Organizing for Pricing

Jarmatz, Martin

Document Version
Final published version

Publication date:
2018

License
CC BY-NC-ND

Citation for published version (APA):
Jarmatz, M. (2018). *Organizing for Pricing*. Copenhagen Business School [Phd]. PhD series No. 20.2018

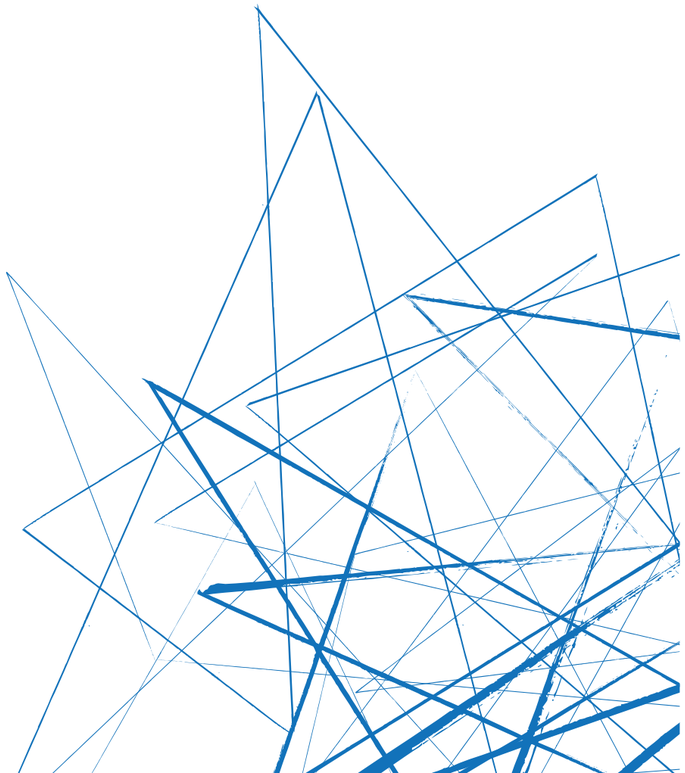
COPENHAGEN BUSINESS SCHOOL
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

WWW.CBS.DK

ISSN 0906-6934

Print ISBN: 978-87-93579-86-6
Online ISBN: 978-87-93579-87-3

ORGANIZING FOR PRICING



PhD Series 20-2018

Martin Jarmatz

ORGANIZING FOR PRICING

Doctoral School of Business and Management

PhD Series 20.2018

CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

ORGANIZING FOR PRICING

Martin Jarmatz

Main Supervisor: Professor MSO Sof Thrane, PhD
Secondary Supervisor: Stephan M. Liozu, PhD

Doctoral School of Business and Management
Copenhagen Business School

Martin Jarmatz
Organizing for Pricing

1st edition 2018
PhD Series 20.2018

ISSN 0906-6934

Print ISBN: 978-87-93579-86-6
Online ISBN: 978-87-93579-87-3

The Doctoral School of Business and Management is an active national and international research environment at CBS for research degree students who deal with economics and management at business, industry and country level in a theoretical and empirical manner.

"... not everything that can be counted counts, and not everything that counts can be counted"

William Bruce Cameron

Acknowledgements

Although this document carries my name, I did not accomplish this work on my own. Throughout my PhD studies I received tremendous support from many people. Therefore, I take this opportunity to express my deepest gratitude.

When I was still in Germany, Professor MSO Sof Thrane and I had several conversations about my potential employment at CBS. He was so supportive and eager to bring me on board, which impressed me greatly and was one of the main reasons I joined CBS. He guided me well as a supervisor and helped me improve my work. Most importantly, he was patient and always tried to motivate me during times of frustration. Your considerate supervision was excellent, Sof!

In this vein, I thank my co-authors, particularly Associate Professors Jawwad Z. Raja and Thomas Frandsen, for their great collaboration and their contributions to my thesis.

I thank my PhD cohort and close colleagues, who ensured that I continue to have fun, even during the most difficult periods of my PhD life: Adela, Andreas, Casper, Cheryl, Christian, Giulio, Ida, Ingo, Jawwad, Johan, Kai, Mikkel Pernille, and Viktor. I will greatly miss our conversations!

Further, I also express my gratitude specifically to the former Pricing Excellence Project team: Michael, Troels, Uli, and Victor. They made working at CBS so enjoyable that I had no choice but to continue my work engagement in the form of an industrial PhD position. I am particularly grateful to Troels, without whom I never would have started at CBS. Thank you, Troels, for being such an inspiring character.

I thank my case firm for giving me the unique opportunity to conduct my industrial PhD study there. I greatly appreciate and truly enjoyed the collaboration. Although an industrial PhD project is probably never smooth sailing, I am happy and thankful to have been part of the firm. Working in the hearing and communication device industry is fascinating, and I am glad to see that the company's global marketing department is on a great path moving forward. Specifically, I thank Sherif, my company supervisor, and Maulik for their enormous efforts in supporting me. It was great being part of the pricing team!

My secondary supervisor, Stephan M. Liozu, has actually been more of a pricing mentor to me. He invested his valuable time in sharing his thoughts with me, whether at conferences or in numerous mail and Skype conversations. He is always extremely responsive, which is much appreciated. Stephan, thank you for being so kind and supportive.

I am also grateful to Associate Professor Ivar Friis, Associate Professor Niklas L. Hallberg, and Professor Susi Geiger for serving as my assessment committee. Thank you for your valuable feedback, helping me on improving the three papers. Your comments are greatly appreciated!

I thank the Professional Pricing Society (PPS) for allowing me to participate in and speak at PPS conferences. It is gratifying to see how much effort they devote to educating pricing practitioners and to boosting the pricing careers of young professionals like me. I certainly do not take it for granted to allow a then-27-year-old to speak at such a conference event. It also allowed me to meet and talk with many inspiring pricing people, such as Hermann Simon, Manu Carricano, Marco Bertini, Reed Holden, Thomas Nagle, and Tim J. Smith, who all gave me great food for thought.

Big thanks to my parents, who have always been there for me. Even though my mom is far from being a pricing expert, she always had great and relevant advice for me. Even today, I can still count on her and her big heart, independent of the situation. Words cannot express how thankful I am for all the amazing things you have done!

My godfather Alfred, who has been a mentor to me since I was 12, has greatly influenced where I am today. I owe my career achievements to his great care. Given the circumstances, the intensity of his support is not self-evident, and yet, it is second to none. Danke, Alfred!

Among my biggest and most valuable assets are my friends. It is absolutely overwhelming how much support and love I have received. I am especially grateful to Chris, Mathies, Niklaas, Pfingstagenten 007, the Dublin guys, Tom, Wenke, and also Nora, who all aided and encouraged me with all their possibilities. You all gave so much, always listened to me, and never asked for anything in return. I am extremely happy to have such loyal and thoughtful friends. I love you guys!

Those three years were intense. It has been a rollercoaster ride, but overall it has been a rewarding experience. Thank you, everyone, for having been a part of it. It is thanks to your immense efforts that I was able to develop myself further personally and professionally throughout my PhD studies. Thank you all for enriching my life!

Best wishes,
Martin

P.S. On a slightly different note, my grandpa, being 98 years old today, said that he still wants to experience the awarding of my PhD. Since the beginning of my project, he has constantly and

impatiently asked me how much longer he has to live, given that I am apparently not done yet. Probably, I should not tell him that it is completed now, so that he keeps pushing it towards turning 100 and above.

Preface

During my studies, I was only exposed to pricing as being one element in the marketing mix. It was more or less discussed only in relation to promotions. The examples were mostly from retail, such as "buy 3, get 1 free" or "previously, 299€, now only 199€". Towards the end of my master's studies I conducted an internship for a German in-house consultancy, belonging to a very large pharmaceutical and chemical company group. As part of the marketing and sales team, I was assigned to a pricing project. Very soon I realized that the content of the project was very far from the kind of pricing I had seen at university. The goal of the project was to implement a fully-fledged global pricing software application. Therefore, we first had to establish a generic price waterfall. For this purpose, we needed to learn the pricing processes and, particularly, the price discounting practices of every local subsidiary. I do not recall the exact number, but we initially had a list of more than 100 different types of discounts. It was important to understand all of these discounts, to map and group them, and to challenge their purpose and existence.

In this project, I realized how complex pricing management really is. During the workshops that we conducted in the countries to learn more about their respective practices and processes, the participants would often come from various disciplines and hierarchy levels. For example, someone would give input on the strategic dimensions, sales managers would share their knowledge on the market and customer environment, and an IT expert would help us understand the numbers and labels in the IT systems (e.g., Navision, BI, SAP). Even though pricing was located within marketing at the central level, it had touch points with many other functions. I quickly learned that pricing is cross-departmental, which makes it more complex and can lead to conflicts among actors.

I found pricing extremely fascinating, but to some extent I was also quite shocked that it is such an unexplored area. It was clearly lacking maturity and professionalism compared with other functions, such as procurement and purchasing. My colleagues at that time, who have partly worked at renowned specialized pricing consultancies, confirmed my impressions. Pricing is very important for a business's success, but most companies do not really know how to do it and are in need of support. When talking to other people in my network, I could clearly see that some companies are also not aware of the potential of pricing. They simply rely on doing pricing in the same way they had always done it in the past. When realizing that firms had a pricing problem, it was a pure "trial and error" and "learning by doing" exercise to deal with symptoms but not the causes, often leading to new problems. No wonder pricing consultancies are prospering, I thought.

After developing a strong passion for pricing, I decided to look more into this apparent knowledge gap by joining Copenhagen Business School as a research assistant. As part of the government-funded Pricing Excellence Project, we interviewed many Danish firms to understand more about their approach to pricing and the challenges they faced. One of these companies turned out later to be the partner for my industrial PhD project. When the different companies told us, the researchers, about their challenges, they always asked us for answers: "Isn't there a theory that can solve this?". First, it became clear to me that practitioners had a clear misunderstanding of academic work. Second, we often could not find useful and practical answers to their problems in the pricing literature. I could easily confirm Cressman's (2012) thoughts that in the business-to-business context much of the work was actually done by practitioner-oriented authors, for instance pricing white papers of consultancies, such as McKinsey or Simon-Kucher & Partners.

With these experiences and impressions in mind, I believed the industrial PhD program, funded by Innovation Fund of the Danish government, would be a great and challenging opportunity to bring academia and industry closer together and to conduct pricing research that is of relevance for pricing practitioners. Studying and understanding what is *really* happening in firms in terms of pricing seemed the logical first step to me. The industrial PhD project implies that I would work for three years inside a case company while conducting research at the university for the firm. The time would be split equally, meaning that I would work 50 percent of the time in a work function that is relevant and related to my research and use the remaining time to conduct research for the firm. In the case firm,[1] a global provider of communication and hearing devices, I took over the role of pricing and value analyst within the central pricing function, located in the marketing department at the Copenhagen headquarters. Together with the team manager, the head of pricing and my university supervisor from the Department of Operations Management at Copenhagen Business School, we agreed on a research proposal. It was approved by the university and Innovation Fund, and I began as an industrial PhD fellow in January 2015. The results of this collaborative project are detailed in this dissertation.

[1] A more detailed description of the case firm of the industrial PhD program is provided in chapter 4, under "Reflection on research and industrial PhD setup".

