



Understanding of the Role of the Customer in the Solution Business

Inaugural dissertation

submitted to attain the academic degree

doctor rerum politicarum (Doktor der Wirtschaftswissenschaften)

at the

ESCP Europe Wirtschaftshochschule Berlin

by

MSc. Jan Torben Petri

born October 20th, 1986 in Hamburg, Germany

Düsseldorf

2017

Doctoral examination committee

Head: Prof. Dr. Martin Schmidt

Examiner: Prof. Dr. Frank Jacob

Examiner: Prof. Dr. Dr. h. c. Michael Kleinaltenkamp

Day of disputation: 29.06.2017

Acknowledgments

This dissertation was a journey that taught me a great deal, not only about my research field but also about myself. Many people who have been part of this journey had a lasting impact on me. I want to use this opportunity to express my gratitude to them.

My highest gratitude goes to my supervisor Prof. Dr. Frank Jacob for the examination of the dissertation and his support throughout the entire process, during which he granted me a high degree of freedom. Furthermore, I want to thank Prof. Dr. Dr. h. c. Michael Kleinaltenkamp and Prof. Dr. Martin Schmidt for assessing the dissertation and serving on the doctoral examination committee.

Special thanks are due to all professors at the ESCP Europe Business School who guided me through the doctoral studies program and the colloquia. I would particularly like to thank Prof. Dr. Robert Wilken for serving as my second supervisor and providing valuable feedback.

To write a dissertation is a demanding and sometimes exhausting exercise. I thank my family and friends, who supported me through their patience and acceptance of my frequent absences. My special gratitude goes to my girlfriend Jana. She always backed me up, enabled that I could focus on the dissertation, and accepted that I spent most of my free time at my desk. I could not have done it without her support.

Finally, I want to thank my fellow students and the staff at the ESCP Europe Business School, who made this time even more fulfilling and instructive.

Jan Petri

Publications of this dissertation

Title	Authors	Publication Type	VHB	Status	Points
The customer as enabler of value (co)-creation in the solution business	Petri, Jan & Jacob, Frank	Journal article	B	Published in: <i>Industrial Marketing Management</i>	1
Customer Participation in the Creation of Business Solutions	Petri, Jan & Jacob, Frank	Journal article	B	Passed desk reject: <i>European Management Journal</i>	1
Hunting for value: How to enable value-in-use? A conceptual model	Petri, Jan & Jacob, Frank	Journal article	Not rated (Blind Peer Reviewed)	Accepted (in press): <i>Journal of Creating Value</i>	
Sum					2.0

Table of Contents

Table of Contents	V
List of Figures	VI
List of Tables	VII
1. The Relevance of Business Solutions in Marketing Research	1
2. Theoretical Background	4
2.1 Theoretical Integration of the Solution Business	4
2.2 The Customer in the Solution Business	6
2.3 Value Creation	8
3. Introduction to the Manuscripts	13
3.1 Research Objectives and Research Questions of the Manuscripts	14
3.2 Research Approach of the Manuscripts	15
4. Manuscripts	18
4.1 The customer as enabler of value (co)-creation in the solution business	18
4.2 Customer participation in the creation of business solutions	19
4.3 Hunting for value: How to enable value-in-use? A conceptual model	20
5. Discussion of the Results	21
5.1 Summary and Evaluation of the Results	21
5.2 Implications for Future Research	27
5.3 Implications for Marketing Practice	30
References	32

List of Figures

Figure 1: A comparison of extant and proposed views of a customer solution rethinking	7
Figure 2: Value generation process and co-creation according to SL	10
Figure 3: Integration of the research objectives	15
Figure 4: Extended conceptualization of customer solutions	22
Figure 5: Customer variables enabling value (co)-creation	24
Figure 6: Model for enabling value-in-use	27

List of Tables

Table 1: Overview of the dissertation manuscripts	13
Table 2: Research objectives and research questions of the manuscripts	14
Table 3: Research design of the manuscripts	17
Table 4: Determining variables for customer participation	25

1. The Relevance of Business Solutions in Marketing Research

“The winners will be those who deliver solutions from the users’ point of view. That is a big part of marketing’s job.” — Jack Welch (Kumar, 2004, p. 84)

Scholars have a long history of investigating the solution business; however, during the past decade, it became a priority in business-to-business marketing research (Ansoff & Stewart, 1967; Wiersema, 2013). The increase in competition across industries has encouraged firms to seek opportunities to differentiate themselves and increase revenue and profit by transforming from manufacturing and service firms to providing business solutions (Biggemann, Kowalkowski, Maley, & Brege, 2013). The outcome of this ongoing “servitization” has resulted in 55% of U.S. manufacturing firms offering solutions as of 2011 (Neely, Benedettini, & Visnjic, 2011). Although it is questionable whether all those firms actually provide solutions or just use it as a fashionable marketing term (Day et al., 2004), the solution literature has evolved in parallel, investigating the required competences and processes to deliver solutions to the customer (Cova & Salle, 2007; Davies & Brady, 2000). A frequently used example is the transformation of the industrial company Rolls-Royce. The manufacturing company shifted from crafting airplane turbines to charging airlines only for the hours they use the firm’s jet engines and offering extensive maintenance services called “power by the hour”. In addition to other benefits, this solution addresses customers’ desire to shift risks – in this example, the risk of engine downtime – from the customer to the provider.

The literature stresses the importance of defining customization of the solution through co-creation with the customer, noting that customer integration is a prerequisite to co-create the outcome because the provider firm depends on the information exchange with its customer (Prahalad & Ramaswamy, 2004; Tuli, Kohli, & Bharadwaj, 2007). Furthermore, Grönroos & Voima (2013) point out that customers in particular hold an important position in that they lead the overall solution creation process: they not only determine the provider’s role in the process but also ultimately receive the created value-in-use. In

addition, Zerbini, Golfetto, & Gibbert (2007, p. 791) note that solution providers must develop a broad understanding of their customers, as they must “anticipate the buyer in identifying a competence gap and in developing the skills needed to fill it” to be successful.

However, although several empirical and conceptual contributions form a stable foundation, certain research directions have been left underexplored. For example, solutions literature has focused on the provider’s perspective but has neglected the customer’s (Tuli et al., 2007), which is particularly important from a value-in-use logic standpoint, as value is experienced through the recipient’s use (Grönroos & Voima, 2013). Furthermore, considerable uncertainty remains among scholars with regard to how value is created and the nature of the customer’s role in the creation process (Grönroos, Strandvik, & Heinonen, 2015; Heinonen & Strandvik, 2015; Vargo & Lusch, 2016).

Thus, this dissertation’s general objective is to investigate the business solutions customer. It addresses this objective through the following four research questions answered using an explorative as well as a conceptual research approach:

1. What are the typical customer needs that prompt them to engage with providers to create solutions?
2. How does the customer typically enable value (co)-creation in the context of solution business?
3. How is customer participation during the solution development changing and which variables determine the degree of customer participation?
4. How can business solution customers enable the creation of value-in-use?

This dissertation has several implications for marketing theory and practice. First, the research enhances understanding of the solutions business customers’ role and activities to enable co-creation. Second, it provides new insight by extending the solution process and identifying customer needs to engage with solution providers. Third, the dissertation explores the degree of customer participation in the solution development process and the influencing variables. Fourth, the research identifies four interrelated elements that

facilitate value-in-use. Finally, by integrating findings from the three articles that constitute this dissertation, it enables applying a systematic approach to co-create solutions that facilitate value-in-use. This contribution enhances theoretical understanding of the customer in a business solution context as well as provides practitioners new perspectives to manage co-creation and value generation when developing business solutions.

This dissertation is structured as follows: The next chapter provides an overview of the theoretical background, describing the theoretical integration of the solution business in marketing research and the business solution customer as well as outlining the discussion on value creation. Chapter 3 introduces the three manuscripts of this dissertation by addressing each article's specific research objectives and questions. Moreover, it explains the research approaches applied to achieve the outlined objectives. The subsequent chapter presents the three manuscripts in detail. Finally, the dissertation concludes with a summary and evaluation of the obtained results and discusses implications for future research as well as marketing practice.

2. Theoretical Background

2.1 Theoretical Integration of the Solution Business

Due to its popularity and long tradition, the solution business has been widely studied in many research fields, which address solutions from various perspectives (Nenonen & Storbacka, 2013). Management and strategy literature streams (e.g. Davies, Brady, & Hobday, 2006; Johansson, Krishnamurthy, & Schlusberg, 2003) are common areas that discuss business solutions; the servitization (e.g. Neely et al., 2011; Visnjic Kastalli & Van Looy, 2013), and marketing and sales (e.g. Aarikka-Stenroos & Jaakkola, 2012; Tuli et al., 2007) research streams discuss them as well.

