research (Håkansson & Prenkert, 2004) and innovation adoption and diffusion research (Makkonen & Johnston, 2014) are proximate to this study's subject area.

The paper is organized as follows. First, the value and value creation literature is presented, with the relevant research perspectives categorized into a matrix. This is followed by the introduction of the ASM, which is applied as a structure to

conceptualize the interface between value creation and the service process. On this basis an integrative framework of value creation and service processes is put forward. Finally, the study discusses and concludes implications on research and business practice.

Categorizing Value and Value Creation

The literature on value can be presented in terms of issues that consider: (a) its nature and dimensions; (b) the locus; and (c) the creation of value. This section begins by considering the nature and dimensions of value and the respective orientations on value creation and provides a categorization of perspectives on value and value creation. Next, perspectives that locate value and value creation with reference to the service process are considered in more detail.

A categorization of perspectives on value creation

Several approaches to the nature of value and its dimensions have been put forward that include, for example, the evaluation of benefits and sacrifices (see e.g., Menon *et al.*, 2005; Heinonen & Strandvik, 2009; Lapierre, 2000) or the means-ends analysis (Woodruff, 1997; Zeithaml, 1988; De Chernatony *et al.*, 2000). Simply put, these approaches consider value is created when benefits exceed sacrifices or when the desired ends have been reached (see Lindgreen *et al.*, 2012). Value is thus a subjective feeling or perception of being better off as a result of the service process, its outcomes, and contribution to the customer (Grönroos, 2008). These approaches consider value to be a cognitive perception (see Grönroos & Voima, 2013). However, they put forward very little on the locus or creation of value per se. In other words, how value emerges or associates with elements that are considered to provide benefits or that serve as a means by which to reach goals is largely implicit.

In regard to the locus and creation of value, a basic distinction can be drawn between the notions of value-in-exchange and value-in-use/value-in-context (see Vargo & Lusch, 2004; Grönroos, 2008). The relationship between the notions of value-in-use and value-in-context is undefined in the current literature; the concepts are used interchangeably to communicate that value is not loaded into an offering and then consumed through usage but is instead created as the beneficiary integrates the offering into its activities (see Holbrook, 1999; Strandvik *et al.*, 2012). This perspective on value is contrary to the notion of value-in-exchange according to which value is an element loaded into the exchanged products along the supplier's manufacturing processes and is exchanged in transaction for money (Grönroos, 2008). These notions seem to comprise a well-understood and shared analytical division among scholars, and thus, it is adopted here to form the vertical axis of the matrix depicted in Figure 1. The horizontal axis shows the dominant orientation on value creation: *process orientation* versus *systems orientation to value creation*. Accordingly, process oriented approaches refer to perspectives that focus on interactions and undertakings in regard to value creation rather than the contextual contingencies and dynamics of the settings

that contextualize value creation and that in turn comprise the key focus area of systems oriented approaches.

Fig.1: Categorization of perspectives on value creation

	Process orientation to value creation	Systems orientation to value creation
Value-in-use/ Value-in-context	Service marketing, Service logic	Service science
	Service-dominant logic Customer-dominant logic	
Value-in-exchange	Traditional linear value chain perspectives	
	Manufacturing/production orientation	Supply chain systems

The lower cells of the matrix in Figure 1 characterize approaches that consider value in its meaning of value-in-exchange. *Traditional manufacturing/production orientation* (i.e., lower-left cell) underlines the role of a sole supplier/manufacturer as the producer of value for the customer (see e.g., Lambert & Cooper, 2000; Kothandaraman & Wilson, 2001). In the same vein, *traditional linear value chain perspectives* describe the value-adding activities of interlinked value chain members that load value into the offering along the value chain in a sequential manner (see Porter, 1985; Rayport & Sviokla, 1995; Evans & Berman, 2001). Both these perspectives have a processual orientation rather than a systems orientation. Despite traditional linear value chain perspectives feature systems characteristics in terms of multiple actors engaged in the value creation process the relationships or coordination measures between the actors are not in explicit focus. Thus these actors are not first of all viewed as a system, but rather they represent sequential spot-markets in terms of the process that flows through them and on which most of the focus is laid. For these reasons the position of these perspectives is located largely on the processual side of the matrix in Figure 1.

The perspectives on supply chains have evolved from the process orientation toward the systems orientation through their explicit consideration of cooperation and coordination mechanisms for the performance of the whole supply chain (Mentzer & Grundlach, 2010; Burgess, Singh, & Koroglu, 2006). Thus, these considerations focus on *supply chain systems* (Li and Wang, 2007) of various actions and structures that comprise the total value creation process as well as its management within and

between the companies. Despite the process- or systems-focus, all of the perspectives in the bottom of Figure 1 focus on value-in-exchange as they perceive the supplier as dominating and conducting the value creation.

