ABSTRACT

Purpose – Performance-Based Contracting (PBC) increasingly finds its way in Service-Dominant Logic (SDL) theory and practice because of a shared focus on the beneficiary’s value creation and reciprocal value propositions that comprise goods, services, information, and customer-firm interactions. As a midrange theory domain, PBC operationalizes SDL by elaborating SDL microfoundations. Novel types of customer-supplier exchange contracts and services, such as PBC, emphasize achievement of outcomes in complex customer settings, rather than merely exchange of products or transactional service delivery. Still, actual use of PBC is still in its infancy. For instance, tensions exist in pre-negotiation phases involving both customers in need of complex assets for their value creation processes, and Original Equipment Manufacturers (OEMs). Since PBC entails a shift of risks towards the OEM, understanding practices that influence OEMs’ commitment are decisive for successful negotiation, contracting and value cocreation. Research so far tends to adopt a customer-centric view. It offers limited insights, however, in OEM-related practices inducive to negotiation. This increases ambiguity on the side of customers interested in proposing PBCs to the market. Along these lines, the purpose of this paper is to contribute to SDL-microfoundations by (1) explaining OEMs’ willingness in terms of practices to enter PBCs with a reciprocal value proposition, and (2) designing a PBC service governance and management model to enable customer-OEM negotiation and anticipate contract management.

Design/methodology/approach – This study expands on PBC and SDL literatures, focusing on the nexus of practices driving OEM interest in pre-negotiation phases. Empirically, it is based on a case study in a complex high-tech context that is dynamic in nature and based on long-term relationships. The case offers a retrospective view on pre-contracting practices that matter to the OEM. The analytical
focus lies on a maintenance agreement – presently active – between a public customer organization and an OEM (hence: business to government, B2G). The contract concerns sustainment of almost 3,000 high-tech products, used in the customer’s home base as well as during international operations. The case illustrates a reciprocal value proposition as sustainment involves human resources, equipment, and facilities from both the customer and OEM. In-depth data has been collected both on the customer and the OEM side through semi-structured interviews, archival study of contracts and related documents, and informal conversations.

**Findings** – Findings are presented in a model that consists of different types of core, generative and balancing mechanisms that include individual practices, which influence the OEM’s willingness to proceed with negotiations. The dominating core mechanism, prospective performing, consists of the practices enabling verifiable forecasting, monitoring, and managing performance and scoping the contract towards growth. Hybridizing activities combines different activities and act as a generative mechanism, which consists of linking the purchase and maintenance contract and safeguarding continuity in OEM workshops. Two balancing mechanisms are constructing relationships and vetting of risk management, in which the former consists of customer independence and governing in a relation manner, while the latter focuses on balancing risk and reward and transferring the risk. These mechanisms demand a careful balancing act to accommodate OEM’s willingness and not restrain it. Finally, maintaining a strategic portfolio for the OEM and facilitating feasible contract duration are two additional and separate practices.

**Implications** – By underscoring the OEM’s willingness in terms of practices in pre-negotiation phases, this study strengthens the theoretical foundation of the management of resources and capabilities in complex service settings as an application of SDL-thinking. We lay out constellations of practices that accommodate value cocreation in reciprocal value propositions. However, the mechanisms require careful execution to prevent a restraining effect on the OEM’s willingness. Our study contributes to interorganizational service (ecosystem) literature by examining the initial phase of setting up a reciprocal B2G relationship. Moreover, the findings provide practitioners insights in the dynamics of value cocreation by specifying what it takes to build reciprocal value propositions.

**Originality/value** – This study coalesces PBC and SDL literature and highlights the importance of the underexposed pre-negotiation phases, which is done specifically in the light of reciprocal value propositions and value cocreation dynamics.

**Key words** – Service-Dominant Logic, Performance-Based Contracting, Practices, Value Cocreation, Value Codestruction, Reciprocal Value Proposition, Pre-negotiation.