English summary

Pricing is the number one driver of profitability (Hinterhuber, 2004) and deserves greater attention from practitioners and academics (Kienzler & Kowalkowski, 2017; LaPlaca, 1997; Liozu, 2015). Research on pricing processes in business-to-business contexts is still underdeveloped (Leone, Robinson, Bragge, & Somervuori, 2012; Rao & Kartono, 2009). In line with authors, such as Homburg, Jensen, and Hahn (2012) and Liozu and Hinterhuber (2017), Carricano, Trinqueste and Mondejar (2010) particularly stress that there is a "continued lack of research providing sufficient detail to understand how companies organize for pricing" (p. 468). It is important to shed light on the phenomenon of organizing in terms of pricing to better understand firms' internal pricing processes and how they arrive at prices, to eventually help firms to move towards smarter pricing and potentially higher profitability (Carricano et al., 2010; Liozu, 2015).

Based on this foundation and motivation, this dissertation addresses the following research question: *how do firms organize for pricing?* For this purpose, an organizing perspective is applied. Rather than focusing on the static aspects of the pricing organization, it draws attention to the process of organizing. Hence, it is a process lens that acknowledges dynamic ways of understanding social phenomena in organizations (Langley & Tsoukas, 2010).

This dissertation comprises three distinctive qualitative case studies to create a better understanding of the phenomenon in question. Case studies are the dominating qualitative research approach in industrial marketing (Piekkari, Plakoyiannaki, & Welch, 2010) and enjoy high popularity for studying individuals and organizations (Dubois & Araujo 2004). In such an approach, the researcher collects detailed and in-depth information about one, or more, case(s) (Berg, 2007). Qualitative research emphasizes people's lived experiences and aims at identifying the meanings people put on events, interactions, behavior, processes, and structures (Miles & Huberman, 1994). The primary data analyzed in this thesis was mainly collected via semi-structured interviews and observations.

All three papers study how companies, operating in business-to-business markets, organize for pricing. In particular, the studies investigate processes of how firms arrive at its sales prices, which means that the focus is on transactional pricing. The first study explores the processes of sales price approvals across locations and hierarchy levels by applying a practice-based approach. It finds that four practices, namely information processing, communication, interaction with the system, and control and accountability, are interlinked and enacted by the various actors involved

in the sales price decision-making process. These practices are used to solve problems of information, coordination, and control issues.

The second paper is a longitudinal study that examines how a firm develops a new price discount model, which entails implications on the pricing structure and delegation of pricing authority. The study deals with the key issue of how much decision-making authority the sales function should have to set sales prices and how price discounts are determined (Frenzen, Hansen, Krafft, Mantrala, & Schmidt, 2010). Instead of taking the structural and agency theoretical approach commonly used in this pricing domain, a process and organizational change approach was applied. During development of the price discount model, tensions arose as the project members encountered various dilemmas and the integration of local knowledge and global objectives into models appeared to be a problematic undertaking.

The last paper investigates the capabilities required for pricing and selling industrial services and solutions based on value. Drawing on a dynamic capability-based approach, this study identified a set of capabilities and examined them in depth. The findings suggest that value-based pricing and selling capabilities may be integrative, which means that they serve both operational and dynamic purposes. In this vein, it is argued that embedded learning processes underpin the capabilities.

Overall, this dissertation contributes to extant pricing research by identifying and unraveling the elements of organizing for pricing. The thesis finds that the four elements, that is practices and activities, structures and authority, actors and systems, and capabilities, are in an interdependent relationship. These elements serve two key purposes in pricing. First, the elements stabilize each other by creating temporary states and entities of the pricing organization. Second, these elements are used to develop and modify each other and, ultimately, to adapt and improve the pricing organization. In other words, the pricing organization is the outcome of continuous organizing; the elements of organizing for pricing are on the inside always “in the making”, even though the pricing organization overall may, at least temporarily, appear to be a fixed entity on the outside.

Danish summary

Den primære drivkraft i forhold til virksomheders overskud er prissætning (Hinterhuber, 2004), og til trods for dette savner prissætning den fornødne opmærksomhed fra den akademiske verden, såvel som hos praktikere (Kienzler & Kowalkowski, 2017; LaPlaca, 1997; Liozu, 2015). Og forskning indenfor prissætningsprocesser i business-to-business sammenhænge vurderes fortsat underudviklet (Leone, Robinson, Bragge & Somervuori, 2012; Rao & Kartono, 2009). I tråd med forfattere som Homburg mfl. (2012) og Liozu og Hinterhuber (2017), fremhæver Carricano, Trinqueste og Mondejar (2010) "den fortsatte mangel på forskning med tilstrækkelig detaljeringsgrad, til at forstå virksomheders organisering ift. prissætning" (s. 468). Videre undersøgelser af virksomhedernes prissætningsprocesser er vigtige, ikke blot for at forstå de interne prissætningsaktiviteter og de resulterende priser, men også for at kunne udvikle smartere og potentielt mere profitabel prissætning (Carricano mfl., 2010; Liozu, 2015).

Med udgangspunkt i ovenstående baggrund og motivation, vil denne afhandling adressere følgende spørgsmål: *hvordan organiserer virksomheder prissætning?* Til formålet benyttes et organisatorisk perspektiv, da fokus herved flyttes til selve organisationsprocessen frem for de statiske aspekter af selve prissætningsorganisationen. Denne tilgang anerkender herved en dynamisk model for forståelsen af sociale fænomener i organisationer (Langley & Tsoukas, 2010).

Denne afhandling udgøres af tre separate artikler baseret på tre korresponderende kvalitative casestudier, for at skabe en bedre forståelse af det omtalte fænomen. Casestudier er den primære kvalitative tilgang der benyttes i industriel marketing (Piekkari, Plakoyiannaki, & Welch, 2010) og er meget populære i forbindelse med studier af individer og organisationer (Dubois & Araujo, 2004) og udføres ved at forskeren indsamler detaljeret og dybdegående information, omhandlende et eller flere konkrete tilfælde (Berg, 2007). Den kvalitative forskning lægger vægt på personers faktiske oplevelser og forsøger at identificere den mening folk tillægger hændelser, interaktioner, processer og strukturer (Miles & Huberman, 1994). De centrale data i denne afhandling er primært indsamlet via semistrukturerede interviews og observationer.

Alle tre artikler undersøger hvordan virksomheder, der opererer på business-to-business markeder, organiserer deres prissætning. Specielt undersøges de processer der munder ud i virksomhedernes salgspriser, hvilket også er årsagen til at fokus lægges på prissætning ved transaktionsniveau. Det første studie undersøger de processer hvormed prissætningen besluttes under inddragelse af både lokation og hierarki. Dette opnås ved at benytte en praksisbaseret tilgang, som kortlægger fire praksisser: informationsbehandling, kommunikation, interaktion med

systemet, og kontrol og ansvar. Alle fire er indbyrdes forbundne og benyttes af aktørerne som er involveret i beslutningsprocessen vedrørende salgsprisen. Disse praksisser anvendes til at løse informations-, koordinations- og kontrolproblematikker.

Den anden artikel er en longitudinalundersøgelse af hvorledes en virksomhed udvikler nye modeller for prisrabatter, som påvirker både prissætningsstrukturen og delegeringen af beslutningsdygtighed. Artiklen undersøger det centrale problem, som omhandler hvor stor en autonomi salgsfunktionen skal have til at fastsætte salgspriser og i forlængelse hvordan rabatter skal fastlægges (Frenzen, Hansen, Krafft, Mantrala, & Schmidt, 2010). I stedet for at tage udgangspunkt i den struktur- og aktørteoretiske tilgang, som ofte anvendes indenfor dette prissætningsdomæne, benyttes en proces og organisatorisk forandringstilgang. Under udviklingen af prisrabatmodellen opstod der spændinger, i takt med at projektmedlemmerne konfronteredes med dilemmaer. Indarbejdelsen af både lokal viden og globale målsætninger i modellen viste sig også at være problematisk.

Den sidste artikel udforsker hvilke kapabiliteter der er nødvendige for at prissætte og sælge industrielle servicer og løsninger baseret på værdi. Ved at anvende en kapabilitetsbaseret tilgang, identificerer dette studie en mængde kapabiliteter og analyserer disse dybdegående. Resultaterne af studiet indikerer at værdibaseret prissætning og salgskapabilitet er integrative, hvoraf det forstås at begge spiller en operationel såvel som dynamisk rolle. I forlængelse heraf argumenteres at indlejrerede læringsprocesser understøtter disse kapabiliteter.

Det overordnede bidrag fra denne afhandling, i forhold til eksisterende forskning i prissætning, er at den identificerer og udreder en mængde forhold vedrørende organisationen af prissætning, ved at udpege fire gensidigt afhængige delelementer af prissætningen: praksisser og aktiviteter; strukturer og autoritet; aktører og systemer: og kapabiliteter. Disse elementer har to nøglefunktioner i prissætningen. Den første er at de stabiliserer hinanden ved at skabe midlertidige tilstande og entiteter i prissætningsorganisationen. Den anden funktion er, at de benyttes til at udvikle og forandre hinanden, hvad der ultimativt fører til en tilpasning og forbedring af prissætningsorganisationen. Med andre ord er prissætningsorganisationen resultatet af en løbende organisering; de interne aspekter ved organisation af prissætningen er stadigt foranderlige, til trods for at prissætningsorganisationen i sin helhed kan fremstå som en statisk størrelse.

Table of contents

List of figures

List of tables

List of abbreviations

ABC	Activity-based costing
ANZ	Australia/New Zealand
APAC	Asia-Pacific
B2B	Business-to-business
CBS	Copenhagen Business School
CFO	Chief financial officer
CM	Contribution margin
CPQ	Configure-price-quote
DACH	Germany, Austria, and Switzerland
EPC	Engineering, procurement, and construction
ERP	Enterprise resource planning
HSO	Head of sales
IMP	Industrial Marketing & Purchasing
IT	Information technology
KAM	Key account management
MIS	Management information systems
O&M	Operations and maintenance
PBC	Performance-based contracting
PPS	Professional Pricing Society
RBV	Resource-based view
RFQ	Request for quotation
RMS	Revenue management system
SM	Sales managers
SR	Sales representative
TCO	Total cost of ownership
VBP	Value-based pricing
VBS	Value-based selling
VBP&S	Value-based pricing and selling

1. INTRODUCTION

The dissertation aims to shed light on how firms organize for pricing. For this purpose, this chapter begins by briefly describing the motivation for conducting this research project, presenting the research questions and outlining the key contributions.

Motivation

Pricing research has existed for many decades, but there is yet much to be discovered within this diverse and complex domain (Hinterhuber, 2004; Kienzler & Kowalkowski, 2017; Leone, Robinson, Bragge, & Somervuori, 2012; Liozu, 2015; Reid & Plank, 2000). Pricing is the only one of the four Ps in the marketing mix that actually creates revenues, and not costs (Simon, 1992), and has, compared with the other elements, the biggest impact on financial results (Hinterhuber, 2004). However, it is also arguably the most neglected component of marketing (Forman & Hunt, 2005; Nagle & Müller, 2018). As stated by LaPlaca (1997), "Price is so important to the firm's success, one wonders why pricing has not received more attention" (p. 192), and this counts particularly for business-to-business (B2B) pricing (Leone et al., 2012). It was a so-called sleeping giant,[2] as many pricing enthusiasts would argue today. However, over the last few years pricing seems to have woken up, and there is now an increasing awareness among scholars and practitioners that pricing is the number one driver of profitability.

