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Toxic collaborations. Co-destroying value in the B2B context

ABSTRACT

Service research and marketing theory have found value co-creation (VCC) to be a key element in the business-to-business (B2B) context. Value can also be co-destroyed by the same actors who interact to create it. However, very few studies have examined service provider–customer work practices when value co-destruction (VCD) occurs. In this qualitative study, we approach VCD by *combining* social interactions (SI) and resource integration (RI) practices *with* a notion of value that reveals its multiform nature. We adopt a value definition that enables us to show that the notion of co-creation and co-destruction should be viewed conceptually as representing a value variation space rather than as being dichotomous or mutually exclusive. Our research allows practitioners to recognize and contrast VCD, as it emerges and impacts their B2B relations.

1. INTRODUCTION

In a Scandinavian town, a heavily trafficked road crosses a railway line perpendicularly. The traffic load on the road has increased in recent years, increasing the risk of accidents at the railway crossing. The Public Transportation Department invites architects and railway and highway engineers to join the town's urban planners in redesigning the crossing. This is a typical business-to-business (B2B) context, where experts from different organizations pool their resources in a series of problem-solving workshops to search for alternative solutions. Despite their considerable efforts and good intentions, the multidisciplinary team fails to co-create a solution that

the customer, the City Council, considers valuable. Eventually, because of schedule and budget overruns, the project is discontinued.

The local society sought value in terms of efficient investments of public money and a safer and more efficient transportation system. The City Council expected value in terms of good solutions. The engineers expected value in terms of financial returns and reputational recognition. However, something in their B2B relationship went wrong. Economic capital was lost, consultants and administrators suffered reputational damage, cross-firm relations were jeopardized, and the risk of accidents was barely reduced. What happened? How did the City Council assess the value created by the experts? What did these experts do that resulted in their failure?

This case is not unique to the B2B context. Questions such as these characterize a number of civil infrastructure projects all over the world, impact our societies negatively, and often remain either unanswered or left to the judgments of a court.

Scholars have begun to devote attention to destructive relationships as an important part of organizational life, approaching it from different points of view, such as project management (Kerzner 2018), trust and partnering (Bygballe, Jahre, and Swärd 2010), and relational coordination. Recently, the term “co-destruction” (Plé 2017; Plé and Chumpitaz 2010) has emerged to describe the phenomenon that occurs within a service ecosystem (Vargo and Lusch 2011) when multiple actors interact and integrate their resources to realize valuable benefits, yet their collaborations result in a decline of the well-being of at least one of these actors (Echeverri and Skålén 2011; Frow, McColl-Kennedy, and Payne 2016; Plé and Cáceres 2010; Vartiainen and Tuunanen 2016; Worthington and Durkin, 2012). Scholars identify VCD as an important research area (Öström et al. 2015), which includes investigating resource integration and how these relate to VCC (Vargo and

Lusch 2011); unveiling the phenomenological nature of value as something that depends on the subjective perception of the beneficiary (Plé 2017); explaining *whether* one kind of value could compensate for another (Lombardo and Cabiddu 2017); and determining *how* VCC for one actor may as well become VCD for others involved in the same interactions (Plé 2017).

Yet, most of the literature that addresses the B2B context today is normative as it proposes, for example, conceptual models for how to plan and execute projects (Fischer et al. 2017) and how to learn from customer interactions in projects (Skjølvsvik et al. 2007). Although the normative approach is the most common (Vargo 2007), it has been criticized (Aarikka-Stenroos and Jaakkola 2012) for ignoring the work practices that are used when multidisciplinary teams experience co-destructive collaborations. According to practice theory, work practices are defined by what *intentions* actors have when they collaborate (e.g., maximizing traffic safety), which *tools* they use (e.g., software for 3D modeling), which *activities* they perform (e.g., design, presentations, analyses), and which *excellence standards* guide their performances (e.g., ISO-9001, environmental regulations) (Sandberg and Tsoukas 2011).

By ignoring VCD practices, scholars and practitioners are left, first, with the impossibility of discerning the causes of their destructive relationships, and, second, without knowledge of how this impacts the value they want to create (Payne, Storbacka, and Frow 2008; Payne and Holt 2001). This knowledge gap may be owing to the researchers' difficulty in accessing reliable data in failed projects *before* failure becomes a fact (Miles and Huberman 1994; Zhu and Zolkiewski 2015). Meanwhile, researchers have long preferred to focus on the positive aspects of B2B relationships (Frow et al. 2016; Grönroos 2011; Vargo and Lusch 2011) and have missed the

opportunity to appreciate the potentially *destructive aspects* (Plé 2017). This stream of literature has addressed some aspects of problematic social interactions (Echeverri, Salomonson, and Åberg 2012; Robertson, Polonsky, and McQuilken 2014) and various deleterious resource-integration activities (Plé 2016; Vafeas, Hughes, and Hilton 2016). However, only a small number of studies specifically address the issue within the context of B2B relationships (Echeverri and Skálén 2011; Smith 2013). This motivates our research questions, “What do practitioners do when their (B2B) relationships turn out to be destructive?” and “How does it impact value?”

This study makes two important contributions.

First, we propose a novel approach to VCD in the B2B context. Whereas previous service literature has conceived the impact of social interaction (SI) and of resources integration (RI) on value treating it as a monolithic concept, we approach VCD by *combining* SI and RI *with* a multiform notion of value. Here, “value” is defined in terms of the amount of economic, cultural, social, and symbolic capital owned by an actor (Bourdieu 1986; Lombardo and Cabiddu, 2017). The results corroborate and provide empirical support to previous conceptualizations of “value” as a multiform concept.

Second, ours is the first attempt to empirically demonstrate that value variation can be mapped into a *value variation space* that develops along two dimensions: access to and exploitation of capital. Accordingly, VCC and VCD are not seen as dichotomous; VCD occurs within this value variation space, as certain SI and RI practices induce *negative* variations in actors’ ability to access and exploit any form of capital. More specifically, our results allow an understanding of how VCD for each actor depends on his/her own practices, in addition to those of other actors, in a complex set of interactions and resources integrations.

Our results may help practitioners recognize and avoid features that characterize destructive SI and RI practices. In the B2B context, this could save firms and society from unnecessary health and financial losses.

We use an exploratory, multiple case study design for the civil engineering service sector, which is a useful B2B service for investigation. In this setting, actors are bound to interact and depend on each other's resources (Bygballe et al. 2010; Fischer et al. 2017), and the value they co-create, or co-destroy, affects society at multiple levels (economy, safety, environment, etc.).

2. STREAMS OF VALUE LITERATURE

Despite the considerable literature on the creation of value, there is no agreement on how value should be defined (Howden and Pressey 2008; Payne and Holt 2001). Despite the differences, one can delineate three main streams of research. The first can be traced to the notion of value-in-exchange embedded in products or services delivered to a customer. In these studies, value is defined as the minimum monetary cost of buying or manufacturing a product to create appropriate use and esteem values (Miles 1961). In these early works, definitions of value usually relied on monetary terms (Anderson and Narus 1998), consumers were found outside the firm, and value creation occurred inside the firm (Prahalad and Ramaswamy 2004). While this view took into account economic value, it failed to allow for the possibility of monitoring changes in the amount of value relative to other kinds of value (e.g., extensive social network or politically powerful positions). The price of a product or service was seen as the “single form of value to which all economic life should be reduced” (Miller 2008, p. 1124).

