

# Towards the operationalization of service logic

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#### Abstract

**Purpose** – The purpose of this study is to review and synthesise different streams of service logic literature and provide elements for the operationalization of service logic within existing management constructs.

**Methodology/approach** – Central elements of service logic are identified from research literature on service operations management, relationship management, marketing, strategic planning and organizational culture. Elements are analysed through integrative Why-What-How abstraction lenses and discussed in terms of management constructs such as business models, service concepts and business strategies.

**Findings** – Service logic elements are combined under the concepts of: nature of value, nature of service, service culture and the integrative control of these elements. For operationalization purposes, nature of value is discussed in terms of the business model level. Nature of service and service culture are primarily mapped against service concept levels and the control and integrative management of service logic elements are mapped against business strategy and strategy control levels.

**Originality/value** – This study is unique in its overarching approach for integrating separate but partially overlapping service logic streams. The synthesis and initial analysis of chosen management constructs is believed to aid further research into the operationalization of service logic and to speed up its practical applications among service business practitioners.

**Key words** – service logic, integrative review, operationalization, management view

**Paper type** – Conceptual review paper

## 1. Introduction

What is logic in context of business management? According to Kingman-Brundage et al. (1995) logic is a conscious or unconscious set of principles that drive the performance of organisations. Prahalad & Bettis (1986) see dominant general management logic (abbreviated to dominant logic) as a way in which “*managers conceptualize the business and make critical...decisions...*”. They continue to define dominant logic as a mind set or world view; the result adapting to current environmental changes. But as the environment continues to evolve, new dominant logics need to emerge so that the organization’s decision making process can be better matched against environmental factors (Prahalad & Bettis 1986; Bettis & Prahalad 1995).

The rise and growth of the service economy has presented plenty of new factors and phenomenon for companies to adapt to. During the last decade noticeable attempts have been made to seek a unifying logic for understanding and explaining the implications of service focus, especially in the areas of service marketing and management research (e.g. Service-Dominant logic, S-D logic) and in the service science multidisciplinary research arena, an IBM initiative. Even though there has been a clear resonance between the service system approach taken by service science and the value

creation thinking of S-D logic, there is still a long way to go until the fruits of these academic endeavours have matured enough for practitioners' managed implementation efforts (e.g. Gummesson et al. 2010; Gebauer 2009; Jacob & Ulaga 2008).

The challenges posed by putting service logic into practice are the scattering approach and the content of the concept of the service logic itself. The definition of service logic has different levels of abstraction (e.g. service strategy or service characteristics), different viewpoints (e.g. marketing or operations) and complementary views (e.g. S-D logic and Richard Normann's views (Normann 2001)). There is also a view that is challenging S-D logics position as a useful decision making tool (Unified Service Theory against S-D logic).

The purpose of this paper is to provide ingredients for service logic operationalization. This task is approached by first identifying the central elements of different service logic streams and secondly discussing the operationalization of these elements within existing business management constructs. The first part of this study answers the following research question:

*From business management perspective, what is integrative view for different service logic approaches?*

In contrast to hitherto operationalization efforts, which concentrate on a specific service logic view (e.g. Sweeney (2007) on S-D logic operationalization), we take a systemic approach by creating a map of different views and the contents of existing and past service logic research streams. As the resulting conceptual map has elements on multiple abstraction levels and originates from different functional views (e.g. from operations and marketing), we use an overarching framework of *Why-What-How* questions to loosely integrate the different service logic elements. In our approach a service provider is seen as a system under investigation that is surrounded by other systems (or environments) and principles governing and influencing inter-system interactions. The system under investigation and its surrounding environment is approached through three high level questions: *Why? What? and How?*. *Why?* focuses on inter-system issues that give companies reasons to exist and interact with surrounding systems in a specific way (Checkland 2000). *What?* elaborates the way companies react and structure themselves based on *Why?*, and finally *How?* investigates the means for implementing or executing the issues defined under *what?*.