The upper cells of Figure 1 (i.e., shaded areas) comprise perspectives that conceptualize value in terms of the value-in-use/value-in-context notions and the value creation with reference to active supplier-customer interaction. These approaches consider the traditional term “manufacturing process” in terms of the service process that refers to interlinked and interactive processes of service production and usage. A notable difference between the perspectives of value-in-exchange and value-in-use/value-in-context lies in the idea of system openness and the identifiableness of the actors. Whereas the value-in-exchange perspectives define a clear-cut process of sequential transactions between largely identifiable counterparts the value-in-use/value-in-context perspectives go beyond the processes of exchange. Here, various interactions take place not only within a customer-supplier dyad or defined value net but with reference to various identifiable and non-identifiable actors, usage situations, norms, and rules that altogether guide the service process and thus value creation. In other words, value is a function of the offering and its usage; that is, offerings are integrated into the customer’s contexts and usage processes where value is actualized. Despite the shared idea in regard to the nature of value being value-in-use/value-in-context in the approaches described at the top of Figure 1, the idea of value creation varies between the approaches as described in the framework and discussed in the next section.

The process and systems orientation on creation of value-in-use/value-in-context

The traditional service marketing approach (e.g., Grönroos, 1978, 1991; Gummesson, 1979; Zeithaml *et al.*, 1985) presents models on service co-production that describe the interaction process along which service is simultaneously produced and consumed. This focus on interaction and thus simultaneous consumption and production processes is featured and communicated by the well-known IHIP characteristics; intangibility, heterogeneity, inseparability, and perishability (see Zeithaml *et al.*, 1985). Although these models do not include the term “value co-creation”, their orientation on value creation can be perceived as co-creational and linked tightly to the interaction process and undertakings over the process whereby service and value are produced, delivered, and consumed (see Grönroos, 2012).

The heritage of the traditional service marketing approach is reflected in the *service logic* approach (e.g., Grönroos, 2011; Grönroos & Ravald, 2011), according to which value creation comprises actions and phases that are solely or together undertaken by either the customer or the producer (Grönroos, 2012). According to service logic, value co-creation requires joint activities and direct interaction between those participating in the service process. For example, Grönroos (2012, p. 1520) states that “value co-creation is defined as joint activities by parties involved in direct interactions, aiming at contributing to the value that emerges for one or both parties”.

Respectively, value co-creation in this perspective is only a part of value formation that encompasses phases and activities prior and after the actual co-creation and direct interactions between the actors.

The *SDL* (see Vargo & Lusch, 2004, 2008, 2015) and *service science perspectives* (Spohrer *et al.*, 2008) (upper-right cell, Figure 1) consider service to be not a category of market offering (cf. services) but a perspective on value creation: service as the fundamental basis of exchange. Despite the duality in orientation, SDL seems to be moving more and more toward system orientation rather than process orientation (see Vargo & Lusch, 2015). Although SDL discusses service exchange and resource integration processes for value co-creation it has a dynamic systems orientation in its focus on institutions, institutional arrangements, and the service system that shapes these processes (see Vargo & Lusch, 2015). Service science posits to system orientation.

The perspectives of SDL and service science adopt value creation as an overarching label that characterizes structures and processes at various levels. As such, value creation is always termed “co-creation”. The expanded focus on service implies a duality concerning the service process. A service process can be depicted from the perspective of: (a) its outcomes as a process that results in a service offering; or (b) the integration of operant and operand resources within and between service systems (Akaka *et al.*, 2012; Vargo & Akaka, 2012; Gummesson & Mele, 2010). This implies that the interaction process between service provider and customer, which is the key focus in the traditional service marketing and service logic approaches, comprises one area with the wider systems perspective comprising another in respect of value and value co-creation (see Vargo, 2009 for the value-creation milieu). Accordingly, value co-creation patterns and the resulting value for the actors is an overarching perspective that has widened from the actor and dyadic service process-level considerations (Vargo & Lusch, 2004) to meso- and macro-level service system frameworks (Chandler & Vargo, 2011; Akaka *et al.*, 2012). The focus in regard to all of these levels is on structures and processes that associate value creation of individual actors. In this sense, value is not only a function of a particular process; it describes also the underlying structures and processes at various levels that maintain the service systems’ existence and evolvment as single entities and also in regard to each other (see Spohrer *et al.*, 2008; Chandler & Vargo, 2011; Vargo & Akaka, 2012).

