Innovative Service Business Models and International Market Resistance: Insights from Service-Dominant Logic

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ABSTRACT

This paper analyzes the reasons that the adoption of innovative business models in business-to-business (B-to-B) settings is low and differs from country to country. The analysis is made against the background of a particular and more recent type of innovative service business model; namely, total cost of ownership (TCO) concepts in B-to-B settings. The concept of the service-dominant logic (SDL) of Vargo and Lusch [2004] is used to explain this phenomenon. The paper presents the new reasoning that the diffusion of innovative service business models like TCO depends on the stage of the transition process from a goods-dominant to a service-dominant logic in business and society. This process runs rather differently depending on countries. Thus, the research question of the paper is twofold: Does the transition process from the goods-dominant to the service-dominant logic explain the sluggish adoption of TCO business models? If so, are there differences among different countries? Because of the newness and complexity of the research topic, the authors use qualitative research and conduct case studies to better understand the reasons that slow TCO adoption differs from country to country.

Keywords: Business models, business model innovations, international market diffusion, total cost of ownership, service-dominant logic
1. INTRODUCTION

Innovative business models in business-to-business (B-to-B) settings – such as pay for performance, contracting, build-operate transfer, and total cost of ownership models (TCO) – provide suppliers with the opportunity to renew their business and to tighten the customer/supplier relationship. Moreover, the models often restructure customers’ value-added structures to the end of productivity gains and/or increase customization and reliability. Nevertheless, the speed of adoption of these new business models is rather low [Ellram and Sifert, 1998; Heilala et al., 2006; Freiling et al., 2011] and differs from country to country. To date, the reasons for this internationally diverging market resistance are open to debate. An answer is needed in order to redesign and tailor innovative business models to best meet the market needs of a particular country. This paper addresses the obstacles to business model innovation and the peculiarities of launching these models in different countries.

Research on service business model innovations in the context of B-to-B markets is limited [e.g., Miles, 2005]. The few existing studies tend to approach this field solely from either a supplier or a customer perspective. In the current study, we transcend this view by focusing on both perspectives and by analyzing the interplay between supplier and customer when establishing innovative service business models. This procedure allows us to address facets of the customer/supplier relationship and the market as well.

To focus our research, we address the diffusion of a specific kind of innovative service business model; namely, TCO models in mechanical engineering. We choose TCO business models because they seem to offer bilateral benefits for both customers and suppliers and also because they face considerable problems when getting launched [Freiling and Dressel, 2014]. These TCO models are designed as long-term relationships between the customer and the supplier and rest on the estimation and calculation of all direct and indirect costs (in particular, purchasing, installation, operations and maintenance, and end-of-life management [Heilala et al., 2006]) for the customer associated with the use of a technical infrastructure over its entire life cycle [Dahut, 2008].

In focusing on TCO business models and their long and uncertain path of international market diffusion, we go beyond current explanations by using the concept of the “service-dominant logic” (SDL), according to Vargo and Lusch [2004; 2007; 2008]. This concept pinpoints the long transition from a goods-dominant to a service-dominant logic, with the latter being characterized by a
close and long-term customer/supplier relationship, the customer as co-producer/co-developer, and a collaboration that considers not only the value-added process but also the use process.

We propose that the diffusion of innovative service business models such as TCO is dependent on the stage of the transition process from a goods-dominant to a service-dominant logic. This stage of transition differs between national markets. Lead markets, penetrated by an almost complete implementation of the SDL, could evolve and provide a fertile background for launching innovative service business models such as TCO.

The research question is twofold: Does the transition process from the goods-dominant to the service-dominant logic explain the low adoption of TCO business models? If so, are there differences among different countries? We propose that most of the TCO business models are too ambitious in terms of the real transition path to a service-dominant logic; that is, they implicitly rest on an advanced implementation of SDL that is not yet given. Many international markets are generally not prepared for these innovative service business models.

To respond to the research question, we highlight the state of the art in research, introduce the SDL concept, and present a more advanced model to derive causalities that explain the phenomenon. Based on the model, we develop research propositions and develop case studies for a first reality check of the causalities. We choose this qualitative empirical research because the early stage of research on this topic does not yet allow quantitative research because of the lack of evidence of causalities. Qualitative research based on case studies provides the researcher with an openness to consider un-researched explanatory factors raised by the interviewees.