The second part of this paper discusses the operationalization of a service logic conceptual map. We follow Grant's ideas for examining dominant logic in relation to corporate management functions and systems (Grant 1988). Originally Prahalad and Bettis (1986) observed that dominant logic is reflected in the '*administrative tools to accomplish goals and make decisions*', and Grant (1988) argues that by specifying these '*administrative tools*', it is possible to operationalize the concept of dominant logic and turn it into a potentially valuable instrument for strategic analysis. In our discussion, we propose further research into operationalization as part of well recognized management constructs: business models, service concepts and business strategies. These constructs cover business and service design on multiple abstraction levels (e.g. business modelling, strategy planning and service concepting) and they also have business implementation aspects (e.g. business strategy and strategy control). The aforementioned constructs provide a rich ground for reflecting on how the service logic elements created by the Why-What-How approach can be integrated into business management.

Different approaches to service logic in the literature are reviewed in section two. Kingman-Brundage et al. (1995) present an approach for integrating separate functional logics within a service company. Their research builds on operations management and service design origins. In 2004 Vargo and Lusch formulated a synthesis of service management, marketing and economic research streams under their Service-Dominant logic (S-D logic) approach (Vargo & Lusch 2004a; 2004b). S-D logic builds on the value-in-use approach and how this value is created through

integrating competence resources. Many of the tenets packaged under S-D logic can be found in Richard Normann's writings (Normann 2001; Normann & Ramírez 1993), as well as in parallel contributions from Nordic School scholars like Gummesson, Edvardsson and Grönroos (Grönroos 1991). Since the introduction of S-D logic, Nordic school writers have contributed to the service logic discussion both by emphasizing many-to-many/network views (Gummesson 2008) and by elaborating the value co-creation dynamics between provider and customer (Grönroos 2006; Grönroos 2008). In 2006 Sampson and Froehle introduced their Unified Service Theory (UST) and concluded that services are processes with customer inputs (Sampson & Froehle 2006). Later on Sampson et al. challenged the position of S-D logic as a foundational philosophy for service science and argue that UST has viable managerial implications (Sampson et al. 2010; Sampson 2010).

Section three analyses different service logic concepts using the aforementioned Why-What-How approach. The analysis pinpoints central elements for a 'balanced' service logic: nature of value, nature of service, service culture and the balanced integration of these elements.

Section four sets out the service logic conceptual elements that go against existing business management constructs; business models, service concepts and business strategies. This preliminary discussion sets a basis for further operationalization research and utilization by practitioners.

## 2. Service logic literature

### 2.1. Service Logic – integrative system view

The service logic model was introduced by Kingman-Brundage, George & Bowen (1995) to promote cross-functional design and the coordination of marketing, operations management and human resource management. The authors define service logic as follows:

*“A service logic describes how and why a unified service system works. It is a set of organizing principles which govern the service experiences of customers and employees.”*

On a more detailed level, service logic promotes understanding and matches the customer and employee perceptions of the service concept, thus fostering satisfaction on both sides. Service logic also covers the technical realities of service operations that aim to provide the promised service outcomes. The above mentioned service logic elements can be divided up into the following three core logics of the service system (Kingman-Brundage et al. 1995):

- 1) **Customer logic** – “What is the customer trying to do, and why?”. From a customer's point of view this question can be split into two roles: customer as a consumer (“How can I get what I want?”) and customer as a co-producer (“What is my role, and how do I perform it?”).
- 2) **Employee logic** – “What are employees trying to do, and why?”. Employee logic drives service employee behaviour through factors like job clarity, abilities to perform as expected and work motivation.
- 3) **Technical logic** – “How are service outcomes produced, and why?”. Technical logic comprises impersonal and objective principles governing service production. Technical logic tries to increase service flexibility while at the same time striking a balance with service performance variability. This is done with the help of tools and techniques.

The authors pinpoint the role of organizational culture as central in binding the service concept to the three core logics. The service concept is defined as outcomes valued by customers, focusing

organizational members on these outcomes and as a concept linking the service firm to the external market. A service logic-oriented organizational culture should advance cross-functional and cross-departmental employee team boundaries to promote a customer perception of seamless service. Organizational culture should also promote the allocation of status, power and authority based on importance and potential value for customers.

The authors use a service mapping technique to design and analyse the implementation of a service system as part of a service logic model. Service mapping builds on service process and interface concepts where the service process covers the variables of value, work activities and the work environment. Interfaces are where perspectives come together, where the above mentioned variables are dealt with by customer, employee and technical logics.