Pricing has been researched within various disciplines, such as economics, management accounting and marketing, and relies mostly on quantitative research. These roots have led to papers that were often normative, technical or experimental. As examples, economics considered prices in relation to the forces of supply and demand in a macro- and microeconomic perspective; the field of management accounting is mainly concerned with costs in relation to pricing; and the now emerging domain of behavioral pricing, rooted in behavioral economics, examines customers' reactions to prices by primarily conducting experiments (Monroe, Rikala, & Somervuori, 2015). Generally, only 14% of all pricing strategy research studies between 1995 and 2016 were qualitative (Kienzler & Kowalkowski, 2017). In this vein, Kienzler and Kowalkowski, (2017) argued that relying more on qualitative research designs would allow "researchers to gain first-hand, in-depth understanding of the intricate, context-specific processes" (p. 106).

[2] A sleeping giant is defined as "one that has great but unrealized or newly emerging power" ("Sleeping giant", 2017).

While the aforementioned research domains have increased our understanding of pricing, there is only very little research examining and explaining how companies in B2B markets price in practice (Leone et al., 2012). Research investigating pricing processes is rather underdeveloped (Rao & Kartono, 2009). Oxenfeldt (1973) realized at an early stage that there is a "gap between pricing theory and application" in practice (p. 48), meaning that the theories supplied are not being used by practitioners. This was confirmed by Noble and Gruca (1999), who highlighted the lack of research studying how companies actually set prices. In a similar vein, Ingenbleek (2007) reviewed more than 50 pricing articles and concluded that the pricing literature is scarce on theoretical developments explaining how firms make pricing decisions in practice. Thus, the knowledge about how firms make pricing decisions is restricted. This is supported by Iyer, Xiao, Sharma, and Nicholson (2015), who stated that "most academic approaches to pricing are either descriptive studies of pricing practices or normative frameworks offering prescriptions on rational price-setting behaviors" (p. 7).

The pricing literature is rather silent on how organizational aspects affect pricing decisions and processes. According to Homburg, Jensen, and Hahn (2012), there is only limited empirical research investigating how firms organize internally. Carricano, Trinqueste, and Mondejar (2010) also stressed this point, arguing that there is a "continued lack of research providing sufficient detail to understand how companies organize for pricing" (p. 468). In line with this statement, Liozu and Hinterhuber (2017) saw "high practitioner interest and the paucity of current research" and therefore called for further studies on "organizing for pricing excellence" as well as previously also on the "micro-foundations of pricing". Improving pricing processes and making them more mature will enable companies to move towards smarter pricing and arguably higher profitability (Carricano et al., 2010; Liozu, 2015). This grounding overall motivates this research dissertation.

Organizing perspective

The purpose is to create an overall better understanding for academics and managerial practitioners of how companies actually organize for pricing. Filling this research gap is important, as we currently miss profound knowledge of how firms organize pricing in practice and how they actually arrive at sales prices.[3] Therefore, this dissertation takes an organizing

[3] The focus of this dissertation is on transactional B2B pricing; therefore, sales prices are primarily considered rather than list prices. This is simply because often firms use list pricing purely for market positioning purposes, that is, price points. To quote the CEO of my case company, it then often becomes more of an "artificial pricing exercise", as the actual sales prices negotiated

perspective to study the phenomenon under investigation. This lens acknowledges the process perspective, advocating a more dynamic way of understanding social phenomena in organizations (Langley & Tsoukas, 2010). Further, it was expressed that "the apparent solidity of 'the organization' is an accomplishment of a process – organizing – which occurs in time and requires a day by day, indeed minute by minute, enactment: the organization of the organization, so to speak" (Grey, 2012, p. 15). This notion is rooted in the discussion that organizations are not just stable and solid but are rather fluid, and constantly moving, being subject to change (Hernes, 2008; Weick, 1979).

Method and research questions

In this papers-based dissertation, three distinctive case research studies are conducted to gain rich insights into internal organizing processes (chapters 6, 7, and 8; see chapter 4 for an overview). These rely to the greatest extent on the collection and analysis of qualitative data, mostly semi-structured interviews and observations. Below the main research question is stated, and the supportive research questions are defined; these are answered in the three distinctive studies forming the key part of this dissertation.

The overarching research question is:

How do firms organize for pricing?

The research question for Study 1 is:

How are pricing practices interlinked in the process of making sales price decisions?

The research questions for Study 2 are:

How is the development of a new price discount model impacted by the issue of local knowledge and global objectives?

How do the opposing forces and resulting tensions affect and unfold in the development process?

The research questions for Study 3 are:

What capabilities do firms seek to develop for value-based pricing and selling (VBP&S) for industrial service and solution offerings?

How does learning influence VBP&S for industrial services and solutions?

---

and paid by customers in B2B markets vary greatly from list prices. Discounts of more than 50% off the list prices are not uncommon (see also chapter 7). It is thus true that decisions on sales prices and price reductions/discounts affect bottom-line profitability more than list prices. Furthermore, some firms do not set list prices (see also chapter 6).

Contribution

By applying a process perspective of organizing, this dissertation contributes to extant pricing research by providing detailed contextual insights on the four elements of organizing for pricing. The elements identified and investigated in this thesis pertain to practices and activities, structures and authority actors and systems, and capabilities. Further, it is suggested that the organizing elements are in an interdependent relationship. The findings show that they stabilize each other, and thereby the pricing organization, but also enable it to develop and advance further. The pricing organization is the outcome of organizing, but has only a temporary state, as its elements are continuously "in the making", meaning that they are continuously subject to change and modification. This thesis creates a deeper understanding by investigating and unraveling the aforementioned elements of organizing.

Structure of thesis

The dissertation is structured as nine chapters; chapters 6, 7 and 8 are the respective research papers forming the key body of the thesis.

Chapter 1

In this chapter the dissertation is introduced and positioned within the field of pricing research. The motivation for conducting the research is described and the knowledge gap in pricing research is outlined to highlight the relevance of this dissertation. This is followed by an overview of the problem statement and supporting research questions. A brief overview of the key contribution is given.

Chapter 2

Building on the previously described motivation for conducting the research, this chapter reviews the related literature on pricing. In particular, it builds a knowledge foundation for the reader and highlights research gaps.

Chapter 3

After the review, the organizing perspective applied in this thesis is introduced, and a preliminary framework of organizing for pricing is presented.

Chapter 4

To present an overview, this chapter outlines three studies forming the key body of this dissertation. The commonalities of the three studies are briefly stated, and short summaries of each paper are provided.

Chapter 5

In this chapter the methodology applied in this dissertation is explained. More specifically, the reader is introduced to qualitative and case-study research. The applicability of this approach for investigating the phenomenon in question is expressed.

Chapter 6

This chapter contains the first study of this thesis and explores how two firms arrive at sales prices by taking practices as the unit of analysis. It illustrates that the identified interlinked practices help firms overcome issues of information, coordination and control. Insights are also gained on the multiple actors involved in the "chain of command", making the pricing process a collective effort, as well as on how systems and tools are used to make possibly better-informed sales price decisions.

Chapter 7

The second paper examines how a firm develops a new price discount model, which has the objective of using customer performance as the main source for defining a structured approach to price discounting in the future. Throughout this project, the team members, from the local sales subsidiary and headquarters, encounter dilemmas and aim to integrate local knowledge and global objectives into the model. This chapter particularly draws upon the literature on delegation of pricing authority as well as on organizational change.

Chapter 8

This third case study explores capabilities of VBP&S for firms moving towards a more service-oriented business model. More specifically, it investigates the integrative nature of such capabilities, arguing that they serve both operational and dynamic purposes. Further, it suggests that learning has a critical role for the pricing and selling of industrial services and solutions.

Chapter 9

The last chapter summarizes the key findings of the studies in relation to the research question of how firms organize for pricing. After a theoretical discussion, highlighting the overall contributions of this dissertation to extant pricing research, the managerial implications are outlined. Further, the limitations of the conducted research and avenues for further research are described. Last, this thesis closes by presenting some thoughts on pricing research and the pricing profession.

2. LITERATURE REVIEW

This chapter presents the literature review and considers the streams relevant to the main research question. More detailed and specific literature reviews are presented in chapters 6, 7, and 8 with regard to the respective studies.

In the past it was assumed that setting prices is rather costless, simple, and tactical rather than strategic (Rao, Bergen, & Davis, 2000). After realizing the complexity of pricing, however, researchers noted that pricing is actually "not … a series of quick 'knee-jerk' decisions" (Lancioni, 2005, p. 183). Some pricing researchers therefore began treating pricing as a process to further unravel its complexity. Besides a few seminal contributions, such as Dutta, Zbaracki, & Bergen (2003) and Zbaracki and Bergen (2010), the literature on pricing processes is still rather underdeveloped (Cressman, 2012). While the literature increasingly acknowledges pricing as a complex process, "our understanding of the pricing processes is still in its infancy" (Rao & Kartono, 2009, p. 9).

Pricing practices and information

To study pricing processes, it is vital to understand related activities and how different types of information are used and processed to make pricing decisions. The literature stream on pricing practices emphasizes the key role of information and the three pricing orientations (Ingenbleek, 2007; Ingenbleek, DeBruyne, Frambach, & Verhallen, 2003; Liozu & Hinterhuber, 2013c). In their research, Ingenbleek et al. (2003) and Ingenbleek and van der Lans (2013) saw a discrepancy between the normative pricing strategy literature and actual pricing practices as observed. A pricing strategy is the means by which a company can meet its pricing objectives, for example penetration pricing, where the price is set below the average market price to attract new customers or increase market share (Noble & Gruca, 1999; Tellis, 1986). Pricing practice is the set of all activities executed by a firm to arrive at a price decision, for example a value-informed pricing practice (Ingenbleek et al., 2003). Whereas pricing strategies can be observed in the marketplace, practices are hidden inside the firm (Ingenbleek & van der Lans, 2013).

The three main price-setting practices are, in the eyes of Ingenbleek et al. (2003), related to the consideration of competitor, cost, and value information. In other words, a practice in this regard is defined by the key type of information used in the pricing process for making a price decision. While some authors adopt this term for that purpose, others more commonly refer to

pricing orientation (Hinterhuber & Liozu, 2013c) or pricing approaches. Ingenbleek (2007) stressed that many different actors are involved who process and work with the information to make a pricing decision, and called for further research in this regard. Next, this chapter takes a slight detour by looking at the three distinctive types of information, that is, the three pricing practices.

Cost information

Using cost information to make pricing decisions implies an internal focus of the selling organization. Typically, firms using this approach first allocate and quantify the fixed and variable costs for a given product or service, and then add a markup on top to set a price. Cost-based pricing sets the limit price, thereby ensuring profitable pricing (Monroe, 2003). However, it is limited, as it does not consider the competitive environment and the customer's demand and willingness-to-pay (Liozu & Hinterhuber, 2012). Management accounting research focuses greatly on costs of pricing decisions,[4] such as activity-based or target costing (Cardinaels, Roodhooft, & Warlop, 2004). While it is often believed that cost information is easy to allocate and precise, this is not necessarily the case. Further, different types of costs impact pricing decisions, and the availability of cost types may bias pricing decisions (see, e.g., Bloomfield & Luft, 2006; Drake & Haka, 2008; Lucas, 2003; Van den Abbeele, Roodhooft, & Warlop, 2009). The management accounting literature also discusses pricing mostly in relation to transfer pricing and costs. Transfer pricing, that is, pricing transactions within different units of a firm, looks at the roles of regulations and tax-related topics. Management accounting is often criticized for its rational perspective on pricing decisions that is not able to fully explain pricing behavior given its key focus on costs for making pricing decisions. However, it has largely been informed by other perspectives, such as psychology (Luft & Shields, 2010) and sociology (Miller, 2006), to compensate for this potential limitation. Such research does eventually relate it back to cost topics in most instances. As an example, management accounting has investigated cost issues in relation to fairness and inequity aversion (Drake & Haka, 2008; Kachelmeier & Towry, 2002; Luft & Libby, 1997) and attribution biases (Bloomfield & Luft, 2006).