We advance research by presenting a new reasoning why the adoption of innovative business models is so low. Moreover, we make a first application of the SDL concept in the context of analyzing differences in adopting innovative business models in different international markets. Finally, we design a particular open system model for a better understanding of the dynamics in customer/supplier relationships.

2. CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

Research on business models and business model innovations has received considerable attention in the last decade [for an overview, cf. Zott et al., 2011]. Despite the large number of articles published on this issue, research on business modes in services is still silent, particularly in the case of industrial services [cf.
Freiling and Dressel, 2014]. This paper, therefore, is an attempt to address this relevant research gap.

There are different conceptualizations of business models [e.g., Osterwalder and Pigneur, 2010; George and Bock, 2011]. One of the easier ones is the model of Timmers [1998], which is of help in structuring the basic pillars of business models. At the same time, the Timmers model is relevant to the service economy because it considers both the value delivered to the customer and the process of value co-creation. For these reasons, it is selected and portrayed in more detail in the following discussion.

TCO models as innovative service business models can be analyzed in light of the three components that constitute a business model [Timmers, 1998]; namely, value proposition, value-added architecture, and sales model.

**Value Proposition.** TCO-based solutions provide customers with a clear, often guaranteed perspective on decreasing costs during the use of a machine over time. Moreover, TCO allows a more transparent and precise calculation of the costs of purchasing and driving this technical equipment. This perspective is accompanied with an extended service level wherein the services differ from country to country and from customer to customer. Technical infrastructure and services form an almost inseparable unit that is often called a “hybrid solution” [Levina and Ross, 2003; Johansson, 2003]. In connection with the sales model, TCO might reduce customer uncertainty considerably.

**Value-Added Architecture.** TCO business models are novel in the way the value-added process is organized. They imply relationships between customer and supplier more intensively and, thus, often a higher degree of customization. Besides a higher level of customer integration in the value-added process [e.g., Johansson et al., 2003], TCO goes along with a considerable integration of the supplier in the use activities of the industrial customer over the entire life cycle. Thus, supplier and customer often form a temporary unit. This union often causes considerable bilateral resource adaptations [Meier and Massberg, 2004] which are typical for SDL, as discussed below.

**Sales Concept.** TCO represents a system solution. Based on this, the customer pays a price for the entire hybrid offering, with the machine as the centerpiece and the services that surround this core. At the expense of a mostly higher purchase price, the customer saves considerable maintenance costs because of intensive supplier integration and related services of the entire TCO package. From the customer’s point of view, it is no longer possible to buy product and service separately. Such a linkage between product and service is
indispensable because the supplier ex-ante guarantees a long-term durability of components or even of the whole product. The entire transaction is framed by a long-term contract that reduces the risks of the supplier and the customer substantially. Moreover, the contracts are often well adapted to the legal systems that differ from one country to another.

What else changes in case of TCO business models? As the customer and the supplier collaborate more closely, the governance situation turns. In terms of Williamson [1991], a shift occurs from (more or less) market governance when simply buying/selling a machine to hybrid governance, with the two parties in a rather active role. Both the supplier and the customer should be well prepared for these governance tasks.

At least at first glance, TCO models seem to be attractive from the buyer’s point of view, thanks to the opportunity to reduce life-cycle costs and uncertainty. Comparing the advantages with the rather slow and, from the supplier’s perspective, disappointing adoption of these models opens the question of obstacles to trade. Typically, literature points to deficiencies in the innovation and/or marketing management of suppliers [Ramírez, 1999] and/or customers that misunderstand the concept or fear that problems will occur in the change process [Degraeve et al., 2005], such as losing critical know-how.

We do not intend to question these findings fundamentally. However, we believe that a suitable explanation of the sluggish adoption of innovative business models in B-to-B markets should consider the business environment; namely, the situation in international markets and societies. To this end, we refer to the Vargo and Lusch’s [2004] debate on the so-called “service-dominant logic” (SDL). Although the concept lacks clarity [e.g., Achrol and Kotler, 2006], it is possible to define SDL as a notion that goes beyond output-related issues and addresses the way of thinking and the basic design of value-added processes (throughput) [Vargo and Lusch, 2004; 2007; 2008]. The SDL thinks in terms of serving other people or organization according to their needs and, to this end, involves them in the value-added process through active participation.