**Paper type** – Research paper.
1. INTRODUCTION

The Service-Dominant Logic (SDL) is a theory consisting of fundamental premises that emphasize the cocreation of value (Vargo and Lusch, 2016, p. 6). Creating “value-in-use” consists of resource integration among autonomous organizations (Payne, Storbacka and Frow, 2008; Vargo and Lusch, 2004, 2016). Recent work stresses the importance of operationalizing SDL by looking at actor engagement, defined as “…a group of actors’ (collectives or organizations) exchange-based and non-exchange-based resource contributions, that are facilitated by dispositions, formed partly by actor specific characteristics and partly by the institutional and organizational arrangements prevalent in the context in which the resource contributions occur” (Storbacka, 2019, p. 8). Actor engagement may contribute to microfoundations of value cocreation in service ecosystems, but it needs more research in particular in the context of reciprocal value creation. Under these conditions, engagement is a more complex mixture of gives and takes that are not precisely defined ex ante (Storbacka, Brodie, Böhmann, Maglio and Nenonen, 2016).

From a temporal angle, early phases of actor engagement are important as it prestructures exchange patterns. This applies in particular to B2B and B2G relationships involving complex value cocreation (Cederlund, 2015). As an exemplar of this phenomenon, Performance-Based Contracting (PBC) has emerged as an institutionalized contracting mode across several industries, and often including the public sector (Selviaridis and Wynstra, 2015). PBC teases out overlapping interests, thereby anticipating mutually beneficial value cocreation.

At the same time, organizations hesitate to engage in early phases (Wilson, 2019), such as in PBC. While current research approaches PBC as a challenge of designing a service ecosystem, decisions on engagement are ill understood. Already in early phases of the customer journey, mismatches may occur (Witell, Kowalkowski, Perks, Raddats, Schwabe, Benedettini and Burton, 2020). An example of a pre-negotiation phase is prebid engagement, aimed at understanding potential overlap between a customer’s business needs and priorities, and the service provider’s capabilities (Biggemann, Kowalkowski, Maley and Brege, 2013). During prebid engagement, mismatches may include misunderstanding of a customer’s needs in relation to an offered solution (Witell et al., 2020). In fact, in depth studying of intraorganizational processes driving an organization’s engagement and preceding negotiation is important. Our objective is to contribute to this challenge by improving insight in OEM engagement during a pre-negotiation phase of an emerging PBC-relationship, and by designing a PBC service governance and management model. Pursuing this objective strengthens SDL by means of a midrange theory.

We elaborate on PBC as a conceptual and empirical exemplar (Randall, Pohlen and Hanna, 2010). PBC increasingly finds its way in SDL theory and practice because of a shared focus on the beneficiaries’ value creation and reciprocal value propositions that comprise goods, services, information and customer-firm interactions (Truong, Simmons and Palmer, 2012). Empirically, our focus lies on pre-negotiation as customer and provider jointly explore opportunities for PBC. So far,
researchers have studied value advantages of PBC (Hypko, Tilebein and Gleich, 2010; Randall, Nowicki and Hawkins, 2011) and some topics pertaining to providers, such as implementation (Selviaridis and Norrman, 2015) and their relationships with subcontractors (Kleemann and Essig, 2013). Little insight, however, has been generated on a providers’ take on tensions during the pre-negotiation phase stemming from a shift of risks towards them as OEM (Kleemann and Essig, 2013).

Subsequently, our empirical objective is to understand practices that influence an OEM’s commitment to engage in PBC. Our empirical work concerns an exploratory case study on a private OEM selling equipment and services to a public customer. In-depth data has been collected both on the customer and the OEM side through semi-structured interviews, archival study of contracts and related documents, and informal conversations. Our study is based on a case study in a complex high-tech context that is dynamic in nature and based on long-term relationships. The case offers a retrospective view on pre-contracting practices that matter to the OEM. The analytical focus lies on a maintenance agreement – presently active – between a public customer organization and this OEM (hence: business to government, B2G). The contract concerns sustainment of almost 3,000 high tech products, used in the customer’s home base as well as during international operations.