Similarly to SDL, the *customer-dominant logic (CDL) approach* (Heinonen *et al.*, 2010; 2013; Strandvik & Heinonen, 2015) is located and crosses between the process and systems focus in Figure 1. CDL is more process than system oriented in its emphasis on the customer needing activities as framed by the micro-level mental models (Strandvik, Holmlund, & Edvardsson, 2012). As a processual element, customer-dominant logic explicitly focuses on the issue of how value emerges or is formed for the customer. It adopts the idea of value co-creation as concrete undertakings through which a supplier’s offerings are incorporated and acted upon in its customer’s practices and which result in value. Accordingly, value is primarily a function of the customer’s activities, practices, and experiences in regard to the usage

and potential co-production of the offering (Heinonen *et al.*, 2010; see also Kleinaltenkamp, 2015). Along with this idea of value, the approach employs the term value formation instead of value co-creation. In terms of the system's realm, value and value formation are described not only with reference to the focal service process but with reference to multiple internal and external, visible and invisible experiential spaces, and customer's ecosystems in a past, present, and future timeframe (see Heinonen *et al.*, 2013).

Differences between perspectives as a stimulant to seek an integrative perspective

The described perspectives feature the relationship between the service process and value creation differently. In terms of the traditional service marketing perspective, service logic, and to some extent customer-dominant logic, the idea of value creation operates largely at a service process level and in the respective actions, interactions, and experiences of the supplier and customer. Value in these perspectives, as attached to the service process, left the dynamics regarding, for example, external environments, resources, competitors, collaborators, substitutes, complements, and their management out of the scope. Thus, as a whole, the perspective on value creation as embedded into a wider system realm in these considerations is rather narrow as compared with SDL and service science.

In terms of SDL and service science, the idea of value and value co-creation seems to be overarching. Critical voices have questioned the analytical power of the concept that is stated as mostly metaphorical (Grönroos, 2012) or largely ambiguous among the scientific community (Hilton *et al.*, 2012). Also, the internal incongruences in SDL between the idea of value as the performance of co-creation (i.e., the supplier as its customer's partner in value creation) and value as a perception (i.e., the phenomenological and experiential nature of value) have been highlighted. These are reflected in discussions, for example, on who creates and who co-creates (Grönroos, 2008), and on the collision between objectivist and relativist ontological positions in terms of value (Ballantyne *et al.*, 2011).

In regard to SDL and service science, it seems that value co-creation cannot be interpreted in terms of "doing together" or in terms of the actual service process only. Rather than concrete action, co-creation mostly seems to communicate the interdependent and complementary nature of actors and their activities, within and between service systems, which results in value for the actors. In other words, value co-creation in SDL and service science perspectives is a very similar notion to the major argument of the IMP approach that is manifested in the expression that "no business is an island" (Håkansson & Snehota, 1989); that is, it always requires an open system and another party to run a business. Thus, this perspective on value creation operates at a system level whereas traditional service marketing, service logic, and CDL link the idea of value creation closely to the service process and its benefits as integrated into the customer's processes.

In sum, the second section of this article provides a categorization of perspectives on value creation. It seems that service perspectives can be categorized into process- and system-oriented perspectives. However, the presented perspectives seem to consider the scope and locus of value creation quite differently. As far as the idea of value creation with reference to the service process remains implicit, this causes contradictions and hinders theoretical development. It seems that many scholars consider SDL as only a new feature added to the service marketing approach. However, as argued above, co-creation in SDL and the service science perspective is much wider, and the systems level is an issue. Inspired by the presented differences, the next section aims to integrate the process and systems elements defined in these service perspectives into a single integrative framework with the help of the ASM.

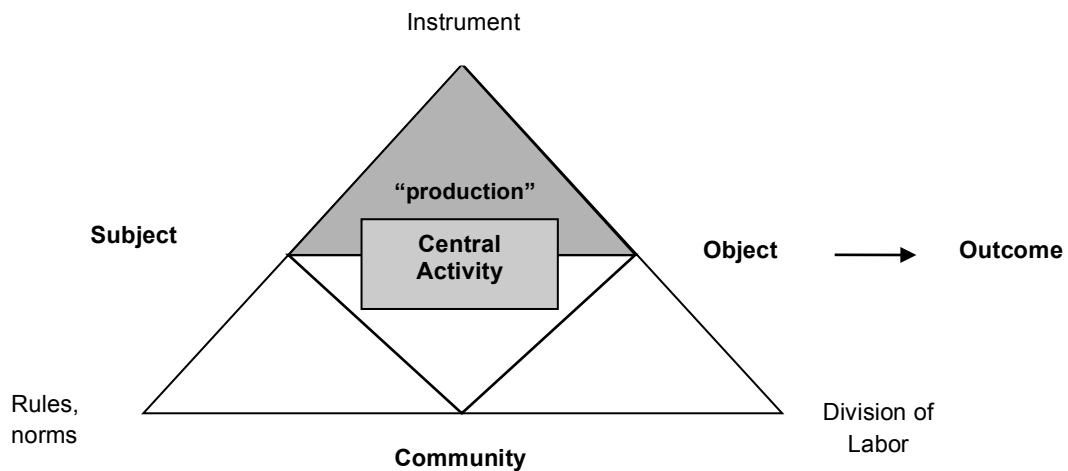
Value Creation in Service Setting

This section presents an activity system model (ASM) (see Engeström, 1987) as a mid-range theoretical lens (cf. Merton, 1968) through which to visualize and conceptualize the value creation and service processes in a common framework. The consideration builds on the similarities and differences between the presented perspectives in the previous section. The section begins by briefly presenting the activity system model, which is then implemented into the service and value creation landscape in the subsequent section.