Regarding the long-lasting dominance of the goods-dominant logic, a transition to SDL would be a paradigm shift in the Kuhnian [1970] sense. As for value-added concepts and activities [Vargo and Lusch, 2004, Lusch et al., 2007], SDL’s “sense and respond” principle replaces the traditional goods-centered logic of “make and sell.” The single customer and the single supplier interact and co-produce what the customer really wants. It takes a high level of empathy on the part of the supplier to patiently analyze and finally understand what the
customer’s problem really is. If it is possible to implement such a way of thinking, both parties are in a much better position to co-produce and co-develop solutions tailored to the (much more evident) need of the customer. This situation requires a mutual openness and, thus, calls for an open system view to model it. More than that, the design of a value-added system implies integration of the customer into the sphere of the supplier. Resources of both parties interact and allow synergies that cannot be raised within the scope of a goods-centered logic. As Vargo and Lusch [2004] argue, it is not important what the final outcome of the value-added process is; rather, it is much more important how the process of co-development proceeds. The relevance of resources – in particular, the so-called “operant” resources [Madhavaran and Hunt, 2008] – and processes of the two involved parties replace the former relevance of goods. Furthermore, the goal of increasing the transactional value for both sides shifts attention from the performance delivered to the utilization process of the customer that is (pro-) actively supported by the supplier.

In this vein, we search for a framework that considers both the customer/supplier interaction and its impact implications for the value-added processes of the supplier. We build on Freiling and Dressel [2014], who researched this phenomenon without considering differing penetrations in international markets. This paper goes one step further by taking these international peculiarities into account.

To the best of our knowledge, this paper is the first attempt in this particular research setting. To date, SDL is a notion that marks the end of a transition process in economies and societies. In modern economies, considerable progress in this transition has already been made. Nevertheless, economies differ considerably in their view of service. Even if the importance of service seems to be well understood in a national market, this does not necessarily mean that service business models such as TCO are easy to implement. Instead, specific values and norms that are rooted in corporate and/or national culture and that are not visible for the supplier could prevent a fast transition of these models.

Considering all the issues raised above in the SDL context, we see that, in many aspects, the transition from GDL to SDL is not yet finished in many national markets. In our next steps, therefore, we analyze in more detail what SDL implies and what might create obstacles to TCO model adoption from an SDL perspective. To this end, we need a theoretical background that allows us to address the problem.
3. RESEARCH PROPOSITIONS AND MODELING IN LIGHT OF OBSTACLES TO TCO ADOPTION

In B-to-B markets, particularly in mechanical engineering, both customer and supplier have their own value-added systems. These systems closely interact over time and, thus, influence each other. It is necessary to model this evolutionary interplay to better understand problems of low TCO model adoption.

The open system view [Sanchez and Heene, 1996] allows us to consider this issue against the background of competence-based theory [e.g., Teece et al., 1997; Freiling et al., 2008]. We therefore adopt the open system view of the firm and modify it to better respond to the setting we are researching. In their original approach, Sanchez and Heene [1996] focus on one firm; namely, a supplier. The entire system consists of six elements: strategic logic, management processes, intangible assets, tangible assets, activities, and products. The open system is surrounded by external assets, so-called “firm-addressable resources,” and the market. The strategic logic and the management processes steer the entire system.

Considering the very nature of services, as well as service transactions in light of the SDL debate, we extend and modify the Sanchez and Heene [1996] model for three reasons.

First, if supplier and customer are closely interrelated in TCO business models, a focus solely on the supplier would be too myopic. Instead, we need to respond to the pivotal role that the organizational customer plays as a co-producer and co-developer in international B-to-B service transactions. Furthermore, supplier and customer form a temporary unit.

Second, service transactions, in particular in case of TCO in mechanical engineering, are customized. The customer participates in the supplier’s sphere by customer integration. Vice versa, the supplier takes part in the use process of the customer by supplier integration. A specific model should consider this.