The case illustrates a reciprocal value proposition as sustainment involves human resources, equipment, and facilities from both the customer and OEM. Specifically, findings show practices enhancing willingness of the OEM to proceed with negotiations, and some practices restraining such willingness. We developed a model that illustrates what mechanisms (i.e. the constellation of practices) and individual practices (e.g. Hui, Schatzki and Shove (2016); Nicolini (2009)) enhance and restrain an OEM’s willingness to engage and how they cohere with each other. Through this, we draw several initial PBC service governance and management guidelines on themes such as performance control, contract management, OEM-customer information processing, and innovation.

This study contributes to the micro dynamics of SDL-inspired value cocreation (Storbacka et al., 2016), with a specific temporal focus on early engagement phases. In this, we specify what mechanisms and practices enhance and restrain service providers’ engagement in PBCs as a reciprocal value cocreation setting. Thereby, we further detail what it takes to accommodate alignment of interorganizational resource integration. This undergirds value cocreation and it prevents misalignment that would lead to value codestruction (Echeverri and Skålén, 2021). Consequently, we confirm the importance of early engagement phases, and unpack key premises in conducting “pre-purchase” business (Wilson, 2019; Witell et al., 2020). Our explanatory and design-based theoretical contributions translate into managerial contributions as well: improving provider self-knowledge and customer knowledge of a provider’s pre-negotiation experiences. Combined, customer and provider insights enable codesign of a framework for managing PBC that anticipates negotiation, contracting and contract management (Selviaridis and Norrman, 2015).
2. SERVICE-DOMINANT LOGIC AS A MIDRANGE THEORY: PRENEGOTIATION IN PERFORMANCE-BASED CONTRACTS AS AN EXEMPLAR

Since its inception through the seminal article of Vargo & Lusch (2004), most SDL-related research has taken place on a metatheoretical level (Hartwig et al., 2021). Consequently, contributions on midrange and managerial levels are scarce (Rabetino, Harmsen, Kohtamäki and Sihvonen, 2018; Vargo, Akaka and Vaughan, 2017; Vargo, Lusch and Koskela-Huotari, 2018). For this omit to be resolved, further attention should be paid first of all to what is more commonly known as “midrange theories” (Soltani, Ahmed, Ying Liao and Anosike, 2014). In conjunction with empirical research, this enables a further refinement of a cross-disciplinary lexicon for SDL (Brodie, Saren and Pels, 2011; Storbacka et al., 2016).

To this end, a closer look at the microfoundations that underpin macro constructs is necessary (Storbacka et al., 2016). The “oscillation” from the macro to the micro and backwards (Chandler and Lusch, 2015) can help in unpacking collective concepts and understand how micro actions and interactions play a key role in this (Storbacka et al., 2016; Felin et al., 2015). The ontological lens consisting of the fundamental premises of the SDL constitute the point of departure for conceptual and empirical investigations at the actor engagement level (Hartwig, von Saldern and Jacob, 2021; Storbacka et al., 2016). This level consists in this case of value cocreation and value codestruction practices in the context of PBC. Next, we explore these concepts in further detail.

2.1 Setting the Scene

The creation, maintenance and facilitation of value lies at the core of marketing theory and practice (Truong et al., 2012). The marketing realm is strongly influenced by the SDL which emphasizes the focus on value cocreation. This is reflected by one of its fundamental premises that states that value is cocreated among different actors in which in all instances the beneficiaries are involved (Vargo and Lusch, 2016). Along the lines of the service-for-service conceptualization in SDL, both the customer and service provider (and possible other actors) can be depicted as a beneficiary if they benefit from the service exchange (Vargo and Lusch, 2016). The process of creating “value-in-use” consists of the integration of resources and exchange of service (Payne et al., 2008; Vargo and Lusch, 2004, 2016). Actors, who are nested at multiple levels of service ecosystems (Storbacka et al., 2016), do not “deliver” value but participate in its creation and facilitation. In short, value is (co)created when an actors’ well-being has improved (Grönroos and Gummerus, 2014). Conversely, when an actors’ well-being decreases value (co)destruction takes place (Laud, Bove, Ranaweera, Leo Wei Wei, Sweeney and Smith, 2019; Smith, 2013).