Many solution providers did not begin in the solution business; thus, successfully adding solutions to a firm's portfolio means going through an extensive transformation process (Jacob & Ulaga, 2008; Sawhney, 2006). The servitization literature frequently discusses the transformation of manufacturing companies to solution providers, emphasizing the benefits of improved competitiveness and higher profits (Neely, 2007; Storbacka, Windahl, Nenonen, & Salonen, 2013). However, reports of lower profitability for these transformed solution provider firms tarnish the picture (Neely, 2008). For example, Fang, Palmatier, & Steenkamp (2008) find that such firms must generate between 20% and 30% of their revenue through services before enhancing profit. Scholars have addressed these challenges from different perspectives. For example, Storbacka et al. (2013) propose that solution provider firms must change their business model along four continua: customer embeddedness and offering integratedness, operational adaptiveness and organizational networkedness. Other scholars address these challenges by suggesting competences, capabilities, and processes that enable manufacturers to deliver solutions to the customer (Davies & Brady, 2000; Zerbini et al., 2007). For example, Kohtamäki et al. (2013) analyze manufacturing firms that added solution offerings to their portfolio. They claim that those firms do not generate additional sales revenue until the firm has network capabilities, which draws on the firm's coordination, relational skills, market knowledge, and internal communication.

However, it is important to define solution providers more broadly. Researchers identify not only traditional manufacturing companies that add services to their offerings as solution providers, but also firms in other industries like information technology (Ceci & Masini, 2011) and knowledge-intensive business services (Aarikka-Stenroos & Jaakkola, 2012). This broad definition is apparent in the marketing and sales literature that addresses the solution business. This literature has its origin in the United States, when researchers first introduced the idea of system selling in the early 1960s (Cova & Salle, 2007; Mattsson, 1973). The traditional product-centric perspective views solutions as bundles of products and services satisfying concrete customer needs that were developed by solution provider firms through an “outside-in” approach (Nordin & Kowalkowski, 2010, p. 442). In this context, it is expected that the solution provider understands and resolves the customer’s problem (Lapierre, 1997). However, other researchers have raised doubts as to how clearly a customer can articulate the problem and whether developing the solution must be viewed as a provider-driven procedure (Aarikka-Stenroos & Jaakkola, 2012; Grönroos & Voima, 2013). In recent years, this perspective has evolved toward a process-centric perspective emphasizing the relational dimension of solution development (Tuli et al., 2007). In the same vein, Vargo & Lusch (2016, p. 8) conclude that “a service-centered view is inherently beneficiary oriented and relational”.

Furthermore, the evolution of understanding the solution business is also reflected when reviewing several definitions in extant literature. Adopting a traditional product-centric perspective, Stremersch, Wuyts, & Frambach, (2001, p. 2) define solutions as a “comprehensive bundle of products and/or services, that fully satisfies the needs and wants of a customer related to a specific event or problem”. In contrast, Storbacka et al. (2013, p. 707) take a process-centric perspective by focusing on the relational solution co-creation, defining it as “longitudinal, relational process that comprise the joint identification and definition of value creation opportunities, the integration and customization of solution elements, the deployment of these elements into the customer’s process, and various forms of customer support during the delivery of the solution”. The literature’s view of the solution business as dynamic is also reflected in the fact that this development continues as scholars turn “from a dyadic orientation toward a network orientation” (Vargo & Lusch,

2016) to investigating “value networks” because “value co-creation is not limited to dyadic relationships, but extends to business ecosystems” (Kohtamäki & Rajala, 2016, p. 6).

2.2 The Customer in the Solution Business

The shift toward business solution development based on co-creation has exposed the solution literature’s neglect of the customer’s perspective (Grönroos, 2011; Grönroos & Voima, 2013), though studies are increasingly emphasizing the meaning of the customer not only in the creation process but also with regard to perceived value (Heinonen et al., 2010; Macdonald, Kleinaltenkamp, & Wilson, 2016). Thus, in solution business research as well, empirical contributions indicate that future research should emphasize the customer (Brax & Jonsson, 2009; Payne, Storbacka, & Frow, 2008; Töllner, Blut, & Holzmüller, 2011). In the same vein, Heinonen et al. (2010, p. 533) suggest focusing not on the exchange but rather on “how a company’s service is and becomes embedded in the customer’s contexts, activities, practices, and experiences, and what implications this has for service companies”.

In particular, Tuli et al.’s (2007) frequently cited article addresses the necessity of a uniform understanding of the solutions customers’ view. They find that solutions providers have a product-centric perspective on solutions, focusing on the customization and integration of the solution only, whereas customers view solutions as the outcome of a four-step relational customer–provider process: requirements definition, customization and integration, deployment, and postdeployment support. Figure 1 illustrates the differences between provider- and customer-informed solutions.

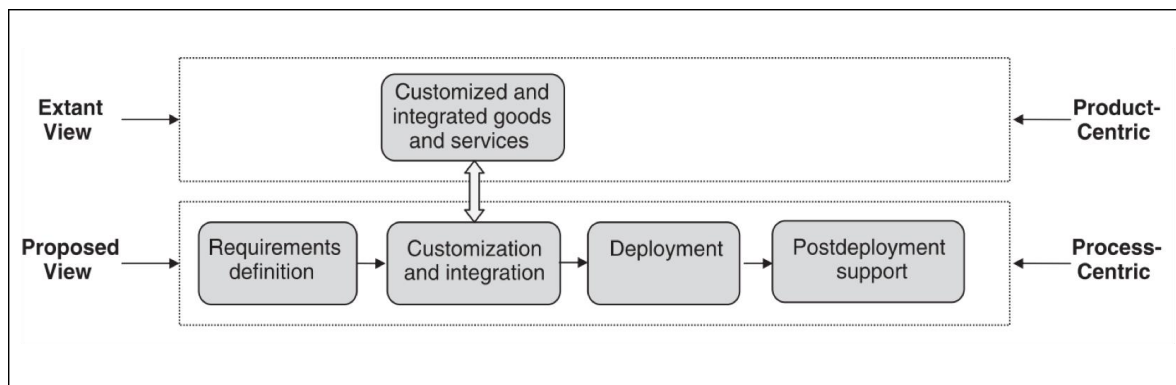


Figure 1: A comparison of extant and proposed views of a customer solution rethinking

Source: Tuli et al. (2007, p. 5)

Furthermore, Tuli et al. (2007) suggest supplier and customer variables that determine solution effectiveness. Specifically, the customer can influence solution effectiveness by being adaptive to the provider's procedures, informing the provider about political issues in the firm, and acting as operational counsel through information exchange with providers regarding the firms' operations. Tuli et al.'s work has influenced other scholars. For example, drawing on the relational directive, Aarikka-Stenroos & Jaakkola (2012) propose a solution process that focuses on joint problem solving with phases such as managing value conflicts. They also propose supplier and customer roles as well as resources to facilitate this process.

Another research stream investigates the perspective and impact of customer participation in the co-creation process. Traditional research emphasizes the economic rationale of customer participation, suggesting that "instead of being a passive bystander, the consumer could supply productive labor just at the moment it is needed" (Fitzsimmons, 1985, p. 62) and considering the customer a subordinate to the provider firm by viewing customers as "partial employees" (Bitner, Faranda, Hubbert, & Zeithaml, 1997, p. 197). This research stream views the provider as the leader in the solution creation process and only involving the customer when needed (Grönroos & Voima, 2013). In contrast, the current prevalent relational perspective on customer participation views customer competences and capabilities as indispensable and the customer as the determining factor when creating

solutions (Grönroos & Voima, 2013; Prahalad & Ramaswamy, 2000). For example, to co-create a solution, customization is necessary (Tuli et al., 2007); thus, it is crucial that customers provide information regarding the firms' specifics. Nordin & Kowalkowski (2010, p. 450) conclude that "the close and collaborative *modus operandi* is seen as a prerequisite for successful solutions".

Scholars also discuss the negative effects of customer participation. Investigating the co-creation of innovative solutions, Töllner et al. (2011) find that although a high degree of customer participation at the beginning and end of the creation process is beneficial, it becomes problematic during the intermediate stage in which the content is generated, as the customer may interfere with the creative process. Furthermore, Chan, Yim, & Lam (2010) claim that customer participation can increase employees' job stress (and thus decrease job satisfaction) by creating higher uncertainty and less information, role conflicts, and work overload. Note, however, that Chan et al. (2010) find that this negative effect is moderated by value creation for the employee. Because the ultimate objective of solution provision is to create value for the customer, value creation has become another important literature stream, as discussed next.

2.3 Value Creation

Customer value has always been a research priority in marketing literature, although extant research supports several competing perspectives, resulting in an inconsistent and often confusing understanding of value and its creation (Grönroos et al., 2015). Similarly, solution business literature is often unspecific with regard to the concrete value that a solution creates for the customer; studies variously refer to "satisfy[ing] customer needs" (Tuli et al., 2007, p. 5), "increas[ing] the overall value" (Brady, Davies, & Gann, 2005, p. 362), and "mak[ing] life easier or better for the client" (Miller, Hope, Eisenstat, Foote, & Galbraith, 2002, p. 3).