The Service-Dominant logic emerged as an alternative way of thinking about value creation and exchange; it conceptualized value creation from a service perspective and focused on the value that emerges through value-in-use (Grönroos 2011; Vargo and Lusch 2004). In this conception of value, the focus is not on products or services exchanged for a price; instead, value creation emphasizes the customer's experiences, logic, and ability to extract value out of products and other resources used. Value, thus, accumulates over time through experiences during use (Grönroos 2011) and is created jointly by the company and the customer (Prahalad and Ramaswamy 2004). From this perspective, suppliers create value not only by providing products and services to customers, but also by sharing and integrating resources (Grönroos 2011; Vargo and Lusch 2016). Thus, VCC is an interactive process of parties co-creating value-in-use by integrating their own with others' resources (Plé 2016).

This second stream of research, while highlighting the important aspects of resource integration and interactive value formation - despite the widespread acceptance of the idea of value as "perceived and determined by the customer on the basis of value-in-use" (Vargo and Lusch 2004, p. 7) - seems to underestimate the destructive side of value-in-use (Plé and Cáceres 2010).

Only recently has a third stream of research begun using the notion of practice to address the interactive and relational aspects of VCD (Echeverri and Skålén 2011; Kohtamäki and Rajala 2016). This branch of research proposes a definition of value in terms of variations in the amount of capital owned by any actor after he/she interacts with other actors in the same field (Lombardo and Cabiddu 2017). In this study, the value of an actor can emerge in economic, cultural, social, and symbolic forms (Bourdieu 1986; 1990). VCC or VCD for an actor is thus given by variations in the

ability to access any form of capital and to transform it into other forms of capital (exploitation). An important contribution of this third stream of research is a notion of value that reveals its multiform nature (economic, cultural, social, and symbolic) (Lombardo and Cabiddu 2017). Thus, it extends the value-in-use and the value-in-exchange approaches that are anchored, respectively, to the economic value of service and goods or to the social and experiential value. A second contribution is the recognition that VCC and VCD can be regarded as two sides of the same coin (Plé 2017). Despite these advances, more work needs to be done to further refine our understanding of VCD and the significance of B2B practices (Payne et al. 2008; Aarikka-Stenroos and Jaakkola 2012). Although the link between what actors actually do and the mechanisms that determine VCD is acknowledged (Järvi, Kähkönen, and Torvinen 2018), it is neither conceptualized nor explained in terms of work practices (Plé 2017). It follows from this that while current practice theory approaches tend to focus on VCD, their explanatory power will be strengthened by exploring how different practices could impact, negatively or positively, the economic, cultural, social, and symbolic forms of value.

Given these gaps, we draw on a definition of value as a multiform concept that simultaneously accounts for VCC and VCD (Lombardo and Cabiddu 2017) and use a practice theory approach (Sandberg and Tsoukas 2011) to identify B2B practices by eliciting the intentions which orient both service providers and customers toward attaining VCC (Schatzki 2001; 2005). In this way, we uncover the constitutive elements of VCD practices and visualize how they cause negative variations in actors' capital property (Vargo, Akaka, and Vaughan 2017). We also disentangle the social interaction and resource-integration processes that constitute value (Bourdieu 1986; 1990).

3. METHODOLOGICAL APPROACH

The aim of this study is to help explain the relationship between service provider–customer interactions, resource-integration, and VCD. Since this is an empirically under-explored area of research, we adopt an exploratory, multiple case study design (Eisenhardt and Graebner 2007). We ground the theorizing in the empirical data for an in-depth understanding of the research question. We talk to practitioners in their own fields and enquire into their diverse modes of engagement with their work (Sandberg and Tsoukas 2011). We put practice theory at the core of our research design. Consequently, our unit of analysis is any *practice* that service providers and their customers draw upon when they collaborate.

3.1. Theoretical Sampling

Our case study research involves collecting and comparing data from eight cases at a large Scandinavian engineering consulting firm engaged in public infrastructure projects (see Table 1). This firm offered a good option as two of the authors of this paper were granted privileged, long-term access to all project and strategic information at the middle- and top-management levels.

The eight cases were selected from an initial pool of 100 cases identified through interviews with managers. We selected the cases for which we had access to secondary data, which provided background information on the projects in the strategic context of the firm. These projects were led by eight managers who were highly knowledgeable, could view the focal phenomena from diverse perspectives, and who volunteered to have a deeper informant-researcher dialog throughout the various phases of their projects.

Comparing data from multiple case analyses, we investigated whether an emergent finding was simply idiosyncratic to a single case or consistently replicated in several cases (Eisenhardt and Graebner 2007). Thus, the multiple cases served as “replication” logic for our results, as contrary replication (observing cases where certain practices were not enacted), or as elimination of alternative explanations (this was used to find alternative explanations for VCD) (Yin 2009). We chose cases from multidisciplinary engineering firms for the following reasons. 1) They serve their clients within the framework of projects, where teams from the service provider and customer are supposed to cooperate to analyze and solve problems (Payne et al. 2008; Hoyer et al. 2010); we expected practices to be particularly transparent in these settings. 2) Consultants and clients frequently have comparable professional backgrounds and levels of expertise in the field of engineering services; thus, economic, social, cultural, and symbolic capital plays a crucial role in the dynamics of their VCC. We stopped at eight cases when theoretical saturation was reached.

Insert Table 1 about here

3.2. Data Collection

We collected primary data from participant and non-participant observers in ten workshops (at least one per case study). In addition, we gathered data from in-depth, face-to-face semi-structured interviews (Yin 2009), informal conversations with workshop participants, and oral and written reports by the eight project managers from the engineering services company.

The written primary data were uploaded in NVivo 10 and coded. We also included secondary data, such as archived documents that provided background

information on the projects (Eisenhardt and Graebner 2007). For the semi-structured interviews, we used an interview protocol organized around the cultural, economic, social, and symbolic forms of capital. We shaped the questions such that they helped elicit specific information on negative practices that could affect the four forms of capital. To ensure that the questions were clear and understandable, we tested the protocol on the manager of a project who was not included in the study (Yin 2009). We used his feedback to refine the protocol. Within two weeks of each workshop, we interviewed two to four key informants from both the customer and consultant organizations. The 21 interviews (eight with the customers), which took between 35 and 96 minutes to complete, were recorded, transcribed, and coded together with the other primary data sources. Following the interview analysis, we sent e-mails with any required additional questions for clarification.

For participant observations, we met project members while they engaged in intensive collaboration and observed consultant-customer job interactions during formal (group work) and informal (break) sessions. Given the confidential nature of the content, we did not record any workshop (Laurila 1997). We took extensive notes during the workshops, which included transcribing verbal quotes. Following the approach of practice theorists (e.g., Reckwitz 2002; Sandberg and Tsoukas 2011), we also took notes on expressions and body language to register informal and non-verbal communication. Within 24 hours, we wrote down our observations, creating thick descriptions and providing context and meaning to observed behaviors. In addition to field notes, through informal onsite interactions with workshop members, we collected secondary data about cultural settings, the biographical backgrounds of workshop participants, and participants' previous project experiences. We also had access to corporate databases and collected secondary written data such as project

documentation, meeting minutes, and strategy reports. Finally, we obtained an overall picture of each organization's recent history by noting the budget, schedule, scope, mission, participants, and stakeholders of each case. Primary and secondary data sources were triangulated.

3.3. Data Analysis

Our analysis focused on the relational whole in data with regard to practitioners, activities, and tools (Sandberg and Tsoukas 2011). Drawing on practice theory approach (Sandberg and Tsoukas 2011), we looked for recurring practices and explored their influence on the VCD process. Since this was a multiple case study, we conducted both within- and between-case analyses (Eisenhardt and Graebner 2007). With this goal in mind, we conducted the data analysis in three cumulative main rounds of coding, starting with the within-case analysis of each case, moving from the particular to the general (Saldaña 2009), as shown in Figure 1.