Activity system model as a device to structure value creation and service processes

The activity system model (ASM) (Engeström, 1987) builds on activity theory and research on cultural psychology (Vygotsky, 1978; Leontyev, 1978; Luria, 1976). These early works focused on the connection between *subject*, *instrument*, and *object* that currently comprises a sub-triangle referring to “production” in the total ASM (shaded in Figure 2). Engeström (1987) expanded this purely activity oriented perspective including also the community and respective interactions in regard to the activity into his model. Thus, the fundamental premise of ASM is that activities can be understood only in their psychological, cultural, and institutional contexts, not in isolation.

Fig. 2: Activity system model (Engeström, 1987)



At the center of the ASM depicted in Figure 2 is an *activity* between subject and object. Activities emerge as collectives from individual actions (see Leontyev, 1978). Individual actions are bound together as a subject targets its efforts toward an *object* to reach a desired *outcome*. In performing the activity, the subject employs *instruments*, which can be both technical artifacts and abstract constructs such as language, theories, or psychological mental tools that bring prior knowledge to the current activity while mediating the activity toward the object (Luria, 1976).

The individual subject is in interaction with the *community* that affects the activities of the subject as the subject perceives, interprets, and acts upon the *shared rules and norms*, and attributes meanings to the activities (Vygotsky, 1978; Leontyev, 1978). In other words, structural elements posed by the communities constantly shape the central activity through the interpretations of involved individuals. Similarly, individual subjects in and through their activities reproduce the rules and norms that guide their interaction with the community.

The *division of labor* mediates the share and role of the community in forming the outcome through the object of activity. This connection between community, object, and outcome has two types of influence on the central activity. First, tasks between individual subjects as part of the group are divided, either beforehand as a result of organizational positions or other formal hierarchies or informally as a result of these individuals' actions based on their personal interests or expertise. Second, the division of labor refers to interconnections and priority status between the central activity in the focal activity system and other activities and activity system relating to the community and individual subjects (cf. Engeström, 1987).

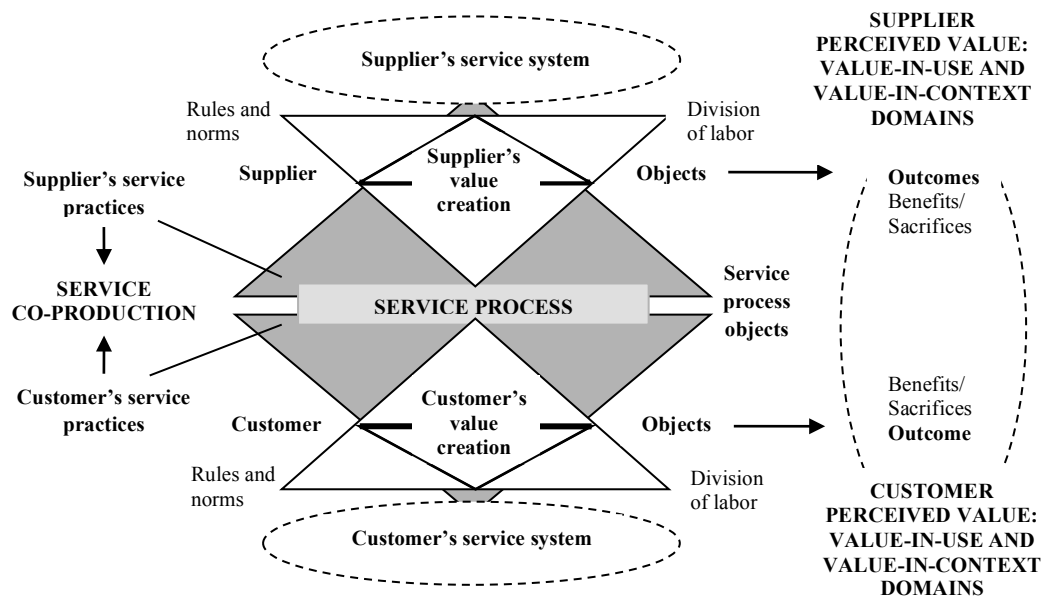
Despite ASM in this study comprising of a framework largely external to the reviewed service research, and thus providing an external viewpoint in classifying and analyzing the perspectives, the model and subsequent writings (see e.g. Engeström, 2006; Engeström, Miettinen & Punamäki, 1999) comprise a perspective on value