In traditional literature, the provider often has the role of the value creator. However, with the emergence of several service logics, this role has been questioned, and literature addressing

value co-creation has become a focal point of research. Three service logics in particular stimulate the following discussion: Service-Dominant Logic (SDL), Service Logic (SL), and Customer-Dominant Logic (CDL).

Vargo & Lusch (2004, 2016) introduced the SDL, which draws on 11 foundational premises, of which 5 serve as axioms. Central in the SDL logic is the transition from value-in-exchange to value-in-use, as the SDL claims that value can only be “determined by the user in the ‘consumption’ process and through use or what is referred to as value-in-use” and not through the exchange with the provider (Lusch & Vargo, 2006, p. 284). This logic also implies that customer perceived value-in-use not only depends on the work of the solution provider but also on the customer’s resources, such as skills and knowledge, to apply the solution. More specifically, Macdonald et al. (2016) elaborate in their empirical study that value-in-use is perceived and judged not only by the customer organization as collective value-in-use, but also by the individual employee as individual value-in-use. Moreover, they find that the employee’s perceived value-in-use depends on his or her place in the hierarchy and job role.

Although SDL is not a new idea, it raised academic awareness of the value creation concept and has stimulated a fruitful discussion among scholars. Thus, adaptations of the term “value-in-use” have emerged (e.g. value-in-context [Chandler & Vargo, 2011], value-in-social-context [Edvardsson, Tronvoll, & Gruber, 2011]). However, scholars agree that value is currently best defined as value-in-use and suggest that it can be defined “as all customer-perceived consequences arising from a solution that facilitate or hinder achievement of the customer’s goals” (Macdonald et al., 2016, p. 98). Furthermore, after several revisions of the foundational premises (Vargo & Lusch, 2004, 2006, 2008), Vargo & Lusch (2016, p. 8) currently define their foundational premise 6 as an axiom and state that “value is cocreated by multiple actors, always including the beneficiary”, thus emphasizing that value is the result of a joint creation process.

Grönroos (2006) proposes the SL for marketing as an alternative view. Although the SL agrees in many aspects with the SDL, it differs in some as well. For example, focusing on differences with regard to value creation, the SL claims that the customer and provider are

not always co-creators of value, whereas “SDL makes value creation an all-encompassing, unspecified process, such that parties involved in an equally unspecified way contribute to a process that ultimately leads to value for the customer” (Grönroos & Gummerus, 2014, p. 212). Grönroos & Voima (2013) investigate the locus of value creation and differentiate three value creation spheres: the provider sphere, the joint sphere, and the customer sphere. In the provider sphere, the provider compiles its resources to facilitate and offer potential value-in-use for the customer. The joint sphere is described as the co-creation platform, which is established if the customer and provider decide to enter into direct interaction to co-create value-in-use. In the customer sphere, the customer creates value-in-use independently from any provider. Figure 2 illustrates the value spheres and co-creation according to SL (the value generation process is portrayed as linear for the sake of simplicity).

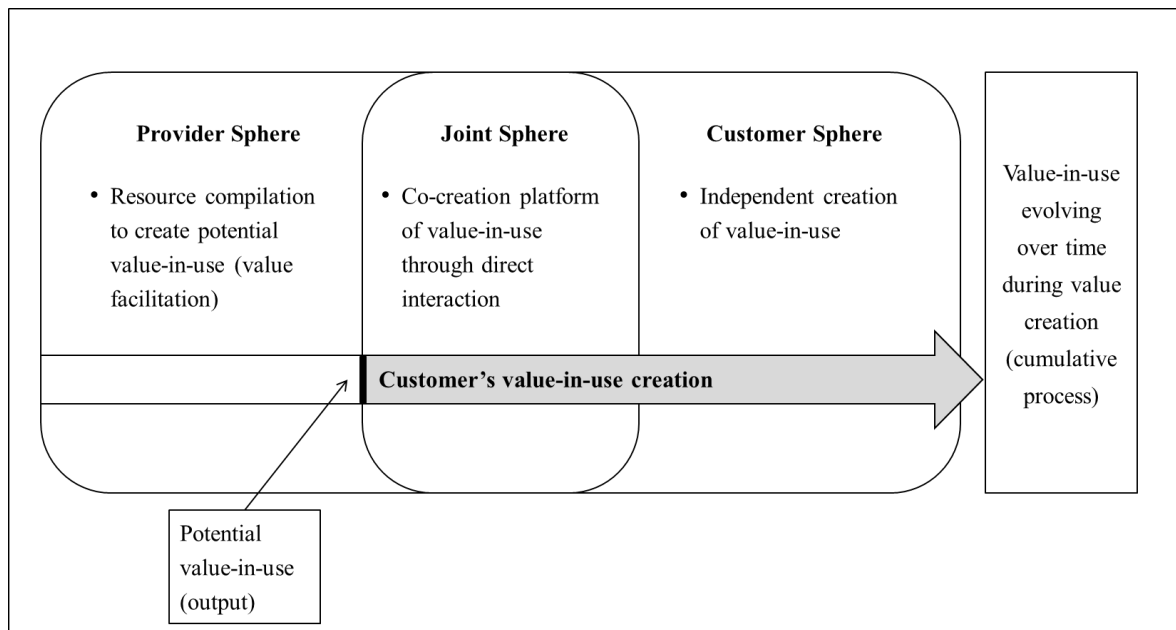


Figure 2: Value generation process and co-creation according to SL

Source: based on Grönroos & Gummerus (2014, p. 218)

Drawing on these three differentiated spheres, Grönroos & Gummerus (2014) claim that value creation cannot be all-encompassing as suggested by the SDL because this would require constant direct interaction between the involved actors. In contrast, the SL specifies

that this interaction occurs only in the joint sphere, which is not always created. Thus, it is possible that the provider would only facilitate potential value creation but not co-create value because the customer does not establish the co-creation platform in the joint sphere. Vargo & Lusch (2016, p. 9), in contrast extend the value co-creation concept by arguing that human systems are characterized by interdependencies and that “value is not completely individually, or even dyadically, created but, rather it is created through the integration of resources, provided by many sources”.

The CDL provides another perspective (Heinonen et al., 2010). Instead of focusing on services or products, the CDL emphasizes the decisive role of the customer in all successful businesses, as “without customers, there is no business, and without business, there is neither service nor service systems” (Grönroos et al., 2015, p. 74). Along those lines, Heinonen et al. (2010) notes that it is not about how the customer gets involved with the provider in the creation process but rather how the customer involves the provider, thus distinguishing CDL from both SDL and goods-dominant logic, as both represent a provider-driven perspective. The main difference is that the CDL focuses on how customers embed services through activities and experiences in their process rather than how providers create such services.

The CDL also elaborates on the value creation aspect. Similar to the SL’s three spheres, the CDL differentiates the customer’s service context, the interactive service context, and the provider’s service context, arguing that the customer will use varying constellations of the three areas to accomplish its objectives (Heinonen & Strandvik, 2015). In this view, the role of the provider is weakened; the offering of value propositions created in the providers’ service context is regarded as a minor contribution, as customers can usually draw on own experiences and knowledge. Only the provider’s concrete performance as defined by the customer affects value creation. Thus, in contrast to the SDL and in line with the SL, the CDL maintains that value is not always co-created (Heinonen, Strandvik, & Voima, 2013). Furthermore, the CDL distinguishes between value creation for the customer and value creation for the provider; though they are connected, they are not necessarily aligned (Grönroos et al., 2015). This view regards the latter as a key issue, as the provider might have a different understanding how value is created than the customer.

Applying a value-in-use logic, Heinonen & Strandvik (2015) suggest that customer value is not created but formed and accumulated by customers' processes and experiences.

In conclusion, the various customer solution logics overlap and differ in several areas, mainly as a result of adhering to different perspectives (e.g. customer vs. provider perspectives); imprecise definitions and applications of terminology, which allow room for interpretation; and different convictions. The manuscripts of this dissertation are influenced and apply concepts from all logics. Drawing on the CDL and the SL, they take the view that the customer has the determining role in the solution creation process and decides about what, with whom, and where the solution will be developed. Also in line with CDL, the manuscripts aim to identify elements of how solution customers enable solution development. However, they also draw on the SDL and further extant literature when emphasizing the importance of relational solution development (e.g. Tuli et al., 2007). Nevertheless, value co-creation as an all-encompassing concept that includes constant provider involvement appears contrary when following value-in-use logic, a concept expressed herein by using the notation "value (co)-creation" in the first manuscript of this dissertation.

3. Introduction to the Manuscripts

This dissertation consists of three manuscripts. One manuscript has been published in a journal, one manuscript has been accepted by a journal, and the remaining manuscript has passed a journal's desk reject in the review process. Table 1 provides an overview and additional publication information. All three manuscripts are structured as stand-alone pieces: They begin with an abstract followed by the article organized by numbered chapters. The numbering of the chapters, illustrations and tables refer exclusively to the specific manuscript, and the literature references concluding each manuscript refer only to the specific article. Any style or linguistic differences of the manuscripts are due to the requirements of the according journal. Chapter 4 presents the manuscripts in their entirety.