Insert Figure 1 about here

The first coding round began with a study of the eight cases and their individual characteristics. We looked for descriptive codes in line with the operational definition of Sandberg and Tsoukas (2011) and Reckwitz (2002). Rather than analyzing single elements to be aggregated later, we focused on how activities are accomplished by the actors as a whole trying to discover certain routinized intentions, activities, tools, and excellence standards. Accordingly, the outcome of the first stage of coding was a list of practices as enacted in the cases and their connection with the project.

At the second stage of coding, we began with the abstraction and generalization process, segmenting and grouping data following a data-driven coding scheme. At this

stage, drawing upon previous research, we checked whether the data describing each of the identified practices could be grouped into a set of patterns; such as, misbehaviors, contradictory interactions, resource non-integration, misintegration, etc. (see Tables 2, 3, 4, and 5).

The third coding round enabled us to understand whether any given practice was providing/denying access to or enabling/disabling exploitation of any given form of capital. Practices that deny access to capital and/or disable capital exploitation to a certain degree could *now* be labeled as “value *co*-destruction practices.” Indeed, data collection in the eight case studies showed that work practices provided access to and enabled exploitation of capital. The data allowed us to appreciate that VCC and VCD were happening simultaneously. We kept our data analysis focused exclusively on the VCD side because a detailed analysis of VCC practices is out of the scope of this article. Two authors were responsible for assigning each practice to the appropriate capital (cultural, economic, social, and symbolic), serving as first and second coders, respectively, employing a dual-coder method. Each coder separately categorized the dataset. Then, the two coders compared the attribution. Finally, the discussion between the first and second coder continued until they agreed on each practice to include in the capital it influenced the most.

At each stage of coding, we checked the robustness of the codes by running a *coding comparison query* and discussed the inconsistencies until the value of the Kappa coefficient was above 0.75.

4. B2B CO-DESTRUCTION PRACTICES IN THE PROFESSIONAL SERVICES CONTEXT

The findings of this study show that VCD happens through practices that predominantly affect one of the four forms of capital: cultural, economic, social, and symbolic (labeled C, E, S, and Sy, respectively). Indeed, despite the fact that these practices can influence more than one capital at a time, based on the data analysis, they were classified according to the capital they impacted the most. We identified some predominant VCD practices (e.g., lacking of knowledge and information resources) and named them as C.1, C.2 through Sy.4, each being enacted in different ways (e.g., underestimating the project complexity) and identified by letters as C.1.A, C.1.B, through Sy.4.B.

Two types of practices emerged from our cross-case analysis. The first one is related to resource integration that shows what actors do as they manage the integration of cultural and economic capital (from C.1 to E.5). The second has practices of social interaction (from S.1 to Sy.4) that actors enact as they collaborate and which cause negative variation in the social and symbolic capital.

4.1. Resource Integration VCD Practices

Each of the eight cases represents a social context in which service providers and customers share cultural and economic resources with the aim of co-creating value. The data analysis unveils ten VCD practices that are enacted in various ways in each case (see C.1 to E.5 in Table 2 and Table 3).

VCD practices related to cultural capital. Cultural capital in multidisciplinary engineering projects is given by the highly specialized know-how of engineers from the service provider and customer organizations, their culture, ideas, intuitions, and their scholastic and practical knowledge. The aim of this kind of project is to enable

the sharing and integration of such resources that are typical of the cultural capital. Nevertheless, in Case 3, the energy production estimation project, the actors had low expectations of VCC, considered the project as a routine activity, and heavily underestimated the project complexity (C.1.A). This attitude led the project manager to ignore some pieces of information made available by the customer which were needed for a proper estimation of the energy cost (C.1.B). These practices limited the integration of the customer and service provider's know-how, knowledge, and information, effectively hindering the integration of their cultural resources (C.1). As information accumulated and more accurate estimates became possible, the customer was not informed (C.4.A), or, as the project manager put it, "*the customer did not ask for updates at the time*" (Case 3). When eventually he had to explain that the energy cost-benefit analysis was worse than estimated, the customer reacted by ousting the service provider from the project (C.4.B; see also Case 2,7, and 8). Here, the project manager was not even integrating his information and knowledge resources with the customer (C.4). On his part, the customer totally interrupted the integration process. The non-integration of cultural resources had negative repercussions for the customer and the service provider's cultural capital such as, for example, an inability to develop an alternative cheaper solution (C.4). A similar pattern was found in Case 4, the design of a renovated sewage treatment process. Here, most of the engineers proposed developing a brand new and innovative treatment plant; a few, however, disagreed (C.3.A). The conservative engineers began to play strategically by hiding know-how (C.2.A) and misrepresenting the innovative solution (C.3.B) to promote the traditional ones. Indeed, C.3.A and C.3.B caused a misalignment of know-how and knowledge resources, resulting in a reduction of the service provider's and customer's cultural capital, because a part of them could not be applied (C.3). Some of the innovators

faced a scaling down of their ambitions (C.2.B) which led, together with hiding knowledge (C.2.A), to VCD, since innovators and conservatives made improper use of their knowledge (C.2). When the engineering project manager showed the set of potential solutions to the customer, many innovators had to witness how their ideas and intuitions had been wasted as the consumer opted for the less innovative of the proposed solutions (C.5.B). Furthermore, all the efforts that the engineers put into the innovative solutions resulted in a waste of time (C.5.A). In this context, the customer used his cultural capital in a way that was incongruent with consultants' expectations (C.5) causing problems not only in their cultural resource-integration process, but also in the economic one in terms of low cost effectiveness and higher future maintenance costs.

Insert Table 2 about here

VCD practices related to economic capital. When a construction project is set up, there is a budget for the engineering design (often in working hours) and a budget for the construction operations. The international high-speed railway project, Case 6, had a large budget (>5 M€) and was set up to connect two large Scandinavian cities, with reasonable expectations of VCC. The engineering team over-focused on details, striving for high quality in every single detail (E.2.A). This attitude caused the project manager to set up more coordination meetings than usual for similar projects (E.2.B) and eventually mismanage the time devoted to the design work (E.2.C), increasing the engineering costs. He acknowledged as much through these words: *“Of course, this is an important assignment for us. Sometimes, we are willing to lose money just because it has something related to how we want to develop our work processes.”* Case 6

showed how the service provider used the project's economic budget (E.2) incorrectly, failing to integrate the investment made by the customer with his own economic resources. Meanwhile, when the customer perceived that the service provider was exceeding his investment capabilities (E.1.A), with the service provider asking for a higher price (E.5.A), the customer refused to pay for part of the "development costs" (E.5.B). Here, the service provider triggered a shortage of financial resources for his customer (E.1). As a result, the customer tried to get back his resources in a way that was incongruent with the service provider's expectations (E.5). The same practices were identified, though enacted in slightly different ways, in Case 2, Case 5, and Case 7.

In Case 2 (motorway upgrade planning), for example, the customer calculated the construction costs before the project planning phase was completed. The public administration needed to calculate the investment costs immediately (E.3.B as well as in Case 4, Case 6, and Case 8) and it could not wait for the information available at the end of the design process. Once the project draft was almost complete, the service provider asked for a reconsideration of the construction budget, which the customer rejected (E.4.B). While in the regional motorway planning project (Case 7), it occurred that the customer had to reduce the investment established for the project because of a reduction in the overall public works budget (E.4.A). As the consultant's project manager put it: *"Now, the national budget for roads and public investments is approved and suddenly [the customer] realizes that they don't have the funds they thought they have. So for one of the big projects we have now, they suddenly cut the cost to almost nothing. So now we are negotiating..."* This unexpected budget cut (E.4), together with the rejection of a proposed budget increase (E.4.B), prevented the integration of the customer's economic resources with the service provider's

knowledge, because the customer did not have the financial resources to pay for the services. Practices such as determining the investment prematurely (E.3.B) led the customer to make an incorrect allocation of economic resources since the customer invests at a time the project design is immature and subject to radical changes.

