Value co-creation practices and capabilities: Sustained purposeful engagement across B2B systems

Javier Marcos-Cuevas *[1]
j.marcos@jbs.cam.ac.uk

Satu Nätti[2]
satu.natti@oulu.fi

Teea Palo[3]
t.palo@lancaster.ac.uk

Jasmin Baumann[4]
J.Baumann@uea.ac.uk

*Corresponding author

[1] Judge Business School
University of Cambridge
Trumpington Street
Cambridge
CB2 1AG, UK
Tel: +44 (0)1223 764026
Fax: +44 (0)1223 764369

[2] Department of Marketing, Oulu Business School[2]
P.O. BOX 4600
University of Oulu
90014 Oulu, Finland
Tel: +358 294 48 2920

[3] Management School, Lancaster University
Bailrigg,
Lancaster, LA1 4YX, UK
Tel: +44 (0)1524 594703

[4]Norwich Business School, University of East Anglia
Norwich Research Park, Norwich,
Norfolk, NR4 7TJ, UK
Tel: +44 (0)1603 59 7399

Javier Marcos-Cuevas is Senior Faculty in Management Practice and the Director of Custom Programmes, Executive Education at Cambridge Judge Business School. His research interests focus on value co-creation, sales and key account management, addressing issues of personal and team performance and sales organizations' effectiveness. He also has interests in organizational knowledge and learning and management education. He has published in Industrial Marketing Management, Management Learning, Journal of Marketing Education and has co-authored two books, *From Selling to Co-creating* (BIS Publishers, 2014) and *Sales Management: Strategy, Processes and Practices* (Palgrave, 2016).

Satu Nätti is a Senior Research Fellow at the Oulu Business School (Finland). Her main research interests relate to professional services, key account management, customer-related knowledge, innovation net management and branding in small and medium-sized companies. She has published, in such journals as Journal of Business and Industrial Marketing, Journal of Service Management, Journal of Services Marketing and Service Industries Journal.

Teea Palo is a Lecturer at Lancaster Management School. (UK). Her main research interests include business models, market and network dynamics, and key account management. She has published in Industrial Marketing Management, Journal of Business & Industrial Marketing, and Service Industries Journal.

Jasmin Baumann is a Lecturer at Norwich Business School, University of East Anglia. Her research interests focus on buyer-seller interaction and the co-creation of value in professional service sectors, relationship marketing, as well as personal selling and sales management. She has published in the Journal of Marketing Management and Journal of Marketing Theory and Practice amongst others.

Abstract

The paradigm of value co-creation in business markets is now well established in the marketing literature. However, the practices and capabilities for collaborative value co-creation are less understood, particularly in increasingly boundaries-less interorganizational, network and ecosystem relationships. This paper describes sets of practices that organizations in business markets adopt to co-create value. We provide a theoretically-grounded, empirically-informed classification of value co-creating practices, identifying the underlying capabilities needed to realize value in B2B systems. We adopt a case study approach utilizing various methods of data collection to explore co-creation practices from four organizations. The analysis reveals that 'sustained purposeful engagement' underpins the organizations' ability to co-create and capture value. Implications for organizations willing to develop co-creation capabilities and practices are discussed.

Keywords: Value co-creation, organizational practices, organizational capabilities, co-production, B2B networks

Research highlights

This paper presents a number of key highlights for research and practice including:

- The identification of 'sustained purposeful engagement' as an overarching mechanism connecting capabilities and practices for value co-creation.

- A theoretically-informed and empirically-grounded framework of value co-creating practices and underlying capabilities.

- A classification of co-creative practices distinguishing amongst linking, materializing and institutionalizing practices.

- A detailed description of the set of strategic organizational capabilities that underpin the realization of co-creative practices.

1. Introduction

In marketing theory development and in practice, value co-creation has become a key approach to facilitate achieving positive customer experience and long lasting relationships (Ballantyne & Varey, 2006; Frow & Payne, 2007; Payne & Frow, 2005; Prahalad & Ramaswamy, 2004). Within business markets, companies across industries have begun to stress the importance of involving customers in understanding their needs better and the development and production of offerings to create superior value. Yet, many organizations engaged in B2B marketing often find it difficult to truly understand what customer value means, not to mention value co-creation (Payne et al., 2008). Indeed, value co-creation remains a rather abstract concept without much empirical development and a limited body of work illustrating its implementation in practice.

Conceptually, value co-creation potential is about understanding the "processes, resources and practices which customers use to manage their activities" (Payne et al., 2008, p. 85). Achieving value co-creation requires finding a "structural fit" between the customer activities and those of the seller (Heinonen et al., 2010, p. 533). Value creation has a collaborative and interactional nature and value is no longer solely about value-in-exchange embedded in firm offerings, but also value-in-use (Ballantyne & Varey, 2006; Grönroos, 2006; Macdonald, Wilson, Martinez, & Tossi, 2011). Thus, value is co-created in interaction between customers, sellers and other actors in complex B2B systems. Specifically, customers interact with the seller to access the resources needed for their own value creation process, with the final value realization happening in the customer organization, thereby also giving rise to the notion of 'customer-dominant logic' (Grönroos & Ravald, 2011; Heinonen et al., 2010; Payne et al., 2008).

Together with the on-going conceptual development of co-creation, more empirical examples are needed (Grönroos, 2006), particularly in contexts of boundary-less inter-organizational relationships and complex offerings. To concretize value co-creation, we suggest it is important to look at practices that actors perform together by integrating their resources to create value (Russo-Spena & Mele, 2012), and the capabilities enabling these practices to emerge (Karpen et al., 2011). To this end, the aims of the paper are to make co-creative practices and capabilities less abstract and more tangible, thereby providing guidelines that facilitate the realization of value co-creation in B2B systems, and to stimulate further scholarly work in value co-creation implementation. In this paper we tackle two research questions: *1) What are the practices and capabilities that organizations in business markets employ to co-create value?* and *2) how are these practices and capabilities used by organizations in interaction with each other?*

As a result, firstly, we provide a theoretically-grounded, empirically-informed framework of co-creation practices and identify the underpinning capabilities that enable their realization. Secondly, we structure the conceptualization of co-creative practices in three categories - linking, materializing and institutionalizing - to provide coherence to practices such as co-ideation, co-design and co-launching. This framework brings these practices together with the strategic organizational capabilities necessary to achieve them, and thus highlights how practices and capabilities are inextricably linked. Thirdly, we present illustrations of value co-creation practices from four case studies that may help other B2B organizations to enhance their own ability to realize value co-creation in their respective contexts.

We contribute to the value co-creation literature (e.g. Ballantyne & Varey, 2006; Frow & Payne, 2007; Vargo et al., 2008; Vargo & Lusch, 2008) by refining value co-creation practices and their implementation. In so doing, we employ an organizational capabilities approach

(interaction capabilities) to understand integrative mechanisms underpinning the realization of such practices. Thereby, we respond to the call by Vargo et al. (2008) to shed light on the processes involved in the implementation of value-co-creation. We introduce and elaborate the concept of *sustained purposeful engagement* as the critical mechanism to develop co-creation capabilities. In line with Grönroos and Helle (2012), who argue that business engagements are founded on a calculation of the benefits that can mutually be created, we claim that co-creation practices and capabilities are reinforced by a widely shared end goal in mind (i.e. purpose) and continued involvement in broadening the scope and nature of collaborative efforts (i.e. engagement) to create value in a joint sphere where the actors involved operate over time (i.e. sustained).

In the following sections, we present in more detail our conceptualization of value co-creation. Subsequently, we analyze four cases to produce an empirically-informed typology of co-creative practices and capabilities prior to discussing our research and presenting the conclusions and implications for practice of this study.

2. Value co-creation

Value co-creation is an overarching construct that captures the evolution of organizational entities towards the development of a higher relational orientation and deeper interaction with their customers (Ballantyne & Varey, 2006). The shift in the locus of value creation from simple exchange ('goods-dominant logic') to use and context of usage means that value cannot be circumscribed to the consumption of units of output anymore, but seen as a process of interacting in ways to produce a holistic experience (Payne et al., 2008; Vargo et al., 2008). Value-in-use

may be created prior, during and after the purchase (Heinonen et al., 2010). Hence, "value resides not in the object of consumption, but in the experience of consumption" (Frow & Payne, 2007, p. 91). Helkkula et al. (2012, p. 59) conceptualize "value in the experience" as individual service customers' lived experiences of value that extend beyond the current context of service use to also include past and future experiences and service customers' "broader life contexts" (see also Heinonen et al., 2010). Drawing on service-dominant logic, value co-creation hence extends beyond the present interaction between a producer and a customer, and includes also past and future experiences and expectations. Service providers therefore need to understand the customers' continuously emerging experience beyond individual interaction episodes, as well as their activities with other actors to facilitate value co-creation (Heinonen et al., 2010).