In summary, the service logic model by Kingman-Brundage et al. builds a set of guiding principles and conceptualizations that aim to unify marketing, service operations and human resource management into a service system. This in turn provides a service experience and service outcomes for the customer. The seamless service experience makes a further contribution to greater profitability, which we can interpret to be one of the driving forces behind the existence of a service system. The origins of the service logic model lie in service operations, and at a practical level it is intended for service process design and blueprinting purposes.

## 2.2. Service-Dominant Logic – value co-creation view

Since it was first introduced by Vargo & Lusch (2004a; 2004b), Service-Dominant logic (S-D logic) has raised lively discussion among academics and scholars, with more than one hundred journal articles directly elaborating S-D logic and its implications, or reflecting on other phenomenon against S-D logic. Due to broad interest and constructive criticism, S-D logic has been restated several times to clarify its point of view. Its latest theoretical basis, the definition of S-D logic, is combined by Vargo & Lusch (2008) into ten foundational premises, see Table 1.

S-D logic builds on traditions of service management and marketing research, while at the same time reflects its tenets of economic exchange within the frame of the historical evolution from a goods and production-centred model of exchange to a service-centred model (Vargo & Lusch 2004a; 2004b).

While the service logic model by Kingman-Brundage et al. (1995) approached the service system through its internal dynamics by interfacing surrounding markets (i.e. customers), S-D logic examines the service system in a more ‘outside-in’ manner, by taking an economic exchange approach. This interpretation is supported by Sampson et al. (2010), who see S-D logic complementing earlier theory-of-the-firm concepts by giving reasons for why business firms exist.

FP – Foundational Premise	Explanation/Justification	
FP1	Service is the fundamental basis of exchange.	The application of operant resources (knowledge and skills), "service" is the basis for all exchange. Service is exchanged for service.
FP2	Indirect exchange masks the fundamental basis of exchange.	Goods, money, and institutions mask the service-for-service nature of exchange.
FP3	Goods are distribution mechanisms for service provision.	Goods (both durable and non-durable) derive their value through use – the service they provide.
FP4	Operant resources are the fundamental source of competitive advantage.	The comparative ability to cause desired change drives competition.
FP5	All economies are service economies.	Service (singular) is only now becoming more apparent with increased specialization and outsourcing.
FP6	The customer is always a co-creator of value.	Implies value creation is interactional.
FP7	The enterprise cannot deliver value, but only offer value propositions.	The firm can offer its applied resources and collaboratively (interactively) create value following acceptance, but cannot create/deliver value alone.
FP8	A service-centered view is inherently	Service is customer-determined and co-created; thus, it is inherently customer

	customer oriented and relational.	oriented and relational.
FP9	All social and economic actors are resource integrators.	Implies the context of value creation is in networks of networks (resource-integrators).
FP10	Value is always uniquely and phenomenologically determined by the beneficiary.	Value is idiosyncratic, experiential, contextual, and meaning laden.

**Table 1. Foundational premises of Service-Dominant Logic (Vargo&Lusch 2008)**

The definition of S-D logic is a chain of deductions emerging from the primary concepts of service, exchange and value. S-D logic defines service as ‘*a process of using one’s resources for the benefit of another entity*’ (Vargo & Lusch 2008; Lusch et al. 2010). Economic exchange is done to obtain benefits of specialized competences (knowledge and skills) or services. Goods or money are seen as vehicles or transmitters of operant resources (embedded knowledge), thus masking the service-for-service exchange (Vargo & Lusch 2004a). Operant resources and their innovative integration are seen as the primary sources of competitive advantage. Operant resources, like knowledge and skills, are those that act upon operand resources, like natural resources, goods or money. Value is seen from the point of view of the beneficiary, and it is not realized until the beneficiary (e.g. customer) has perceived it. This value concept is referred to as *value-in-use* (Woodruff 1997; Vargo & Lusch 2004a) or as *value-in-context* in more recent discussions (Vargo et al. 2010). The value-in-use concept implies that the customer of a service is always a co-creator of value and that the provider is only offering a value proposal. A value proposal (provider’s resources) is used as an input in the resource integration processes of customers (Vargo et al. 2010).