Table 1: Overview of the dissertation manuscripts

	Title	Authors	Publication Type	VHB	Status	Points
Manuscript 1	The customer as enabler of value (co)-creation in the solution business	Petri, Jan & Jacob, Frank	Journal article	B	Published in: <i>Industrial Marketing Management</i>	1
Manuscript 2	Customer Participation in the Creation of Business Solutions	Petri, Jan & Jacob, Frank	Journal article	B	Passed desk reject: <i>European Management Journal</i>	1
Manuscript 3	Hunting for value: How to enable value-in-use? A conceptual model	Petri, Jan & Jacob, Frank	Journal article	Not rated (Blind Peer Reviewed)	Accepted (in press): <i>Journal of Creating Value</i>	
Sum						2.0

3.1 Research Objectives and Research Questions of the Manuscripts

As noted previously, this dissertation has four main research objectives. Table 2 provides an overview of them and the corresponding research questions addressed in each manuscript of the dissertation.

Table 2: Research objectives and research questions of the manuscripts

	Research objectives and research questions	
Manuscript 1	1. Research objective:	Understand business solution customers' needs to engage with solution providers.
	1. Research question:	What are the typical customer needs that prompt them to engage with providers to create solutions?
	2. Research objective:	Investigate customer's role and contributions during the value (co)-creation of solutions.
	2. Research question:	How does the customer typically enable value (co)-creation in the context of solution business?
Manuscript 2	3. Research objective:	Provide a differentiated understanding of customer participation during the solution co-creation.
	3. Research question:	How is customer participation during the solution development changing and which variables determine the degree of customer participation?
Manuscript 3	4. Research objective:	Development of a conceptual model to capture value-in-use in solution creation.
	4. Research question:	How can business solution customers enable the creation of value-in-use?

Figure 3 portrays the integration of these research objectives and illustrates how the dissertation addresses the overarching topic of the customer in the solution business. The integration of the findings provides a systematic approach for co-creating solutions. Structured by the solution development process, research objectives 1 and 4 focus on the preparatory measures of the solution development, whereas research objectives 2 and 3 provide a differentiated perspective of the relational solution development to create value.

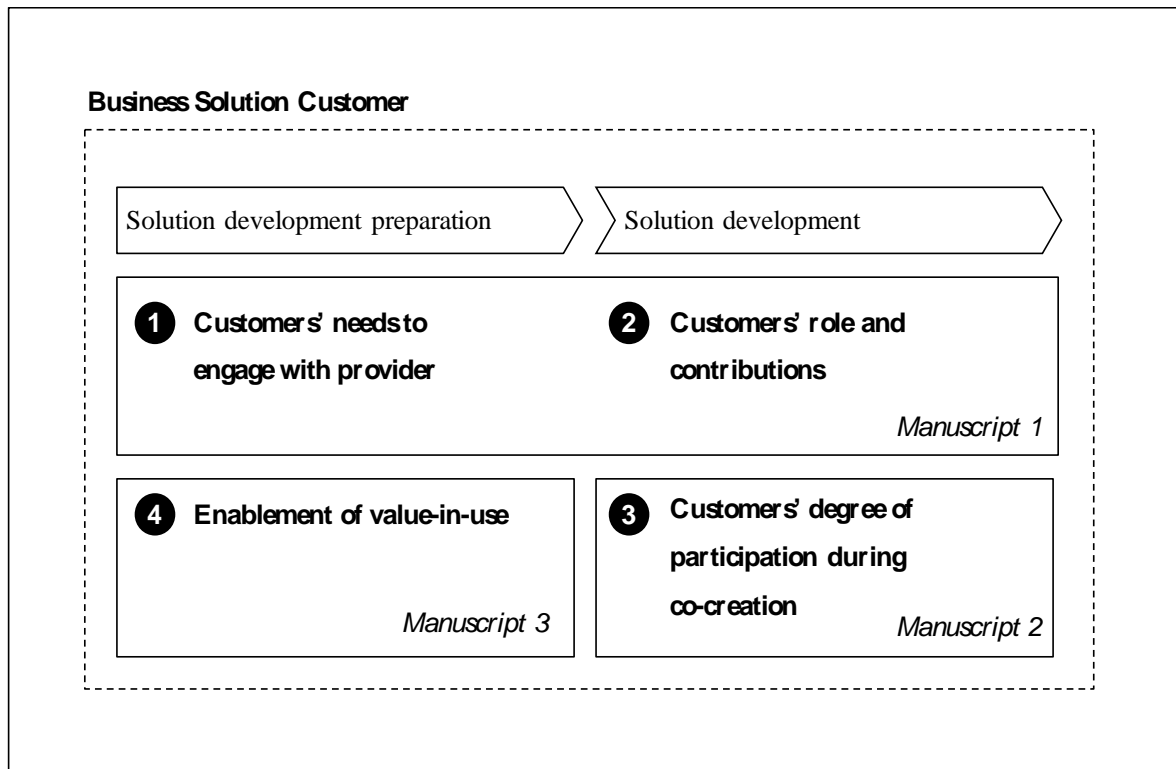


Figure 3: Integration of the research objectives

3.2 Research Approach of the Manuscripts

Selecting the research approach to study a topic depends on, among other criteria, the research problem and the availability and options to collect data (Creswell, 2013). Although the overarching topic of the customer in the solution business is defined, the manuscripts presented in Chapter 4 have different research objectives and therefore use varying research approaches, as explained in detail in the following paragraphs. Table 3 provides an overview of the research design and sample of each manuscript.

The explorative character of qualitative research methods offer scholars the opportunity to investigate new areas and adapt to changing conditions in the research field as well as when interacting with a research subject (Lamnek, 2010; Steger, 2003). For Manuscript 1, considering that scholars' focus for many years was on the provider of business solutions and only a few empirical studies address the business solution customer (Grönroos, 2011; Tuli et al., 2007), as well as its objective of investigating individual solution experiences, a

qualitative research approach was deemed appropriate. The empirical data were collected through semi-structured in-depth interviews. This research method allows the researcher to structure the interview but allows the flexibility to follow up on individual interviewee responses. This method allows novel research directions to develop and emphasizes the explorative character of this approach (Flick, 2014; Mason, 2006).

The explorative character of the qualitative research approach is also reflected in the second manuscript. The obtained empirical data from the first manuscript pointed to another research question. Hence, the research design was after the first two interviews slightly adjusted by extending the semi-structured interview questions and those two interviewees have been excluded from the sample of the second manuscript. The new empirical data was not reported in the first manuscript as well as independently analyzed.

The third manuscript applies a conceptual approach. MacInnis (2011) suggests a typology of conceptual contributions. Drawing on this typology, this manuscript follows the integrative approach as the proposed conceptual model integrates well established empirical research by linking their independent results. The purpose of this approach is to create a new perspective through an overarching conceptual model.

Table 3: Research design of the manuscripts

	Research design
Manuscript 1	<ul style="list-style-type: none"> • Research method: Semi-structured in-depth interviews • Sample: 12 interviewees at four solution customer firms; 19 interviewees at a solution provider firm • Data collection period: 9 months • Data analysis: Qualitative content analysis; Krippendorff's Alpha reliability test
Manuscript 2	<ul style="list-style-type: none"> • Research method: Semi-structured in-depth interviews • Sample: 12 interviewees at four solution customer firms; 17 interviewees at a solution provider firm • Data collection period: 9 month • Data analysis: Qualitative content analysis; Krippendorff's Alpha reliability test
Manuscript 3	<ul style="list-style-type: none"> • Research method: Conceptual • Type of conceptual contribution: Integrative

4. Manuscripts

4.1 The customer as enabler of value (co)-creation in the solution business

Manuscript 1

The manuscript is published as: Petri & Jacob (2016). The customer as enabler of value (co)-creation in the solution business. *Industrial Marketing Management*, 56, 63–72.

DOI: 10.1016/j.indmarman.2016.03.009

4.2 Customer participation in the creation of business solutions

Manuscript 2

The manuscript passed the desk reject as: Petri & Jacob (2017). Customer participation in the creation of business solutions. *European Management Journal*.

4.3 Hunting for value: How to enable value-in-use? A conceptual model

Manuscript 3

The manuscript is accepted (in press) as: Petri & Jacob (2017). Hunting for value: How to enable value-in-use? A conceptual model. *Journal of Creating Value*, Published electronically March 22, 2017.

DOI: 10.1177/2394964317694780

5. Discussion of the Results

The objective of this chapter is to present and evaluate the main results of the research conducted for this dissertation. The chapter concludes with implications for future research and marketing practice.

5.1 Summary and Evaluation of the Results

To summarize the results of the three manuscripts, this discussion is structured using the four research questions investigated. A brief discussion following the summary evaluates the results.

Research Question 1: What are the typical customer needs that prompt them to engage with providers to create solutions?