In service-dominant logic, the roles of producers and consumers shift, given that value is co-created in the interfaces amongst actors that connect and integrate their resources (Vargo et al., 2008). According to Grönroos (2008), customers create value for themselves when using the resources offered by a firm, whereas firms can develop opportunities to co-create value with customers by creating possibilities for interaction during the use of goods and services. Hence, value creation can occur within at least three spheres: the provider, the customer, and the joint sphere created in their interaction (see Figure 1). In addition to the customer being an independent value creator (Grönroos & Voima, 2013; Heinonen et al., 2010), value is co-created in the joint sphere by empowering the customer to integrate and use other actors' resources into their own processes. Often wider networks of B2B actors can also be involved in the process, e.g. by 'mediating' value creation (Nätti et al., 2014). This way, the boundaries of the joint sphere are expanded, enabling a broader interaction platform and engendering new value co-creation opportunities.

Finally, service-dominant logic emphasizes the distinction between value co-creation and co-production; the former being a more encompassing and higher-order concept capturing different types of resource-integrating practices among multiple network actors (Vargo & Lusch, 2008), i.e. using the supplier's and other actors' resources in the customer's processes without necessarily involving the supplier directly. Co-production, in turn, has been defined as customers' "participation in the development of the core offering itself" (Lusch & Vargo, 2006, p. 284). However, to understand ways in which suppliers can manage and perform value co-creation practices, we focus on practices performed in interaction with customers and with other actors across the B2B system to concretize value co-creation (instead of practices beyond the direct interaction). Hence, value co-creation includes also the co-production of the offering.

3.   Value co-creation practices and capabilities

In this paper, we understand a practice as a "a routinized type of behavior" consisting of bodily and mental activities, things and their use, understanding and knowledge (Reckwitz, 2002, p. 249). Schatzki (2006) considers organizations as bundles of practices and material arrangements involving not only actions but material objects as well. In fact, practices involve an integration of materials, meanings, and forms of competence, and are made by their active reproduction (Shove & Pantzar, 2005). Hence, *practices* can be claimed to be *routinized ways of doing* performed by actors, underpinned by specific *capabilities*. These provide stability and continuity to the organization (Cohen & Bacdayan, 1994; Cohen, 2007).

In this study, we see capabilities as embedded, sustained and habitual patterns that become the foundation for competitive advantage. Capability is generally defined as a set of "skills and resources which enable the company to achieve superior performance" (Harmsen &

Jensen, 2004, p. 535) in a way that is almost impossible for competitors to mimic (Barney, 1991; Prahalad & Hamel, 1990). Because of its dynamic nature, it enables matching the resources of the organization and its network of actors to the changing needs in the environment (Teece et al., 1997, p. 515).

Practices are interconnected, and through a process of translation, the effects produced in one practice are resources for others (Nicolini, 2009). We characterize capabilities as the integrative mechanisms that provide the coherence and integration of practices so they result in co-creation. In this sense, capabilities allow the 'whole' (value co-creation) to emerge, becoming more than the addition of the 'parts' (practices). In other words, capabilities provide the background for the assembly and integration of firm-specific assets into clusters, allowing the realization of value co-creation. Karpen et al. (2011) conceptualize six strategic 'interaction capabilities' that enable an organization to co-create value by facilitating the reciprocal integration of resources: (1) individuated interaction capability refers to the identification of a customer's expressed and latent needs, processes and value sought (Terho et al., 2012), and (2) relational interaction capability to the cultivation of social and emotional ties between the parties and empathic interaction with the customer (Wieseke et al., 2012). Further, organizations have to ensure that fair and non-opportunistic processes, as well as trust, are established between the actors to be able to engage in joint value realization, which refers to (3) ethical interaction capability. The seller can enable customers to influence the nature and content of these processes by ensuring they take place in the joint sphere of the two parties, thus translating the customer's voice back into the organization, which is termed (4) empowered interaction capability (see also Grönroos, 2008). To engender the optimal value, sellers should also contribute to the customer's own knowledge expansion, competence building and learning necessary for resource integration,

referring to (5) developmental interaction capability. Finally, they need to have (6) concerted interaction capability, meaning the ability to co-ordinate and involve the customer in value-creating activities that take place across departments and the wider network of actors (Karpen et al., 2011). However, although these capabilities are seen to enable organizations to achieve a service-dominant orientation and jointly realize value with their customers, it is unclear how they relate to the various co-creation practices identified in previous literature (Russo-Spena & Mele, 2012), suggesting more empirical work on the role of these organizational capabilities is needed.

In the literature, a number of value co-creation practices are identified. For example, the provision of complex offerings in advanced technologies such as aerospace and professional services like management consultancy require elements of 'co-diagnosis': Actors collect and organize information for collaborative use (McColl-Kennedy et al., 2012) in order to 'co-diagnose' their needs to facilitate offer development and, if necessary, its re-design (Aarikka-Stenroos & Jaakkola, 2012; Grönroos, 2011; Sampson & Spring, 2012). Organizational innovation processes are driven by co-creation practices like co-ideation, co-valuation, co-design, co-testing, and co-launching (Russo-Spena & Mele, 2012). These practices can be seen as intertwined stages during which actors co-create value. In addition, a customer's role in quality assurance relates naturally to value co-creation practices in B2B markets, i.e. to evaluate the emergence and outcomes of an offering (Sampson & Spring, 2012). In the event of unexpected results, both customer and seller can be involved in service recovery resulting in positive consequences for the development of the relationship, including diminishing risk perception for future cooperation and clearer roles followed by better value co-creation potential (Dong et al., 2008; Meuter et al., 2005; Prahalad & Ramaswamy, 2004). Finally, institutional logics such as regulative, normative and cognitive rules emerge and shape value co-creation among actors in

service systems (Edvardsson et al., 2014b), referring to the co-development of such institutions and the coordination of value co-creation practices.

Whilst a number of different practices and capabilities have been identified in previous literature, they remain fairly abstract and sometimes vague in their definition. Close analysis also reveals that some capabilities and practices overlap – for example, the practices of co-ideation and co-design suggested by Russo-Spena and Mele (2012) arguably share certain similarities with the developmental interaction capability of Karpen et al. (2011), as the joint elaboration of solution ideas and designs will most likely contribute to the customer's knowledge expansion and competence building. Such overlap arguably limits the practical value of the different theoretical conceptualizations that have been developed in recent years, as it renders their implementation by businesses in practice nearly impossible. The lack of clear-cut definitions, as well as missing indications in terms of effective practical employment, make it difficult for organizations seeking to realize co-creative practices. Earlier studies on the topic are more focused on narrowly chosen perspectives of value co-creation and have described the concept on a very abstract level rather than highlighting current organizational practices and specific actions to explain how value co-creation is achieved. To address this gap, we employ the strategic interaction capabilities conceptualized by Karpen et al. (2011) and integrate them into our framework to develop a typology of value co-creation practices. For that purpose, we group different types of practices into linking, materializing and institutionalizing.

When analyzing value co-creation research, three overarching dimensions appear to be salient. Firstly, some of the practices relate to facilitating connections and mobilizing networks (see e.g. Ballantyne & Varey, 2006), which we label *linking*. Such practices ideally take place on a continuous basis, and include sharing and circulating knowledge and ideas not only about the

offering, but also about the relationship, markets, and resources. Secondly, the literature describes in detail operational practices tightly related to the emergence of co-created offerings (e.g. Russo-Spena & Mele, 2012) that we refer to as *materializing*. These practices include the creation of material objects and artifacts that demonstrate and realize elements of the co-created value offering. Thirdly, *institutionalizing* practices are embedded across the linking and materializing practices by continuous coordination, i.e. the design of institutions and structures to capture and retain the value created (Edvardsson et al., 2014b). The categories presented in Table 1 are not suggested to happen in a linear order, but may take place simultaneously (such as linking and materializing) and continuously (such as institutionalizing). We see coordination practices as intertwined with those classified in the linking and materializing sets.