Third, the output of the value-added process of the supplier is a solution, jointly developed by the two partners. Supplier and customer agree on specifications beforehand within the scope of a contract. Thus, a promise of performance is sold in the sales act, followed by the final value-added process. Alchian and Woodward [1988] call this a contract – in contrast to the exchange. Therefore, there is no real selling process after the solution is provided and there are no products to be stored and sold that we could assign to the supplier. Instead, the solution will be transferred to the customer according to the specifications of
the contract. This can be easily considered within a modified open system view as well.

Figure 1 depicts the modified open system view, which consists of the supplier system, the organizational customer system, and the temporary unit that the two partners form. We outline below the cornerstones of our modified view against the background of the SDL debate in order to develop research propositions on the low adoption of TCO business models in different international B-to-B markets.

![Figure 1. Modified Open System View](image)

We have already pointed out that the steering character of the strategic logic and the related management processes form a single system element. This system element is in no way independent from external influence. In close relationships in mechanical engineering, these strategic logics develop with the transactions in international markets so that there is at least some impact of the organizational customer on the supplier, and vice versa. Spill-over effects between different
international locations of the supplier are possible. More important, the strategic logics are in close interaction with standards in international markets and societies and develop by taking external advice. The general shift in the economy and the society toward SDL is translated to some extent via this external linkage. External forces and external advice fuel the transition from a goods-dominant logic to SDL in international markets.

The other way around, the question arises as to how far strategic logics cause rigidities. In this respect, strategic logics are equipped with a phenomenon we can call a “built-in inflexibility.” Strategic logics rest on previously learned patterns and are used by decision-makers in a rather automatic manner. Rigidities occur because people are often not able to unlearn rapidly. The lack of willingness and/or ability to unlearn closely corresponds to the capacity to absorb external knowledge. To this end, Cohen and Levinthal [1990] introduced the concept of “absorptive capacity” in a different context. Absorptive capacity applies in our context to decision-makers who have to be able to identify, assimilate, and integrate external knowledge in this respect as well.

A second source of inertia refers to the interrelationships of the strategic logics of both customer and supplier. If they do not fit, unproductive modes of conflict occur and make adaptations unlikely. In case of TCO models, the customer often focuses attention on the price when it comes to decision-making in transactions [Cambra-Fierro et al., 2008]. Cost savings in later periods get out of sight. It is not easy to re-educate customers in their way of thinking [Wind and Thomas, 1980]. Moreover, organizational procedures and decision rules need to be changed to prepare the ground for a TCO adoption. Thus, strategic logics and management processes of the customer are not open for TCO adoption and represent an obstacle to innovation.

Finally, international markets differ in their service orientation, particularly in the SDL sense. Service orientation is embedded in national culture. Some cultures are much more cooperative and open so that people care for other people, whereas other national cultures are much more individualistic [Kluckhohn and Strodtbeck, 1961; Ouchi, 1981; Gelfand et al., 2004]. If service orientation in one country is rather low and people predominantly care for themselves, launching TCO solutions is harder because of lower levels of mutual understanding. Against this background, we formulate our first set of propositions:
Proposition 1a. With a lower degree of a firm’s embeddedness in national markets, the pressure of moving toward SDL decreases and so does the openness for TCO business models.

Proposition 1b. A low level of absorbing external knowledge leads to a lower awareness of innovative service solutions and, thus, a lower penetration of the national market.

Proposition 1c. With more rigid goods-centred strategic logics, the adoption of TCO solutions in national markets decreases.

Proposition 1d. With more service orientation in the respective country, the openness for TCO solutions increases.

We have already pointed out that TCO business models are hybrid solutions that need a thorough alignment of processes and elements of the solution provided. If the whole bundle of product elements is not well aligned and is customized only to a small extent, we cannot expect that the solutions will make their way into the different international markets. Moreover, the structures of both customer and supplier need to go hand in hand if the two parties are to form a real temporary unit, as suggested by SDL thinking [Vargo and Lusch, 2004].

Based on the interplay of e-system elements shown in Figure 1, at least three aspects come to the fore: customer integration in the value-added process, supplier integration in the utilization process, and combinative capabilities in use.

First, participation of the customer matters in the case of providing TCO solutions because the customer is co-producer and co-developer. Without exact specifications, no supplier will be able to provide a fitting solution. The same holds true for customer participation in the value-added process. Thanks to often intense customer integration, the quality depends to a large extent not only on the supplier, but on the customer as well. If the customer is not aware of this role, is unable to integrate, or is insufficiently supported by the supplier, a poor quality will cause skepticism and slow the pace of TCO adoption.