The aim of the first research question addressed in Manuscript 1 is to gain a better understanding of the solution customer by identifying the main reasons a customer engages with a solution provider, a previously unexamined topic in the solution literature. To do so, the study uses a qualitative content analysis of empirical data, obtained through provider and customer interviews, to investigate customer needs.

The data analysis reveals two contributions. First, the results indicate that Tuli et al.'s (2007) established solution process must be extended to include the problem and need definition phase at the beginning of the process to specify the solution deliverables. In this phase, customers analyze their internal situation before entering into the co-creation of the solution. Figure 4 shows the extended conceptualization of customer solutions. Although this initial recognition of the customers' problem is well established in extant service and solution literature (Lapierre, 1997; Nordin & Kowalkowski, 2010), identifying internal needs of the customer to engage with a solution provider is novel for solution literature. Second, the data analysis identifies five internal factors: capacity, methodological expertise, functional expertise, market insight, and legitimation.

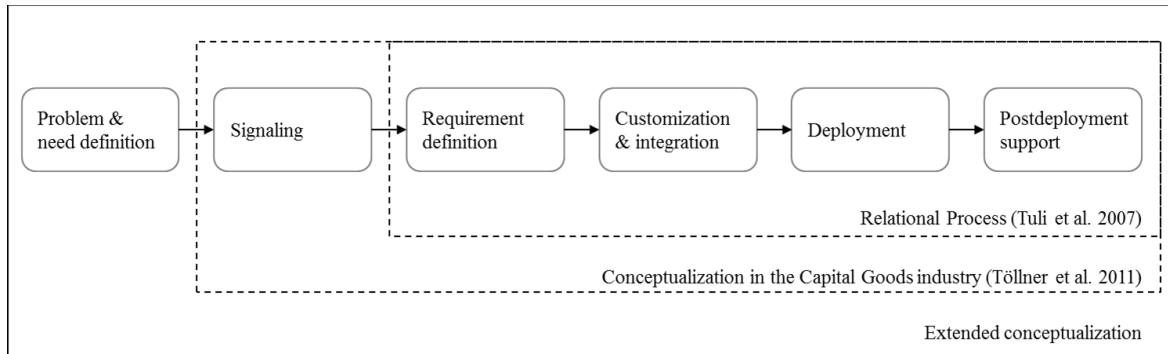


Figure 4: Extended conceptualization of customer solutions

The first research question extends available research determining why customers engage with provider firms to develop solutions. Answering this question broadens understanding of the solution customer in that it provides insights about customers' fundamental motives to engage with providers and to enter a co-creation process. The results confirm earlier findings from different research streams such as institutional theory (e.g. Carroll, 1997; Meyer & Rowan, 1977) and innovation management (e.g. Keskin, 2006) and integrate them through empirical data into the business solution research stream. The extended conceptualization of the solution process as well as the internal needs to engage with providers enhances marketing theory and provides scholars new opportunities to address the solution customer. Indeed, the results influenced further research in this dissertation: Manuscript 3 uses the identified internal needs phase when suggesting a conceptual model that enables value-in-use. Furthermore, it has several managerial implications, discussed subsequently.

Research Question 2: How does the customer typically enable value (co)-creation in the context of solution business?

Answering many scholars' (e.g. Heinonen & Strandvik, 2015; Payne et al., 2008) calls, Manuscript 1's second research question investigates the role and activities of the customer when developing solutions. The data analysis reveals that the solution customer must be regarded as a unit within the customer firm. Thus, the solution customer not only enters into a relational process with the solution provider but also with the internal stakeholders

such as senior management and affected employees. Within this context, the study suggests eight customer variables that enable value (co)-creation: objective and scope, target orientation, information and knowledge exchange, commitment, communication, people, trust, and ownership. Figure 5 illustrates the findings and the interactions of solution customer with the involved actors.

The results of this study confirm and extend extant research. For example, variables such as information and knowledge exchange and communication are integral elements of the SDL and the SL (Grönroos & Gummerus, 2014; Vargo & Lusch, 2016). To explore opposing and shared convictions as well as to avoid a customer or provider uninformed understanding, Manuscript 1 uses a research sample that includes both solution customers and providers, as Tuli et al. (2007) suggest. The data analysis reveals that providers particularly emphasize the customer variables commitment and communication, whereas the solution customers point out people, trust, and ownership as enabling variables for the provider. The remaining variables are equally supported.

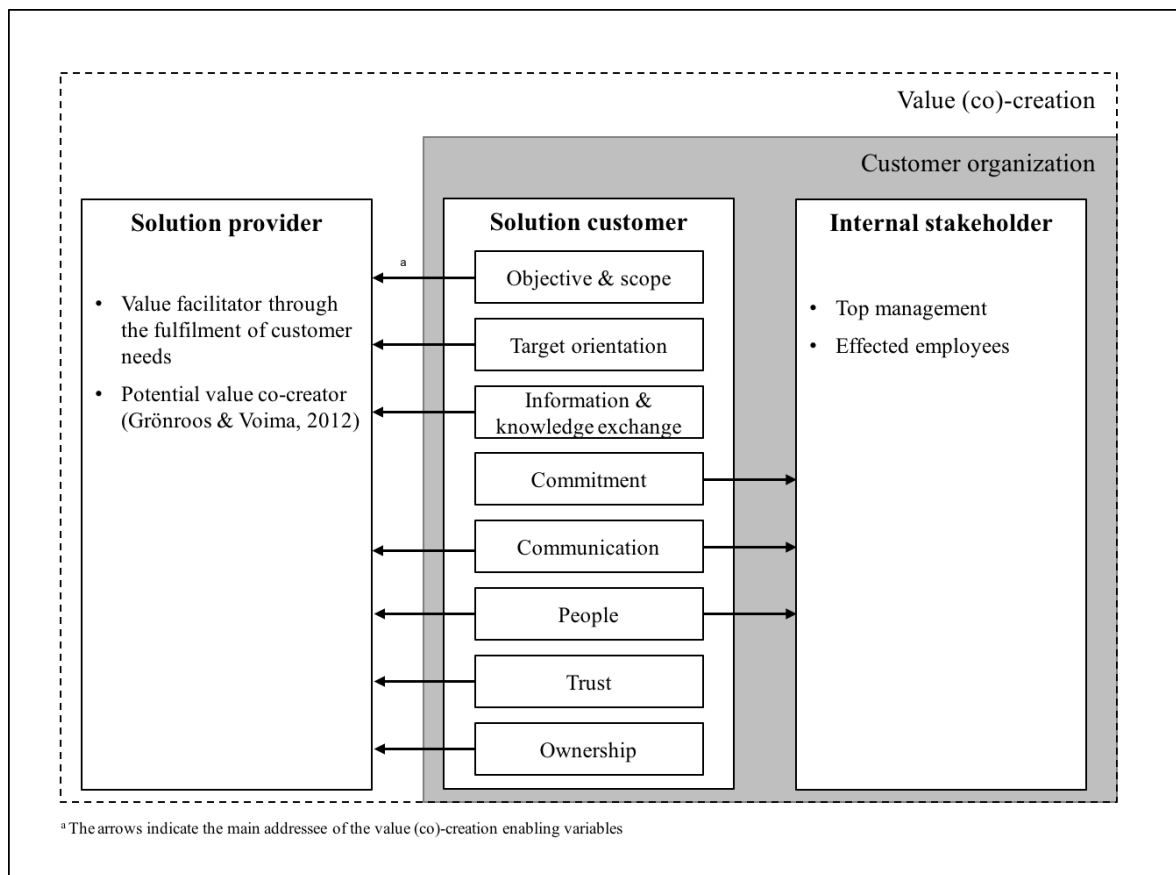


Figure 5: Customer variables enabling value (co)-creation

Moreover, the results of this study confirm and emphasize the important role of the customer in the solution process. Drawing on the identified enabling variables, necessary activities such as the provision of organization-specific information or the establishment of management and employee commitment for the solution can be hardly, if at all, be passed on to the provider.

Research Question 3: How is customer participation during the solution development changing, and which variables determine the degree of customer participation?

Manuscript 2 addresses the third research question; its objective is to investigate the degree and determining variables of customer participation in the solution process. Extant studies provide an undifferentiated picture of the degree of customer participation, treating it as static (e.g. Aarikka-Stenroos & Jaakkola, 2012; Tuli et al., 2007), though they emphasize its general importance (Mustak, Jaakkola, & Halinen, 2013). Research discussing service

and customer logics similarly notes the importance of customer participation (Grönroos & Gummerus, 2014; Heinonen & Strandvik, 2015; Vargo & Lusch, 2016).

Drawing on the data obtained from Manuscript 1 and applying the relational solution process from Tuli et al. (2007), the data analysis reveals that the degree of customer participation is high during the requirement definition and customization and integration of the solution but low during deployment and the postdeployment phases. The analysis further reveals four determining variables for customer participation: uncertainty, organizational specificities, management attention, and exhaustion. Those lead to four propositions for the degree of customer participation. Table 4 provides an overview of the determining variables and summarizes the derived propositions.