During the last couple of years S-D logic’s relationship orientation has been increasingly discussed, using many-to-many, value network and network theory approaches (e.g. Gummesson 2008; Lusch et al. 2010). Lusch et al. evaluate S-D logic in the context of value networks and link S-D logic to service provisioning through supply chains and networks of supply chains. Together with networked and many-to-many value co-creation views, other systemic approaches for handling complexity have been proposed. Among others, Barile & Polese (2010) have studied a Viable Systems Approach (VSA) for handling complex features of networked resource integration and value co-creation in business. Barile & Polese also compare VSA to the service system approach of Service Science (Maglio & Spohrer 2008; Spohrer et al. 2007).

In summary, from the service provider’s point of view (that can be seen as one type of service system), S-D logic focuses on environmental factors and drivers for the existence of a service system. S-D logic builds on marketing origins and elaborates nature of value (value-in-use). It also links the integration of active resources with value creation.

### 2.3. Service logic – Nordic School elaborations

Nordic School researchers, like Gummesson, Grönroos and Edvardsson, among others, have been pioneers in the research field of service marketing and service management since the 1970s (Grönroos 1991; Grönroos 2006). The Nordic School approach recognizes service as a perspective on value creation, rather than just an offering (Edvardsson et al. 2005). Based on this perspective, Grönroos (2008) describes service logic from both the customer’s and provider’s point of view:

- 1) “*When using resources provided by a firm together with other resources and applying skills held by them, customers create value for themselves in their everyday practices (customer service logic).*”
- 2) “*When creating interactive contacts with customers during their use of goods and services, the firm develops opportunities to co-create value with them and for them (provider service logic).*”

The customer view of service logic implies that the customer is by default the value creator (not just value co-creator as defined in S-D logic) and the value is realized in a value-in-use manner. The provider view of service logic enhances 'goods logic', where the provider is only providing value foundation through their resources and skills, thus facilitating value creation for customers. By developing its marketing and customer relationships according to service logic, the provider aims to broaden its role from purely facilitating value towards co-creating value with the customer (Grönroos 2008).

In addition to the value creation perspective, the Nordic School recognizes the activity-based definition of service. A set of activities takes place during interactions between a customer, goods and resources, and the service emerges in an 'open process' between the customer and the provider. The usage or consumption of a service is process consumption rather than outcome consumption (Grönroos 2006; Grönroos 2008).

As a managerial implication, service logic should guide service marketing and customer management away from just concentrating on short-term exchange based transactions to focus more on facilitating interactions during the consumption/utilisation of service process. Marketers are not only limited to giving value propositions, as they also ensure that value fulfilment actually takes place in a customer's value creation processes (Grönroos 2008).

#### *2.4. Unified Service Theory – process oriented view*

Unified Service Theory (UST), introduced by Sampson & Froehle (2006), examines service as a process with customer inputs. These customer inputs and related interactions differentiate service processes from non-service processes and are the main source of managerial implications, which are common to service operations and management across different service businesses. Service logic is seen as *a concept that defines services (service processes) and tells us what makes them uniquely challenging to manage* (Sampson et al. 2010).

Sampson et al. (2010) contrasts UST with S-D logic in terms of strategic and managerial insights. They argue that S-D logic's broad definition of service does not give enough managerial support when making decisions for competitive advantage at a strategic management level. UST aims to provide a balanced view which combines customer focus with operational realities.

UST's definition is built on customer inputs i.e. what the customers provide to the service provider. This is summarized in the definition of a service process:

*“Services are production processes wherein each customer supplies one or more input components for that customer's unit of production.” (Sampson 2010)*

When service processes always involve or integrate customer-provided resources, non-service processes do not depend upon customer resources and thus can operate independently from customers (Moeller 2008; Sampson et al. 2010). This distinction leaves room for different operative decisions related to the process implementation. Sampson et al. (2010) identify the following three types of processes that can be considered for strategic planning:

- 1) **Service processes** – interactive processes where customer resources (customers themselves, their belongings, and/or information) are required in provider processes.
- 2) **Non-service processes** – providing customer value potential (but not value realization) independent from customers. These processes can be decoupled in time and space.
- 3) **Customer led consumption processes** – decoupled processes where customers access resources owned by the provider.