Insert Table 3 about here

4.2. Social Interaction VCD Practices

Engineering projects represent a social context where numerous actors socialize and interact across established hierarchical and organizational structures. Our data analysis shows eight practices (from S.1 to Sy.4 in Table 4 and Table 5), enacted in several ways, which destroy social and symbolic capital (from S.1.A to Sy.4.B).

VCD practices related to social capital. Projects usually start with a problem definition meeting, where most of the actors meet for the first time. These workshops are usually facilitated by a manager who tries to let the actors become acquainted with each other. In cases such as Case 2 (and Case 6), the customer engagement was neglected (S.4.A) because the service provider's engineers valued focusing on technical design rather than knowing the customer the most. On their side, the customer's engineers were also not at ease with engaging with the service provider. Such a social context had an undesirable impact (e.g., delayed communication and feedback) on the service provider–customer interaction flow, making it feeble. This, in turn, eroded both the actors' social capital (S.4). In Case 1 (local road-railway traffic planning), a similar social context led to fractures in the social relationship (S.2). The local politicians were ignored (S.2.A); the customer's project manager explained that “[...] planners are very often afraid of politicians' decisions; they think

that their values are wrong. So I have experienced that planners very often want to avoid the politicians.” Local politicians were invited to the solutions debate only when the design process was almost completed (S.2.A). The following debate caused delays and further revisions as the decision-makers did not feel a sense of ownership of the proposed solutions. As one politician put it, *“This is their solution! Not ours! I don’t buy it!”* Similar VCD practices occurred in other cases (5,7, and 8).

When projects develop, the social context changes as the actors interact and progressively socialize. Here, interpersonal conflicts (S.3) can provoke more serious damage to the social capital than a simple disagreement on technical details. For example, when the project managers from the service provider and the customer were interacting to assess the solutions developed in Case 5 (the planning of a tunnel for ships), they did not agree on some points and could not find a compromise (S.3.B). In Cases 3 and 4, a prolonged standoff, such as the one described in Case 5, emerged, leading the customer to remove an engineer from his position (S.3.A) and discontinuing the social relationships.

Moreover, social misbehaviors (S.1.A) were observed: actors “stole” ideas from others (Case 2), abandoned the workshop (Case 3), were continuously distracted when another was presenting solutions (Case 4), or blamed/betrayed another actor (S.1.B, Case 1, Case 7, and Case 8). These actors did not obey social rules and were not able to build stable positive relationships (S.1), thus destroying their social capital.

Insert Table 4 about here

VCD practices related to symbolic capital. Projects are complicated webs of social relationships; while some of these relationships are well-established through

hierarchical positioning (e.g., among project director, managers, and junior engineers), most of them are not explicit and are built during the project activities. In Case 8 (tunnel improvement), a young environmental engineer suggested digging a path for improving the circulation of seawater in a shallow coastal area. The customer liked the idea, but the solution was almost ignored for lack of trust from more senior members of her team (Sy.1.A) who boycotted (Sy.4.A) the solution of the young engineer, almost abusing their hierarchical advantage (Sy.1.B). Showing a map, she told us: *“They [her colleagues] thought to build the channel here so that the water could be better. I asked repeatedly to open up here [digging a path to join two parts of the shore], but they ignored me. I had a big fight trying to convince them to open up here in a meeting with the client. I told the client that we should open the path and the client replied, ‘Is it something to assess? It seems obvious!’ and I told, ‘Yes... for me it is obvious.’”* The projects’ success is based on the freedom to propose as many solutions as possible and has a wide range of solutions to assess in later phases. Actors gain symbolic capital (such as reputation) by proposing innovative ideas. Hence, damaging an actor’s legitimacy (Sy.1) or interacting negatively (Sy.4) with younger or less authoritative members of the working group (including young engineers from the customer side) can destroy their symbolic capital and reduce the solution’s heterogeneity (Table 5).

However, social contradictions (Sy.2) and conflicts (Sy.3) can also affect interactions by members in the same hierarchical position (Table 5). One example was the planning of a tunnel for ships (Case 5), where several engineers were considered specialists (hierarchically equals). There, conflicts among specialists coordinating design operations made decision-making very problematic (Sy.3.B). Decisions previously made had to be repeatedly reconsidered (Sy.2.A), which in turn spoiled

interactions among the specialists and weakened their authority (loss of symbolic capital). Moreover, these contradictory interactions spoiled customer expectations (Sy.3.B) about the engineers' capabilities and thus, the service provider's legitimacy, with a further loss of symbolic capital.

Insert Table 5 about here

4.3 B2B VCD Practices in the Value Variation Space

Value, in terms of economic, cultural, social, and symbolic capital, changes mainly because of two capital variation factors: access to and exploitation of the capital. Our findings revealed that VCD happens through practices that tend to deny access to the four forms of capital and to disable their exploitation. Some of them can negatively affect both capital access and exploitation (e.g., S.3, C.4, and E.3), while others can provide access, but disable capital exploitation (e.g., S.2, Sy.4, and C.2) or enable exploitation, but deny access to other forms of capital (e.g., Sy.1, S.1, and E.4). This means that the capital variation factors have positive or negative influences depending on what actors do. These rules are conceptualized in Figure 2, which places the practices in a matrix that symbolizes the value variation space. The matrix is formed by the axis Provide \Leftrightarrow Deny access to the capital, on one hand, and Enable \Leftrightarrow Disable capital exploitation, on the other. The value variation space is divided into two areas depending on the prevalence of VCC over VCD or vice-versa. This is represented by the diagonal in the matrix where the area under the line is characterized by a predominance of VCD over VCC, while above the diagonal, exactly the opposite prevails. When the capitals are equally (negative and positive) affected by the capital variation factors, practices are placed on the diagonal and this

means zero VCC. The actors' numerical assessments of capital loss/gain can be used to estimate the destructive/constructive power of a given practice. These assessments can be used to place the practices in the value variation space. Nevertheless, while the categories of the value variation space are determined by our analysis, the positioning of the various dots in Figure 2 reflects our interpretation of how practices observed in the eight cases can be placed in the value variation space.

Insert Figure 2 about here

Enable exploitation/Deny access quadrant. Gaining access to new capital means increasing the amount of any of the capital forms, while capital exploitation refers to its use or conversion into other forms. In this category, VCD practices that enable exploitation of capital but, to varying degrees, deny access to other capital forms are located.

Focusing on the resource-integration process, since actors gain legitimacy proposing valid innovative ideas, the improper arrangement of cultural resources in relation to other ones (C.3) and, in particular, resisting change (C.3.A), allows only for weak exploitation of consolidated knowledge (cultural capital), but effectively reduce access to symbolic capital. Of the practices that prevent the integration of economic resources with other types of resources (E.4), this category exemplifies how VCD can be linked to lack of access to economic capital. Indeed, the customer, by reducing the investments (E.4.A) or rejecting a budget increment (E.4.B), is denying access to its economic capital. On the other hand, the economic resources saved by the customer may be exploited in other activities or projects.