Second, and the other way around, the same holds true for the utilization processes of the customer. We can learn from SDL thinking [Vargo and Lusch, 2004] that the full potential of service and hybrid solutions can be raised only in case of customers accompanied by the supplier in the utilization process, thanks to superior know-how of the supplier. The customer adopts TCO with the
expectation of cutting the costs of driving and maintaining the machine. This, however, depends to a large extent on supplier integration. If this integration does not take place on a regular as well as an effective and efficient basis, a wider TCO adoption will be rather unlikely.

Third, since supplier and customer collaborate in a tight relationship and form a temporary unit, problems arise without a minimum adaptation between the customer and the supplier. However, the more the supplier and the customer act independently, the worse the adaptation will be [Mirza, 2008]. In case of TCO, many customers behave far too autonomously. They do not adapt to the supplier, they restrict the contact and the interaction processes, and they do not involve themselves in a way that causes synergies. Thus, the loose way of coupling prevents the customer from raising a relational benefit. To connect structures, processes, and output-relevant elements of both the customer and the supplier, combinative capabilities [Kogut and Zander, 1992] stand at the fore. Finally, the readiness and willingness of organizations and people to involve themselves in other organizations differ from country to country. In some countries, mutual help and integration are rather conventional, but, in other countries, that is not the case. We propose:

**Proposition 2a.** Insufficient customer integration in the value-added process of the supplier will negatively affect the overall product quality, life-cycle costs, and TCO adoption in national markets.

**Proposition 2b.** Insufficient supplier integration in the utilization process of the customer will negatively affect the overall product quality, life-cycle costs, and TCO adoption in national markets.

**Proposition 2c.** Insufficient combinative capabilities will lead to disconnected and/or mismatched structures and solutions and to a slow pace of TCO adoption in national markets.

**Proposition 2d.** With more sense of community in the respective country, integration processes are facilitated and, thus, the TCO adoption process.
The SDL concept operates with two resource categories; namely, operant and operand resources [Constantin and Lusch 1994; Vargo and Lusch, 2004; 2007; 2008]. Constantin and Lusch [1994] define operand resources as those on which operations are performed to produce an effect. Typical production factors belong to this category. Operant resources, on the other hand, are used to act on operand resources. Whereas operand resources are typically finite, operant resources are generative; i.e., their value increases in use [Moldaschl and Fischer, 2004]. Capabilities, knowledge, technologies, and even inspiration are examples of this category. Vargo and Lusch [2004] argue that operand resources are considered primary in the goods-dominant logic. In contrast, operant resources stand in the forefront in SDL.

Analyzing the complex, demanding, and long-lasting solutions provided in case of TCO business models in mechanical engineering, one can see the pivotal relevance of operant resources. However, questions arise as to how far operant resources are available the way they should be and whether the ratio of operant and operand resources used in TCO settings is reasonable. In the case of bottlenecks that are more or less evident [Coviello and McAuley, 1999; Hollenstein, 2005; Perrini et al., 2007], we additionally ask for an absorptive capability to integrate “firm-addressable resources,” according to Figure 1. We conceptualize the absorptive capability similarly to the absorptive capacity [Cohen and Levinthal, 1990; Zahra and George, 2002] with the decisive difference that the absorptive capability is not bound to the integration of external knowledge, but instead refers to any kind of firm-addressable resources. This leads us to our next set of propositions:

*Proposition 3a.* Insufficiently developed operant resources of both the supplier and the customer prevent a faster transition to the SDL and have a negative impact on the adoption of TCO business models in international markets.

*Proposition 3b.* A disproportion of operant and operand resources with over-emphasized operand resources prevents a faster transition to the SDL and has a negative impact on the adoption of TCO business models in international markets.
**Proposition 3c.** Lacking absorptive capabilities to integrate firm-addressable resources weakens the entire value-added system and has a negative impact on the adoption of TCO business models in international markets.

Following our line of reasoning, we finally propose:

**Proposition 4.** A still-fragmented state of SDL implementation in firms, national markets, and national societies causes insufficient hybrid solutions and market resistance to launching TCO business models.