themselves as well. The difference between ASM and other perspectives in regard to its primary subject domain of psychology and the critical study of organization, work and learning is the idea that value is not the mental and subjective state of an individual mind but instead is relative to objects and their reaching in a community. Objects in these considerations represent “contradictory unities of use value and exchange value, generated materially, mentally and textually” (Engeström, 2006, 194). Furthermore, the use value refers to consequences i.e. the objects reached and the exchange value to the expenses of this activity i.e. how and by what costs are the objects reached. Despite use value and exchange value being somewhat different types of concepts when compared with value-in-use and value-in-exchange as understood in the current service research, the overall idea of value in the ASM model, as linked with active undertakings and the objects and outcomes of those, seems to resonate with the reviewed service perspectives and their view of value creation as an interactive and co-creative process. The ASM also seems to facilitate organizing both the process- and system-oriented concepts into the same framework, and thus building toward an integrative understanding of value creation in service in the next section.

Value creation and the service process as interlinked activity system

Figure 3 employs the ASM model to describe: (a) supplier service practices; (b) customer service practices; (c) value creation for the supplier; and (d) value creation for the customer. All these four entities are described as individual, but interrelated activity systems in the form of two white and two shaded triangles in Figure 3. The service practices are embedded in service process activity systems (two shaded triangles), of which the upper includes the supplier and the lower the customer service practices. The upper triangle features the supplier, and the lower the customer, as a subject that uses its service system as an instrument (Akaka *et al.*, 2012; Heinonen *et al.*, 2010) to reach service process objects (described on the right). As a composite of the service practices the service process emerges. In order to cut down the complexity of the framework and focus on the role of service in value creation, these service process activity systems are limited to production practices similar to the “production” sub-triangle of the ASM model as presented in the previous section in Figure 2.

Fig. 3: The interface between value creation and the service process



For example, in case of a car rental service, variant actors may contribute to the service by affecting the supplier and the customer. The supplier may have variant business partners (e.g. investors, insurance companies, advertisers, media agencies etc.) that provide elements of the supplier business model, and thus are instrumental in assisting the car rental service process. Similarly, in terms of the customer, variant actors may contribute to the customer service practices by representing for example the necessity to engage in the actual driving activity such as at a driving school and the requirement of the authorities to grant a driver's license. Similarly, variant actors may belong both to the customer's and supplier's service systems simultaneously. For example, other services the customer uses and/or the supplier partners with (e.g. hotels, airlines, trip advisor and booking websites, etc.) may give a referral in regard to the car rental agency. The supplier service practices are essential in providing the necessary actions and structures to realize the service, but the customer's activities and required activeness in the service process may vary. In an extreme case, the service is solely produced by the supplier; the customer service practices and, thus, the lower shaded triangle (customer service process activity system) are minimal or do not appear at all. Respectively, when the customer participates in the service process in an active way, both shaded triangles exist and, thus, the service is *co-produced* by the supplier and the customer (Bitner *et al.*, 1997; Vargo & Lusch, 2008).

In the case of the car rental service the objects of the service process may be shared (e.g. a good quality service produced effectively and efficiently in terms of both the parties) or individual in regard to the supplier and the customer. The supplier may have a service blueprint and internal measures regarding the service process and the customer is likely to have an idea about the reasonable costs of the service it is willing to pay for with reference to the expected benefits. However, both the supplier and the customer engage in the service process to gain something (Grönroos, 2008). These

motives, value creation, and expected and realized value outcomes (see Kleinaltenkamp, 2015) are thus presented as related but external elements to the service process in the framework. Respectively, Figure 3 shows opposing (i.e., white) triangles that demonstrate the supplier's and customer's value creation activity systems in which service is employed and put into action and whereby value emerges.

The customer's and supplier's value creation activity systems, can be further understood in the light of the car rental service example. The customer may rent a car for variant purposes: for occasional use, which relieves the customer from the need to possess one; for replacing his/her own car under repair; for moving by renting a bigger car; or for making an impression by renting a luxurious car. Similarly, the car rental agency may have different objectives for different types of cars or customer groups. A car rental agency focusing on ordinary cars may acquire a luxurious car to get visibility in order to support the core business of ordinary car renting or to probe a new market segment, for example. Similarly, the agency may rent cars according to different terms for short and long periods to business and consumer customers. Thus, both the customer's and supplier's motives and activities that the service process eventually serves can be seen as external to the service process itself. In ASM language, this means that both the supplier and the customer comprise subjects in their value creation activity systems and utilize the service as an *instrument* (thus located at the apex of both of the white triangles) with which to serve particular activities (customer's/supplier's value creation activities in the framework) launched toward a particular *object(s)* (a mission set for the activity) to reach a particular *outcome(s)* whose reaching produces both benefits and sacrifices (see Engeström, 1987; Woodruff, 1997).