[4] Note that in this dissertation costs and accounting activities, and therefore also the management accounting and economics literatures, are not considered to a great extent. For some, if not all, of the case companies, the margins are rather high, making cost considerations for pricing decisions not highly relevant. Further, the pricing literature as well as the studied companies move towards prioritizing customer rather than cost information in pricing management. The two aforementioned literature streams, however, have a rather cost-driven focus.

Competitor information

Some firms rely on prices of their competition as the main source for setting prices (Liozu & Hinterhuber, 2012). In many industries, gathering and tracking competitive price information is not easy. While firms may (have to) publish their list prices, the actual discounted sales prices are not easily obtained. Quite often the sales force must gain further information about this when talking to customers. However, purchasers often provide false information in order to reduce prices (Nagle & Müller, 2018). Overall, the competitor-based approach may lead into price wars and does not consider the customer's needs.

Value information

The value-based approach is argued to be superior to its two alternatives (Anderson & Narus, 1998; Cressman, 1999; Hinterhuber, 2004; Nagle & Müller, 2018). Here, the selling company researches the customers' value perceptions and quantifies their willingness-to-pay in setting its prices. But obtaining and assessing this information, for example via a conjoint analysis, is not a simple undertaking (Hinterhuber, 2008; Nagle & Müller, 2018). Overall, adopting this approach to pricing is troublesome, as many different challenges are encountered, which is also why only a few firms have successfully implemented it (Hinterhuber & Bertini, 2011; Liozu, Hinterhuber, Perelli, & Boland, 2012).

Returning to the literature on pricing practices, Ingenbleek (2007) in his conceptual paper reviewed the studies on pricing practices, all from different fields, and found that around half are quantitative studies. His paper leads to the impression that descriptive, non-normative research on pricing is perceived as pricing practice research. Ingenbleek (2007) concluded that (1) pricing practice studies are limited and fragmented, (2) this stream has been facing rather weak development, and (3) the theoretical underpinnings are weak as well. When looking at the papers considered by Ingenbleek (2007), it becomes evident that most pricing studies use the term "practice" in a rather imprecise way. It seems that pricing research is somewhat unclear on what a pricing or price-setting practice actually is.

In addition to the above, it appears that pricing practice research is not grounded in practice theoretical considerations. In the practice theory literature it is stated that practices are central for understanding organizational and social phenomena (Korica, Nicolini, & Johnson, 2017). While there are many different views on what constitutes a practice, it is generally agreed that practices are "orderly materially mediated doings and sayings" (Nicolini & Monteiro, 2017, p. 2). The

practice concept and its perspective are useful for understanding the process of organizing (Brown & Duguid, 2001; Gherardi, 2001; Nicolini, 2012; Schatzki, Knorr Cetina, & von Savigny, 2001).

To conclude, pricing practices are an interesting avenue for future research given their potential to reveal new insights on pricing processes. In this vein, it is also worth noting that Ingenbleek et al. (2003) called for more research on other pricing practices and other pricing processes, such as price alterations. In the key studies so far, pricing practices are defined and considered on a rather high level (e.g., Ingenbleek, 2007; Ingenbleek et al., 2003) and are not really based on a practice theoretical approach. As a result, they do not offer rich insights into what is happening inside firms with regard to practices and sets of activities. For example, we still lack detailed insights into how the three key types of information are being used and processed. As initially advocated by Geiger and Kelly (2014) with regard to sales management research, it is similarly argued for pricing that the application of a more practice-based approach will lead to new opportunities, as it sheds light on the "variety of actors and objects in a rich, contextual, recursive and interactive tapestry of socio-material practices" (p. 229).

Psychological aspects of pricing

Several authors (e.g., Hinterhuber & Liozu, 2015, 2017; Kienzler & Kowalkowski, 2017) have argued for using new lenses, such as psychological and sociological theories, to better understand the behavioral and psychological aspects of pricing in B2B markets. The general argumentation is here that "organizations are made up of individuals, and there is no organization without individuals" (Felin & Foss, 2005, p. 441). Decision-making in pricing is thus not purely rational due to human nature, and to learn about the "violations of rational choice" (Hinterhuber, 2015, p. 65), one should not only consider the organizational aspects but also explore the individual factors impacting pricing processes.

With regard to the earlier mentioned criticism, several researchers (e.g., Kahneman, Knetsch, & Thaler, 1986, 1991; Kahneman & Tversky, 1973, 1979, 1984) have challenged human rationality in judgment and decision-making, clearing the pathway for a new research area called behavioral economics. By moving away from purely rational models, such as marginal cost pricing and simplified supply-and-demand models, this stream of research acknowledges the complexity of the human mind and its cognition. Much of the research conducted in this field has great implications for pricing.

From behavioral economics emerged the literature stream of behavioral pricing, which studies consumers' reactions to pricing aspects by taking a more psychological perspective (Koschate-Fischer & Wüllner, 2017). Thus, it is primarily concerned with consumers' behavior and cognition, for example perceptions of price fairness (Somervuori, 2014). However, other definitions indicate that the focus on price behavior and how price information is being processed does not necessarily need to relate to the consumer only, but may also concern B2B customers and may be even considered inside the selling firm (Woodside, 2015). However, such research on pricing is very limited (see, e.g., Hallberg, 2017b; Kienzler, 2018; Rusetski, 2014 for exceptions).

Decision-makers are exposed to biases and heuristics, such as loss aversion or status quo bias (Kahneman, 2003). It is often believed that the resulting bounded rationality, discovered by March and Simon (1958), can influence decisions. With regard to judgment, many firms use IT-based systems as a commercial decision resource to overcome biases and heuristics that humans are subject to and thereby foster rationality in decision-making. Such systems and tools may increase the chances of value appropriation and profit extraction (Hallberg, 2017a). However, not all biases and heuristics necessarily negatively impact decisions (Hallberg, 2017a; Kahneman, 2003; Matzler, Uzelac, & Bauer, 2014). For example, under certain circumstances, such as high uncertainty, relying on intuition and making use of its inherent biases and heuristics, such as the "fast and frugal heuristics" (Gigerenzer, 2007), may yield better results (Dane & Pratt, 2007; Tversky & Kahneman, 1974).

To conclude, understanding the roles of actors is critical for pricing processes. A few avenues for further research may be derived from the literature review. First, more qualitative research may be conducted that looks more deeply at the cognitive traits of people that affect pricing processes, particularly within a B2B context. A potential downside of the extant research is that the conducted studies are predominantly based on quantitative surveys and are experimental. This means that the answers provided do not have real consequences, as they do relate not to real-world decisions but rather to hypothetical situations (Kienzler, 2017). Second, pricing is a cross-functional effort that involves various actors, for example for supplying relevant pricing information. Therefore, it seems fruitful to better understand the psychological aspects in relation not only to pricing decisions but also to the group dynamics and interactions among such employees in the pricing process (Kienzler, 2017). Third, with the increasing advancement of technologies, many of the tasks are now taken over by systems, such as for processing and analyzing information. However, we know relatively little about how such systems and tools are

being used as part of pricing processes and to what extent they influence pricing decisions (Hallberg, 2017a).

Pricing capabilities

A limited, but increasing number of studies has begun to explore pricing capabilities that firms use in pricing processes (e.g., Dutta, Bergen, Levy, Ritson, & Zbaracki, 2002; Dutta et al., 2003; Hallberg, 2008; Liozu & Hinterhuber, 2014). As opposed to pricing practices, research on pricing capabilities draws very clearly from theoretical considerations, in this case the capability-based view of the firm.

The subject of organizational capabilities has its roots in the resource-based view (Dutta et al., 2003), where it is mentioned that "activities have to be carried out by organizations with appropriate capabilities" (Richardson, 1972, p. 888). Helfat and Peteraf (2003) stated that "organizational capability refers to the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular result" (p. 999). According to Grant (1991), it is "the capacity for a team of resources to perform some task or activity" (p. 119). Similarly, Amit and Schoemaker (1993) defined organizational capabilities as a "firm's capacity to deploy resources, usually in combination, using organizational processes, to affect a desired end" (p. 35). Similarly in terms of process thinking, Dutta et al. (2005) derived that capabilities are an intermediate transformation ability that converts inputs (resources) into outputs the firm desires.

With regard to pricing and capabilities, Dutta et al. (2003), treating pricing as a process, saw pricing capabilities as a set of complex routines, skills, systems, know-how, coordination, mechanisms, and complementary resources with the purpose of increasing firm performance. They argued that two dimensions of price-setting capabilities exist: the first dimension exists within a firm, that is, identification of competitive prices, setting of pricing strategy, and analysis and buy-in of price proposals; and the second dimension exists vis-à-vis customers and refers to pricing activities with customers, such as negotiating price changes and convincing them of the price change logic. Liozu and Hinterhuber (2013c) defined pricing capabilities as a "resource and activity configuration that [...] enables a firm to build a competitive advantage and to achieve superior profitability as a result of pricing activities" (pp. 608–609). Adding to previous work on pricing capabilities, they developed a construct of 10 items along three dimensions, namely customer (e.g., ability to quantify willingness-to-pay), competitor (e.g., ability to respond to

market changes) and company (e.g., establishing price-management processes; Liozu & Hinterhuber, 2014). Recent research also confirmed a positive relationship between pricing capabilities and firm performance (Liozu & Hinterhuber, 2014).

Pricing capabilities are of strategic importance, as they can lead to competitive advantages (Dutta et al., 2003; Hallberg, 2008). We also know that market environments are constantly changing, requiring firms therefore to adapt to gain or sustain a superior position. Pricing capabilities are not easily bought, because of their social character (Dutta et al., 2002), and instead must be built and cultivated over time (Liozu, 2015). The pricing capability literature already points to the dynamic nature and the need to adapt capabilities to changing external factors, such as customer needs (Liozu, 2016c).

Researchers investigating capabilities more explicitly aim to distinguish between operational and dynamic capabilities. Operational capabilities determine how a firm creates its revenues today; dynamic capabilities help it modify operational capabilities to generate sales tomorrow (Helfat & Winter, 2011). While the theory on dynamic capabilities is argued to be still in its infancy, there is a common understanding that firms operations and routines need to be developed and modified through so-called dynamic ("higher order") capabilities (Winter, 2003).