Strategic choices made by providers deal with different combinations of the above mentioned process types; which processes to carry out on their own, which processes to carry out in

interactions with customers and which processes to let customers perform on their own (Sampson et al. 2010).

### *2.5. Service orientation and transition views*

There are a couple of other service logic related research streams that are worth mentioning, but they are not covered in detail due to space restrictions. Oliva & Kallenberg (2003) study the transition from product orientation to service orientation and Nordin (2004) identifies several strategic issues during the transition and adoption of service logic.

Service orientation is studied through both hard and soft factors. For example, hard factors like the structural aspects of organizations or solutions are studied by Nordin (2004), Neu & Brown (2008) and Gebauer et al. 2010b). Soft factors like organization culture, and links between values and behaviour, are studied by such scholars as Gebauer et al (2010a) and (Homburg et al. (2003).

A common aspect of these service orientation and transitional studies can be found in hints at the importance of service culture. Service culture is seen as an important internal success factor for implementing service oriented strategy. Service culture is not explicitly emphasized as a service logic element by our main sources (in sections 2.1 - 2.4), but it is seen more or less as a central companion to service logic. Grönroos recognizes service culture as an enabler for implementing service strategy (Grönroos 2007, p. 421) and Kingman-Brundage et al. (1995) see organizational culture as an implementing mechanism for core (service) logics and service concept.

## **3. Conceptual map of service logics**

A holistic approach is a necessity for successful service management, sustainable improvements and optimizing a provider's efforts aimed at maximal customer value experience (Kwortnik & Thompson 2009; Enders et al. 2009; Ostrom et al. 2010). In the context of this study, a holistic approach involves overarching perspectives across multiple business functions and understanding the critical role of customers, employees, technology and operations in creating customer value and in further capturing provider value (Ostrom et al. 2010; Kingman-Brundage et al. 1995). By jointly evaluating all the 'source' service logics in the service business system as complementary views, we promote the above mentioned integrative and holistic approach.

Service logic 'source' concepts are summarized in Table 1. The interconnectedness, overlaps and divergences of the concepts are studied by evaluating their main elements from a *Why*, *What* and *How* perspective. Logics are loosely grouped by their origins or viewpoints. Marketing views are emphasized in S-D logic and the Nordic School's service logic concepts, while in turn operations views predominate in the service logic of Kingman-Brundage et al. (1995) and in Unified Service Theory.

S-D logic builds on the re-evaluations of economic exchange principles (Vargo & Lusch 2004a;2008) while the Nordic School's research is based on context-oriented theories and their testing in service marketing and management (Grönroos 2007;2008). Grönroos (2008) elaborates value creation and the roles of provider/customer at a deeper level than studied in S-D logic. Grönroos argues that the distinction between value facilitation and value co-creation is important in order to drive the company's marketing and relationship management towards true value co-creation. According to Grönroos, S-D logic is not comprehensive enough for marketing management without considering distinct yet intertwined customer and provider logics (Grönroos 2008).

The operations and service engineering based Service logic concept introduced by Kingman-Brundage et al. (1995) has been referenced by Unified Service Theory (Sampson & Froehle 2006), which shares the same service production-oriented view on service systems. The service system integrates structures and processes to operationalize the service concept, and service logic is the whole that creates the synergy between the separate logics of customers, employees and service provisioning mechanics (Kingman-Brundage et al. 1995). Unified Service Theory has lately been suggested and discussed as an alternative logic to be applied to service science (Sampson et al. 2010; Sampson 2010).

Figure 1 combines the main elements derived from source service logics. There are two partially overlapping umbrella concepts; *nature of value* for value realization mechanisms (like value-in-use and value co-creation) and *nature of service* for resource integration, open processes and relationship orientation. The two remaining elements are *service culture* for promoting service-oriented values and behaviour, and finally *seamless integration* as a meta element connecting the previous ones. Seamless integration pushes the idea of wholeness: separately the elements of service logic are quite familiar features in management literature from past decades (see e.g. Jacob & Ulaga (2008)), but together these elements can be seen as emerging service orientation factors in business logic.