The right side of Figure 3 depicts the *customer's and the supplier's value*, which are the sum of the supplier/customer *value-in-use* and *value-in-context domains*. The better the service fits the actors' activities and facilitates reaching the objects, the better the outcomes and the higher the *value-in-use* and *value-in-context* (see Kleinaltenkamp, 2015; Edvardsson *et al.*, 2011; Korkman, 2006). The framework facilitates to establish a distinction between the *value-in-use* and *value-in-context*. Accordingly, value-in-use here refers to more direct benefits and sacrifices that are gained from the service and its implications in regard to the objects reached. For example, for the customer the rent car may facilitate the object of moving from A to B, for example travelling to meet the relatives that he/she has not seen for a while. Value-in-use emerges in this setting if the car works properly and enables a private and schedule-free travelling experience, and thus the gained benefits exceed the sacrifices. For the supplier, on the most basic level, the car rental brings in income and thus value-in-use. In ASM language, value-in-use refers to the service ability to assist as an instrument in targeting the direct objects in a way that generates more benefits than sacrifices for the customer/supplier.

Value-in-context is here interpreted as the more indirect benefits and sacrifices that are related to the service and its ability to assist reaching the desired outcomes. For the customer, the car and the travelling it facilitates serves the more general purposes

of having a good time with relatives and keeping good relationships with them. Thus, the service facilitates the customer to enforce and maintain its relationships with this specific community and assists in creation of value-in-context. Similarly, for the supplier the indirect benefits and sacrifices that are gained from the rental of a car go far beyond the actual income of a single rent and can, for example, be seen as the building blocks of the competitive position over the a long-term. In ASM language, the value-in-context is thus strongly connected to the implications of the service to the relationship between the actor and its community i.e. service system (see Akaka *et al.*, 2012; Vargo & Akaka, 2012; Heinonen *et al.*, 2010). The service may enhance the role (division of labor) as well as the position (rules and norms) of the actor in regard to its service system and thus facilitate value-in-context. The following section provides short examples of potential uses of the framework for the study of value creation and the service process interface in both b-to-c and b-to-b settings.

Examples of utilizing the framework to study value creation and the service process interface

The framework is comprised of a plain outline that addresses both business-to-consumer (b-to-c) and business-to-business (b-to-b) service processes and respective value creation. An example of a co-produced service in a b-to-c service setting might be different social media applications. Together with its partners, the supplier's role in the service process concerns, for example, maintaining and developing the platform in terms of technical features and functions, marketing the platform to collaborators, and building interfaces to other media for advertisements and visibility. In turn, the consumers are the content providers and part-time marketers in terms of producing and sharing the content and engaging people from their social networks as members of the social media. Regarding value creation, the service comprises an instrument for the supplier in its networked business model that aims to gain information on users of the media and to refine this information into various kinds of knowledge that can be sold to potential advertisers and other parties that might benefit from it. This generates revenues for the supplier (i.e., value-in-use) and, as the social media application develops and expands, it can provide opportunities to access other types of networks and expand the business into versatile areas that benefit from the information delivered by the initial social media application, thus producing value-in-context. From the consumers' perspective, utilizing social media brings value-in-use in terms of communication and is also a platform through which the norms, rules, and division of labor within the social network are shaped and renewed, thus providing a source of value-in-context (see e.g., Hirschman & Holbrook, 1982). For instance, an update of a publication in a highly respected journal on Researchgate is an example of social media in a professional academic setting; it helps to communicate the appearance of new publication (value-in-use), but this also might alter the norms, rules, and division of labor regarding the researcher and his/her research community. This might result in a more respected position within the academic community that, in turn, generates citations and invitations to collaborate, thus producing value-in-context.

In terms of b-to-b service, for example, an advertising campaign might represent service co-production. The supplier, as an advertising agency, brings its in-house and potential network partners' expertise and knowledge on the campaign's content and channels, whereas the customer knows, for example, its products, brand values, and target audience that are to be incorporated into the campaign. By employing the advertising service, the customer generates value-in-use for itself in regard to the objectives met and goals set for the campaign, and for the supplier because of target revenues gained. However, both parties can experience value-in-context that goes beyond direct benefits and value-in-use. In a b-to-b context, value-in-context thus refers to the capacity of the focal service process to establish an actor's position and activities in the service system (see Håkansson & Snehota, 1995). For the supplier, sources of value-in-context, for example, might be reference value, positive word-of-mouth, and access to new customers; for the customer, sources of value-in-context might be new ideas regarding branding, marketing, and potential markets for the products. In terms of the focal service relationship between the customer and supplier, the service process might establish elements in the relationship such as relational goals (Epp & Price, 2011) and social and technical bonds between the actors (Håkansson & Snehota, 1995) that in this sense represent value-in-context as enforcing the relationship. The next section discusses the contributions and implications of the presented framework.