It is evident that pricing capabilities, taken together, are essential to successful pricing (Liozu & Hinterhuber, 2014), and there is a need to explore their dynamic nature. The concept of pricing capabilities is key to understanding price decision-making and the organizational challenges in pricing (Johansson, Hallberg, Hinterhuber, Zbaracki, & Liozu, 2012). Pricing research, thus far, focuses to the greatest extent on identifying and describing desired or needed operational capabilities for specific pricing purposes rather than on examining how such capabilities are changing in firms and how they serve dynamic purposes. This, however, seems to be crucial for advancing our knowledge on pricing capabilities. Simply put, more research on capabilities, and how they change, in pricing processes is needed, as its role is seen to be crucial.

Pricing structures and authority

This section of the literature review discusses how the pricing organization may be structured and how pricing authority may be allocated. Homburg et al. (2012) observed two dimensions of pricing structure: horizontal dispersion of pricing authority and vertical delegation of pricing authority. Pricing authority is referred to as the influence of a unit or function on pricing decisions (Joseph, 2001).

Overall, the degree of formalization, or the "extent to which formal rules and standard procedures govern the pricing process" (Burkert, Ivens, Henneberg, & Schradi, 2017, p. 197), varies greatly among organizations. Some companies have clearly defined roles, responsibilities and processes; others appear to be less formally organized (Smith, 1995). Such organizations often rely on past behavior and experience of employees and use tacit knowledge to reach pricing decisions. Although empirical research in this area is rather sparse (Burkert et al., 2017), it is the general belief that many companies lack the formal structures in pricing management (Baker, Marn, & Zawada, 2010). An indicator might also be that most companies to date do not employ pricing functions and do not establish separate pricing processes. Rather, these are part of sales or product management activities; in addition, pricing is treated only as a tactical activity (Liozu, 2015).

Horizontal dispersion of pricing authority

Horizontal dispersion is concerned with allocation of decision rights across central departments, such as marketing, sales or finance (Homburg et al., 2012). Dispersion of influence refers to the distribution of power among different central functional groups (Krohmer, Homburg, & Workman, 2002). As opposed to vertical delegation, which deals mostly with transactional prices, the horizontal dimension is mainly concerned with strategic pricing decisions (Homburg et al., 2012), such as pricing objectives or list prices. The location of pricing management often depends on the pricing approach and competitive environment. For example, a company with a strong cost focus in a highly competitive market is likely to grant more power over pricing aspects to the finance and controlling departments to ensure profitable contribution margins.

For reaching pricing decisions, the functions are often interdependent and need to work jointly in the pricing process (Homburg et al., 2012). The cross-functional nature of pricing makes it potentially more complex, as conflicts among the different units may arise (Lancioni, Schau, & Smith, 2005; Liozu, 2015). For instance, whereas the controlling functions might want to price on costs, marketing might follow the philosophy that prices should be based on customers' value perceptions. In general, pricing is said to be primarily influenced by the departments of marketing, sales and controlling (Krohmer et al., 2002).

As shown, firms need to decide which department or function should be responsible for pricing management. Companies are increasingly establishing dedicated pricing functions with pricing managers and pricing analysts, which also relates back to the dimension of formalization

(Carricano et al., 2010; Liozu & Ecker, 2013). Even with dedicated pricing functions, the question remains whether they should be established as an independent department, or as part of an existing one, such as marketing or finance.

With the increasing development of central pricing management, some firms even hire chief pricing officers, who report directly to the CEO (Liozu & Hinterhuber, 2013c; Liozu, 2016d). There are many different titles for specialized pricing positions, for example pricing and value analyst, revenue manager or strategic pricing manager. In some companies there is no staff employed that explicitly concentrates on working with pricing. However, specialization may also mean that pricing boards and committees are formed, such as for reviewing and approving launch prices (Liozu, 2015). Companies are increasingly specializing and explicitly defining tasks and activities for pricing management (Liozu, 2016d).

Vertical delegation of pricing authority

The vertical dimension relates to the hierarchical decentralization of authority, and deals mostly with tactical pricing topics (Homburg et al., 2012). Central to pricing delegation is thus the question of whether decision rights for setting and negotiating prices should be located at a central or a local level (Stephenson, Cron, & Frazier, 1979).

This literature draws heavily on agency theory and examines the problem between the principal and the agent. The sales force, that is, the agent, is closer to customers and has more specific local knowledge about their needs and willingness-to-pay than does the principal, that is, more centralized management. Therefore, it may be argued that the sales force should have decision-making authority, so that the firm can make effective use of their knowledge. However, the local sales function might also behave opportunistically, and close deals at low prices, for example because this requires less effort (Joseph, 2001; Lancioni et al., 2005). In other words, delegating decision rights to the sales force might lead to results that are inconsistent with the headquarters' objectives (Frenzen, Hansen, Krafft, Mantrala, & Schmidt, 2010). This argues then for a more centralized approach to pricing authority, but transferring the local knowledge to the principal can be costly (Jensen & Meckling, 1995). In short, the delegation of pricing authority has to be well balanced between local knowledge and global objectives (Jensen & Meckling, 1995; Krafft & Hansen, 2011). In certain situations, such as markets characterized by high

environmental uncertainty and customer heterogeneity, delegating pricing authority to the sales force may be beneficial (Frenzen et al. 2010; Lal, 1986; Nagar, 2002).[5]

In sum, the literature on organizational pricing structures and delegation of pricing authority has so far greatly contributed to our understanding of pricing and pricing organization, but it also confirms the claims of various authors, such as Homburg et al. (2012), Mantrala et al. (2010), Carricano et al., (2010) and Balan (2016), that we still lack an understanding of how firms organize for pricing in practice. The reviewed literature in this section describes the various structural choices firms have, for example centralizing a specialized pricing function for strategic pricing and price controlling, or delegating pricing authority to the sales force for transactional pricing. However, this also highlights its key limitation. This literature does not really inform the reader in a detailed way about what is truly happening inside firms, meaning how companies organize for pricing and make processes work within different structural choices. Structures in pricing are not naturally given choices that already exist by themselves. Rather, these structures also need to be developed as part of pricing. So far, profound knowledge of how firms go about developing structures, price approval levels or delegation of pricing authority, is missing. In other words, we might have considerable expertise on pricing organization due to agency theoretical and descriptive quantitative studies, but not in how companies are organizing for pricing.

[5] Please see Balan (2016) or Frenzen et al. (2010) for a detailed overview of drivers as well as the advantages and disadvantages of price delegation.

3. ORGANIZING PERSPECTIVE

As elaborated on previously, the purpose of this dissertation is to investigate how firms organize for pricing. In this chapter, the organizing perspective, developed from various sources and forming the overarching theoretical framework of this dissertation, is presented. This is followed by the derivation of a preliminary framework of organizing for pricing, which is strongly based on and connected to the conducted literature review. Furthermore, a short recap of the identified research gaps is given and the different theories of this dissertation are reflected upon.

Several authors have recognized organization as a verb and a noun (Bakken & Hernes, 2006; Weick, 1979). Organizing emphasizes the process perspective (Langley & Tsoukas, 2010), as organizations "are a complex set of social processes" (Scott & Davis, 2015, p. 7). Generally, it is argued that one should talk about organizing rather than organization (Weick, 1979). Using the gerund (-ing) shows the ambition to move towards a more dynamic perspective for investigating organizational phenomena (Langley & Tsoukas, 2010). As argued by Hernes (2008), organizing "implies attempts at creating a meaningful and predictable order out of a tangled world" (p. xiv).

Although organizing stresses the process perspective, structures are also mentioned in this regard. Employees, for example, are restricted by structures, but they also make use of and modify them through organizing (Scott & Davis, 2015). However, organizing goes beyond structure. It can be a solid "thing" but also a process, meaning that organization is the result of a process, namely organizing, that occurs in time and requires day-by-day enactment (Grey, 2012).

Because of this, Whittington and Melin (2003) argued, the success of a firm lies not just in having the right strategy and structure in place, but in possessing the required capabilities to be continuously reinventing them. In other words, the organizing approach "does not deny the existence of events, states, or entities, but insists on unpacking them to reveal the complex activities and transactions that take place and contribute to their constitution" (Langley & Tsoukas, 2010, pp. 2–3). Hernes and Weik (2007) explained that in a recursive interpretation the current form of the organization is the foundation for organizing. Hence, the current state contains the history of past events, experiences and structures, which are taken up into the present, and which provide "a basis from which organizing processes are projected into the future" (Hernes & Weik, 2007, p. 261).

To study the phenomenon in question then, the organizing perspective in this dissertation acknowledges processes of pricing: "the organization of the organization, so to speak" (Grey,

2012, p. 15), only in terms of pricing. However, it also considers the less fluid and temporary forms of the components of pricing.

Whereas organizing is the overall perspective taken in this thesis, the three studies apply different theoretical lenses that pertain to the specific elements of organizing being studied. The theoretical approaches used in each study are described and discussed in greater detail in their respective chapters: chapters 6, 7 and 8.

Preliminary framework on organizing for pricing

One can derive from the literature review that when investigating how firms organize for pricing, the following may need to be considered: practices and activities in relation to information being used, roles of the involved actors and systems, capabilities, and the structures and levels of pricing authority. However, as discussed in the previous section, one should not simply look at the current and accomplished entities and states but should also unravel how these are evolving and how they affect processes and interactions. For the purpose of this thesis then, organizing for pricing is defined as an *information-intense process, characterized by the deployment of practices and activities, actors and systems, and capabilities within organizational structures and levels of authority.*

Figure 3.1 illustrates the elements of organizing as derived from the literature review. The dashed line with regard to structure and authority indicates that even though pricing structures and the delegation of authority shape the boundaries and determine the frame of the other elements, it is believed that it is also those elements that may reorganize and newly define such structure and authority. The second dashed line referring to information illustrates that the information, which is taken as an input into the pricing process, is being processed by the elements to lead to the sales price decision.

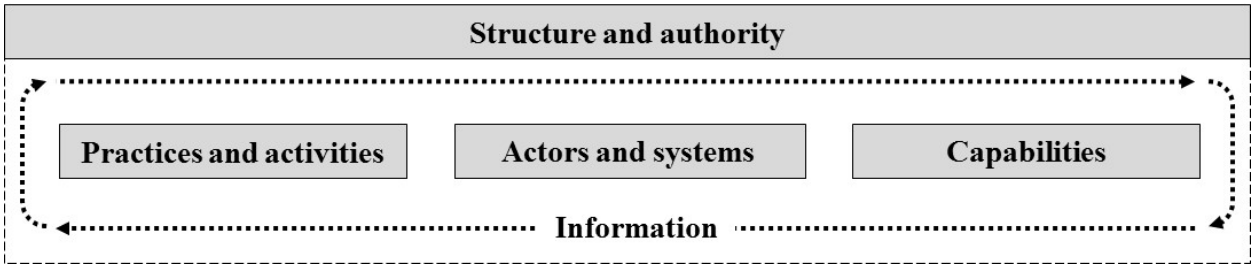


Figure 3.1: Preliminary organizing for pricing framework.

Recap on potential areas for contribution

In the literature review it was demonstrated that pricing processes are complex and that challenges are likely to be encountered. A research gap on organizing for pricing was identified and was outlined as a promising field for further research. As of now, empirical pricing research is limited in this regard (Carricano et al., 2010; Homburg et al., 2012; Liozu, 2015; Rao & Kartono, 2009). The reviewed literature streams provide valuable and critical insights but also point to limitations in the overall identified knowledge gap. Given the outlined importance and the lack of expertise in both managerial practice and academia, this dissertation aims to address this gap to further enhance our understanding of this phenomenon. The more specific knowledge gaps and potential areas for contribution within the realm of organizing for pricing are briefly summarized next.