The process of value creation is dynamic, temporal, and communicative in nature. This permits value propositions to evolve from unilateral to reciprocal (Truong et al., 2012). “Cocreated value” (is) being created by the interactions with customers taking place throughout the relational process, and the provider receiving benefits beyond monetary rewards. It is thus rooted in subjective performance criteria
and measured by value-in-use. Firms do not deliver value, but instead offer propositions that have the potential to cocreate value in partnership with customers. Such propositions are defined as “reciprocal promises of value, operating to and from suppliers and customers seeking an equitable exchange” (Kowalkowski, 2011). Value proposition reciprocity is based on the idea that service provider can develop value propositions, but the beneficiaries are the ones who always remain the arbiter of value and decides what is valuable and what not (Ballantyne, Frow, Varey and Payne, 2011; Grönroos and Voima, 2013). Consequently, value has emerged as a fundamentally subjective, interactive, idiosyncratic and phenomenological concept (Chandler and Vargo, 2011).

Furthermore, embracing temporality, marketing literature contemplates on how actors create and experience value in their “journey” (Witell et al., 2020; Lemon and Verhoef, 2016; Sahhar, Loohuis and Henseler, 2021). In business to consumer (B2C) literature, customer journeys have largely remained purchase focused and tend to be framed in a weak process manner (van Fenema and Keers, 2020). Phases in customer journeys are for example divided into pre-purchase, purchase and post-purchase (Lemon and Verhoef, 2016). In business to business/government (B2B/G) however, customer journeys are much more complicated because of the multiplicity of actors (including their roles and responsibilities), warranting more research to deal with the complexity of offerings and the intensity of interaction (e.g. Fornell, Henneberg, Witell and Kindström (2017); Mikolon, Kolberg, Haumann and Wieseke (2015); Zolkiewski, Story, Burton, Chan, Gomes, Hunter-Jones, O’Malley, Peters, Raddats and Robinson (2017)). In this context, phases are identified as evolving relational processes and divided into for example prebid engagement, negotiation, value proposition, implementation, and operations (Brady et al., 2005; Tuli et al., 2007; Witell et al., 2020). Although B2B and B2G settings have much in common, B2G contexts contain further complexities. Examples are the dynamic power field in which elaborate political-institutional structures are at play, and difficulties between public and private interaction may arise (Knight, Harland, Telgen, Thai, Callender and McKen, 2012). Despite these additional complexities, we treat the phases in B2B and B2G journeys in a similar manner because of their focus on reciprocity in business relationships and value cocreation (Eggert, Ulaga, Frow and Payne, 2018).

Despite increasing research into the temporal aspects of the creation and experience of value throughout B2B/G journeys, managing them remains challenging, in part because performances are incompletely understood and pre-articulated (e.g. Sahhar et al. (2021); Witell et al. (2020)). Already in early phases of the customer journey mismatches may occur (Witell et al., 2020). In pre-negotiation phases, such as prebid engagement, which aim to understand potential overlap between a customer’s business needs and priorities, and the service provider’s capabilities (Biggemann et al., 2013), several mismatches may occur. These include for example, the service provider’s lack of understanding how to best engage with the customer organization, and vice versa; different degrees of formalization in information sharing between service provider and customer; the necessity of developing trusting personal relationships; and the opaque picture of availability and actionability of provider capabilities as well as a customer’s prospective needs in the eyes of the service provider (Witell et al., 2020). The
latter stems from public customers’ complicated internal structure, with multiple levels and units such as shared service centers (de Waard, de Bock and Beeres, 2019; Mahon, 2007).

There is a consensus that the SDL paves the way for organizations to offer highly customer-focused offerings and create value based on integration of resources (Hartwig et al., 2021; Karpen, Bove, Lukas and Zyphur, 2015). While this view has been institutionalized in service literature, SDL’s focus remains so far largely abstract and metatheoretical. To make sense of this view, one can adopt the notion of oscillation (Chandler and Lusch, 2015), which means to move back and forth between different levels. This process helps to add more granularity to collective concepts and it substantiates these concepts in turn (Storbacka et al., 2016).