	Marketing originated			Operations originated	
	Nordic School Service Logic	Service-Dominant Logic	Richard Normann Service Logic	Service logic for unified service system	Unified Service Theory (UST)
Main contributors	Edvardsson et al. (2005), Grönroos (2006; 2008)	Vargo & Lusch (2004;2008) + many commentators/contributors	Richard Normann (2001)	Kingman-Brundage et al. (1995)	Sampson & Froehle (2006), Sampson et al. (2010)
Origins & focus (Why, What, How)	Relationship oriented service marketing and customer management. Focus on <b>WHY</b> (value co-creation) but links to <b>WHAT</b> and <b>HOW</b> (e.g. part time marketers and open processes).	Marketing, principles of economic exchange and value creation. Focus on <b>WHY</b> (value-in-use) but links to <b>WHAT</b> (operant resources).	Strategic planning, principles of economic exchange and value creation. Focus on <b>WHY</b> but links to <b>WHAT</b> .	Operations management. Focus on <b>HOW</b> (integrating functions).	Unifying service management and operations approaches. Focus on <b>WHAT</b> and <b>HOW</b> (customer inputs, processes).
Definition of Service logic / main tenets	<ul style="list-style-type: none"> <li>- Customer creates value and provider can co-create in addition to facilitating customer value creation.</li> <li>- Interactive and open processes.</li> <li>- Relationship orientation.</li> <li>- Intertwined provider and customer logics.</li> <li>- Interactions and open processes as driving concepts for marketing instead of exchange and transactions.</li> <li>- Service as a perspective on value creation (rather than offering).</li> </ul>	<ul style="list-style-type: none"> <li>- Service is an application of resources for the benefit of others, goods are provisioning mechanisms for services, value is co-created in user's context.</li> <li>- Manifested through 10 Foundational Premises.</li> </ul>	<ul style="list-style-type: none"> <li>- Shifting attention from production to utilization, from product to process, from transaction to relationship.</li> <li>- Blurred roles of consumer and producer in simultaneous, synchronous, and reciprocal processes.</li> <li>- Customer as a value creator instead of value destroyer.</li> <li>- Service logic frames a manufacturing logic rather than replaces it.</li> </ul>	<ul style="list-style-type: none"> <li>- Contrasts to industrial logic.</li> <li>- Set of organizing principles which govern the service experiences of customers and employees.</li> <li>- Integration of employee, customer and technical logics =&gt; conceptual tool for service engineering, for smooth service experiences and integrated service management.</li> <li>- 5 service logic propositions for service management and production.</li> </ul>	<ul style="list-style-type: none"> <li>- A concept defining services (service processes) and explaining what makes them uniquely challenging to manage.</li> <li>- Service processes are distinct from non-service processes in that they involve/ integrate customer-provided resources.</li> </ul>
Relations to other service logic views	<ul style="list-style-type: none"> <li>- Elaborations of S-D Logic's value creation roles. Shares most of the focal content with S-D Logic but questions the 'Dominant' term (in service vs. goods).</li> </ul>	<ul style="list-style-type: none"> <li>- Also compiles ingredients from Nordic School research, shares value and value creation views with R. Normann.</li> <li>- Proposed as underlying philosophy for Service Science.</li> </ul>	<ul style="list-style-type: none"> <li>- Written before the compilation of S-D Logic.</li> </ul>	<ul style="list-style-type: none"> <li>- Mostly referred from service operations oriented papers. No new contributions within last decade.</li> </ul>	<ul style="list-style-type: none"> <li>- Referring to service logic defined by Kingman-Brundage et al. (1995). Proposes UST as an alternative logic for Service Science</li> </ul>

**Table 2. Overview of different approaches to service logic and service orientation.**

#### 4. Towards operationalization

As the elements of service logic can be approached from different viewpoints (e.g. *Why-What-How*), it is also natural that operationalization should be considered on different levels. Thus the first question is how to find the appropriate management constructs to benefit and apply service logic elements.

Our proposal is to start operationalization with three management constructs, namely business models, business strategies and service concepts. We argue that these constructs are more or less present in every service company, even though the explicitness and visibility of their usage vary a lot. These constructs also cover service business management at different levels of abstraction, from business strategy to service operations and service encounter levels.