Practice and activities

A focus on studying practices, which are hidden inside the firm (Ingenbleek & van der Lans, 2013) potentially leads to new and more detailed insights on how companies organize for pricing. It is believed that more practice research is needed, particularly at a more micro level. Only in this way can the practice lens depict "the fine details of how people use the resources available to them to accomplish intelligent actions, and how they give those actions sense and meaning" (Gherardi, 2012, p. 2), and thus, potentially lead to in-depth pricing insights.

Actors and systems

Organizations are made up of people, who act as decision-makers in pricing and live the pricing processes. They are therefore an important element of organizing. Based on the literature, it can be said that further research on the more cognitive and psychological aspects would enhance our understanding of the actors in pricing processes (Hinterhuber & Liozu, 2015, 2017). Furthermore, the literature thus far is rather sparse on how the individuals involved in pricing decisions interact with each other to reach price decisions. In this vein, it is worth highlighting that studying IT-based systems as commercial decision resources is a promising area for future research (Hallberg, 2017a).

Capabilities

Reflecting on the research on pricing capabilities has, in a detailed way, enhanced our understanding of firms' pricing processes and of what it takes from a capability perspective to make pricing more successful in organizations. Pricing capability research is mostly concerned with the needed and desired pricing capabilities for specific purposes, such as value-based pricing or increasing firm performance (e.g., Hinterhuber, 2004; Liozu, Hinterhuber, & Somers, 2014). However, it appears that pricing capabilities are mostly discussed as being fully developed and as "in use" in practice, and we lack understanding of how firms go about adapting and reconfiguring such capabilities. In other words, pricing capabilities are thus far mostly considered with regard to their operational purposes. Based on the insights from the literature, considering the dynamic and operational nature of pricing capabilities is crucial when examining how companies organize for pricing.

Structure and authority

As derived earlier, organizational structures and authority levels are a sort of operating frame and define boundaries. Although they are rather static, they do support and stabilize processes. They are integral to organizing, as initially described. Not considering them when studying how firms organize for pricing might eventually lead to less complete findings. Several authors have called for more research on delegation of pricing authority, particularly to create a better understanding of how sales price decision rights are actually centralized or delegated in practice (Balan, 2016). In this regard, it also seems that using alternative lenses, next to agency theory, seems promising for further advancing in this field, with Homburg et al. (2012) being a prominent example here (Balan, 2016; Yuksel & Sutton-Brady, 2006). Furthermore, although structures and authority levels play a critical role in how firms organize pricing, definitions and modifications of structures and levels of authority are also outcomes of organizing, an area that is clearly underresearched with regard to pricing. While there is generally a lack of research on such means of governance and control in pricing (Hallberg & Andersson, 2013), we lack, even more, an understanding of how firms choose and develop organizational structures and authority levels.

Moreover, in line with Dutta et al. (2003) and others, pricing is seen as a social process. Thus, a focus on static structures and the like neglects social features, such as behavior, interaction, conflict and learning. Further, authors have also pointed to the critical role of irrational and intuitive behavior that actually might positively influence firm performance (Liozu &

Hinterhuber, 2013a). These social aspects are known to play important roles in pricing processes (Liozu & Hinterhuber, 2013b, 2013c; Hallberg, 2017b; Hinterhuber & Liozu, 2017) and seem to be critical in explaining how firms organize for pricing.

Reflection on theoretical lenses

In this section clarification is provided on the different kinds of theories that were introduced and discussed in the literature review (chapter 2) and this chapter on the organizing perspective (chapter 3). It is evident that some of these theories, such as agency theory or capability-based view, are rather normative, whereas other lenses are following a more practice and processual approach. The organizing perspective as mentioned earlier in this chapter is the overarching theoretical lens, but other theories are used to study particular elements in the respective papers, for instance the capability-based view for studying capabilities, which form an essential part of the organizing for pricing framework. For clarification, the focus on social relationships, interactions and processes will be key, also when investigating normative characteristics of pricing.

There are various normative and processual/practice studies that greatly contributed to the pricing domain. Given the nature and complexity of pricing, it is important not to disregard the rather fixed and normative characteristics, such as structures and capabilities. As highlighted earlier, they are an essential element as they affect interactions and processes. Leaving out processual elements, on the contrary, also means that important insights might not be captured. The literature review has pointed towards the importance of including both normative and processual aspects for investigating how firms organize for pricing.

While not all scholars are supportive of a non-parsimonious theoretical or multi-paradigm approach, it needs to be highlighted that it is not the goal of this research to construct a theory which is internally coherent and parsimonious, but to create a better and more in-depth understanding of the phenomenon in question. It is believed that it is not worth losing the ability to capture the phenomenon in its complexity to achieve theoretical parsimony.

That is also why ruling out either the normative or processual aspects when studying phenomenon of organizing for pricing for the beauty of theoretical parsimony might come at a loss. Scholars in other fields, for example, Sil & Katzenstein (2010) on politics, have conceded that the phenomena they are studying are so complex and important that actually insisting on theoretical parsimony at an ontological level results in explanatory sacrifice.

Overall, the organizing perspective presented in this chapter is somewhat similar as to what Lewis and Grimes (1999) considered paradigm bridging. Here, the term transition zone is introduced based on the example of structuration theory (Gioia & Pitre, 1990), where one does not separate between structuring processes and formal structures. Something very similar to what is also discussed in this thesis with regards to pricing structures and delegation of pricing authority.

Therefore, it is important to also consider and discuss normative theories in the literature reviews of the respective papers, particularly if they have been dominating the research domain as it is the case with pricing. Introducing then the organizing perspective as a potential transition zone also gives the opportunity and value of communicating across paradigms (Lewis & Grimes, 1999), and to illustrate to the reader that the "phenomena in question can legitimately be subject to various research strategies (Weaver & Gioia, 1994, p. 577). This also helps to establish a common ground, and to ensure that a dialogue may be created rather than opening a new separate, parallel path to study the same phenomenon.

4. DISSERTATION OUTLINE

In this chapter, the three studies forming the key body of the thesis are introduced, followed by a reflection on the research process as an industrial PhD fellow. Even though I was employed at a case firm, the numbers of companies studied varies in the papers (see chapters 6, 7 and 8 for more details about the included case firms). All three papers explore pricing processes and how companies organize for pricing, which therefore links back to the initial motivation for conducting this project and the identified knowledge gap. A papers-based dissertation usually implies that each paper tells its very own little story, compared with a monograph with only one big single story. When looking at the three research studies that made it into this dissertation (see Table 4.1), it may appear that they are rather fragmented. Although each of the three studies stands alone, I describe very briefly the most evident commonalities between them.

First, all three studies investigate how selling firms arrive at their sales prices. This means that the key focus is on the context of transactional pricing. The first study particularly addresses the sales price approval process across locations and hierarchy levels. The second paper explores how a firm develops a new, rather centralized price discount model that determines the sales prices in a local sales organization. The last paper explores the needed and desired capabilities for pricing and selling industrial services and solutions based on value. Second, all studies examine pricing in a B2B context. Third, although the roles of the customers and competitive environment are considered, the key focus is on the internal pricing processes, that is, how the studied firms organize for pricing. Fourth, from a methodological point of view, all three papers employ case-study research and are qualitative. Fifth, all three papers do not consider individuals as isolated decision-makers. Rather, they take a social perspective and look at the interactions occurring among multiple actors to arrive at sales price decisions. A short summary of each individual paper follows. The full studies can be read independent of each other in chapters 6, 7, and 8, respectively.

Table 4.1: Overview of research studies

Study	I	II	III
Titles	A practice-based approach to collective decision-making in pricing	Developing a price discount model: A process perspective	Value discovery and learning: Capabilities for value-based pricing and selling of industrial services and solutions
Other co-authors	• Sof Thrane • Michael Fetahi Laursen • Katrine Fabritius Kornmaaler	• N/A (single-authored)	• Jawwad Z. Raja • Thomas Frandsen • Christian Kowalkowski • Sof Thrane
Research topics	• Sales price approval processes • Practices for arriving at sales prices • Sales price decision as a collective effort	• Development of a new price discount model • Dealing with tensions in price discounting • Opposing positions between central pricing and local sales management	• Capabilities for value-based pricing and selling • Role of learning for pricing and selling industrial services based on value
Literature streams	• Accounting and control • Market	• Delegation of pricing authority • Pricing management • Organizational Change	• Value-based pricing • Value-based selling • Servitization
Theoretical foundations	• Practice-based approach	• Process theory • Change theory	• Dynamic capability-based view
Number of case firms	• 2 firms	• 1 firm	• 2 firms
Conference presentations	• Nordic Working Life Conference, 2016 • Industrial Marketing & Purchasing (IMP) Asia Conference, 2016 • CBS Department Seminar, 2015 • CBS 1st Work-in-Progress Seminar, 2015	• CBS 2nd Work-in-Progress Seminar, 2016	• Service Operations Management Forum, 2017 • Industrial Marketing & Purchasing (IMP) Conference, 2016 (paper was short listed for special issue)
Publication status	• Submitted to *Qualitative Research in Accounting & Management* (February 2018)	• Not submitted (yet)	• Under second round of review at *Journal of Business Research* (February 2018)

Summary paper I –

A practice-based approach to collective decision-making in pricing

Price decision-making in B2B environments is very complex, which leads to three key problems that firms need to overcome. First, information, for example on costs or customer value, is often imprecise, difficult to process and hard to measure. Second, the information is located in different parts of the firm, often across functions and locations, which means that coordination is

problematic. Third, the involvement of different parties in the pricing process results in a control problem.

Pricing scholars have investigated this complexity through empirical research to a limited extent only. This research mostly ignores the organizational process of sales price decision-making. Therefore, this study responds to calls for further studies and to claims that the literature does not provide "sufficient detail to understand how companies organize for pricing" (Carricano et al., 2010, p. 468). Specifically, we seek to answer the following research question: *How are pricing practices interlinked in the process of making sales price decisions?*

To shed light on the phenomenon in question, this paper applies an interdisciplinary, practice-based approach that draws on the market and accounting literatures. It thereby takes practices as the unit of analysis, which may be viewed as the "doings and sayings" (Nicolini & Monteiro, 2017, p. 2). The data are gathered by analyzing two firms in an in-depth case study, collecting data through mainly semi-structured interviews.

This paper contributes to pricing research in four ways. First, it adds to the literature by generating a detailed overview of micro-level practices and their respective activities. These practices are information processing, communication, interaction with system, and control and accountability. The findings show that the practices used in complex pricing processes are interlinked and enacted by the actors to solve information, coordination and control problems. Second, the paper contributes to behavioral research on pricing by showing that the intuitive and rational processing of information is linked to other activities and practices. Third, it extends research on the delegation of pricing authority by illustrating how the pricing practices are enacted by actors to make a formalized, or not so formalized, level of organizational structure and pricing authority work in practice. Fourth, the data suggest that access to cost and capacity information furthermore is not dichotomous.

Summary paper II –

Developing a price discount model: A process perspective

Pricing management is a cross-departmental effort and, due to its nature, often conflicts emerge among the involved parties. In particular, this pertains to the sales function with regard to pricing (Lancioni et al., 2005). The sales force is often believed to grant too-high discounts, which strongly affect bottom-line profits (Joseph, 2001; Stephenson et al., 1979). Therefore, firms aim

to control the sales force to ensure profitable pricing and avoid price inconsistencies, as this can otherwise lead to long-term issues (Nagle & Müller, 2018).