### 4. CASE STUDY-BASED REALITY CHECK

The subject is still rather new and complex. Some concepts, such as SDL, are fuzzy and need to be translated into a model to facilitate scientific treatment. In this early stage of research, it is useful to aim for a better understanding of all factors that affect TCO adoption in international markets. In this regard, the current study is exploratory. What we want to know at this point is the set of factors that are relevant from an SDL point of view. We start out, therefore, with a set of constructs as part of the research propositions and are open to take into account other factors the interviewees consider relevant. To this end, we conducted empirical research based on case studies. In particular, we carried out an in-depth case study according to Yin [2009], involving four internationally operating mechanical engineering companies (companies A, B, C, D) – all of them confronted with developing and launching innovative TCO business models in different countries. We developed four case studies based on the marginality principle according to Eisenhardt [1989].

Between 2009 and 2011, we conducted 20 interviews with different persons and at different times in order to better understand how problems in launching these complex solutions evolve. Our interview partners were carefully selected to ensure consideration of relevant internal and external factors from a multitude of perspectives. To this end, we interviewed CEOs, heads of construction, heads of sales and marketing management, and purchasing managers so that different corporate functions as well as different hierarchical levels could be considered. Moreover, following the modified open system view, we interviewed representatives of customer firms to better understand the peculiarities of organizational buying behavior in the realm of industrial services and hybrid
solutions. Besides that, we took care that interviewees were from different countries; namely Switzerland, Germany, and Finland. Although all three countries are in Europe, they developed in different ways and their service orientation differs.

We conducted semi-structured interviews following an interview guideline based on the typical principles in literature [Lindlof and Taylor, 2002]. Each interview was conducted face-to-face with the firms’ employees and customers and contained a narrative section at the beginning. This approach gave us the opportunity to identify constructs beyond the model in use. Each of the interviews lasted more than one hour. For the sake of quality assurance, we collected additional data (documents), recorded each interview, and made transcriptions that were reviewed afterward by members of the research team who were not involved in the interviews. In the case of unclear or contradictory results, we had the chance to receive feedback from our partners for the purpose of clarification.

Core ambition was a first reality check of the research propositions in order to specify, modify, or amend them whenever necessary. This first step prepared the way for follow-up steps to investigate core causalities in more detail.

Next, we introduce the core findings pertaining to the propositions we developed above. Whereas the first set of propositions touches on the embeddedness in national markets and societies, on absorbing external knowledge, and on goods-centered mental models, the second set refers to the level of customer/supplier integration and the combinative capabilities. In addition, we consider SDL implementation (P4) from the very beginning.

In the last two years of research, we realized that the better and more specialized a solution is, the less the company is aware of the importance of service and the need to behave in a more service-oriented manner. In the beginning of the research period, the CEO of company A (German context) stated: “We produce a special kind of machinery. We do not have to change our attitude or to offer goods and customized services because the customer does not find any other supplier.” Although company A had a considerable innovation potential, the goods-centered thinking of powerful persons within the firm prevented company A from fully tapping this potential (Proposition P1c, P4). Further, the statement reflects the basic country-related attitude in Germany (and Switzerland, to some extent as well, company D) that products come first and services do not play a considerable role, an attitude that hampers TCO diffusion as well (P1d).
Moreover, several interviews revealed that there is no real cooperation between supplier and customer and, thus, only limited integration. An exception involves the findings from Finland (company C, customer’s point of view): “I think that the supplier is not afraid of working closely with us. When talking about printing press purchasing processes, I felt cooperation very friendly and open (. . .) but in the last years more and more cooperation inside of our country (. . .) is happening.” These findings reveal a country-specific shift toward more SDL. However, the customer of company C also mentioned that printing plants “(. . .) in Europe are more open.” From the customer’s point of view, the behavior and the attitudes of the supplier were perceived as problematic, since the customer wanted to have more information, more adaptation, and more individual support for the products and the services from the supplier.