With regard to social interaction, S.1 lets the actors break the social rules. For example, blaming another consultant of making a mistake (S.1.B), can restrain access

to the consultant's social capital, but it can be a justification for asking more money of the customer (enable exploitation). Further, ignoring the customer engagement (S.4.A) can reduce the flow of interaction between the actors (S.4). This practice greatly denies access to the customer's social capital, while permitting weak exploitation of the economic capital, since activities such as team building, business party, etc. are avoided. Finally, while violation of social relationship rules (Sy.1), such as distrusting a colleague (Sy.1.A) or abusing hierarchical power (Sy.1.B) destroys the symbolic capital of the consultants involved, it can also save social relationships with the customer or its economic resources by preventing mistakes by less experienced co-workers.

Deny access/Disable exploitation quadrant. In this category of the value variation space are located "pure" VCD practices since both capital variation factors have negative effects on the capital.

In the resource-integration domain, an actor underestimating the project complexity (C.1.A) and lacking in information (C.1. B) simultaneously reduces the possibility of obtaining cultural capital (e.g., new ideas and intuitions) and fails to exploit the cultural capital to gain an economic one (e.g., more expensive solutions). This also happens in C.4 when both actors are not integrating their resources. Therefore, actors cannot access and exploit any forms of capital because there is no resource exchange. As regards C.5, the service provider uses the cultural capital in a way that is unexpected by the customer (C.5.A) or vice-versa (C.5.B). In C.5, the actors strongly reduce the exploitation of cultural capital (rejecting innovative solutions) and deny access to other forms of capital too (planning too many meetings). Moreover, we often observed engineers triggering financial shortage in the customer's economic capital endowment (E.1), developing, for instance, projects that were too

expensive (E.1.A). Whereas, E.1 prevents the exploitation of the customer's economic capital and stops the engineer from gaining symbolic capital (e.g., through repercussions on the engineer's reputation). E.3 has an even stronger VCD power compared to E.1. Prematurely determining economic resources (E.2.B) or hiring unfit workers (E.2.A) can, of course, damage the exploitation of economic capital and deny access to social capital (e.g., through future conflicts among workers or between the service provider and customer).

When social interactions among the actors lead to serious conflicts (S.3), such as difficulties in finding a compromise (S.3.B) or the removal of an actor from the project (S.3.A), access to their social and cultural capital is denied. S.3 has negative effects on other capital too by disabling the transformation of social relationships into other forms of capital (e.g., future business relations). Further, divergent opinions lead to spoil the service provider and customer interactions (Sy.3). Leadership loss (Sy.3.A) and anticipating the operating activities before taking related strategic decisions (Sy.3.B) reduces access to symbolic capital (e.g., loss of authority) and impedes its exploitation (co-workers do not wait for strategic decisions). Lastly, Sy.2, as it plays out in the procedure of reconsidering already-taken decision (Sy.2.A) and disappointing expectations (Sy.2.B), when repeated over time, has a big impact on the exploitation of symbolic capital (the customer doubts the consultant's capabilities) and, meanwhile, Sy.2 denies access to social capital (less engagement) or economic resources (lower future commissions).

Disable exploitation/Provide access quadrant. Here, “provide access” positively changes the value, while “disable exploitation” has a negative impact on it.

When a customer scales down consultants' ambitions about a project, they damage their resource-integration process, resulting in an improper use of the service

provider's cultural capital (C.2). In situations like this, despite the service provider limiting exploitation of the cultural capital, the customer can save economic capital by forcing the engineers to reduce the project's complexity. In this category, E.2 is also located because, even if the incorrect use of economic resources prevents their exploitation, E.2 provides an abundance of cultural capital (E.2.A exceeding in perfectionism). E.5 follows the same logic; when the service provider asks for a higher price (E.5.A) or the customer for further unpaid work (E.5.B), both actors gain access to economic capital, while disabling exploitation of other kinds of capital such as social and symbolic capital.

With regard to problems in social interactions, S.2 shows fractures in these relationships. For instance, discriminating against a category of customers by not inviting them to some phases of the project can make the process faster and thus less expensive (by providing access to economic capital). On the other hand, S.2 can impede the transformation of social capital into symbolic capital, given that the excluded category of actor cannot appreciate the capabilities of the other actors. Finally, unwelcome interactions (Sy.4) as executing the customer's willingness uncritically (Sy.4.B) despite being able to supply access to social capital, creating affinity between the actors, can also almost totally disable the exploitation of symbolic capital (e.g., the consultant loses his autonomy).

5. DISCUSSION

Building on prior research on service and marketing theory, our study contributes to the literature on VCC and VCD in the B2B context. First, using a multiform notion of value, this paper contributes to an understanding of the SI and RI practices that shape VCD in the B2B context. Second, it empirically demonstrates that

value variation happens in a space—value variation space—determined by two capital variation factors: access to and exploitation of capital.

VCD practices of resource integration and social interaction affect different forms of capital. Previous studies have shown that value can be co-created or co-destroyed through SI and RI, conceptualizing value as a monolithic concept (Echeverri and Skålén 2011; Plé and Cáceres 2010; Karpen, Bove, and Lukas 2012; Kohtamäki and Rajala 2016) and providing some understanding of the link between practices and value outcomes (Frow et al. 2016). However, it is unclear how SI and RI affect value. Our study, drawing on practice theory approach (Sandberg and Tsoukas 2011), complements previous research (Echeverri and Skålén 2011; Karpen, Bove, and Lukas 2012; Kohtamäki and Rajala 2016) by theorizing how multiform VCC/VCD is affected by work practices related to SI (Payne et al. 2008; Laamanen and Skålén 2014) and RI (McColl-Kennedy et al. 2012; Plé 2016; Vargo and Lusch 2008). More specifically, while previous research has demonstrated that interactive value formation derives from service providers and customers drawing on congruent and incongruent elements of practices (Prior and Marcos-Cuevas 2016; Plé 2016; Wilden et al. 2017; Hoyer et al. 2010), our data suggest that VCC/VCD derives from the impact of actors' SI and RI practices on the variations in the amount of the four forms of capital owned by any given actor. The results also show a broad typology of VCD practices, each affecting different forms of capital: economic, cultural, social, or symbolic. In particular, our analysis shows that VCD practices related to RI are mostly to affect cultural and economic capital, whereas SI VCD practices are mostly linked to social and symbolic capital.

Insert Table 6 about here

VCD practices in the value variation space. Previous studies appear to treat VCC and VCD as two dichotomous or mutually exclusive perspectives (Plé and Cáceres 2010). In doing so, they fail to appreciate the variation space between co-destruction and co-creation (Echeverri and Skålén 2011). Our study marks the first attempt to empirically demonstrate that value variation happens in a space determined by two capital variation factors: access to and exploitation of capital. Our study reveals that their intersection divides the value variation space into four quadrants wherein practices may move, depending on the positive or negative impact on capitals and so on value (Figure 2). Our data also indicate that, in some cases, access to and exploitation of capital could both be either positive or negative, showing practices that exclusively co-destroy or co-create value (see, respectively, the quadrant at the bottom-left or top-right of Figure 2). In other cases, practices dictate a simultaneous co-creation and co-destruction of value because while access to capital generates a positive variation in capital (e.g., an actor gains new capital), the disabling of capital exploitation destroys the same or another form of capital (top-left quadrant), or practices may enable capital exploitation while access to capital is denied (bottom-right quadrant). These results help overcome the mainstream dichotomous view of the phenomenon.

Finally, the data analysis elicits, precisely, the connection between actors' access to and exploitation of capital and their actual ways of engaging in social interactions and resource integration. Thus, our research provides an understanding of VCD based on what actors *actually do*, showing *how* VCD for each actor depends on

his/her own practices and those of other actors (Payne et al. 2008; Öström et al. 2015; Järvi, Kähkönen, and Torvinen 2018; Plé 2017).