Table 1:

Types of Co-Creation Practices

Dimension		Examples of practices	Description	References
Linking (Mobilizing social connections and networks)	Co-ordination	Co-diagnosis Co-ideation Co-evaluation	Collecting and organizing information for collaborative use Generating and suggesting ideas, communicating and sharing, engaging Commenting and selecting ideas	Ballantyne & Varey, (2006); McColl-Kennedy et al., (2012; Aarikka-Stenroos & Jaakkola, (2012); Grönroos (2011); Russo-Spena & Mele, (2012); Sampson & Spring (2012)
Materializing (Operational practices related to the production of a value co-creating offering).		Co-design Co-testing Co-launching	Developing concepts and knowledge Prototyping and improving the offering, giving feedback Creating and managing information, advertising, marketing, and diffusing information	Aarikka-Stenroos & Jalkala (2012); Russo-Spena & Mele, (2012)
Institutionalizing (Organizational practices related to the design of institutions and structures to capture and retain value created)		Embedding	Developing rules, norms and standards	Edvardsson et al., (2014)

Existing literature addresses the nature of value co-creation and related concepts, but there

is a scarcity of empirical examples of co-creative practices and how they could be grouped

together. In the following section, we present the methods used to observe and study such value

co-creating practices in four business organizations. We then describe key findings from four case studies prior to discussing the contributions of this research and concluding the article.

4. Methodology

A case study approach was adopted for the empirical part of this research. We employed a purposive sampling in line with other studies of co-creation (Kowalkowski et al., 2012) and related topics such as solution selling (Storbacka et al., 2011), product-service systems (Martinez, 2010) and key account management (Davies & Ryals, 2014). Additionally, the research team sought to select companies where extensive access could be obtained, thus making the cases reported in this article also conveniently sampled. Two cases were chosen as established examples of successful value co-creation (Rolls- Royce TotalCare® and SAP) to examine whether the practices previously conceptualized in the literature would hold to scrutiny in real life, and to find out how these companies use their strategic organizational capabilities to achieve joint value realization. In a second stage, Bekaert and Unilever Foodsolutions were selected to enable investigation of the developed practices/capabilities framework in settings that were relatively new to co-creation and characterized by lower complexity in their offerings. All the companies had two key features in common: firstly, they all provide a combination of products and services, and secondly, they fully engage their customers and other parties in the process of value co-creation through in-depth and continuous interaction.

Using various data collection methods, the authors sought to gain an in-depth understanding of the processes and practices that underpin the co-creation of value. Firstly, participant observation was employed, since it allows researchers to study first-hand the behavior of individuals in their contexts and when interacting with relevant parties in their business

network. The engagement with practicing managers allows the researcher to understand the experiences and interpretations of actors (Taylor & Bogdan, 1984). In this study, the research team had access to real meetings with customers as part of sales training and coaching and sales strategy development initiatives, whereby we had the opportunity to 'shadow' sales executives and account managers in their engagement with customers and in their quest to co-create value with them. The authors participated in the observation of 648 customer meetings conducted by 70 sales executives/account managers and a total of 18 workshops, where sales strategies, value proposition and customer value were addressed.

A key distinguishing feature of participant observation is that the observer's own experience is considered an important and legitimate source of data (Brewer, 2000). The research team adopted the role of participant-as-observer by actively contributing to the activities of the different actors (Burgess, 2006) and following a dialectical procedure and 'analytic induction' (Burns, 2000). In this process, "data are dissembled into elements and components; these materials are examined for patterns and relationships, sometimes in connection to ideas derived from literature. This synthesis is then evaluated and critically examined" (Jorgensen, 1989, p. 100).

Secondly, interviews were conducted with 23 individuals in the value creation network of the case study companies, including customers, suppliers, resellers and distributors. Interviews are a very common method of data gathering, as they are flexible and well-suited to a wide range of research designs. Interviews are "particularly suited for studying people's understanding of the meanings in their lived world, describing their experiences and self-understanding, and clarifying and elaborating their own perspective on their lived world" (Kvale, 1996, p. 105). Interviews were used in this study to help the research team see the theme of value co-creation from the

16

perspectives of different actors in the network, and to understand how and why they have that particular perspective. In order to gather these accounts, interviews were conducted with a low degree of structure (King, 2004), adopting an inductive approach (Patton, 2002) to identify emerging themes from the interviewees' accounts.

A large set of archival data including 232 documents such as meeting agendas, presentations, planning documents, reports, project plans, models, diagrams and other records and written artifacts were also employed in this study. These written documents are rich information resources, which provide valuable insights about how the organizations in the study implement processes of value co-creation (Hill, 1993). Written materials can be considered 'social facts' in that "they are produced, shared and used in socially organized ways. They may not be, however, transparent representations of organizational routines, decision-making processes or professional diagnoses" (Atkinson & Coffey, 1997, p. 47). Text and insights contained in the materials provided opportunities for triangulation (Patton, 2002), helping the researchers to further explore informants' statements. Documentary research provides an excellent means of examining different perceptions of the users, and potentially indicates alternative explanations to significant phenomena (Rowlinson, 2004).

A thematic content analysis of the empirical data was performed whereby themes are allowed to emerge without pre-imposing a coding structure (Patton, 2002). Portions of text identified as representing relevant concepts were coded and labeled, and often kept as 'free nodes', that is, separated from any emerging conceptual structure or hierarchy. Through an iterative process, emerging themes were tentatively organized into higher order categories. As new text is coded, earlier categories are removed, revised, retained, and constantly developed into clustered themes. Overall, a general grounded approach was employed to derive the 'loose'

framework. Insights from the different sources of data were collated and compared to help validate the findings, which we now present.

5.   Value co-creation practices in business markets: Description of cases and findings

The research team had access to a wealth of data that needed to be organized. Thus, the presentation of the different cases is arguably a succinct summary of key co-creation practices. We now outline briefly the nature of the business of the case companies, followed by a description of co-creation practices and capabilities organized into a matrix for each case (see Tables 2 to 5). Although the practices appear in specific cells in these tables, in reality, they overlap occasionally, as the clear-cut categorizations pointed out in the theoretical development section did not manifest as such in the empirical work. To further facilitate understanding of how the co-creative interaction capabilities and practices are linked and inform each other, we develop a conceptual model (see Figure 1) visualizing practices and capabilities as interrelated 'cartwheels' - theoretically allowing each capability to inform each of the practices if you turned either of the wheels. This model helps to provide integration and coherence to the findings. Subsequently, each of the cases is described and findings about co-creation practices presented.

5.1   Rolls-Royce TotalCare®

The Rolls-Royce group is a global business with customers in more than 120 countries that engages a work force of 55,000 committed to the vision of "better power for a changing world". Rolls-Royce provides power systems and services for civil aerospace, defense, marine and energy markets (Rolls-Royce, 2014). The company is widely known in the aerospace industry for TotalCare®, an innovative offering that consists of a menu of original equipment and related services. Rolls-Royce provides a comprehensive suite of services including full engine

overhaul and a number of engine reliability improvements, all under Rolls-Royce specialist maintenance capabilities. Add-on services comprise technical records management, engine transportation, spare engine support, additional overhaul coverage and the option for the customer to initiate specialist line maintenance. The customer-driven approach and the slightly different service levels across different customers make TotalCare® highly customizable and adaptable to customer needs.

The development of TotalCare® was driven by the interest from key customers such as American Airlines to be offered 'on the wing' service contracts (Frank, 2014). Additionally, the threat of third parties that entered the aftermarket parts business compelled Rolls-Royce to further develop new service offerings. Over the years, this offering proved highly successful. TotalCare® developed further into providing engine health monitoring, a service that allows to capture engine performance data in real time using the Aircraft Communications Addressing and Reporting System (ACARS). The data is then transmitted from the aircraft to Rolls-Royce service centers by radio or satellite, enabling Rolls-Royce to detect potential anomalies quickly and to predict and plan urgent or future engine repairs. Over the years, the focus of TotalCare® has gradually shifted to 'no remote site issues'; in other words, preventing the costly breakdowns in remote locations that result in major expenditures in terms of flying engines out for refit and significant costs for airlines as a result of network disruption (see Foden & Berends, 2010; Lazonick & Prencipe, 2005; Pugh, 2002; Ryals, 2010). TotalCare® and other advanced services represent for Rolls-Royce civil aerospace more than 50% of its revenue today (Rolls-Royce, 2014).

For customers, TotalCare® means enhanced predictability, durability, efficiency, reliability and maintained asset value. Customers achieve higher levels of predictability in terms

of operational performance, reducing unplanned shop visits. Rolls-Royce has a huge amount of data on engine performance that enables the company to quickly detect variance and address potential non-conformities. TotalCare® also enables to increase cash-flow predictability since customers can opt into the process of paying by the hour of engine operation, aligning both Rolls-Royce and the customers' interests. In order to realize these benefits, deep engagement with the customer and a clear understanding of the purpose and operational model of the airline is required. Very close Rolls-Royce-customer collaboration is realized underpinned by Rolls-Royce's 'empowered' and 'concerted' interaction capabilities to ensure in-depth understanding of the airline operations, network structure and asset (i.e. aircraft) utilization regimes. TotalCare® packages are designed knowing how the airlines operate their aircrafts in order to gain efficiencies. A factor that affects engine lifecycle is the way that airline pilots fly. Rolls-Royce adopts an 'engine life' approach to service contracts and encourages pilots to manage the use of thrust in ways that enhance engine durability. In an effort to employ its developmental interaction capability and co-diagnosing practice, a Flight Operations Advisor (FOA) from Rolls-Royce works closely with airlines and spends time with pilots, advising them on more efficient flying methods that also help reducing fuel burn. Lastly, value is co-created well beyond the product, since modern equipment under TotalCare® maintains higher re-sell value (Ryals, 2010).