Table 4: Determining variables for customer participation

Variable	Description	Proposition
Uncertainty	<i>Uncertainty</i> addresses customers' and providers' lack of information and the high complexity of solutions.	P1: The greater the uncertainty of a customer and provider, the greater is the degree of customer participation.
Organizational specificities	<i>Organizational specificities</i> refers to the extent of customization necessary to fit the solution to the organization (e.g., processes, systems, culture).	P2: The greater the customer's organizational specificities, the greater is the degree of customer participation.
Management attention	<i>Management attention</i> describes the level of management attention as the development process evolves the impact of this attention on customer participation.	P3: The greater the management attention in a solution project, the greater is the degree of customer participation.
Exhaustion	<i>Exhaustion</i> refers to the impact of the effort employees have to put into the solution development.	P4: The greater the exhaustion of customer employees, the lesser is degree of customer participation.

These findings extend extant literature and raise new questions. Tuli et al. (2007) derive their suggested solution process using the frequency with which customers mention specific themes as a proxy for importance. However, Manuscript 2's data analysis indicates a gap between the emphasized importance and actual experience of customer participation at certain phases. This gap appears critical, particularly in the process phases with low customer participation, which focus on the application of the solution and therefore hold potential value-in-use for the customer. In the same vein, interviewees

pointed out that in successful projects, the degree of customer participation is also high during the later solution process phases.

Marketing and service logics extensively discuss if and where a provider is involved in the value (co)-creation process (Grönroos & Gummerus, 2014; Vargo & Lusch, 2016). However, from a customer value creation point of view, it appears to be more important to follow Heinonen & Strandvik's (2015) call to investigate how customers embed solutions and generate value-in-use. For example, Macdonald et al. (2016) suggest extending the solution process by adding a value-auditing phase, which would enable monitoring and optimization of value-in-use for the customer. This phase could allow detecting a decrease in customer participation in a critical value creation phase and adjusting for it through the management of identified variables.

Research Question 4: How can business solution customers enable the creation of value-in-use?

Manuscript 3 addresses the fourth research question, which involves enabling value-in-use through the business solution customer. The study is based on the idea that the solution creation process must align with value-in-use evaluation criteria. Thus, drawing on extant literature, it suggests a conceptual model that facilitates value-in-use. This model has four interrelated elements—solution objectives, resource requirements, assessment, and customer–provider interaction—that are grounded in extant literature and integrated in the solution creation process (see Figure 6).

Existing studies provide an extensive amount of knowledge analyzing value creation and business solutions, but they often do not apply the results to operational solution creation processes (e.g. Grönroos & Gummerus, 2014; Vargo & Lusch, 2008) or integrate findings on business solutions into the context of value creation (e.g. Tuli et al., 2007). Thus, Manuscript 3 embeds the suggested model in three commonalties identified in the value and business solutions literature. First, the customer is the locus of value creation (e.g. Grönroos & Gummerus, 2014; Heinonen & Strandvik, 2015). Second, value is created through a relational process (e.g. Tuli et al., 2007; Vargo & Lusch, 2016). Third, value is

perceptual and the result of the customer experience (e.g. Grönroos & Gummerus, 2014; Heinonen & Strandvik, 2015; Macdonald et al., 2016). In summary, Manuscript 3’s contribution lies in the integration of extant literature to suggest an overarching model that enables customers to prepare and conduct solution projects that are aimed at maximizing value generation for the customer.

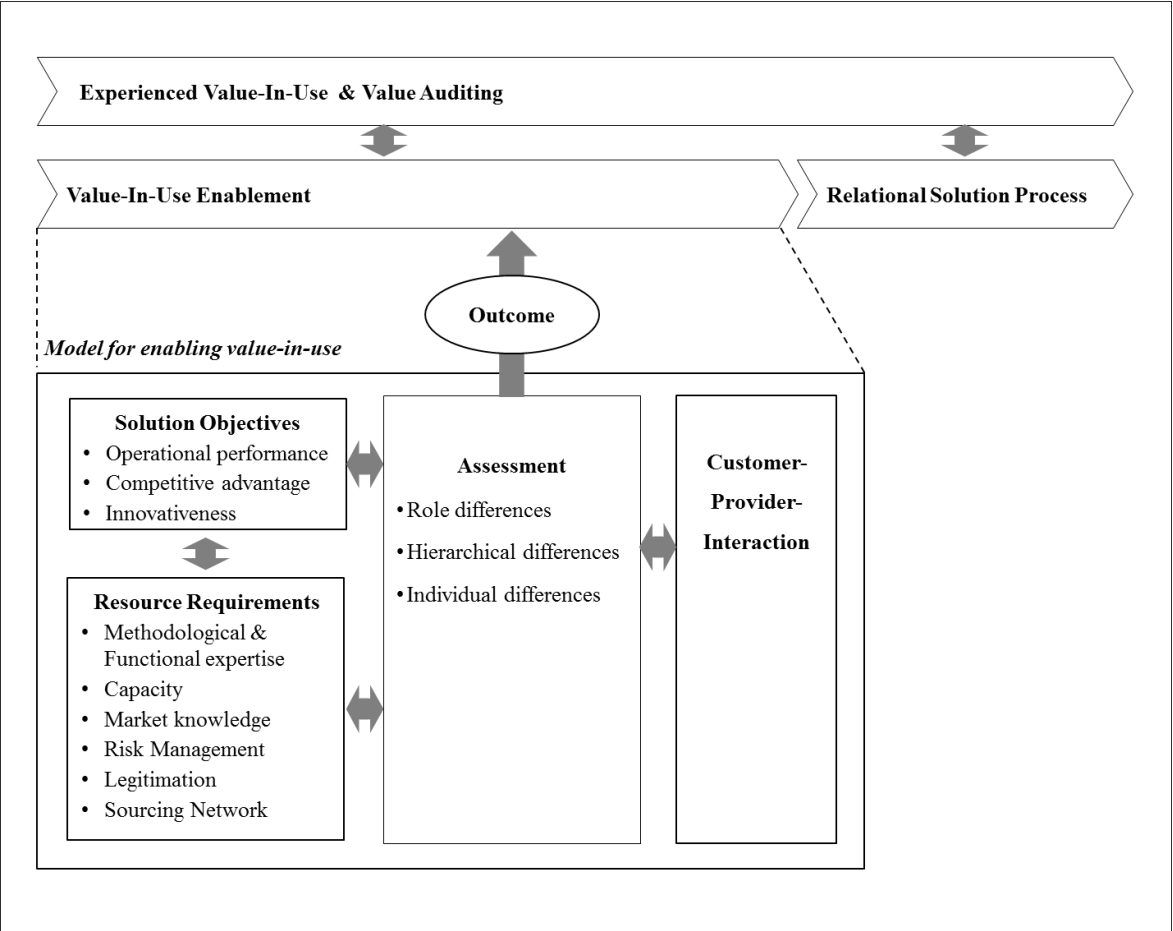


Figure 6: Model for enabling value-in-use

5.2 Implications for Future Research

In addition to this research’s theoretical contributions, it provides a basis for future studies. Each manuscript in this dissertation offers individual implications for future research, and the cumulative character of this dissertation means that presented opportunities for future research in one manuscript can be followed up in subsequent manuscripts. For example,

Manuscript 1 suggests investigating the customer engagement in the solution process, and Manuscript 2 follows this suggestion and determines the degree of customer participation in the solution creation. Nonetheless, three topics remain for future research that would support and enhance the contributions of this dissertation. The subsequent subsections discuss each in turn.

Business solutions in the context of value co-creation in service ecosystems

Like the findings of Manuscripts 1 and 2, most extant business solution and value co-creation literature draws on empirical data obtained from dyadic customer–provider relationships. However, modern business models create value in interorganizational systems that might include these classical dyadic relationships but focus on value networks or service ecosystems (Kohtamäki & Rajala, 2016). This development is also reflected in adaptations of the SDL, in which axioms 2 and 3 acknowledge multiple actors, defining ecosystems as “a relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional logics and mutual value creation through service exchange” (Vargo & Lusch, 2016, p. 10).

This development is currently not reflected in the solution business literature, which is still dominated by Tuli et al.'s. (2007) relational solution process based on dyadic customer–provider relationships. Potential areas for future research are exploring the impact of service ecosystems on the solution creation process, how the role of the solution customer should be defined in such a system, and how value co-creation will occur in an ecosystem.

Impact of culture on value in the solution business

Value is subjective and the result of the perceived experience, which can be influenced by many factors. Macdonald et al. (2016) note that the perception of value depends on a firm's hierarchy: Managers focus on collective goal achievement, whereas lower-level employees focus on the individual value. Moreover, Bendapudi & Leone (2003) find that when judging the outcome of a solutions project, employees involved in the creation

process are influenced by a self-serving bias and are more satisfied with the outcome than those who did not participate in the creation process.