A central question is, then, how much decision-making authority the sales force should have to set sales prices and determine price discounts. On one hand, centralizing decision rights implies that the specific knowledge that the local sales unit has about customers cannot be taken into account when making a pricing decision (Dolan & Simon, 1996). On the other hand, decentralizing pricing authority may lead to decisions that are not aligned with central management's objectives, as the sales force might reduce the price to close a transaction more easily, which means less profits for the firm (Frenzen et al., 2010; Lancioni, et al., 2005). This implies that managers need to find a balance between local knowledge and global objectives (Jensen & Meckling, 1995).

Firms may implement new structures and authority levels to better address the outlined key issue and to control the sales force's discounting behavior. However, research on such internal control mechanisms is sparse (Hallberg & Andersson, 2013), particularly with regard to B2B price discounting. As of now, we know little about how price discount models, which imply definitions of pricing structures and pricing authority, are actually developed in practice. So far the literature on price delegation mostly discusses the different scenarios, for example low and high delegation of pricing authority to the sales force, assuming they were successfully implemented. The change from one scenario to another, and thereby also the development of new structures, has been disregarded.

Given this grounding, this research study examines how a B2B company actually manages the development of a new price discount model. It thereby responds to several calls for more empirical research related to the phenomenon under investigation (e.g., Balan, 2016; Frenzen et al., 2010; Geiger & Guenzi, 2009; Homburg et al., 2012; Joseph, 2001; Liozu, 2016a). The two research questions are as follows:

1. How is the development of a new price discount model impacted by the issue of local knowledge and global objectives?

2. How do the opposing forces and resulting tensions affect and unfold in the development process?

The paper contributes to extant pricing research by employing a process-based perspective on the development of a price discount model. It shows that price discount structures and authority levels are not merely structural choices as indicated by previous agency theoretical research but are developed in a lengthy and interactive process. The empirical study suggests that opposing forces

surface during the process. As a result, various dilemmas are encountered and the integration of local knowledge and global objectives into the model is problematic. Further, the findings indicate that the factors of pricing unfairness, risks and costs help explain the existence of opposing views and tensions among the project team members.

Summary paper III –

Value discovery and learning: Capabilities for value-based pricing and selling of industrial services and solutions

Many industrial firms are moving towards new service-oriented business models (Kindström & Kowalkowski, 2015; Storbacka, 2011). Such firms aim to price and sell their solutions and services based on value, which is a difficult and troublesome undertaking (Töytäri, Rajala, & Alejandro, 2015). For this purpose, capabilities are required; however, there are still challenges for understanding the required capabilities for generating profits with industrial services and solutions (see Dutta et al., 2002, 2003; Liozu, 2015a; Liozu & Hinterhuber, 2013a).

When studying capabilities, it is important to pay attention to not only operational but also dynamic capabilities (Winter, 2003). Operational capabilities are described as "how you earn your living" and dynamic capabilities as "how you change your operational routines" (Helfat & Peteraf, 2003; Winter, 2003). However, it must be noted that the line between operational and dynamic capabilities is not always clear and that some "capabilities can be used for both operational and dynamic purposes" (Helfat & Winter, 2011, p. 1245).

In this exploratory study two industrial firms providing services and solutions are studied to shed further light on the VBP&S capabilities. It aims to answer the following research questions:

1. What capabilities do firms seek to develop for VBP&S for industrial service and solution offerings?

2. How does learning influence VBP&S for industrial services and solutions?

The study contributes to the literature in two ways. First, it provides a detailed set of capabilities for VBP&S, whereas the previous literature has studied mainly pricing and selling capabilities in isolation. Second, this study goes beyond viewing capabilities as purely operational in the context of pricing and selling and illustrates how operational capabilities may support the development of higher-level (dynamic) capabilities. In this vein, the role of learning with regard to VBP&S is discussed given the fact that providers discover the value and other requirements in a dialogue with the customer over an extended period.

Reflection on research and industrial PhD setup

This section briefly recaps the industrial PhD project. I would like to inform the reader about the actual research process to give them a more realistic picture of "what really happened". Initially, my supervisor, the case firm and I agreed on three studies. The overarching idea was to investigate how firms organize for pricing from a social psychological perspective and with a greater focus on customers. My case firm is a manufacturer of communication and hearing devices with more than 5,000 employees. It operates across the world and sells its products mainly to retailers and distributors, which can vary greatly in size. The case firm is actually a company group consisting of two businesses located in the same building. One business (paper II), where I primarily worked, already had an established pricing function, whereas the other one (DAN Communication, in paper I) was interested in setting up central pricing management. Therefore, we first wanted to compare the pricing capabilities between a dedicated, that is, established pricing function, and non-dedicated pricing structure (paper I). The second study was meant to investigate price discounting and, particularly, the global development and implementation of a new price discount model (paper II). The third paper aimed at examining how pricing and key account management can be coordinated for effective value management.

In January 2015, I joined the pricing function in the marketing execution team, which was located in the marketing department at the headquarters. After 2 weeks, the team leader, who had initially hired me, left the company. The team then went for 9 months without a leader, because the head of the department was fired and the successor needed more time to restructure the department. All budgets were frozen for that period and planned activities were cancelled. This meant that the price discounting project (paper II) would not begin in February 2015 as planned. Paper III was cancelled, as at that point in time it was not certain whether the key account management function would be established or not. So I began with paper I, which eventually became not a comparative study on pricing capabilities but a practice-based paper on how firms approve and decide on sales prices. This study is based on two case firms: the business without an established pricing function at the case company, and an outside firm. Although my main stakeholder in that part of the case firm switched positions, I was still able to present my findings. The firm afterwards took actions by hiring a central pricing manager, redefining the pricing process, changing the approval and authority levels, and buying pricing software to speed up and automate the approval process.

After being left hanging for 9 months, not knowing what would happen next, our team was divided and the pricing function was put into a newly formed team named "insights and analytics". The new team leader came from outside the industry. He had no experience in pricing, and no interest in it. He was an economist and had tremendous difficulty understanding the qualitative approach to my research inquiry. Also, value-based pricing was somewhat new to him. For example, he strongly believed that willingness-to-pay analyses require only historic sales data and no input from customers. Luckily, the head of pricing had the pricing discount project (paper II) approved by the CEO directly. The project began with more than a 12-month delay. The idea was initially to interview customers once the new model was implemented to understand how satisfied they were with the new approach to price discounting and to observe negotiations to see how the new model affected the interactions between customers and the sales force. That work could never be done, however, so paper II became a study investigating the internal process of price discount model development.

After realizing that the timing on paper II to study effects after implementation was not beneficial and that I would not really be granted access to customers in my industrial PhD, we set up a laboratory experiment with students. The laboratory experimental task of this study consists of B2B, incentivized negotiations (n = 120) between a supplier and buyer. Negotiations include decisions on price, discounts, and costs. These are related to profit outcomes and perceptions of price fairness. The findings were very promising, but comparing the experiment with the other qualitative case studies conducted, it felt like a misfit. It was therefore excluded from this dissertation. The same is also true for a survey I conducted with Stephan M. Liozu of all sales managers in my case firm to examine the corporate value mindset.

Based on discussion on pricing related issues with colleagues, the opportunity for a collaboration emerged. As part of a separate project investigating industrial firms transitioning to servitization, Associate Professors Jawwad Raja and Thomas Frandsen were investigating the issue of value-based pricing and selling in this context. I was able to complement this research with my know-how of the pricing literature and inform the data-collection and analysis process. This endeavor resulted in paper III.

After some time in the project at my case firm, the head of pricing, who was my direct superior and company supervisor, switched positions inside the firm, although he initially wanted to leave the firm. He told me openly various times that he felt sorry for me, as I was not learning anything at the case company. For many months, the pricing team, and probably all the teams in the department, seemed to be in a somewhat lethargic state of mind. Thankfully, my company

supervisor really enjoyed his new role, and I was very glad to still have him around. He was a great company supervisor, trying to keep my back free to conduct my research, and has overall been very supportive within his abilities.

During the 3-year period, I had three different department heads in the case firm, two team leaders, and two direct superiors in the pricing function, and I needed to change my office desk more than eight times due to restructuring activities in the department. During the period of my employment the company faced high employee turnover, and the manager in the marketing leadership team of the department with the longest work experience inside the company had been there for 1.5 years. I also would like to emphasize that the conducted changes were good, and I am highly convinced that the company is finally on the right path moving forward. I very much enjoyed working for and being part of the case firm. While it no longer offers great potential for a career in pricing, it is a very good place to work and is greatly improving its marketing and sales practices.

Overall, though, I think the numbers with regard to changes in the case firm already imply the accompanying challenges. Being an industrial PhD, navigating between changing stakeholders in the case firm and academia, is often not easy, but it is rewarding in the end, as learning can be derived. I am very thankful to have had this opportunity, but for actually conducting the research I really wanted and planned to do, it has been an immense struggle. I probably owe my first grey hairs to this. It is a huge challenge to run an industrial PhD project, funded for 3 years, in a company facing so many changes and high uncertainty. Although this dissertation, like most others, is presented in a rather straightforward and rationalized fashion, the experience has been very far from that.

5. QUALITATIVE CASE-STUDY RESEARCH

To investigate and create a better understanding of the phenomenon of interest, that is, how firms organize for pricing, qualitative case-study research was conducted. Over the years, case studies have become "one of the most common ways to do qualitative inquiry" (Stake, 2000, p. 435). The case-study approach is popular in industrial research for studying individuals, organizations and their relationships (Dubois & Araujo, 2004; Dubois & Gadde, 2002; Halinen & Törnroos 2005; Järvensivu & Törnroos, 2010). In fact, case studies are dominating qualitative research in industrial marketing (Piekkari, Plakoyiannaki, & Welch, 2010).

Qualitative research

Although case studies are not necessarily purely qualitative, they are surely more associated with the collection and analysis of qualitative data, for example interviews and observations. The word "qualitative" clarifies that the focus is on the qualities of entities, processes and meaning (Denzin & Lincoln, 2000). The role of meaning is particularly important in this type of research, as qualitative studies are "attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2000, p. 3). Qualitative research acknowledges the socially constructed nature of reality and "locates the observer in the world" (Denzin & Lincoln, 2000, p. 3). Miles and Huberman (1994) explained that the focus is on events in natural settings, meaning studying them how they naturally happen, which enables the researcher to get a better understanding of "real life". It emphasizes people's "lived experiences", and through that approach identifies "the meaning[s] people place on the events, processes, and structures" (Miles & Huberman, 1994, p. 10). Denzin and Lincoln (2000) stated that in qualitative research, empirical material is collected that describes people's routines, problematic moments and meanings. It is worth highlighting that qualitative research is also about actions, which imply intentions and meanings, resulting in consequences (Miles & Huberman, 1994). The two authors further explained that qualitative studies come with high flexibility, as times and methods for collecting the data can vary throughout the research process. Linking this to case studies, the authors explained that this enables the researcher to create a more thorough understanding of what the case is really about. It particularly helps in comprehending issues and challenges that are below the surface, meaning not obvious at first sight and more underlying and latent (Miles & Huberman, 1994). Insight is thus the outcome of a case study (Gerring, 2007).