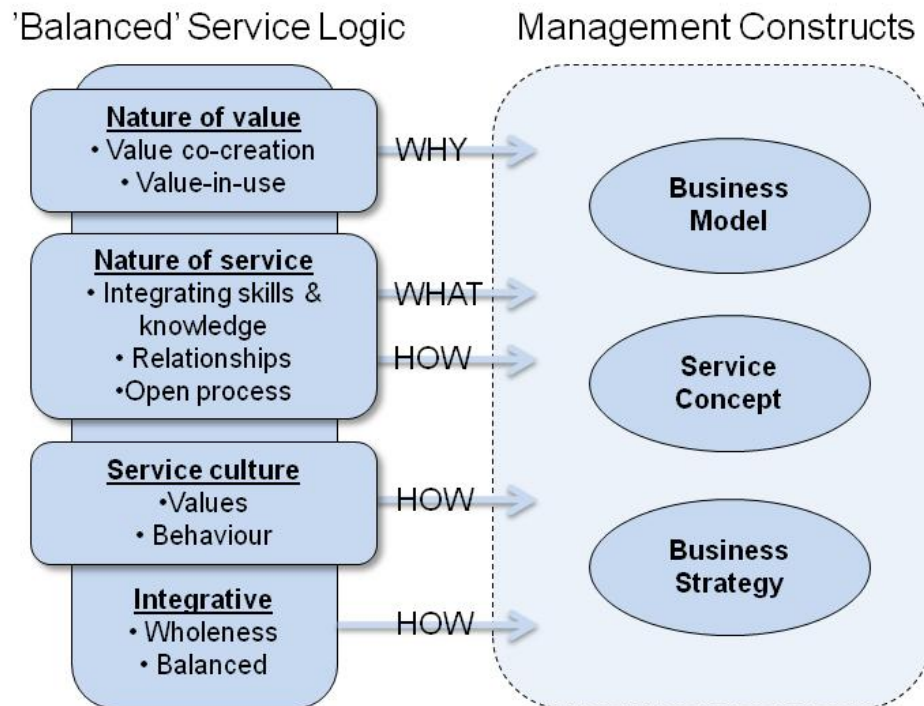


Figure 1. Service logic elements providing content for management constructs.

##### 4.1. Business model and service logic

Osterwalder et al. (2005) define “business model” as a conceptual tool that contains a set of elements and their relationships and allows the business logic of a specific firm to be expressed. Business models should describe the value proposition to segments of customers, and should also depict the architecture of the firm and describe its network of partners.

Nenonen & Storbacka (2010) group the contents of business models into five parts: customers, earning logics, resources & capabilities, value networks and, finally, strategic decisions. According to our interpretation, strategic decisions can be seen as a continuum towards the implementation of a business model. Business model implementation and business model design are distinct activities (Osterwalder et al. 2005). It could be summarized that business models set out the intention and the baseline for business logic, while the actual implementation is steered by the business strategy and strategy control (discussed in next section).

Business models offer a versatile framework for the utilisation of service logic. From a value co-creation point of view, business models are the communication tools used by parties to match their value propositions and expectations. Nenonen & Storbacka (2010) discuss this alignment as external configurational fit between the business models of providers and customers.

Balancing the value logics of both providers and customers (or more parties in the case of value networks) is a crucial element in the earning logic dimension of business models. In addition, business models offer design placeholders for viewing a company's business as an element in a value network.

From an operationalization point of view, measuring customer value or the customer's perception of value remains the main challenge. Customer value and value perception evaluations should be central service concept design tasks (value metrics for individual service) and strategy control levels (value metrics for an external configurational fit).

#### *4.2. Service concept and service logic*

Most definitions of service concept cover the pair of customer needs (WHAT, from the customer's perspective) and HOW these needs and wishes are satisfied by the service offer (e.g. Edvardsson & Olsson 1996; Grönroos 2007; Johnston & Clark 2008; Goldstein et al. 2002).

Grönroos sees service concept as an umbrella concept, guiding the development of basic service packages and augmented service offerings, including service process models, interactions and co-production efforts. Basic service offerings focus on the technical quality of what the customer receives, while the augmented service offering emphasizes the "how", including process quality (Grönroos 2007).