TotalCare® as a co-created and integrated service offering is constantly evolving. Rolls-Royce has developed sophisticated processes and capabilities to better understand airlines' interests. Frequent internal events called the 'Voice of the Customer' allow customer teams to visit Rolls-Royce and to spend time with various parts of the business, including sales, marketing, service operations and engineering, to share their experiences with Rolls-Royce teams and vice versa. This helps build mutual organizational understanding and to focus on providing

specific operational benefits. Overall, the provision of TotalCare® brings about a fundamental shift from emphasizing the transaction (new engine sale) to a long-term, risk-sharing, value co-creating partnership.

Table 2:

Co-Creation Practices at Rolls-Royce

Linking practices			Materializing practices			Institutionali-zing practices
Co-ideation	Co-valuation	Co-diagnosing	Co-testing	Co-design	Co-launching	Embedding
Coordination						
- Exploration and alignment of interests with the customer focused on increasing predictability and reducing complexity - "Voice of the Customer" events organized to share experiences	- In depth understanding of customer processes (airline operations) and usage		- Engine performance data captured in real time is analyzed and needed interventions scoped - Identification of more effective flying techniques for pilots	- Highly customizable service packages to be delivered are jointly discussed and agreed - Capability building for new co-created offerings e.g. Data-driven aircraft performance optimization services - Service extensions available	- Long term R&D investments with aircraft manufacturers - Joint engineering teams from both airline and Rolls-Royce implement TotalCare®	- Integrated ways of reducing costs and increasing revenue generation - Engines are utilized optimally for increased durability and reduced fuel burn - Asset value maintained throughout the product lifecycle
	- Cross-functional engagement teams: commercial, engineering and service support to map out opportunities - Identification of specific customer performance improvements and operational requirements	- Joint operational planning enabling cost optimization and minimized disruption				

5.2   SAP Co-Innovation labs

SAP is a global technology and service provider offering enterprise software solutions and technology-related business services. SAP develops and commercializes both standard applications as well as industry-specific solutions, typically developed to fulfill a particular sector requirement. For instance SAP focuses on industries such as aerospace and defense, automotive, banking, healthcare, higher education, oil and gas, retail etc., as well as functions such as finance, human resources, information technology or sales. SAP reaches its markets primarily through a network of subsidiaries with which SAP establishes licenses to commercialize SAP products to customers in defined territories (SAP, 2014d). Agreements are also signed with independent distributors and service providers in certain regions in order to increase the reach and the range of services offered to customers. SAP's quest to be at the forefront of technology services has translated into numerous targeted acquisitions over the years, including CAS and Dacos (in the 1990s), Triversity, Khimetrics, TomorrowNow and DCS Quantum (first part of the 2000s), Virsa Systems and Frictionless, Business Objects, Visiprise (second part of 2000s) and TechniData, SuccessFactors, Datango, Syclo and Ariba over the last five years. SAP operates in over 130 countries, employing in excess of 64,000 employees and serving more than 232,000 customers. In 2013, SAP reported revenues of €16.8 billion (SAP, 2014c) and in 2014 a 4% growth of € 17.56 billion.

SAP's quest for finding new ways to create customer value goes beyond the sphere of the company's interactions with its own clients, meaning it employs its empowered interaction capability, co-diagnosis and co-ideation practices across its entire network, rather than limiting the implementation of these co-creative activities to direct customers. SAP promotes linkages amongst SAP partners to jointly work with a broad range of SAP development and business

teams under the so-called 'Co-Innovation Lab' (SAP, 2014b). SAP recognizes that co-innovation activities occur every day between the company and its ecosystem in endless forms. Employing its 'linking' practices in a strategic manner, SAP supports collaborative work with partners, customers, universities, governments, standardization groups and others to establish long-term engagements and to contribute to co-creating sustainable and mutual competitive advantage. SAP fosters openness within its ecosystem community to accelerate the overall innovation process, leading to the creation of useful solutions. The results of successful projects are widely disseminated though events such as Sapphirenow® (SAP, 2014e) and the SAP TechEd conferences.

Co-Innovation Labs operate in California, Tokyo, Bangalore, Brazil, Walldorf, Zurich, Moscow, Shanghai and Singapore. Overall, SAP Co-Innovation Lab projects have a number of features in common: there is a well-established business case, the required resources and expertise are available, as well as well- identified senior stakeholders, clear goals and objectives with an approved Co-Innovation Lab project plan, and suitability for use in demos and showcases. Overall, the SAP Co-Innovation Labs serve as a catalyst to bring together ideas and talent to create innovative solutions to solve complex business problems. They use technology to support 'better-run businesses' through the deliberate and targeted implementation of its linking and materializing practices supported by 'sustained purposeful engagement' throughout the entire network.

As a company that aspires to be at the forefront of innovation and business transformation through technology, SAP promotes the dissemination of ideas and trends that are re-shaping or likely to re-shape our world and our organizations. Another value co-creation initiative is 'The Future of Business' (SAP, 2014f), an online resource supported by SAP, offering a collection of

relevant articles and media from the best minds in the industry. SAP also endeavors to put

technology in context and to promote a forward-thinking agenda on topical issues such as

customer centricity (SAP, 2014a) (where suggestions are offered on how to turn customers into

co-creators or to understand customers' channel choice) or new approaches to driving business

value (Becher, 2014).

Table 3:

Co-Creation Practices at SAP Co-Innovation Labs

Linking practices			Materializing practices			Institutionali-zing practices
Co-ideation	Co-valuation	Co-diagnosing	Co-testing	Co-design	Co-launching	Embedding
Coordination						
- Pioneering events such as 'The Future of Business' to ideate new models of value creation in business - Creating spaces for bringing together ideas and talent across the SAP ecosystem	- Business cases considered and assessed at the Co-innovation Labs - Involvement of senior stakeholders, definition of goals and objectives are required in new innovation projects	- Definition of required resources and anticipated impact of new initiatives - Collaboration with universities and a variety of stakeholders to scan new technological frontiers	- Fostering the co-creation of solutions through open innovation - Co-Innovation Lab project plans include suitability for use in demos and showcases	- Advancing innovation between networked SAP partners and SAP businesses - Promoting linkages and joint projects amongst SAP development teams across the ecosystem	- Openness in ecosystems and significant investments in social and technical infrastructure globally - Dissemination of projects through Sapphirenow® and SAP TechEd conferences	- Targeted acquisitions that bring about enhanced capabilities and technical scopes - Willingness to embrace and reconcile divergent thinking and disruptive technologies

Unilever Foodsolutions (UFS) is a global provider of food products and ingredients aimed at creating solutions that help chefs and food service professionals in their jobs. UFS operates in 65 countries worldwide, directly employing 5400 people, including 2600 salespeople and 150 chefs, all sharing a 'passion for food'. Despite the complexities of the food service market and its decline in mature markets through the global economic recession, UFS has maintained a stable position in a highly competitive environment by recognizing that food service has increasingly become a commoditized market with a growing number of alternative brands for professional use. The company prides itself for being a customer-centric organization, that is, rather than just a food product manufacturer, a solutions provider, committed to adding value to the catering industry through engaging with its clients in purposefully defined culinary developments. They realize this mission by sponsoring key industry events, helping customers with recipes and ideas for food preparation and presentation, food costing analyses, and working with its chosen channel partners to provide customers with the best possible solutions for their food preparation processes.

UFS aims to offer its customers 'inspiration every day', helping them succeed in their own business through its developmental interaction capability. To address this purpose, UFS re-energized its offering by developing a comprehensive suite of services towards the end of 2011. These include three core areas: Firstly, 'Your Guests' aiming to inspire food operators to understand more about their guests and their behavior when eating out. Secondly, 'Your Menu', encouraging food professionals to design nutritious and healthy meals, but at the same time profitable menus. Thirdly, 'Your Kitchen', providing operational insights to optimize kitchen processes, helping chefs to work smarter rather than harder (UFS, 2012c). Drawing on a wealth

of knowledge of food operations, consumers and markets, UFS co-creates solutions in its interaction with customers through its linking and materializing practices (especially co-diagnosis, co-ideation and co-design), which help food service businesses to become more effective and competitive. UFS's chefs are a key element of the customer service strategy and their expertise is offered as part of a total value proposition. Overall, UFS sales and culinary teams are instrumental in implementing the firm's aim of sustained purposeful engagement through its developmental, concerted and empowered interaction capabilities by working with customers to identify how to meet key challenges in food service like quality, effectiveness of kitchen functions, taste, originality and food safety.