Discussion on the Framework and its Implications on Research

The theoretical contributions

The framework in Figure 3 presented in the previous section aims to integrate the process and systems orientation on value creation into a single framework, and also to describe the interface of the service and value creation processes. The framework is neither alike any of the perspectives nor integrates them as such. Rather the integrative nature of the framework refers to the reorganization of the elements and ideas derived from the perspectives into a new whole through the assistance of the ASM. The framework features the reviewed perspectives and adopts elements of their process and systems orientation. The framework: (a) puts an explicit emphasis on the service and value creation processes (in line with the traditional service marketing, service logic, and customer dominant logic); and (b) provides a systemic description of service systems (service dominant logic, service science) associated with these processes

The framework depicts value creation both with reference to the service and, more widely, to the customer's and supplier's activity system and the service systems with which they are surrounded (see Heinonen *et al.*, 2010; Gummesson, 2007). In this sense, the described approach provides conceptual clarity and structure, bringing both the customer's and supplier's service systems into the same analytical framework; it shows their links and also the supplier's and customer's roles and spheres in regard to the service and value creation processes. This contributes by converting the mostly philosophical reasoning, which dominates the respective discussion on value creation,

into a concrete framework and by facilitating the integration of the partial perspectives presented in the literature that focuses either on the service supplier service system (Akaka *et al.*, 2012; Vargo & Akaka, 2012) or customer service system (Heinonen *et al.*, 2013). In the same vein, the framework provides a wider contextualization for the idea of service constellations (Jüttner & Wehrli, 1994) according to which other services and resources utilized by the customer link with the value of the focal service. In the presented framework, the other services and resources are ingredients comprising the actors' activity system and, respectively, the idea of value creation can be regarded in terms of a mutual fit between the actors' activity system and the service process as described.

The framework considers the service process and the value creation process as separate but linked phenomena. Value relates to activities in which the customer or supplier employs the service process and its outcomes as an instrument to direct its activities toward particular desired outcomes (for value actualization, see Gummesson, 2007). Hence, a successful service process creates a basis for value-in-use and value-in-context, although is insufficient to create value per se. This is because value ultimately is not created in the service process, but in usage processes within the beneficiary's (i.e., customer/supplier) activity system. As such, value and value creation take place in other activity system separate to the service process activity system of the supplier and customer (see Ballantyne *et al.*, 2011). This implies that value co-creation as a term is misleading if understood with reference to the service process and partners attending the process. Simply, value is not co-created among these actors.

The idea of value and value creation conveyed by the framework reflects the idea of emergence or formation of value (see e.g., Heinonen *et al.*, 2010) instead of active creation as widely presented in the service literature. This interpretation of the emergent nature of value and its relationship with undertakings in regard to customer/supplier activities can be understood and elaborated with reference to the theories of action. Accordingly, a distinction can be made between events and occurrences that befall an actor; for example, the process of becoming sick leading to sickness, and the actor's intentional activities such as attempts to either prevent or recover from the illness (see Davidson, 1980; Goldman, 1970). Similarly, value is something that is not actively produced; rather, it comes as a result of perceptions and interpretations of service usage and respective outcomes. In some cases the service fails to comprise a basis for value to emerge, and in some cases it succeeds in this. For example, a well-planned theater evening may end up in boredom if a play turns out to be uninteresting and eventually value may be created not by the play, but if a consumer falls asleep and gains some rest that makes him-/herself feel better off.

The managerial implications

Managerially, the study's proposed perspective emphasizes that the supplier focus should go beyond the service process toward the actual use processes and use contexts that are relevant for the customer in terms of the service. Thus, the prevailing idea of co-creation in business practice (maintained by the current research), that

largely refers to the supplier-customer co-creation, needs to be complemented by an idea of co-creation in terms of the customer and the customer's relevant stakeholders that are influenced by the service process. This implies that the supplier does not possess all of the building blocks needed for service and customer value. Rather, the service, regardless of the extent of its sophistication, must find its place in the customer's domain and, thus, integrate itself into the web of customer needs and related substitute and complementary offerings that are prevalent in the customer's domain and that shape customer interactions with its relevant stakeholders. For a long time, companies have engaged both individual and organizational customers in innovation and manufacturing processes. In this respect, approaches such as open innovation and crowdsourcing have been in place. However, these approaches are customer-oriented but supplier-dominant. As such, the idea of customer value being the eventual source of competitive advantage must be understood not in regard to a company's resources and offerings but in regard to the customer's organizational (b-to-b) or individual (b-to-c) life and the service role therein.

The proposed framework provides a visualization and framework with which to start contextualizing service in the customer's domain in an actual business case. The supplier could begin by seeking general answers to questions such as the following: (a) How and for what purposes is the service used, and what are the targeted and experienced outcomes?; (b) What are the other customer activities that link with the focal activity in which service is employed?; and (c) How do these activities affect each other, and what factors and elements are relevant in this respect? This kind of mapping of a customer activity system and respective customer resources and network should facilitate the company to perform the following: (a) to develop the service to address better the customer's set objectives; and (b) to actualize or at least raise discussion on some potential needs that the customer might have and which the company has the potential to meet.