Although researchers recognize that the perception of value can be influenced through many factors, the influence of culture on value in the solution business has not been explored. Large-scale research projects such as the Hofstede studies (e.g. Hofstede, 2003) and the Globe studies (e.g. House, Hanges, Javidan, Dorfman, & Gupta, 2004) show the differences of national and societal cultures along a set of cultural dimensions. Future research could draw on extant literature on culture to investigate its impact on the perception of value in the solution business.

Improvement of generalization

Using four research questions, the manuscripts herein investigate the customer in the context of business solutions. Although this focus was intended and the theoretical foundations are often overlapping and strongly influenced by related research directions such as marketing services, this does not mean that the results of this dissertation are valid for other research streams or businesses as well. Moreover, the manuscripts apply qualitative and conceptual approaches when addressing the research questions. Research conducting quantitative approaches to test and enhance the findings would support the generalization of the results.

In the same vein, the empirical data from Manuscripts 1 and 2 are obtained from large organizations only. Those companies have often dedicated resources to handle larger solutions and embed them into the organization. The results of the first manuscript show that large solution customer firms can integrate themselves intensively in the co-creation process. However, small to mid-size companies might not be able to provide such internal resources, because they may lack the necessary knowledge and skills or appropriate personnel. Therefore, an organization's size might have an impact on solution co-creation with a provider as the roles and activities of customers might be different than larger organizations.

5.3 Implications for Marketing Practice

The dissertation has several implications for the managerial practice. Although each manuscript suggests implications for marketing practice, integrating the cumulative findings of the three manuscripts suggests an overarching systematic approach to co-create solutions. Managers from customer and provider firms of business solutions can benefit from these implications.

Applying a systematic approach to co-create solutions

A continuous element throughout Manuscripts 1–3 is the focus on the solution customer. The findings of the dissertation are intertwined as follows: First, the third manuscript introduces a model that consists of four interrelated elements that must be aligned to enable value-in-use. This model represents the groundwork before the actual solution co-creation begins. Second, the next phase consists of solution customers focusing on the eight variables identified in Manuscript 1 and enabling customers to facilitate value (co)-creation during the solution development. Third, Manuscript 2 offers four variables that determine the degree of customer participation during co-creation.

These findings support solution customers in different ways. During the early phases, the variables enabling value-in-use support customers in aligning their internal organization to develop the solution according to those variables. These variables also address the customer uncertainty that emerges from complex solutions in that they provide a framework of how customers can approach solution development and facilitate value (co)-creation. Drawing on this framework, customers can focus on value-adding tasks and set the priorities for the solution development. Furthermore, knowledge and skills have an important role as resources in modern service logics (Grönroos et al., 2015; Vargo & Lusch, 2016). The results of this research support customer firms in deriving requirement profiles to select the right employees to lead and work for a solution co-creation.

After the solution project has been set up, customers can use the suggested variables to manage the value co-creation process. The identified variables support customers in

focusing their resources on certain activities and managing the involved stakeholder. This process must be closely aligned with determining the degree of customer participation during co-creation. For example, being able to focus internal resources on certain core activities in the solution co-creation might mitigate employee exhaustion, an important determining variable for customer participation in the co-creation process. Therefore, applying the findings from this dissertation as an overarching concept allows customers to manage the entire business solution process more effectively.

This systematic approach also has implications for managers of provider firms, as the increased understanding of the customer enables the provider to shift “from a mere facilitator to a co-creator of value” (Grönroos & Voima, 2013, p. 141). The suggested model to enable value-in-use gives providers the opportunity to design an accompanying model for their solution offering as well as to align with the customer on how to set up the solution project.

Furthermore, solution providers must compensate for the customer’s resource gaps (Payne et al., 2008; Zerbini et al., 2007). Thus, providers can use the identified variables to analyze how to complement the solution customer during the value co-creation process. However, the results of this research show that certain tasks that have significant impact on value co-creation (e.g. ensuring organizational commitment from top management and affected employees) cannot be delegated to the provider. Customers and providers can use these findings to strategically discuss co-creating value so that the solution customer can decide which tasks are created in the provider, customer, or joint sphere. Finally, understanding the determining variables in the degree of customer participation during co-creation can direct providers in preparing countermeasures if they perceive the risk that an undesired degree of customer participation will occur.

References

- Aarikka-Stenroos, L., & Jaakkola, E. (2012). Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process. *Industrial Marketing Management*, 41(1), 15–26.
<https://doi.org/10.1016/j.indmarman.2011.11.008>
- Ansoff, I. H., & Stewart, J. M. (1967). Strategies for a technology-based business. *Harvard Business Review*, 45(6), 71–83.
- Bendapudi, N., & Leone, R. P. (2003). Psychological implications of customer participation in co-production. *Journal of Marketing*, 67(1), 14–28.
- Biggemann, S., Kowalkowski, C., Maley, J., & Brege, S. (2013). Development and implementation of customer solutions: A study of process dynamics and market shaping. *Industrial Marketing Management*, 42(7), 1083–1092.
<https://doi.org/10.1016/j.indmarman.2013.07.026>
- Bitner, M. J., Faranda, W. T., Hubbert, A. R., & Zeithaml, V. A. (1997). Customer contributions and roles in service delivery. *International Journal of Service Industry Management*, 8(3), 193–205.
- Brady, T., Davies, A., & Gann, D. M. (2005). Creating value by delivering integrated solutions. *International Journal of Project Management*, 23(5), 360–365.
<https://doi.org/10.1016/j.ijproman.2005.01.001>
- Brax, S. A., & Jonsson, K. (2009). Developing integrated solution offerings for remote diagnostics: A comparative case study of two manufacturers. *International Journal of Operations & Production Management*, 29(5), 539–560.
<https://doi.org/10.1108/01443570910953621>
- Carroll, G. R. (1997). Long-term evolutionary change in organizational populations: Theory, models and empirical findings in industrial demography. *Industrial and Corporate Change*, 6(1), 119–143.
- Ceci, F., & Masini, A. (2011). Balancing specialized and generic capabilities in the provision of integrated solutions. *Industrial and Corporate Change*, 20(1), 91–131.
<https://doi.org/10.1093/icc/dtq069>
- Chan, K. W., Yim, C. K. (Bennett), & Lam, S. S. K. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of Marketing*, 74(3), 48–64.
<https://doi.org/10.1509/jmkg.74.3.48>
- Chandler, J. D., & Vargo, S. L. (2011). Contextualization and value-in-context: How context frames exchange. *Marketing Theory*, 11(1), 35–49.
<https://doi.org/10.1177/1470593110393713>
- Cova, B., & Salle, R. (2007). Introduction to the IMM special issue on “Project marketing and the marketing of solutions” A comprehensive approach to project marketing and the marketing of solutions. *Industrial Marketing Management*, 36(2), 138–146.
<https://doi.org/10.1016/j.indmarman.2006.04.008>

- Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA, US: Sage Publications.
- Davies, A., & Brady, T. (2000). Organisational capabilities and learning in complex product systems: towards repeatable solutions. *Research Policy*, 29(7–8), 931–953. [https://doi.org/10.1016/S0048-7333\(00\)00113-X](https://doi.org/10.1016/S0048-7333(00)00113-X)
- Davies, A., Brady, T., & Hobday, M. (2006). Charting a path toward integrated solutions. *MIT Sloan Management Review*, 47(3), 39–48.
- Day, G. S., Deighton, J., Narayandas, D., Gummesson, E., Hunt, S. D., Prahalad, C. K., ... Shugan, S. M. (2004). Invited commentaries on “evolving to a new dominant logic for marketing.” *Journal of Marketing*, 68(1), 18–27.
- Edvardsson, B., Tronvoll, B., & Gruber, T. (2011). Expanding understanding of service exchange and value co-creation: A social construction approach. *Journal of the Academy of Marketing Science*, 39(2), 327–339. <https://doi.org/10.1007/s11747-010-0200-y>
- Fang, E., Palmatier, R. W., & Steenkamp, J.-B. E. . (2008). Effect of service transition strategies on firm value. *Journal of Marketing*, 72(5), 1–14. <https://doi.org/10.1509/jmkg.72.5.1>
- Fitzsimmons, J. A. (1985). Consumer participation and productivity in service operations. *Interfaces*, 15(3), 60–67. <https://doi.org/10.1287/inte.15.3.60>
- Flick, U. (2014). *An Introduction to Qualitative Research* (5th ed.). Thousand Oaks, CA, US: Sage Publications.
- Grönroos, C. (2006). Adopting a service logic for marketing. *Marketing Theory*, 6(3), 317–333. <https://doi.org/10.1177/1470593106066794>
- Grönroos, C. (2011). A service perspective on business relationships: The value creation, interaction and marketing interface. *Industrial Marketing Management*, 40(2), 240–247. <https://doi.org/10.1016/j.indmarman.2010.06.036>
- Grönroos, C., & Gummerus, J. (2014). The service revolution and its marketing implications: service logic vs service-dominant logic. *Managing Service Quality*, 24(3), 206–229. <https://doi.org/10.1108/MSQ-03-2014-0042>
- Grönroos, C., Strandvik, T., & Heinonen, K. (2015). Value co-creation: critical reflections. In J. Gummerus & C. Von Koskull (Eds.), *The Nordic School - Service marketing and management for the future* (pp. 69–81). Helsinki: CERS.
- Grönroos, C., & Voima, P. (2013). Critical service logic: making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, 41(2), 133–150. <https://doi.org/10.1007/s11747-012-0308-3>
- Heinonen, K., & Strandvik, T. (2015). Customer-dominant logic: foundations and implications. *Journal of Services Marketing*, 29(6/7), 472–484. <https://doi.org/10.1108/JSM-02-2015-0096>
- Heinonen, K., Strandvik, T., Mickelsson, K.-J., Edvardsson, B., Sundström, E., & Andersson, P. (2010). A customer-dominant logic of service. *Journal of Service Management*, 21(4), 531–548. <https://doi.org/10.1108/09564231011066088>