UFS marketing and sales teams work together with key customers' marketers and food operations staff to co-design concepts and co-ideate new solutions. These concepts typically include a combination of branded products, merchandise and equipment. Altogether, these are aimed to offer the end consumer an enhanced experience, and to the operator new opportunities to grow its revenues in the food (UFS, 2012a) and beverage (UFS, 2012b) categories. Overall, differentiated value propositions are co-created for different types of customers, aiming to be consistent with the company's overall customer management strategy.

As an example of its empowered interaction capability and co-ideation practice, UFS prides itself for its ability to listen to its customers and consumers. Award-winning marketing practices (Benjamin, 2012) and new products have often come from its sustained purposeful engagement with network partners that allow an in-depth understanding of the consumer and meaningful customer insights. Applying the latest technologies, the company aims to co-create products that provide consumers with a unique experience (Unilever, 2014). Product innovation is at the heart of what the company does. In particular, there is a marked emphasis in co-

designing product innovations that significantly increase consumers' well-being, whilst reducing its environmental impact. For instance, the company reported (Unilever, 2011) that 61% of its products met salt levels equivalent to 5g per day, and the total waste per ton of production was reduced to 4.77kg (from 6.48kg) in 2010.

Understanding consumer and customer needs is a key driver for product innovation at Unilever. Bi-annually, UFS releases the World Menu Report (UFS, 2011). This document contains research into consumers' eating habits globally. It is recognized that eating habits have changed substantially over the last decades, with increasing concern for the nutritional aspects of food, but without compromising the enjoyment and pleasure of food tasting. In particular, the latest report indicated an overwhelming need for consumers to be provided with more information about the food they are eating when out of home. As a result, UFS is developing ways to raise awareness and increase transparency about food ingredients. As the report recognizes, "chefs have the power to change the health of our world. And restaurants, shops, canteens, schools and cafeterias along with food service providers all need to be part of the solution" (UFS, 2011, p. 11).

Innovation in business-to-business contexts does not just come from product innovation. It is widely acknowledged that sustainable competitive advantage can no longer be achieved just by improving existing products. As in other sectors, food service has seen the surge of service solutions, part of which is the co-creation of value and the adoption of a partnership approach with the customer (Occhiocupo, 2011). UFS has been pioneering innovative offerings and ways of working collaboratively through sustained purposeful engagement that have become 'best practice' in food service.

Table 4:

Co-Creation Practices at Unilever Foodsolutions

Linking practices			Materializing practices			Institutionali-zing practices
Co-ideation	Co-valuation	Co-diagnosing	Co-testing	Co-design	Co-launching	Embedding
Coordination						
- Discovery days where culinary teams work on key challenges such as food quality, taste and safety, kitchen effectiveness - Launch of "Your Guests" service approach to improve the understanding of the end consumer preferences - Idea generation for food preparation and presentation	- Full kitchen audits including food costing, supply inventories, equipment, nutritional value	- Identification of customer's hidden needs by analyzing consumer behavior in outlets - Sales teams and chefs work closely with culinary teams in the customer to scope areas with the potential to gain efficiencies	-Implemen-tation of "Your Kitchen" services aimed at finding ways to work more effectively in kitchen processes	- Culinary contests that push the frontiers of dish creation forward - Recipe development with emphasis on standardization - Design of informative merchandise and marketing communication material	- "Your Menu" offerings focused on developing healthy meals and profitable menus - Creation of new concepts with and for the customer	- Sponsoring industry events that become key dates in the calendar of the culinary and food service industry - Further reaching to channel partners (e.g. distributors) that bring to their customers the best solutions for their food preparation processes

5.4   Bekaert

Bekaert is an international leader in steel wire transformation and coatings headquartered in Belgium, which employs 27 000 staff globally. Serving customers in 120 countries, Bekaert pursues sustainable profitable growth in all its activities and generated combined sales of €4.1 billion in 2013 (Bekaert, 2014a). Bekaert manufactures steel cord products reinforcing components such as tires, concrete etc. in a wide range of applications in cars, trucks, elevators and infrastructure assets. The company's slogan "better together" synthesizes its unique approach to co-create value with its business partners. Bekaert prides itself for its emphasis in engaging with customers to help grow their businesses and to address needs in both the short and long term through its linking, materializing and institutionalizing practices.

In the textile industry, Bekaert manufactures special products used for carding fibers, such as balls of wool or cotton, into threads (Bekaert, 2014b). The process is achieved by passing wool or cotton through a set of cylinders covered with small spikes, which act like a comb. This breaks up fibers and aligns them up into threads, which are then suitable for the weaving process. These spikes come in the form of wires, which are winded around the cylinders of the carding machine. Carding machines are considered very expensive, thus need to be used at their maximum capacity. These machines are typically part of a production line, which only stops for maintenance purposes, such as replacing the spikes for the cylinders after they have worn off. Bekaert sells the wire with the spikes and the service to base the wire and spikes on the cylinders. The wire and spikes have a large impact on the quality and the output of carding machines.

Following the acquisition of a company, Bekaert realized it had the license for using a patent, consisting of a design for a new shape of spike to be used in carding processes. The new

shape was unproven and was significantly more complex to manufacture. Bekaert decided that to further develop this patent into a commercial product, it needed to employ its linking and materializing practices by collaborating with other manufacturers willing to take on the risk of further co-developing and co-testing the new spikes. It also required a customer open to trial this innovation on at least one of their production lines. Initial tests revealed that the throughput could be increased by 20%. In addition, a customer discovered that the shape of the spikes created less dust, reducing maintenance and raw material costs, since the fibers could be made thinner. In light of these results, Bekaert engaged in further testing and in the co-development of other geometric forms for the spikes for different types of applications.

Bekaert's agenda when engaging with other companies in its network is clear: to implement its co-ideation and co-evaluation (i.e. linking) practices, as well as its co-design, co-testing and co-launching (i.e. materializing) practices to jointly develop a series of new technologies (e.g. new spikes), with a distinct purpose at heart - increasing the manufacturer's output. As one of the executives from Bekaert recognized, "our sales people practically live in the customer's premises", showing commitment to the end results co-created with the customer.

Table 5:

Co-Creation Practices at Bekaert Carding Solutions

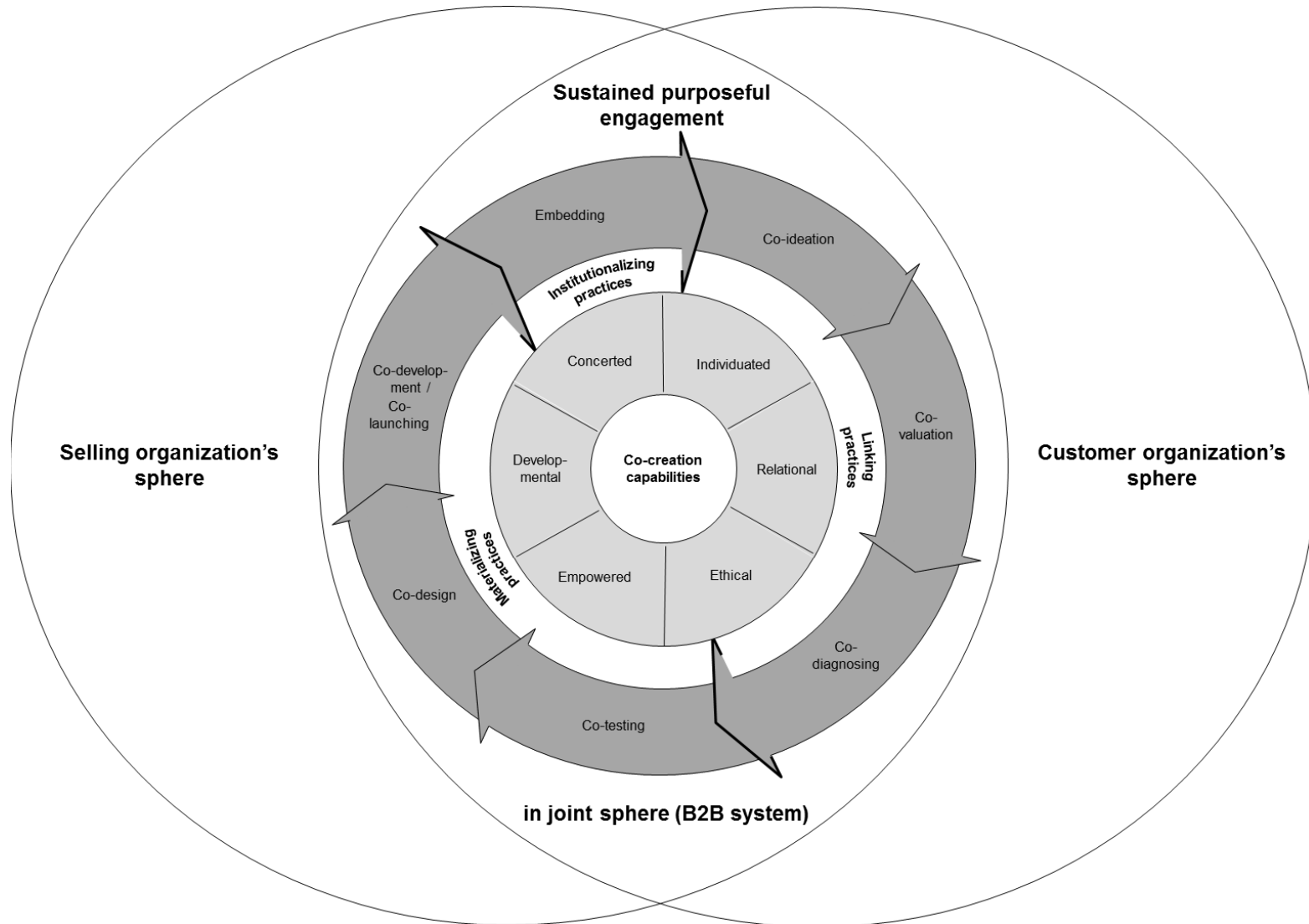| Linking practices			Materializing practices			Institutionali-zing practices
Co-ideation	Co-valuation	Co-diagnosing	Co-testing	Co-design	Co-launching	Embedding
Coordination						
- Creation of joint learning opportunities to enable the emergence of continuous questioning, reflection and analysis	- Sharing of information and insights about operational processes in search of opportunities for productivity enhancements	- Customer identification of additional patent benefits (reduction of maintenance and material costs) - Mapping and sequencing production processes to identify additional benefits and enhancements	- Open customer trials to test new spike shapes	- Wider roll-out and prototyping of enhanced carding technologies	- Implemen-tation of newly developed technologies to increase customers' output	- Patent development through collaboration with partners

6.   Discussion: Sustained purposeful engagement for value co-creation in B2B systems

This study contributes to the much-needed empirical exploration of co-creation practices, with methods that enable deriving valid conceptual insights from case studies that are also transferrable to practice. In this study, we set out to provide a classification of value co-creation practices. The analysis of empirical data and synthesis of prior research enable us to conceptualize capabilities as the 'integrative mechanisms' that provide the underpinning background for practices to coalesce and amalgamate into value co-creation. We present a theoretically-grounded, empirically-informed grouping of value co-creation practices and underpinning capabilities. This makes the process of value co-creation more tangible and thus applicable to other B2B organizations that may be striving, but possibly struggling, to achieve value co-creation in their business contexts.

In this paper, we present value co-creation practices and develop a conceptualization of three higher-order categories (linking, materializing and institutionalizing) to organize and make sense of co-creative practices by bringing them together with the strategic organizational capabilities necessary to achieve them: concerted, individuated, relational, ethical, empowered, and developmental (see Figure 1).

Figure 1:

A Model of Co-Creation Capabilities and Practices

Our cases offer important empirical insight into some of the actual processes of co-creation. Data confirmed the importance of high degrees of interaction across levels, from the individual to the organization, to co-create value. Our study shows that co-creation is associated with an increasing blurring of boundaries across actors operating in a network that is held together throughout by high levels of trust, as well as social and emotional ties. For instance, Bekaert's relationships across its entire network is characterized by strong connections, collegiality and confidence that facilitate transparent sharing of information. Similar phenomena were revealed in Rolls-Royce's approach to co-create and to deliver complex aerospace programs and SAP's technology-driven business transformations. The findings summarized in Tables 2-5 show that the organizations we investigated employ the individual co-creative practices in different ways, resulting from their diverse industries. We see commonality in the high level of engagement of their network partners and the role of this engagement in the co-creation process. For example, Bekaert's co-creative efforts led to the development of an actual tangible product, which was exclusively realized through interaction with already established customers – meaning that the materializing practices we found in this case were a lot more distinct than in others. Conversely, SAP co-creates knowledge and new solutions not only by involving customers, but also deliberately inviting a number of different partners from their ecosystems such as universities or governmental groups. This results in a co-creative process with a pronounced emphasis on linking and institutionalizing. We argue that these differences in practice focus do not mean that one approach to co-creation is more successful than the other – on the contrary, our cases demonstrate that the practices we identified, and the capabilities that they emerge from, can be combined and realized in different ways, while still leading to co-creation of value.

In the analysis of all case studies, we did not find specific instances in which the 'relational' and 'ethical' interaction capabilities conceptualized by Karpen et al. (2011) were employed, suggesting that these capabilities underpin co-creation practices, bringing coherence across them, and resulting in mutually-reinforcing processes that bring about value co-creation. This difference in the significance of capability when compared to Karpen et al. (2011) supports our view that it is now necessary to empirically integrate and bring together the different prevalent facets of the value co-creation concept, rather than focusing on ever more ramified theoretical conceptualizations, which might have little practical value for businesses attempting to achieve value co-creation.

With our study, we extend the current state of the field by arguing that 'compelling events' lie at the heart of the of co-creation capability development process. These events act as catalysts for renewed collective action towards co-creation to fulfill the actors' needs and expectations. These events were identified by our informants and reported as significant occurrences that either triggered new or reinforced existing value co-creation endeavors. Rolls-Royce faced an unexpected demand (i.e. an opportunity) from a key customer, American Airlines, to provide engine-related services to reduce complexity and to increase predictability. SAP initiated their approach to engage key players in their markets with the first major acquisitions of software companies like Steeb and CAS. Unilever Foodsolutions realized that increasingly commoditized markets with an explosion of distributor-own brands (DOBs) would quickly diminish their growth, unless a fundamental program to 'reconnect' with buyers and a fully revised offering was developed and implemented in collaboration with customers. Bekaert discovered the huge advantage that lies in co-creation when they offered untapped resources such as a patent to be exploited jointly with customers.

In the course of conducting this study, the research team engaged in discussions with companies, whose responses to similar "compelling events" were different. This suggested the notion of "co-creation readiness" as an ability to, first, sense and seize (Gebauer et al., 2013) opportunities for value co-creation and second, deploy the necessary capabilities to build strong relationships to enable sustaining co-creation. We argue that not all organizations may have an organizational culture and social capital to enable the fruitful adoption and development of co-creation practices.

This study also shows that high levels of interaction in networks, strong connections, collegiality and trust are necessary, but not sufficient, conditions to co-create value in B2B systems. Concerted interaction ability provided opportunities for realizing co-ideation, co-valuation and co-diagnosing. Sustained purposeful engagement ensured that these further developed into co-design and co-launching. For instance, sustained purposeful engagement enabled high-risk technology developments at SAP and the formulation of new generation jet engines services at Rolls-Royce by galvanizing a collective willingness to mobilize the resources to co-create value in a context of ever-evolving ecosystems and complex technologies. In fact, some of Rolls-Royce's new engines and existing engine improvement programs with customers span decades. The integrated IT suites that SAP is able to offer are the result of consolidation, integration and redeployment efforts over years. Unilever Foodsolutions' new service campaign to co-create menus, and to implement more efficient meal preparation procedures, was implemented owing to the company's tradition to deeply engage with chefs, buyers of food and beverages and owners of outlets in their food service operations. Bekaert's textile equipment and carding innovations came to fruition as a result of the relentless pursuit to deliver demonstrable

lower risks in loading and melting fibers as well as less consumption and lower waste in the overall textile production process.

We argue that *sustained purposeful engagement* becomes an overarching mechanism that connects organizational capabilities, practices and resources across actors within the B2B system in a way that creates value over protracted time frames. In this study, *purpose* emerges as a widely shared view of the outcomes a co-creating endeavor is expected to deliver, facilitated by common technical knowledge. Purpose revealed itself as an important underpinning driver of co-creation, particularly in complex industrial systems, where technologies are constantly evolving and the materialization of a product or a service happens in the medium or long term (i.e. *sustained*).