5.1. Managerial Implications Provider–Customer

Managers who want to avoid destructive B2B relationships may find it interesting that VCD depends on the way they manage their own SI and on their own attitudes toward RI with clients and other actors. Our data show that value-minded B2B relationships are characterized by managers who give access to capital and provide opportunities to exploit that capital, across project disciplines and functions. The data show that VCD practices related to denial of access to social capital occur mostly at the outset of the project (e.g., S.2 and S.4). Therefore, managers who are quick to recognize and counteract these kinds of social interactions would be effectively moving away from VCD and toward higher social capital (larger and more efficient networks) and symbolic capital (reputation among peers). Similarly, managerial policies that facilitate the integration of cultural and financial resources among the participants in B2B relationships are most useful to avoid losses in cultural and economic capital. This is particularly evident when service providers and clients concentrate their efforts on developing alternative problem solutions (e.g., E.3, E.4, and C.2).

Our data analysis method provides a useful template for managers who want to map their own B2B practices on the value variation space. This would require mapping the goals of the cooperation; estimating the capitals that are brought into the B2B relation by each part; and monitoring access to and exploitation of various capital forms in line with the results of this study. Whenever one observes VCD practices in real life, the value variation space can be applied to guide and stimulate the interpretation of their features. This tool can help to raise VCD awareness among

practitioners as it stimulates them to recognize VCD practices as they emerge in different ways and with different degrees of impact on various forms of capital.

Finally, this study points out that intentions are a constitutive element of any human practice (Sandberg and Tsoukas 2011; Reckwitz 2002; Schatzki et al. 2001; Nicolini 2012), while VCD is merely a consequence of certain types of human practices. In other words, what our study suggests is that intentionality cannot be used as a definitional category of VCD/VCC. VCD is the result of an assessment that is based on the subjective estimates and appreciation of any interested actor. This has clear managerial implications, as managers' intentions would always impact their practices, while the consequences of their practices, in terms of value creation, would always be subject to the assessment of whoever is calculating the gains and losses (i.e., the variations in one's capital possession).

6. CONCLUSION AND FUTURE RESEARCH

Service research and marketing theory have long acknowledged that SI and RI, among various actors in B2B relationships, are determinants of value creation or destruction. This study offers novel insights on the research on VCC and VCD by connecting RI and SI with a definition of value as a multiform concept (Bourdieu 1986) that enables the researcher to catch an actor's sense of loss or gain and by eliciting, disentangling, and analyzing mundane work practices (Sandberg and Tsoukas 2011) of actors who experience VCD. Thus, the VCD phenomenon becomes as visible as the number of monetary losses in a transaction, the lack of expertise needed to solve a problem, or deteriorating customer relations. VCD does not happen by chance; it is a foreseeable consequence of actors' ways of interacting and their decisions in matters of resources integration. VCD can be understood as negative

variations in actors' ability to access and exploit different forms of capital; these variations can be mapped into a two-dimensional *value variation space*.

The exploratory design of this research implies limitations which suggest avenues for further theoretical and empirical research. The choice of engineering design workshops and the dyadic interaction as the study's empirical setting provides a partial view of the VCD process in the broader multi-actor social field of service relations. Additionally, this study was based on a sample of eight projects within a single geographical market. Future research is needed to extend our approach to other service sectors, particularly in a multinational/multicultural context. In addition, our methodology to study VCD practices is a qualitative one. A more pluralistic approach to the research design and a focus on different B2B contexts may be utilized to provide holistic perspectives, richer insights, and more concrete implications for specific service contexts. Our study marks the first attempt to empirically demonstrate that value variation happens in a space determined by two capital variation factors: access to, and exploitation of, capital. This paper focuses on VCD practices; future research could extend this research to the VCC side.

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TABLE 1
Overview of the Eight Cases

Case description	VCC expectation	Project budget*	Actors (n)	Primary data sources***
Case-1: Local road-railway traffic planning. Remove local road crossings perpendicular to the international railroad. Provide alternative solutions for crossing and avoid the separation of the city into two parts by the railway line.	Low	Medium	Client (9) Consultant (6) Third parties** (3)	4 SSIs; 2 POs.
Case-2: Motorway upgrade planning. Upgrade a 30-km segment of a highway in a high-traffic area.	Low	Small	Client (3) Consultant (3)	3 SSIs; 2 POs.
Case-3: Energy production estimations. Estimate the energy price for different production methods and suggest to the client the better investment in energy-producing equipment.	Low	Small	Client (4) Consultant (3)	3 SSIs; 1 PO.
Case-4: Sewage treatment: innovative renovation. Plan the conversion of sewage treatment from phosphorus removal to bacteriological removal. Improve the cabins'	High	Large	Client (10) Consultant (13) Third parties (2)	3 SSIs 1 PO.

efficacy in terms of reducing pollution and to double the capacity. It was suggested to have an innovation session to do a completely new treatment plan.				
Case-5: Planning a tunnel for ships. Design the world's first tunnel for ships which will shorten the route and avoid a dangerous area of the sea. The ship tunnel will cut through 1,7 kilometers of solid rock and be 37 meters high and 26,5 meters wide.	High	Large	Client (12) Consultant (15) Third parties (6)	2 SSIs; 1 PO.
Case-6: International high-speed railway plan. Upgrade an international railroad to a high-speed line and solve the problem of commuting from smaller cities to two Scandinavian capitals.	Medium	Large	Client (8) Consultant (10) Third parties (3)	2 SSIs; 1 PO.
Case-7: Regional motorway plan. Design a 95-km-segment of motorway connecting two cities.	Medium	Medium	Client (4) Consultant (5) Third parties (2)	2 SSIs; 1 PO.
Case-8: Tunnel: improving the environmental quality. Dig a tunnel and put the stones in the sea to build a road and a roundabout. Reopen a part of the sea that was closed during previous work.	Medium	Medium	Client (7) Consultant (8)	2 SSIs; 1 PO.

*Project budget: Small < 1 M€, 1M€< Medium < 5 M€, Large > 5 M€, **Third parties are representatives of local think tanks, non-governmental organizations, politicians, and similar actors indirectly touched by the project. *** SSI, semi-structured interview; PO, participant observation

TABLE 2

Cultural Capital VCD Practices

VCD practice ID nr	As enacted in case	Illustrative example
C.1: Lacking knowledge and information resources.	C.1.A Underestimating the project complexity	“The team started thinking that the problem was quite easy and then when you had analyzed it, it was more complicated than one thought” Case-3
	C.1.B Lacking in information	“He said that the metal I wanted to use was more expensive than the one he wanted to use. I just asked him why? And he didn’t have any answer for me.” Case-8
C.2: Making improper use of his/her own or another actor’s knowledge.	C.2.A Hiding knowledge	“Definitely, they were not ready to talk about the subject even though I tried to bring it up. I don’t know if I want to tell them later.” Case-8
	C.2.B Scaling down ambitions	“I believe that our project should do more than what we were asked to do. So, we disagree [consultant and customer]” Case-1
C.3: Improper arrangement of resources in relation to other resources.	C.3.A Resisting change	“Many people resist change... I feel resentment from them because [they say] we always made it like this. Why should we change?” Case-8
	C.3.B Misrepresenting solutions	“They put all their examples in one drawing. It was difficult to understand what this group had in mind.” Case-1