PBC is a midrange theory domain that embodies the notion of value cocreation over time through the integration of resources in reciprocal value propositions. It thereby is a palpable and important type of interorganizational B2B/G service exchange which restructures resource management and risk allocation (Kleemann and Essig, 2013). Furthermore, where understanding of and gaining control on early “pre-use” phases of journeys remains an ill-understood phenomenon, this phase is crucial to PBC as stage-setting for prolonged value creation (Randall et al., 2010). An empirical account of PBC has the potential to fill this pre-use void, allowing to create a deeper understanding of how actor engagement takes place in early journey phases, thereby contributing to break the “purchase shackles” (Wilson, 2019).

2.2 Performance-Based Contracting

In recent years, PBC has received increasing attention (Essig, Glas, Selviaridis, & Roehrich, 2016). The phenomenon takes different forms of which some examples are: PBC, performance-based logistics (PBL), outcome-based contracting (OBC), availability contracting, pay for performance, and performance-based service acquisition of Power-by-the-Hour (Essig et al., 2016). Nevertheless, the phenomenon is not new. In 1908, the Signal Corps of the United States Army already had PBCs on the market for a heavier-than-air flying machine (Jacopino, 2018). However, a clear increase is visible from 2003 onwards (Selviaridis & Wynstra, 2014). This is also when the US Department of Defense introduced legislation to introduce contracts that optimize total system availability and reduce costs.

With a traditional (transactional) contract, there is a high risk that the interests of the customer and the supplier are not in line (Randall, Pohlen, & Hanna, 2010). In such a type of contract, the customer pays for the repair of a defective part of the system. Hence, the more often a part becomes defect, the more the customer must pay and the lower the availability of the system. The supplier, on the other hand, has the potential to earn more when parts fail more often. Therefore, it is obvious that both parties have opposite interests. While the customer wishes for high availability (few defective parts) and low (maintenance) costs, the supplier aims for creating profit through repairing parts.

To resolve this misalignment, PBCs aspire to align interests on each side of the coin thereby allowing both parties to collaborate in reaching common goals (Kim, Cohen, & Netessine, 2007). An
example of service exchange can be that the supplier safeguards a certain level of performance for the customer. In return, the customer facilitates the process of such a contract in terms of knowledge sharing and on-time payment. Consequently, PBCs offer several advantages for both parties. The supplier can offer great value for attractive pricing for the customer, while simultaneously pushing down its costs due to effective processes (Randall, Nowicki, and Hawkins, 2011). Fixed performance prices allow for enhanced costs management on behalf of the supplier. As a result, a supplier will actively look for opportunities to optimize its processes by for example improving the reliability of parts or economizing maintenance practices. These resulting processes on the side of the supplier also offers advantages for the customer by offering greater value in the long run. Still, for PBCs to be realized, initial investments on behalf of the supplier are necessary (Randall et al., 2011). The supplier therefore incurs more costs in the first period compared to a traditional contract, thus involving a higher risk. On the customer side, PBCs may increase costs and reduce internal capabilities. PBCs thus changes value co-creation in the spirit of SDL, but both customer and supplier may hesitate. It is therefore a good exemplar for developing a midrange theory by examining pre-use relationship building.