Our cases uncover how common purpose is facilitated by similar professional cultures and identities. Chefs from Unilever Foodsolutions share insights with chefs from food service operators. Engineers from Rolls-Royce scope and assess new developments and address aero-engine issues jointly with airline and aircraft manufacturers' engineers. Process specialists in Bekaert are up to date with the 'lived experience' of operators and textile engineers in their customers. IT consultants from SAP share an in-depth understanding of information technologies, and customize through demanding configurational activities the systems that will help deliver the customer's business goals. Across the cases, there is a consistent theme: the high level of appreciation between the organization's technical and professional communities. Case study data showed how common purpose was facilitated by agreed mechanisms to share the risk and the benefits of co-creation, particularly when substantial investments were needed. Our findings revealed that the actors involved (customers, suppliers, distributors and partners) all had a clear and shared understanding of the roadmaps to technology and service excellence delivery.

39

Our cases showed that common purpose becomes stronger where relative mutual dependencies are present.

Engagement in this research manifested as the individual actors' interest in the co-creation enterprise, and this was demonstrated by their contribution to practices such as co-ideation, co-valuation, co-diagnosing, through to co-launching. Engagement was also evidenced by a party's openness to consider possibilities and an uncompromising quest to push the 'possible' so it became 'feasible' within complex technologies and highly interconnected B2B systems.

Our conceptualization distinguishes linking, materializing and institutionalizing capabilities. However, these capabilities manifest in an intertwined way and occur in a continuum over time and across actors' boundaries. Sustained purposeful engagement is the overarching mechanism that connects these capabilities and the force sustaining their emergence to enable the transformation of latent resources into new outcomes and realized value.

6.1 *Managerial Implications*

The adoption of co-creation practices through implementation of specific organizational capabilities has a number of implications for industrial marketing, as well as sales organizations and managers. Firstly, the value proposition, traditionally originated by the supplier, now resides in the interface and interaction between key players of the network. Thus, the approach of 'communicating value' needs to be re-focused into efforts to facilitate sustained purposeful engagement. Managers can achieve this by designing and agreeing flexible contracts containing outcome-based agreements (Ng et al., 2013) that encourage alignment and common goals realization. Secondly, new forms of risk and benefit sharing need to be defined, particularly when

risk is either higher, or more unpredictable than the potential value created within one organization only. Thirdly, the implications of an increasingly servitized and co-created marketplace for sales forces are profound. Conventionally, sales forces were deployed when services or products had been developed by a supplier organization. In complex service offerings, sales forces may be needed even before the solution exists. Sales professionals will be required to engage with customers to co-create the service, and then employ a concerted interaction capability to engage various functions across the supplier organization to deliver it (Sharma et al., 2008; Storbacka et al., 2011). Industrial sales forces, therefore, will in many contexts have to become more aligned and in some cases integrated with R&D, operations and supply chain functions. Since customer value is created 'in-use'(Macdonald et al., 2011), sales people will have to adopt a proactive and collaborative approach with customers to fully understand their needs and requirements, using methods other than the established customer needs analysis. Because customer knowledge may become more critical than product knowledge, business relationships will still fundamentally underpin B2B exchanges and will transcend traditional exchanges to become complex dynamic interactions with customers and other network members. These trends will challenge the conventional notion of the role of sales people from 'selling' to 'co-creating' (Lemmens et al., 2014). Fourthly, managers need to foster collective (i.e. across actors) social capital that facilitates alignment and compatible cultural meanings (Peñaloza & Mish, 2011). Social gatherings, inter-personal relationships, games, team work exercises, off-site away days and the like will contribute to create the 'social fabric' that underpin meaningful relations conducive to value co-creation.

6.2   Limitations and future research

This study has a number of limitations. Generalizability is often a concern in case study research. Though the data collected for this paper is rich in depth and breath, and the analytical procedures sound, it does not allow extending its findings beyond theoretically generalization. Data was collected from a limited number of companies, and thus some insights may be only applicable to a particular industry or organizational setting similar to those of the case studies. We acknowledge that the co-creative practices and organizational capabilities integrated into our framework might not be all-encompassing, but our focus was on making those identified as relevant as possible, as well as more tangible and thus replicable, rather than adding further to the large number of very detailed theoretical conceptualizations that exist. In terms of future research, the community of B2B marketing academics and practitioners would certainly benefit from additional empirical work on the precursors of value co-creation, and a more in-depth exploration of the conditions under which value co-creation is likely to materialize.

7.   Conclusion

As a concept, the co-creation of value has now reached a point where theoretical developments need to meet efforts to make it more tangible and to foster its adoption and realization in practice. In this study, we have aimed to bring theory and practice together by developing a framework that deconstructs the underlying co-creative organizational capabilities and integrates them with the practices to demonstrate how these are intertwined, showing how sustained purposeful engagement lies at the heart of the co-creation of value. To be as specific and illustrative as possible, we have investigated and classified the co-creative activities of four case study companies, thereby not only reflecting on how these organizations successfully realize

joint value creation across their respective networks, but also offering insight to help other firms in their quest to engage with customers and other partners in more meaningful and effective interactions. While it has always been evident that the co-creation of value is not easy to achieve in practice, our study shows that sustained purposeful engagement across B2B systems can only be established through careful and strategic calibration of the underpinning co-creative interaction capabilities and practices of all actors in the network.

We believe that our study, and its resulting framework and classification of capabilities and practices, make a step towards offering insight into the implementation of value co-creation by encouraging practitioners to consider how the identified constructs can be employed and effectively combined in their own organization and across the B2B networks they operate in.

Overall, we conclude by arguing that co-creation is seldom an organizational capability fortuitously developed, but the result of sustained purposeful engagement, that is, a purposefully planned, highly engaged response to triggering events perceived as significant, sustained over time.

8. References

Aarikka-Stenroos, L., & Jaakkola, E. (2012). Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process. *Industrial Marketing Management*, *41*(1), 15–26.

Atkinson, P., & Coffey, A. (1997). Analysing documentary realities qualitative research Theory, Method and Practice. London: Sage.

Ballantyne, D., & Varey, R. J. (2006). Creating value-in-use through marketing interaction: The exchange logic of relating, communicating and knowing. *Marketing Theory*, *6*(3), 335–348.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99.

Becher, J. (2014). Core principles for driving business value. *SAP Center for Business Insight*.

Bekaert. (2014a). Bekaert corporate website. Retrieved from http://www.bekaert.com

Bekaert. (2014b). Textile machinery. Retrieved from http://www.bekaert.com/en/Product Catalog/Application/Equipment/Textile machinery.aspx?Industry={C9664973-5BF5-41CF-B90B-52E4452693A8}&ProductCategory={5099D21A-7967-410A-A238-D3675DD71183}

Benjamin, K. (2012). Unilever tops 2012 Marketing Society Awards nominations. Retrieved from http://www.marketingmagazine.co.uk/news/1129581/

Brewer, J. D. (2000). *Ethnography*. Open University Press Buckingham.

Burgess, R. G. (2006). *In the field: An introduction to field research*. New York: Routledge.

Burns, R. B. (2000). *Introduction to research methods* (4th ed.). London: Sage.

Cohen, M. D. (2007). Reading Dewey: Reflections on the study of routine. *Organization Studies*, *28*(5), 773–786.

Cohen, M. D., & Bacdayan, P. (1994). Organizational routines are stored as procedural memory: evidence from a laboratory study. *Organization Science*, *5*(4), 554–568.

Davies, I. A., & Ryals, L. J. (2014). The effectiveness of Key Account Management practices. *Industrial Marketing Management*, *43*(7), 1182–1194.

Dong, B., Evans, K. R., & Zou, S. (2008). The effects of customer participation in co-created service recovery. *Journal of the Academy of Marketing Science*, *36*(1), 123–137.

Edvardsson, B., Kleinaltenkamp, M., Tronvoll, B., McHugh, P., & Windahl, C. (2014a). Institutional logics matter when coordinating resource integration. *Marketing Theory*, *14*(3), 291–309.

Edvardsson, B., Kowalkowski, C., Strandvik, T., & Voima, P. (2014b). Negative critical waves in business relationships: an extension of the critical incident perspective. *Journal of Business & Industrial Marketing*, *29*(4), 284–294.

Foden, J., & Berends, H. (2010). Technology management at Rolls-Royce. *Research Technology Management*, *53*(2), 33–42.

Frank, N. (2014). Powering the Future – Rolls Royce Total Care business success. Retrieved from http://productserviceinnovation.com/home/2014/08/20/powering-the-future-rolls-royce-total-care-business-success/

Frow, P., & Payne, A. (2007). Towards the "perfect" customer experience. *Journal of Brand Management*, *15*(2), 89–101.

Gebauer, H., Paiola, M., & Saccani, N. (2013). Characterizing service networks for moving from products to solutions. *Industrial Marketing Management*, *42*(1), 31–46.