C.4: Not integrating resources with those of other actors.	C.4.A Omitting information	“It’s a bit of strategy. Sometimes you wait to tell about things. You know there is a problem, but you wait to have information” Case-5
	C.4.B Ousting an actor from the project	“[a colleague] doesn’t really want to do the environmental things and wants to cut me off, playing the card that costs could be saved for the client.” Case-7
C.5: Using resources in a way that is incongruent with another actor’s expectations.	C.5.A Wasting time	“We have ten issues we need to discuss within two hours, and we see that we are still discussing the second point after one hour” Case-2
	C.5.B Wasting knowledge	“For me, it is obvious. If we open up here the circulation would be better. That’s an example where my knowledge ...wasn't used... we spent so much money planning that channel that wouldn't have effects if we didn't open here.” Case-8

TABLE 3
Economic Capital VCD Practices

VCD practice ID nr	As enacted in case	Illustrative example
E.1: Triggering a shortage of monetary or financial resources.	E.1.A Developing a project more expensive than that allowed by investment capabilities	“We had an idea how to increase the extension of the bridge, [...] but it was more expensive. But the client didn’t want to do that.” Case-7
	E.1.B Working in a room insufficiently equipped	The PM should have already prepared the tools such as city maps and transparent paper on which participants can draw their solutions, but they are not ready yet. Case-1
E.2: Using economic resources incorrectly.	E.2.A Excessive focus on perfectionism	“We should think about our economy within the limits of an as good as possible project for the client, but we go too far on technical issues.” Case-6
	E.2.B Planning unnecessary activities	“I think many meetings were a bunch of people put together to discuss one subject that may not affect more than a half of the participants.” Case-1
	E.2.C Mismanaging the time	“Now for me, it’s impossible to finish this work within this time; probably we have to set another deadline” Case-2
	E.3.A Forcing people to work on projects that	“There have been some projects I was invited to and the others could definitely tell that I didn't have any interest” Case-1

E.3: Positioning economic resources incorrectly.	they are not interested in	
	E.3.B Determining the investment prematurely	“He established the budget quite early and convinced the politicians that it was sufficient. When he got the final figure, it wasn’t.” Case-3
E.4: Preventing integration of economic resources with other resources.	E.4.A Reducing the investment established for the project	“The governmental bodies get funds year by year and suddenly they didn’t get the same as last year. So, they asked to renegotiate. If you take out some activities, the project gets less money.” Case-7
	E.4.B Rejecting a budget increment	“Sometimes the client says, ‘you should have considered this [issue] when we did the contract’. So, we start a negotiation and, maybe, we absorb [the cost of] some of the extra hours.” Case-5
E.5: Employing economic resources incongruently with other actors’ expectancy.	E.5.A Asking for a higher price	“We have 200 hours in this contract, but we want to make the project a bit better. So, we try to make the client pay for the extra hours” Case-3
	E.5.B Requiring further unpaid work	“The [clients] said that we had to deliver more [...] and if we don’t do that, they could be unsatisfied regardless of the contract.” Case-6

TABLE 4
Social Capital VCD Practices

VCD practice ID nr	As enacted in case	Illustrative example
S.1: Not interacting under the constraints of social rules.	S.1.A Misconduct	“We were in a meeting and a lady was showing a good solution for a problem and a guy almost fell asleep. [...] then he energetically woke up and held the meeting like the idea was his own.” Case-2
	S.1.B Blaming/Betraying another actor	“If you’ve made a mistake, you cannot ask [the client] for more money. You can blame someone else and ask for more money” Case-8
S.2: Contradicting social relationship between actors.	S.2.A Discrimination	“We had a discussion with the client about whether to invite politicians or not. I think that they had nothing to do with this workshop.” Case-1
S.3: Contrasting social relationship between actors.	S.3.A Removing actors from the project	“I was kicked out. I had a complete clash with the director” Case-3
	S.3.B Avoiding compromises	“We can disagree and then [the customer] can make a decision. If I go and tell them after they’ve made the decision that I still disagree. Then... you can arrive at troubles, right?” Case-5
S.4: Reducing social interactions flows between actors.	S.4.A Ignoring the engagement	“Too many times, we don’t put the client in the first row because we are more focused on the project” Case-6

TABLE 5
Symbolic Capital VCD Practices

VCD practice ID nr	As enacted in case	Illustrative example
Sy.1: Damaging actors' legitimacy.	Sy.1.A Distrust	"I tried to come up with my point of view and a colleague stepped in front of me... the client was at the meeting... and said: This is too much, let's go now. He does not recognize the value of my subject" Case-8
	Sy.1.B Abusing hierarchical power	"I have never received that treatment: We are the ministry of finance and we do exactly what we want', they said." Case-1
Sy.2: Reducing actors' authority.	Sy.2.A Reconsidering already-taken decisions	"You said it should be done like this and the entrepreneur or our people at the building site told us it can't be done like that, you have to change it." Case-8
	Sy.2.B Disappointing expectations	"I have been on projects where you are not on time or up to quality standards. Then, the quality of the relationship [with customers] declines" Case-4
Sy.3: Spoiling actors' interactions due to divergent opinions.	Sy.3.A Losing meeting leadership	"[The PM] holds the meetings and has an agenda; there is always at least one person that tries to take leadership. Often, this negatively affects the discussion." Case-2
	Sy.3.B Anticipating operating activities	"If my colleague begins to work before me, I have to say, calm down! Because he will ruin the whole process I presented today." Case-5

	before taking the related decisions	
Sy.4: Performing unwelcome interactions.	Sy.4.A Boycotting solutions	“The old boss is well spoken. So, he managed to convince the new director to do it the old way, no innovations, nothing” Case-3
	Sy.4.B Executing uncritically the customer’s willingness	“Usually, the client is working on the project and often is the decision maker and this is the reason we often give him what he wants and we don’t push too hard” Case-6