2.3 Exploring Micro Foundations of Performance-Based Contracting from a Service-Dominant Logic lens

Merging the macro-level foundational premises of the SDL with its midrange and micro-level embodiment in the case of PBC, we tease out the following observations. In SDL, value is phenomenologically determined by the beneficiary (Vargo and Lusch, 2016). This revolves around the idea that the beneficiary is the arbiter of value, making the SDL essentially customer centric. PBC, on the other hand, promises a certain performance through delivering solutions in a way that aids in achieving customers’ goals. In other words, a supplier making a promise in PBC, facilitates the customer with present but also future – potential – value-in-use (Grönroos and Voima, 2013). PBC showcases the shift in focus from a transaction-based model to one that is based on outcomes through the exchange of service – a key premise in the SDL (Vargo and Lusch, 2004, 2008, 2016). Furthermore, within the SDL, temporality has become increasingly part of the investigation of value creation processes through its focus on customer usage processes (e.g., Grönroos (2011); Grönroos and Voima (2013)), and involving the customer journey as a guideline in understanding and managing customer experience (e.g., Lemon & Verhoef, 2016). Throughout all phases in a journey, it is becoming more common practice to understand where and how mismatches can occur (Witell et al., 2020). This is crucial for both value cocreation as well as value codestruction. PBC can be seen as a case that embodies the understanding of the customer in early phases of the customer journey to facilitate value cocreation. Also, within this process, the integration of resources is not solely facilitated unidirectionally from the provider perspective. The customer also performs a constitutive role, implying reciprocal value propositions (Truong et al., 2012). In short, PBC is an institutionalized form of a reciprocal value proposition and emphasizes “early” value cocreation (Randall et al., 2010). The beneficiary party needs to share

Van Strien, Sahhar, Van Fenema (2021) – Work-in-progress manuscript for the Naples Forum on Service 2021
knowledge of its context and facilitate resources. The provider, in turn, delivers a customized solutions that needs to be realized over time. As known, in this process there is significant risk at play, especially on the provider’s side (Essig, Glas, Selviaridis and Roehrich, 2016).

These collective conceptualizations do not prevent that theoretical depth is lacking and explanations through empirical support remain scarce. This is in line with strategic management literature (e.g., Barney and Felin (2013); Felin, Foss and Ployhart (2015)) suggesting adoption of a micro foundational view. Such a complementary research effort explores a level of analysis lower than the concept itself (Storbacka et al., 2016), which allows to investigate specific actions and activities on an actor engagement level.

Despite this call for a turn towards micro foundations, questions about actor engagement in early phases of journeys remain unanswered. For example, what are crucial elements for a service provider to engage in a PBC? Which actions and activities accommodate and restrain a service provider’s willingness to enter such a contract? In addressing these questions, this paper adopts a practice perspective to investigate what practices influence the OEM’s commitment to enter PBCs. Our empirical objective is to understand practices that influence OEMs’ commitment to PBC.

A practice theory lens, as commonly applied in service research (e.g., Echeverri and Skålén (2011); McColl-Kennedy, Cheung and Ferrier (2015); Sahhar et al. (2021) is useful because it allows to zoom into phenomena by focusing on procedures, understandings, and engagement (Echeverri and Skålén, 2021). In this study, the willingness of a provider specifically involves the investigation of practices that describe one’s engagement, which involves goals, commitments, and motivations (Echeverri and Skålén, 2021; Schatzki, 1996; Schau, Muñiz and Arnould, 2009). Practice theory looks carefully at the routinized and non-routinized actions and activities that are at play to breach the implicit and taken for granted (e.g. Nicolini (2009)). Such activities and actions, known as practices, can present themselves individually but also in constellation of practices, also known as mechanism of practices or the nexus of practices which form mechanism (Gherardi and Nicolini, 2002; Hui et al., 2016). All in all, this contributes to breaking the purchase shackles (Wilson, 2019) by creating a better – micro level – understanding of the rationales in terms of practices to enter a PBC on behalf of OEMs.

3. METHODOLOGY

3.1 Research Design and Case Description

For the empirical piece of this study, we adopted a single case approach as a mode of studying a contemporary phenomenon (Yin, 2015). We used the principles of abduction to create and ensure depth (Anderson, Dubois, Lind, 2018; Dubois and Gadde, 2002, 2014). Abduction allows to travel back and forth between the empirical observations and theoretical insights. This process is especially suitable with our study because of its explorative nature.