Communicational and alignment aspects are especially pinpointed by Clark et al. (2008), who see the service concept as a mental picture of the service that is shared by customers, employees, and shareholders. Service concept aligns an operational view (HOW) and a marketing view (WHAT) with customer perceptions.

Goldstein (2002) sees service concept as a tool for determining the most appropriate performance measures for a particular service. The authors place particular emphasis on measures that affect service process through the behaviour of service workers in all functional areas. This view, together with the 'service in mind' mental picture approach by Clark et al. (2008) provides a basis for studying service concept as an important operationalization construct for service culture.

As many of the service concept formulations utilise a WHAT and HOW approach (Goldstein et al. 2002), then how can this paper's *Why-What-How* approach be included in this perspective? *What* and *how* levels clearly match their counterparts in the literature about the service concept, but the *Why* approach puts an extra emphasis on the evaluation of customer needs and wishes. We propose that the *Why* approach explicitly introduced into service concepts would improve service design and provide better support for the value creation activities of customers (for value-in-use). For example, the *Why* approach promotes a deep analysis of customer processes and usage context from the value realization perspective, as implied earlier in the business model discussion.

#### *4.3. Business strategy and service logic*

The relationship between business models and strategy is not completely clear, and it is common for these concepts to be used interchangeably (Seddon et al. 2004; Osterwalder et al. 2005). However, according to the Osterwalder et al (2005) literature review, more authors see these concepts as linked but distinct.

Business strategy is focused on describing how the company will achieve its desired outcome of satisfying employees, customers, and shareholders (Kaplan & Norton 2004). Many authors emphasize the dynamic nature of business strategy; strategy guides decisions concerning changing business conditions, and competition is the most crucial environmental factor (e.g. Kaplan & Norton 2004; Porter 1996; Osterwalder et al. 2005).

It can be summarized that when the business model is more like a company's architecture, logic of existence and intentions, then business strategy is a more dynamic and goal-oriented survival framework used to guide the execution of these intentions.

Kaplan and Norton describe strategy as a pathway between the present position and a desired but uncertain future. This pathway is illustrated as a series of linked hypothesis - cause-and-effect relationships, communicated in the form of a strategy map (Kaplan & Norton 2004). A strategy map with goals and links is operationalized into a balanced scorecard (BSC), which aims to provide aligned performance control on financial, customer, internal process, and learning and growth levels.

From a service logic operationalization point of view, strategy control through strategy maps and balanced scorecards seem to be an attractive match. Service logic pushes an integrative and systemic approach to business management and a balanced scorecard is a construct used to link multilevel strategy implementation approaches into an overarching but quantifiable strategy.

However, BSC has been criticised as being too mechanistic and simplistic with its one direction causalities, and lacking means to cope with networked co-creation environments (Jackson 2006; Voelpel et al. 2006). Voelpel et al. (2006) propose a new systemic scorecard (SSC) concept (first conceptualized by Leibold et al. (2002)) to patch up deficiencies of BSC. A systemic scorecard aims to extend BSC's four perspectives (financial, customer, processes and learning & growth) towards networked value co-creation, customer success and systemic knowledge management.

As discussed earlier with business model and service concept levels, the operationalization of customer value perceptions and realisation remains the focal topic for further research. While customer value is operationalized on a service concept level and measured by implementing a service system, by definition this measure would have a place in balanced or systemic scorecards for controlling the success of the strategy implementations of companies.

## **5. Conclusions**

Service logic, as analysed and discussed extensively in this study, gathers both elements that are well known in management disciplines, as well as newer elements and interconnections that are not trivial to operationalize for further implementation in business management. Our literature study forms a balanced view of service logic with elements that are combined under the nature of value, nature of service, service culture and seamless integration of these elements.

We initialized discussion about the operationalization of balanced service logic within existing management constructs. An emphasis should be placed on the main operationalization challenges of making the realized value as explicit as possible (thus justifying value co-creation as early as possible) and controlling the balance of multilevel service logic elements throughout the service provisioning chain, from value proposition to value realisation. But research has to remain open to the possibility that current management constructs might be more or less tied to dominant logics from the past, thus requiring new design and control frameworks to fully exploit the potential of new logics. The next step for further research is to gather rich empirical data and experiences of

how the different service logic elements, as well as all the elements as a whole, are manifested in service business management.

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