- Heinonen, K., Strandvik, T., & Voima, P. (2013). Customer dominant value formation in service. *European Business Review*, 25(2), 104–123.
<https://doi.org/10.1108/09555341311302639>
- Hofstede, G. (2003). *Culture's Consequences: Comparing Values, Behaviours, Institutions, and Organizations Across Nations* (2nd ed.). Sage Publications.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies* (1st ed.). Sage Publications.
- Jacob, F., & Ulaga, W. (2008). The transition from product to service in business markets: An agenda for academic inquiry. *Industrial Marketing Management*, 37(3), 247–253.
<https://doi.org/10.1016/j.indmarman.2007.09.009>
- Johansson, J. E., Krishnamurthy, C., & Schlissberg, H. E. (2003). Solving the solutions problem. *McKinsey Quarterly*, (3), 1–6.
- Keskin, H. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of Innovation Management*, 9(4), 396–417. <https://doi.org/10.1108/14601060610707849>
- Kohtamäki, M., Partanen, J., Parida, V., & Wincent, J. (2013). Non-linear relationship between industrial service offering and sales growth: The moderating role of network capabilities. *Industrial Marketing Management*, 42(8), 1374–1385.
<https://doi.org/10.1016/j.indmarman.2013.07.018>
- Kohtamäki, M., & Rajala, R. (2016). Theory and practice of value cocreation in b2b systems. *Industrial Marketing Management*, 56(7), 4–13.
<https://doi.org/10.1016/j.indmarman.2016.05.027>
- Kumar, N. (2004). *Marketing As Strategy: Understanding the CEO's Agenda for Driving Growth and Innovation* (5th ed.). Boston: Harvard Business School Press.
- Lamnek, S. (2010). *Qualitative Sozialforschung* (5th ed.). Basel: Beltz Verlag.
- Lapierre, J. (1997). What does value mean in business-to-business professional services? *International Journal of Service Industry Management*, 8(5), 377–397.
- Lusch, R. F., & Vargo, S. L. (2006). Service-dominant logic: reactions, reflections and refinements. *Marketing Theory*, 6(3), 281–288.
<https://doi.org/10.1177/1470593106066781>
- Macdonald, E. K., Kleinaltenkamp, M., & Wilson, H. N. (2016). How business customers judge solutions: Solution quality and value-in-use. *Journal of Marketing*, 80(3), 96–120. <https://doi.org/10.1509/jm.15.0109>
- MacInnis, D. J. (2011). A framework for conceptual contributions in marketing. *Journal of Marketing*, 75(4), 136–154. <https://doi.org/10.1509/jmkg.75.4.136>
- Mason, J. (2006). Mixing methods in a qualitatively driven way. *Qualitative Research*, 6(1), 9–25. <https://doi.org/10.1177/1468794106058866>
- Mattsson, L. G. (1973). Systems selling as a strategy on industrial markets. *Industrial Marketing Management*, 3(2), 107–120. [https://doi.org/10.1016/0019-8501\(73\)90025-4](https://doi.org/10.1016/0019-8501(73)90025-4)

- Meyer, J., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363. Retrieved from <http://www.jstor.org/stable/2778293?origin=JSTOR-pdf>
- Miller, D., Hope, Q., Eisenstat, R., Foote, N., & Galbraith, J. (2002). The problem of solutions: Balancing clients and capabilities. *Business Horizons*, 45(2), 3–12. [https://doi.org/10.1016/S0007-6813\(02\)00181-7](https://doi.org/10.1016/S0007-6813(02)00181-7)
- Mustak, M., Jaakkola, E., & Halinen, A. (2013). Customer participation and value creation: a systematic review and research implications. *Managing Service Quality*, 23(4), 341–359. <https://doi.org/10.1108/MSQ-03-2013-0046>
- Neely, A. (2007). The servitization of manufacturing: An analysis of global trends. In *14th European Operations Management Association Conference, Ankara, Turkey*. (pp. 1–10). <https://doi.org/10.1007/s12063-009-0015-5>
- Neely, A. (2008). Exploring the Financial Consequences of the Servitization of Manufac. *Operations Management Research*, 1(2), 1–50.
- Neely, A., Benedettini, O., & Visnjic, I. (2011). The servitization of manufacturing: Further evidence. In *European Operations Management Association Conference*. Cambridge, UK.
- Nenonen, S., & Storbacka, K. (2013). Finding market focus for Solution Business Development. *Journal of Business Marketing Management*, 3(6), 123–142.
- Nordin, F., & Kowalkowski, C. (2010). Solutions offerings: a critical review and reconceptualisation. *Journal of Service Management*, 21(4), 441–459. <https://doi.org/10.1108/09564231011066105>
- Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83–96. <https://doi.org/10.1007/s11747-007-0070-0>
- Petri, J., & Jacob, F. (2016). The customer as enabler of value (co)-creation in the solution business. *Industrial Marketing Management*, 56(7), 63–72. <https://doi.org/10.1016/j.indmarman.2016.03.009>
- Petri, J., & Jacob, F. (2017). Hunting for value: how to enable value-in-use? A conceptual model. *Journal of Creating Value*, 3(1), 1–13. <https://doi.org/10.1177/2394964317694780>
- Prahalad, C. K., & Ramaswamy, V. (2000). Co-opting customer competence. *Harvard Business Review*, 78(1), 79–87.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creating unique value with customers. *Strategy & Leadership*, 32(3), 4–9. <https://doi.org/10.1108/10878570410699249>
- Sawhney, M. (2006). Going Beyond the product: Defining, designing and delivering customer solutions. In R. F. Lusch & S. L. Vargo (Eds.), *The Service-Dominant Logic of Marketing* (pp. 365–381). New York: M.E. Sharpe.
- Steger, T. (2003). Einführung in die qualitative Sozialforschung. In *Schriften zur Organisationswissenschaft* (pp. 1–29). Chemnitz: Professur für Organisation und Arbeitswissenschaft. <https://doi.org/ISSN:1612-7218>

- Storbacka, K., Windahl, C., Nenonen, S., & Salonen, A. (2013). Solution business models: Transformation along four continua. *Industrial Marketing Management*, 42(5), 705–716. <https://doi.org/10.1016/j.indmarman.2013.05.008>
- Stremersch, S., Wuyts, S., & Frambach, R. T. (2001). The purchasing of full-service contracts: An exploratory study within the industrial maintenance market. *Industrial Marketing Management*, 30(1), 1–12.
- Töllner, A., Blut, M., & Holzmüller, H. H. (2011). Customer solutions in the capital goods industry: Examining the impact of the buying center. *Industrial Marketing Management*, 40(5), 712–722. <https://doi.org/10.1016/j.indmarman.2011.06.001>
- Tuli, K. R., Kohli, A. K., & Bharadwaj, S. G. (2007). Rethinking customer solutions: From product bundles to relational processes. *Journal of Marketing*, 71(3), 1–17.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17.
- Vargo, S. L., & Lusch, R. F. (2006). *The service-dominant logic of marketing: Dialog, debate, and directions*. Armonk, NY: ME Sharpe.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10. <https://doi.org/10.1007/s11747-007-0069-6>
- Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5–23. <https://doi.org/10.1007/s11747-015-0456-3>
- Visnjic Kastalli, I., & Van Looy, B. (2013). Servitization: Disentangling the impact of service business model innovation on manufacturing firm performance. *Journal of Operations Management*, 31(4), 169–180. <https://doi.org/10.1016/j.jom.2013.02.001>
- Wiersema, F. (2013). The B2B Agenda: The current state of B2B marketing and a look ahead. *Industrial Marketing Management*, 42(4), 470–488. <https://doi.org/10.1016/j.indmarman.2013.02.015>
- Zerbini, F., Golfetto, F., & Gibbert, M. (2007). Marketing of competence: Exploring the resource-based content of value-for-customers through a case study analysis. *Industrial Marketing Management*, 36(6), 784–798. <https://doi.org/10.1016/j.indmarman.2006.06.005>