Among others, the lack of supplier integration in the utilization phase created a lot of disconfirmation on the part of the customer (P2b), who at the same time bemoaned the lack of a sense of community by the supplier as a core feature of the country-specific culture (P2d). In particular, with regard to the situation in Finland (company C, customer), the interviewee remarked (P2a, P2b): “I think in our case it has been autonomous. The dream was to have more double-interactive processes so that value would have been increased also after the purchasing process. More or less it was just cost tracking in the beginning and quite quickly the process was totally forgotten. (. . .) I think that we should be more open on both sides. At the same time I feel that our organization likes to restrict information what is given to the supplier.”

The CEO of one customer remarked that the supplier should rethink a lot of processes and structures. In particular, the behavior, the attitudes, the way of thinking, and the entire project management were not well-suited to the supplier’s ambition to deliver an innovative and customized solution. As for P2a, we learned from the interviews that customer integration, by far, depends not only on the customer’s willingness and readiness for integration, but also on the supplier’s willingness. Obviously, not all suppliers (cf. company A and company C) are aware of the positive effects of customer integration and collaboration in the value-added process. Instead, they fear losing control and expect conflicts in cooperation.

In contrast, company B seems to be aware of the necessity of customer integration. A manager of this company stated (German context): “For us it is not even more just selling a product. To retain the customer we have to ask the customers for their wishes and more important, we have to integrate the customer
to create the services that fit the product.” Nevertheless, integrating the customer in a useful manner is not taken for granted. The sales manager stated (German context): “It is very difficult to convince the customer to give input during the development of the machinery so that we could fit the wishes with our product or services.” In terms of customer and supplier integration, the situation in Finland does not differ so much from the German context (company C). Obviously, the customer is afraid of telling the supplier too many details. These insights are useful to specify P2a.

Moreover, the sales manager of company A (German context) stated that a big company simply does not want to buy machinery without an ex-ante cost calculation in future. The manager added that it is very difficult to calculate lifecycle costs of machinery only by the supplier. Furthermore, in his view, it is completely impossible to do this before the contract is almost fixed. He sees the supplier in charge of such calculations, but in close interaction with the customer. This viewpoint was confirmed by the customer of company C with regard to the situation in Finland as well. Although combinative capabilities (P2c) are basically required in this respect, we need to consider in our proposition system as well that supplier’s awareness of the problem must be given. This, however, is also relevant to P4.

A sales manager of company B pointed to the relational background of customer/supplier collaboration and the way the supplier is embedded in the market (P1a) and, with regard to TCO partnerships, stated (German context): “Suddenly we realized the win/win situation for both, the customer and ourselves. In former times we had to ‘fight’ for the relationship; now it comes without any additional effort – and lasts for a long time.” Simultaneously, he pointed out the necessity to renew the TCO business model in a customer-oriented direction almost permanently. In this sense, he considered it useful to be open-minded in order to be receptive to upcoming issues as early as possible (P1b). Otherwise, customers would perceive the lack of open-mindedness, become skeptical, and finally drop the relationship, sometimes before it is tightly established.

The third set of propositions refers to the ability of both supplier and customer to develop operant resources, the disproportion of operant and operand resources, and the lack of absorptive capabilities. In the beginning, when we analyzed both companies (A and B), we found that both were not aware of the importance of operant resources. The product was the only focus because, in their minds, goods deliver value to the customer – and profit to the supplier. Although
the companies – imprinted by the national culture (P1d) – were rather self-aware of their own expertise and technical capabilities, they did not really take notice of the experience and know-how of their customers, which could have helped them improve their solutions. Both P3a and P3b passed this very first reality test.

SDL thinking, however, implies understanding of value as a product of the joint activities of customer and supplier (value co-creation) [Vargo and Lusch 2004]. In this regard, the CEO of company B added (German context): “When a lot of information and knowledge has to be exchanged and explained, understood and used, it is important that both partners have a clear understanding of the situation and common goals.” This statement supports P3a and P3b as well. Besides the considerable disproportion of operant and operand resources, a lack of absorptive capabilities turned out as well (P3c). Obviously, the problem is rooted in the lack of identifying the usefulness of integrating some firm-addressable resources.

We have already considered the final proposition (P4). Notably, the attitudes of the suppliers changed over time. Being familiar with the basic debate on the transition toward the SDL, the CEO of company A stated (German context): “It was and still is a very complex process to change the logic from a goods-centered to a service-focused one. But we see that this change brings us lots of opportunities, allows satisfying the customer, forging the relationship, and so on. We are sure the TCO business model will bring lots more advantages in future; e.g., cost reductions, quality improvements and well-educated resources.”