Grönroos, C. (2006). Adopting a service logic for marketing. *Marketing Theory*, *6*(3), 317–333.

Grönroos, C. (2008). Service logic revisited: who creates value? And who co-creates? *European Business Review*, *20*(4), 298–314.

Grönroos, C. (2011). A service perspective on business relationships: The value creation, interaction and marketing interface. *Industrial Marketing Management*, *40*(2), 240–247.

Grönroos, C., & Helle, P. (2012). Return on relationships: conceptual understanding and measurement of mutual gains from relational business engagements. *Journal of Business & Industrial Marketing*, *27*(5), 344–359.

Grönroos, C., & Ravald, A. (2011). Service as business logic: implications for value creation and marketing. *Journal of Service Management*, *22*(1), 5–22.

Grönroos, C., & Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, *41*(2), 133–150.

Harmsen, H., & Jensen, B. (2004). Identifying the determinants of value creation in the market: A competence-based approach. *Journal of Business Research*, *57*(5), 533–547.

Heinonen, K., Strandvik, T., Mickelsson, K.-J., Edvardsson, B., Sundström, E., & Andersson, P. (2010). A customer-dominant logic of service. *Journal of Service Management*, *21*(4), 531–548.

Helkkula, A., Kelleher, C., & Pihlström, M. (2012). Characterizing value as an experience: Implications for service researchers and managers. *Journal of Service Research*, *15*(1), 59–75.

Hill, M. R. (1993). *Archival strategies and techniques*. London: Sage.

Jorgensen, D. L. (1989). *Participant observation: A methodology for human studies* (Vol. 15). London: Sage.

Karpen, I. O., Bove, L. L., & Lukas, B. A. (2011). Linking service-dominant logic and strategic business practice: a conceptual model of a service-dominant orientation. *Journal of Service Research*, *15*(1), 21–38.

King, N. (2004). Using interviews in qualitative research. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 11–22). London: Sage.

Kowalkowski, C., Persson Ridell, O., Röndell, J. G., & Sörhammar, D. (2012). The co-creative practice of forming a value proposition. *Journal of Marketing Management*, *28*(13/14), 1553–1570.

Kvale, S. (1996). *Interviews: an Introduction to Qualitative Research Interviewing*. London: Sage.

Lazonick, W., & Prencipe, A. (2005). Dynamic capabilities and sustained innovation: strategic control and financial commitment at Rolls-Royce plc. *Industrial & Corporate Change*, *14*(3), 501–542.

Lemmens, R., Donaldson, B., & Marcos, J. (2014). *From selling to co-creating: New trends, practices and tools to upgrade your sales force*. Amsterdam: BIS Publishers.

Lusch, R. F., & Vargo, S. L. (2006). *The Service-dominant Logic of Marketing: Dialog, Debate, And Directions*. Armonk: NY: M.E. Sharpe.

Macdonald, E. K., Wilson, H., Martinez, V., & Tossi, A. (2011). Assessing value-in-use: A conceptual framework and exploratory study. *Industrial Marketing Management*, *40*(5), 671–682.

Martinez, V. (2010). Challenges in transforming manufacturing organisations into product-service providers. *Journal of Manufacturing Technology Management*, *21*(4), 449–469.

McColl-Kennedy, J. R., Vargo, S. L., Dagger, T. S., Sweeney, J. C., & Kasteren, Y. van. (2012). Health care customer value co-creation practice styles. *Journal of Service Research*, *15*(4), 370–389.

Meuter, M. L., Bitner, M. J., Ostrom, A. L., & Brown, S. W. (2005). Choosing among alternative service delivery modes: an investigation of customer trial of self-service technologies. *Journal of Marketing*, *69*(2), 61–83.

Nätti, S., Pekkarinen, S., Hartikka, A., & Holappa, T. (2014). The intermediator role in value co-creation within a triadic business service relationship. *Industrial Marketing Management*, *43*(6), 211–257.

Ng, I. C. L., Ding, D. X., & Yip, N. (2013). Outcome-based contracts as new business model: The role of partnership and value-driven relational assets. *Industrial Marketing Management*, *42*(5), 730–743. doi: http://dx.doi.org/10.1016/j.indmarman.2013.05.009

Nicolini, D. (2009). Zooming in and out: Studying practices by switching theoretical lenses and trailing connections. *Organization Studies*, *30*(12), 1391–1418.

Occhiocupo, N. (2011). Innovation in food service: the case of a world leading Italian company. *The Marketing Review*, *11*(2), 189–201.

Patton, M. (2002). *Qualitative research & Evaluation Methods* (3rd Ed.). Thousand Oaks, CA: Sage.

Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, *36*(1), 83–96.

Payne, A., & Frow, P. (2005). A strategic framework for customer relationship management. *Journal of Marketing*, *69*(4), 167–176.

Peñaloza, L., & Mish, J. (2011). The nature and processes of market co-creation in triple bottom line firms: Leveraging insights from consumer culture theory and service dominant logic. *Marketing Theory*, *11*(1), 9–34.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, *68*(3), 79–91.

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *18*(3), 5–14.

Pugh, P. (2002). *The Magic of a Name, The Rolls-Royce Story. Part 3 A Family of Engines*. Cambridge, UK: Icon Books.

Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, *5*(2), 243–263.

Rolls-Royce. (2014). Rolls-Royce corporate website. Retrieved from www.rolls-royce.com

Rowlinson, M. (2004). Historical analysis of company documents. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 301–311). London: Sage.

Russo-Spena, T., & Mele, C. (2012). "Five Co-s" in innovating: a practice-based view. *Journal of Service Management*, *23*(4), 527–553.

Ryals, L. (2010). *Rolls-Royce TotalCare: Meeting the needs of key customers*. KAM Club Executive Briefing. Cranfield School of Management, Bedford, UK.

Sampson, S. E., & Spring, M. (2012). Customer roles in service supply chains and opportunities for innovation. *Journal of Supply Chain Management*, *48*(4), 30–50.

SAP. (2014a). Deep Dive: Customer centricity embracing the new paradigm. Retrieved from

http://fm.sap.com/data/UPLOAD/files/SAP_FoBDeepDive_CustomerExperience_20140127

.pdf

SAP. (2014b). SAP Co-innovation Lab. Retrieved from

http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/5065d74c-51db-3010-

5899-be8f38c1cbb8?QuickLink=index&overridelayout=true&58600533788605

SAP. (2014c). SAP corporate website. Retrieved from www.sap.com

SAP. (2014d). SAP partners. Retrieved from http://www.sap.com/uk/partners/overview.html

SAP. (2014e). Sapphire Now & Asug annual conference. Retrieved from

http://www.sapandasug.com

SAP. (2014f). The Future of business. Retrieved from http://futureofbusiness.sap.com

Schatzki, T. R. (2006). On organizations as they happen. *Organization Studies*, *27*(12), 1863–

1873.

Sharma, A., Iyer, G. R., & Evanschitzky, H. (2008). Personal selling of high-technology

products: the solution-selling imperative. *Journal of Relationship Marketing*, *7*(3), 287–308.

Shove, E., & Pantzar, M. (2005). Consumers, producers and practices understanding the

invention and reinvention of Nordic walking. *Journal of Consumer Culture*, *5*(1), 43–64.

Storbacka, K., Polsa, P., & Sääksjärvi, M. (2011). Management practices in solution sales- a multilevel and cross-functional framework. *Journal of Personal Selling & Sales Management*, *31*(1), 35–54.

Taylor, S. J., & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meaning*. New York: John Wiley & Sons, Inc.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509–533.

Terho, H., Haas, A., Eggert, A., & Ulaga, W. (2012). "It's almost like taking the sales out of selling'— Towards a conceptualization of value-based selling in business markets. *Industrial Marketing Management*, *41*(1), 174–185.

UFS. (2011). World Menu Report. Retrieved from http://www.ufs.com/company/media-center/world-menu-report

UFS. (2012a). British Roast Dinner Week.

UFS. (2012b). Helping your brew a better business. Retrieved from http://prod.ufs.teatips.co.uk

UFS. (2012c). Unilever Foodsolutions Corporate Website. Retrieved from www.unileverfoodsolutions.com

Unilever. (2011). Annual report and accounts. Retrieved from http://www.unilever.com/images/Unilever_AR11_tcm13-282960.pdf

Unilever. (2014). Product innovations. Retrieved from

http://www.unilever.co.uk/innovation/productinnovations/

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, *36*(1), 1–10.

Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, *26*(3), 145–152.

Wieseke, J., Geigenmüller, A., & Kraus, F. (2012). On the role of empathy in customer-employee interactions. *Journal of Service Research*, *15*(3), 316–331.