This study draws on a case that finds itself in a complex highly technological B2G setting. We focus on a business relationship between a large governmental institution and an internationally well-
known manufacturer of high-tech and valuable units. The former represents the customer and the latter the supplier (OEM). For purposes of anonymity, we label the customer organization “ForceOrg” and the supplier “Supply & Co”. Both organizations consist of a complex matrix structure with several business units consisting of stakeholders with each different responsibilities and roles. For ForceOrg, this case study involves one business unit that is responsible for procuring equipment, and one keeping equipment running through maintenance. The latter unit is most often in direct contact with provider organizations for PBCs. The contract in this case consists of a large and long-term contract for both the purchase and sustainment of 2,800 high tech products, i.e. vehicles including components. With a scope of initially term of ten years, the contract can be extended twice for a period of five years.

Typically for knowledge intensive services (Aarikka-Stenroos and Jaakkola, 2012; Bettencourt, Ostrom, Brown and Roundtree, 2002) and reciprocal value creation (Truong et al., 2012), the business relationship consists of intensive contact. Supply & Co provides highly customized product-service solutions that aim to fulfill the needs of ForceOrg. This requires reciprocal knowledge exchange and problem-solving capabilities on behalf of both parties (Muller & Zenker, 2001). These efforts are imperative for meeting higher-order sustainability and cybersecurity goals which are especially applicable to our case.

3.2 Data Collection

Throughout the entire process, we call on the extensive professional experience of the first and third author in the industry. This experience has helped us gaining access to key positions at ForceOrg as well as Supply &Co. Furthermore, being familiar with the specific language used in our setting accommodated to resonate with our research participants. Reflection with the second author ensured calibration of internal and external perspectives. To elicit depth and meaning in our data, we relied on desk research and in-depth interviews. In the first phase of this research, we have carefully studied the PBC applicable to this case including relevant documents, such as presentations and reports that served as background information. Subsequently, a total of five in-depth interviews were conducted with high-level practitioners that fulfilled key positions in the business dyad and were directly involved in the PBC. Two interviews took place at ForceOrg while three were conducted at Supply & Co. This resulted in a total of eight hours of audio recordings that were transcribed verbatim, resulting in a total of 118 pages. Moreover, an educational presentation by a Supply & Co representative was included in our analysis.

3.3 Data Analysis

We stored all data and carried out the data analysis in NVivo. Building on the coding principles of open coding, directed coding and thematic coding (Hahn, 2008), we were able to elicit first-order and second-order themes. The first-order themes represent the sub-practices and were created through analyzing recurring statements and patterns. The same process, but on a more abstract level, was done
to create the second-order themes, which depict the overall practices. The first and second-order practices were connected to the overall theme of this study.

3.4 Quality

We have taken several measures to ensure the reliability of this study. First, we used the qualitative data analysis tool NVivo to serve as the case study database. This program stores all the interview recordings, transcripts, documents, codes, and memos. In addition, we also use an interview guide that is another method to ensure the reliability of a study as it allows the study to be verified and the analysis to be repeated (Voss, Tsikriktsis and Frohlich, 2002).

Furthermore, we adopt the guidelines offered by Yin (2003) to enhance construct validity. These include using multiple sources, maintaining a chain of evidence, and having the operationalization assessed by others. We used different sources, namely, scientific literature, the interviews and company documents including the contract. In addition, we conducted interviews with key officials from both the supplier and customer side. By conducting interviews with officials in different positions and organizations, we shed light on the subject from different angles and get as holistic view (Huber and Power, 1985). We used NVivo to maintain a chain of evidence, from interview questions, recordings, to transcripts and codes. For the operationalization we used operationalized terms from literature. These terms have been operationalized in various (peer-reviewed) publications. As a last measure to ensure construct validity, we had peers review and approve the operationalization and the questionnaire before conducting the interviews. The operationalized terms form the basis for my interview questions.

With regard to internal validity, which refers to “establishing causal relationships where certain conditions are believed to lead to other relationships than spurious relationships” (Yin, 2003), we have taken several measures. First and foremost, we applied pattern-matching. The empirical based patterns from the derived research data are compared with the analysis framework. The analysis framework is based on literature and established concepts as SDL, PBC, and practice theory.

FINDINGS

We are working on the findings and we will present an update during the conference.

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