New approaches are required to gain sufficient visibility within the customers' domain and to gather information on service usage and respective customers' activities. In the consumer marketing context, social media and its applications represent an example of a vehicle producing this type of knowledge. In terms of b-to-b marketing, this type of knowledge and key account and customer relationship management tools have existed for a long time. However, the next step is to implement this knowledge into relationship structures and processes and their management. For example, organizing the selling and buying functions, setting the relationship goals to produce this type of information, and building a common framework that enables a supplier to integrate its activities into those of its customers. Improving this type of mindset at the supplier company requires management support and organization. Eventually, in addition to the formal structures and processes, the key will be to nurture a culture in which it is everyone's responsibility in the supplier's organization to aim at supporting the customer's organizational or individual life. In this sense, service management mainly concerns feeding creativity and the capability to foresee dynamics within and between industries and business sectors, and implementing these dynamics within interactive service processes and offerings together with customers.

The limitations and further research

As a single conceptual study, this article has limitations. The literature on service comprises a massive body of various perspectives. As such, any effort to synthesize this field must be understood as a partial viewpoint. Similarly, the variant terminology and conflicting perspectives make it a challenge to find solid grounds for establishing a viewpoint in a conceptual article such as this. As such, this study should not be considered an all-encompassing literature review but a categorization building on the authors' knowledge of the field and their selections regarding the organization of the main theoretical perspectives and aspects that are relevant for building understanding of the service process and value creation. However, along the process, the agenda was to explicate differences and similarities between the variant perspectives and organize these differences and similarities into a holistic understanding of value creation and the service process.

The integrative approach proposed in this article needs further conceptual fine-tuning and development, and also it needs empirical studies for theory generation and testing. Conceptually, the framework establishes a plain outline rooted in the ASM and service perspectives but leaves room for sharpening the elements and dynamics within and between different parts of the framework. Future research should aim for integrative cross-disciplinary approaches to further understanding of value as an emergent phenomenon that arises in usage. For example, the constitution of a customer's service system and its structural and processual nature regarding value creation needs clarification. The previous perspectives have been dominated by the ideas of supplier-dominant value creation. In this sense, value-in-use and value-in-context as customer driven phenomena should open up opportunities to bring elements from other disciplines into a new light and merge these with service perspectives.

Regarding the consumer service setting and consumer value, for example, consumer culture theory and other related fields of psychology and sociology might facilitate further understanding on macro- and micro-foundations of value in regard to the customer's activity system and the service process. Versatile perspectives addressing various levels and units of analysis should be employed to understand the dynamics of how shared norms, values, and beliefs at collective levels trickle down to the roles, situations of usage, and individual perceptions of value, and parallel individual psycho-social affections, cognitions, and conations. In terms of business markets, value creation should be studied in relation to the different activities, mechanisms, and factors that iterate between the levels of actor, dyadic relationship, and network that influence service and value creation. This should not only target the adoption of a holistic idea of service and value creation as open systems (instead of linearly proceeding entities) that are affected by previous, current, and future events and dynamics at various contextual levels, but it should also target identifying and conceptualizing these elements in order to create better frameworks. For example, in terms of relationship level, it seems that balanced presentations on the processes and structures that eventually underpin the relationships and their capacity to support the service process, and thus value creation, are scarce. As such, very little is known, for example, about the relational elements between companies that support service-

dominant business or about elements that restrict relational development from goods-to service-dominant relationships. Similarly, the interplay between value-in-use and value-in-context especially needs further clarification in the b-to-b setting.

Conclusions

At best, the described contradiction surrounding the concepts of value and value creation or co-creation stimulates an impetus for further research seeking better conceptualizations. At worst, it might produce a great deal of rootless research that is difficult to understand, does not advance the science, or divides respective researchers and research into camps that primarily posit their work to destructive criticism and not to further understanding of value and value creation. This article aims to articulate the interface between the service process, value creation, and the actors' respective roles, and to visualize these elements in a framework and, on that basis, build toward terminological clarity.

In terms of value co-creation, the present authors suggest that for analytical purposes the following are observed: (a) instead of value co-creation, the term value formation is employed; and (b) consecutively, theoretical development should aim at finding new ways to conceptualize both the systemic and processual nature of value that relieve the contradictions between the prevailing conceptualization and perspectives and instead build toward enhanced understanding.

We state that the previous research widely associates co-creation with the actual interactions related to the service process, despite being able to interpret the idea of co-creation as referring to the various interactions in terms of the use of the service. The latter is potentially closer to the ideas that the perspectives of service dominant logic and service science aim to convey. Consequently, value formation is seen as a better term due to: (a) it being free from these dominant interpretations regarding co-creation and its locus; and (b) it representing a general term that is applicable to refer to interactions that relate to the service process and actors co-producing the service as well as the use of the service and the use related interactions between the customer and the relevant actors in its service system.

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