TABLE 6

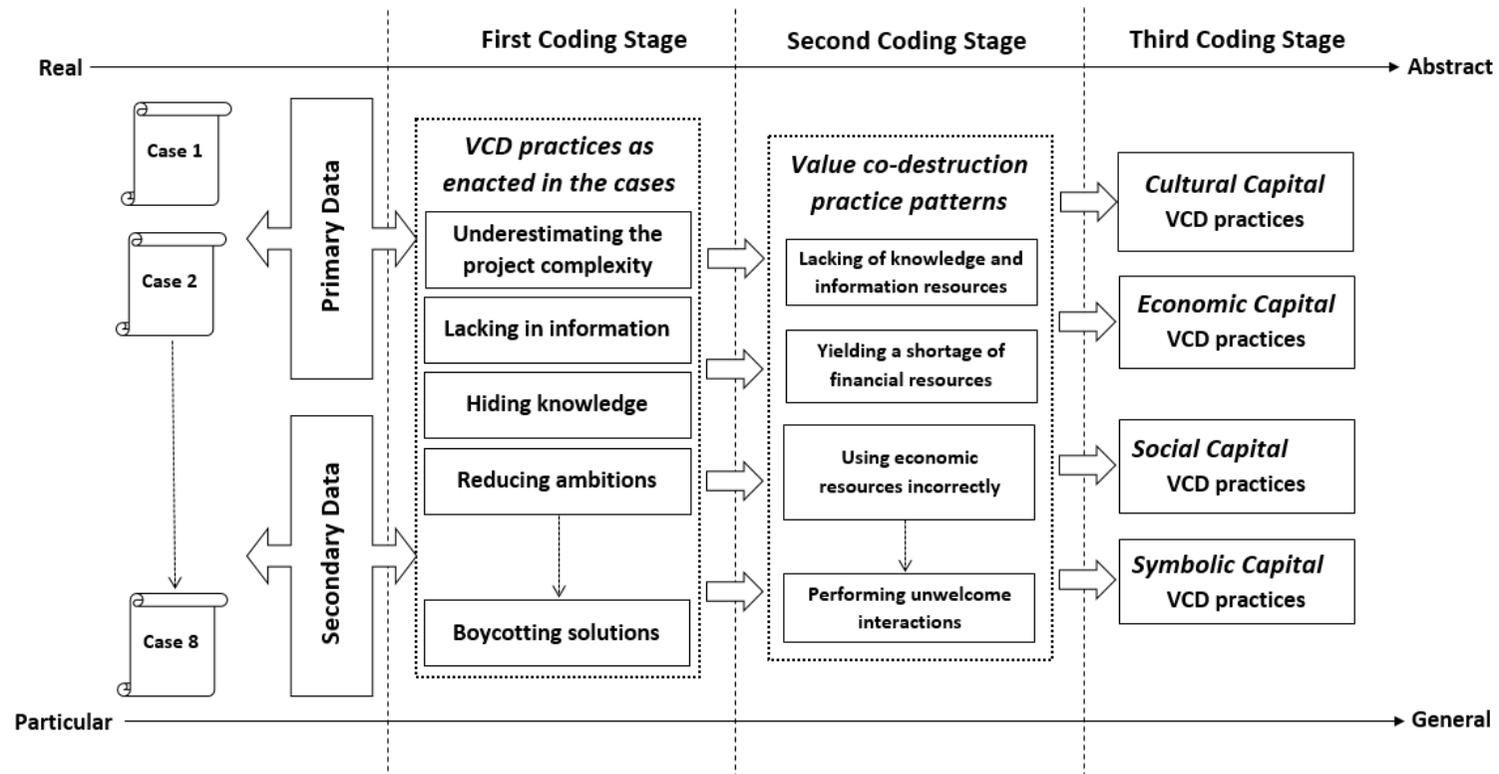
Determinants of VCD, VCD Practices, and the Related Affected Capitals

Concept	Sub-concepts	VCD practices	Affected capital
Resource integration	Deficiencies Robertson et al. 2014	C.1-Lacking knowledge and information resources.	Economic and Cultural
		E.1-Triggering a shortage of monetary or financial resources.	
	Misuse Plé and Cáceres 2010	C.2-Making improper use of one's or another actor's knowledge.	
		E.2-Using economic resources incorrectly.	
	Misalignment Prior and Marcos-Cuevas 2016	C.3-Improper arrangement of resources in relation to other resources.	
		E.3-Positioning economic resources incorrectly.	
	Non-integration Plé 2016	C.4-Not integrating resources with those of other actors.	
		E.4-Preventing integration of economic resources with those of other resources.	
	Misintegration Plé 2016	C.5-Using resources in a way that is incongruent with another actor's expectations.	
		E.5-Employing economic resources incongruently with other actors' expectations.	
Social interactional	Misbehavior Echeverri et al. 2012	S.1-Not interacting under the constraints of social rules.	Social and Symbolic
		Sy.1-Damaging actors' legitimacy.	
	Contradictory Kashif and Zarkada 2015	S.2-Contradicting social relationships between actors.	
		Sy.2-Reducing actors' authority.	

	Conflictual Vafeas et al. 2016	S.3-Contrasting social relationships between actors.	
		Sy.3-Spoiling actors' interactions owing to divergent opinions.	
	Negative Smith 2013	S.4-Reducing social interaction flows between actors.	
		Sy.4-Performing unwelcome interactions.	

Figure 1

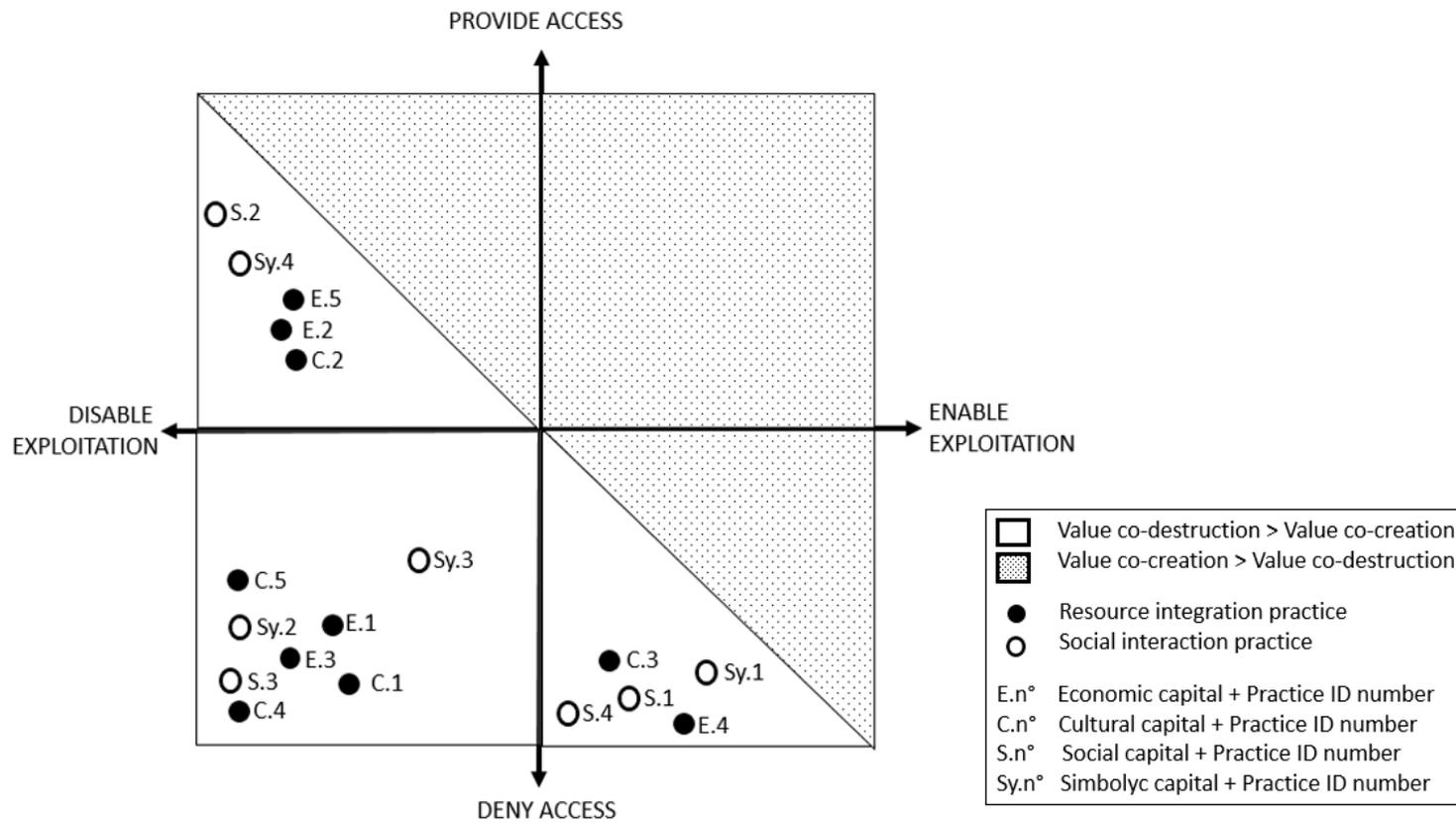
Data Analysis Process



Adapted from Saldaña 2009.

Figure 2

The Value* Variation Space



*Value is defined in terms of the amount of economic (E), cultural (C), social (S), and symbolic (Sy) capital owned by an actor