5. CROSS-CASE ANALYSIS, DISCUSSION, AND OUTLOOK

To what extent is the sluggish adoption of TCO business models influenced by the state of the transition process from the goods-dominant to SDL in the international context? Building on Freiling and Dressel [2014], our case studies provide the first evidence that successfully launching innovative business models such as TCO depends on considerable progress in the transition process from a goods-dominant to a service-dominant logic. Empirical evidence reveals that countries with a more service-oriented culture offer a much more fertile background for successfully launching TCO solutions. In other words, without fulfilling certain requirements, well mirrored in the SDL, on both the supplier and the customer side, the innovative solution does not match the given situation and, thus, cannot unfold its potential.

What we learned from our case studies is that these requirements are not given, not only on the customer’s side, but, surprisingly, on the supplier’s side as
well. Notwithstanding the innovative ambitions of the suppliers we investigated, they are in many ways not well-prepared for this renewed business. One aspect in this regard is the development of operant resources that are, in many regards, far too low. To name but a few, relational competences, combinative capabilities, customer-related knowledge, and some inspiration are missing. The entire SDL thinking rests on customer and supplier integration. In fact, integration in the activities of the exchange partner takes place, but on a rather low level and without the explicit intention to raise the potential related to partner integration. In particular, reliable routines and capabilities of effective partner integration are missing so that rather simple endeavors such as calculating the total costs of ownership already run dry. More fundamentally, the mindset of the observed suppliers is to some extent too different from thinking in terms of SDL. We need to consider this in our set of research propositions, particularly in our first set, more explicitly because it seems to reduce the pace of TCO adoption basically.

Moreover, our case studies reveal that real value co-creation by customer and supplier is still an exception – with a more advanced situation in Finland compared with Germany and Switzerland. Although both customers and suppliers seem to be at least to some extent aware of necessities and benefits that may evolve from collaboration, they seem to fear a loss of expertise that occurs as an unpreventable drawback of establishing a close customer/supplier relationship. Even though this fear is not very reasonable in terms of the modified open system view and SDL, it seems to determine the perception and action of the customer and supplier to a large extent and should not be underestimated.

Our case studies reveal that another factor not explicitly considered in our set of propositions might play a role; namely, trust among the exchange partners (all companies). A certain level of trust is often missing. Instead, mutual reservations prevent the temporary unit from tapping full potential. Because trust often takes a long time to develop, this obstacle cannot easily be circumvented. Again, it is a matter of the mind-sets of the people involved in the partnership. Besides this, we can assume that a certain “relational culture” might work as “glue” between the partners and facilitate the move to more ambitious ways of collaboration in the sense of SDL. Both trust and relational culture also belong to the operant resources, according to SDL.

In this discussion, we have touched on the mind-sets of the people involved in TCO-based cooperation. From our case studies, we learned that unlearning is an issue. People use strategic logics based on previously learned knowledge.
These logics, which are influenced considerably by principles of the goods-dominant logic, work automatically; that is, without an explicit cognitive control. Because of this implicit character, it is very hard to identify them as obstacles of the transition process and, thus, to change them. It seems that these routines and logics, in connection with the rigidities, deserve more attention in on-going empirical research.

The empirical fieldwork provided us with useful insights to modify and specify our propositions. The empirical findings, however, fit well in the modified open system view of the firm. Finally, the transition process to an SDL, as well as the SDL concept in general, seems to be rather useful in understanding the phenomenon of the internationally differing low adoption of innovative TCO business models.

Despite the usefulness of the first empirical steps we made, we are aware of potential biases of the interviewers as well as interviewees and the fact that the number of case studies we conducted is rather small and is related to only one industry. Therefore, the results have only restricted explanatory power – although we are able to understand general principles of TCO adoption in the realm of the transition from the goods-dominant logic to SDL in a specific national market. More qualitative research that illuminates in more detail the markets of different countries is necessary for a more detailed reality check of a modified and specified system of research propositions, especially because, in different markets, the explanatory power of the causal factors identified may differ. In summary, the development of more case studies is required.

REFERENCES


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