There are many ways to gather primary data in qualitative research, that is, data to be collected for the purpose of this research. Secondary data comprise data collected for another purpose, independent of the specific research being conducted (Saunders, Lewis, & Thornhill, 2012). In qualitative research, people may be interviewed or researchers may participate as observers, for example in meetings of organizations (Miles & Huberman, 1994). However, there are many other, more specific approaches, such as shadowing (Czarniawska, 2007; Gherardi, 2012) or the interview to the double (Nicolini, 2009). Triangulation in qualitative and case-study research is another important aspect of data collection (Pettigrew, 1990; Stake, 1995; Yin, 2009). It refers to the review of consistency, for example by checking findings of different data sources or different data-collection methods (Patton, 2015; Saunders et al., 2012). Thus, it "reflects an attempt to secure an in-depth understanding of the phenomenon in question" (Denzin & Lincoln, 2000, p. 5). It is therefore an alternative to validation and not to be treated as a tool or strategy thereof (Flick, 1998).

Case-study research

In case-study research the researcher collects "extremely rich, detailed, and in-depth information" about one, or more, case(s) (Berg, 2007, p. 283). The term "case" originates from the Latin word *casus,* which means occurrence (Easton, 1992). Definitions of case studies are troublesome, as "some are useful, others not" (Flyvbjerg, 2011, p. 301). Gerring (2007) stated that a case "connotes a spatially delimited phenomenon (a unit) observed at a single point in time or over some period" (p. 19). In a similar vein, Miles and Huberman (1994) wrote that a case is the unit of analysis, and that it is, generally speaking, a phenomenon occurring in a bounded context. One of the simplest definitions is from Hagan (2006): case-study research relates to "in-depth, qualitative studies of one or a few illustrative cases" (p. 240). Within social science this type of study is used to describe an intense study, consisting of a description and analysis of a person, group or organization, that either tests a theory or that proposes a new theory based on the study's findings (Easton, 1992). A case study investigates one or a smaller number of cases in depth, but in contrast to experiments, the cases are constructed as they appear in their natural social situations (Hammersley & Gomm, 2009; see also page 4 in Hammersley & Gomm, 2009, for a comparison of case studies, experiments and surveys). In this fashion, Gerring (2007) argued that it is also the fuzziness of case studies that gives them an advantage for exploratory research compared with larger sample studies with more pre-determined variables and outcomes.

Case studies are conducted "not just to swell the archives, but to help persons toward further understandings" (Stake, 2009, p. 19). They enable the researcher to find answers to "how" and "why" types of questions, while considering "how a phenomenon is influenced by the context within which it is situated" (Baxter & Jack, 2008, p. 556). Context, as described by Patton (2015), relates to what is happening around and occurring to the people, groups, or organizations of interest. Further, without context, "qualitative findings are like a fine painting without a frame" as it "envelops and completes the whole" (Patton, 2015, p. 69). Thus, paying attention to the interaction between the phenomenon and its context is critical and can be done by conducting in-depth case studies (Dubois & Gadde, 2002). Berg (2007) argued that this method of inquiry is "an extremely useful technique for researching relationships, behaviors, attitudes, motivations, and stressors in organizational settings" (p. 296). Similarly, Woodside and Wilson (2003) proposed that the key objective of the case researcher should be to create a "deep understanding of the actors, interactions, sentiments, and behaviors occurring for a specific process" (p. 497). A detailed overview, borrowed from Flyvbjerg (2011), about the strengths and weaknesses of case studies, is shown in Table 5.1.

Table 5.1: Strengths and weaknesses of case studies; adapted from Flyvbjerg (2011)

Strengths	Weaknesses
Depth	Selection bias may overstate or understate relationships
High conceptual validity	Weak understanding of occurrence in population of phenomena under study
Understanding of context and process	Statistical significance often unknown or unclear
Understanding of what causes a phenomenon	
Linking causes and outcomes	
Fostering new hypotheses and new research questions	

There are several dimensions to case research. Some of its main advocates are Eisenhardt, Yin, Ragin/Bhaskar and Stake, with each having their own perspective on case-study research (see Welch, Piekkari, Plakoyiannaki, & Paavilainen-Mäntymäki, 2011). The latter author's view on case studies may be labeled interpretive sensemaking (Welch, et al., 2011). Stake (1995) took a clear position by explaining that some case studies have a goal of identifying cause-and-effect relationships (e.g., Yin, 2009) and that others seek to understand human experience. Stake (1995) is a clear promoter of the latter approach. This view on case studies allows for information-rich

contextual descriptions that are required to develop an understanding of the phenomenon (Lincoln & Guba, 1985). While Yin (2009) advocated generalization, Stake (1995) believed that particularization is the aim of case studies, and that the "purpose of a case report is not to represent the world, but to represent the case" (Stake, 2000, p. 448). It is about recognizing the uniqueness of the case(s) (Welch et al., 2011). It becomes clear, then, that contextual descriptions and an understanding of the subjective experiences of the studied actors are inevitable (Stake, 2000; Welch et al., 2011). A search for meaning is required, and thick description therefore also implies an "appreciation of how the social context imbues human action with meaning" (Welch et al., 2011, p. 745).

Notion of thick description

Thick description refers to the task of the researcher to describe and interpret the observed social action and behavior within its context (Ponterotto, 2006). The notion of thick description was also taken up by Nicolini (2012), who stated that social science is about making thicker, not thinner descriptions. Instead of making the world simpler, good research makes the world appear more complex. This also means that complex questions will potentially also lead to complex, rather than simplified, answers (Nicolini, 2012). Qualitative case-study research has great potential for identifying and unfolding complexity, as its data provide "thick descriptions that are vivid, nested in a real context and have a ring of truth that has strong impact on the reader" (Miles & Huberman, 1994, p. 10). The goal of social science is to work towards and to establish richer and more nuanced understandings (Nicolini, 2012). Here, a referral is made to Stengers (1997), stating that "scientific" means making "us more articulate, that is, more capable of appreciating differences that matter" (Nicolini, 2012, p. 216). Being more articulate about a certain phenomenon leads to new ways of acting or not acting in a more informed way. Woodside and Wilson (2003) argued that thick description is in itself not enough, depending on the level of depth and detail. They saw a risk that the researcher might only describe the surface level, and therefore argued that deep understanding is required. This can be achieved through triangulation, as the researcher can then better learn about the "subjective significance of persons and events occurring in a case study" (Woodside & Wilson, 2003, p. 497).

Sampling

The studies in this dissertation employ all strategies for selecting the cases that fall within the category of purposive sampling (Miles & Huberman, 1994; Patton, 2015). For analyzing the data, sampling is crucial (Miles & Huberman, 1994). The choices researchers make about "whom to look at or talk with, where, when, about what, and why – all place limits on the conclusions" they can draw (Miles & Huberman, 1994, p. 27). The authors added that sampling cases typically involves two actions. The first pertains to setting boundaries, that is, defining the elements of the case that can be studied in the time the researcher available has and that are connected to the research question. The second action is the creation of a frame helping the research to "uncover, confirm, or qualify the basic processes or constructs that undergird" the study (Miles & Huberman, 1994, p. 27). For sampling in case-study research, various strategies exist. The likely most extensive overview, with more than 40 different sampling strategies, is found in the newest edition of Patton's book *Qualitative Research & Evaluation Methods*. As explained by Patton (2015), the logic and power of sampling based on purpose is the focus on an in-depth understanding of specific cases, that is, information-rich cases. Such cases are those "from which one can learn a great deal about issues of central importance to the purpose of the research" (Patton, 2015, p. 53).

Applicability of qualitative case-study research

Having read and been inspired by many other published case studies, I was curious to learn more about this inquiry and its suitability for my research dissertation. My employment and specific role as an industrial PhD student with very good access to "example[s] of a larger phenomenon" (Gerring, 2007, p. 42) further fostered my interest and intuition that this might be the right approach. Learning more about case-study research in this review and then bringing this together with the previously described purpose and research questions of my research dissertation convinced me. The advocates of case-study research, such as Stake (1995) and Yin (2009), convinced me that case-study research is very suitable for examining the rather unexplored phenomenon of organizing for pricing. Investigating how firms organize for pricing in practice through a qualitative approach would allow me to examine more deeply the inherent processes and challenges, and how the actors involved in pricing bring meaning to it. It is a promising attempt to "inject 'realism'" (Carricano et al., 2010, p. 469) into pricing processes, and I therefore decided to "use the case study approach as a guide" (Berg, 2007, p. 284) to my research. For more

detailed descriptions of the methods used, see the respective sections of the individual studies in chapters 6, 7, and 8. Here, the sampling strategies and criteria for purposefully selecting the cases are more thoroughly outlined, and insights are provided on how data was collected and analyzed. Table 5.2 provides a quick overview.

Table 5.2: Overview of studies

Study	I	II	III
Titles	A practice-based approach to collective decision-making in pricing	Developing a price discount model: a process perspective	Value discovery and learning: capabilities for value-based pricing and selling of industrial services and solutions
Number of case firms	• 2 firms	• 1 firm	• 2 firms
Sampling strategy	• Purposive sampling (Patton, 2015)	• Purposive sampling (Patton, 2015) • Exemplar of the phenomenon of interest (Patton, 2015) • Illustrative case (Stake, 2000)	• Purposive sampling (Patton, 2015) • Emergent theory sampling (Patton, 2015)
Primary data types	• 21 interviews • 4 meetings • 1 shadowing	• 24.7 hours participant observations • 19 interviews • 7.4 hours shadowing • Field notes	• 69 interviews • Field notes
Secondary data types	• 22 documents and presentations	• 91 MS files (Excel, Word, PowerPoint) • 261 emails	• Documents and presentations

6. PAPER I – *A PRACTICE-BASED APPROACH TO COLLECTIVE DECISION-MAKING IN PRICING*[6]

Abstract

Purpose—To analyze price decision-making through a practice-based approach. The paper investigates the micro-level practices used to arrive at sales price decisions.

Design/methodology/approach—In this study a qualitative study approach is used to develop findings abductively. The data are gathered through an in-depth case study at two firms: semi-structured interviews, meeting observations, shadowing and pricing documents.

Findings—The paper finds that pricing is a collective decision-making process involving multiple actors across the organization. The case firms work on solving information, coordination and control problems to arrive at sales prices by enacting interlinked practices. Pricing is therefore neither a structure nor a single decision but a process consisting of multiple micro-level practices that enable firms to make pricing decisions.

Originality/value—The paper develops a practice-based approach to pricing studies how micro-level practices enable firms to make decisions in spite of the numerous challenges encountered in pricing processes. The paper is interdisciplinary and adds to the accounting and market literatures, which have tended to study pricing as a decision made by one decision maker, and not as an organizational process where multiple actors share, evaluate, interpret, and coordinate information and decisions.

Keywords Pricing practice, behavioral pricing, price decision-making, information processing, pricing control.

Paper type Research paper

Acknowledgements

This research study was partly funded by the Pricing Excellence Project, an initiative funded by the Danish Industry Foundation. Here, we are especially grateful to Troels Troelsen for his

[6] This article has been submitted to *Qualitative Research in Accounting & Management.* It is co-authored by Sof Thrane, Michael Fetahi Laursen, and Katrine Fabritius Kornmaaler.

support. We would like to thank Ivar Friis for his advice and guidance as well as the participants at the first work-in-progress seminar, the IMP Asia Conference 2016, and the Nordic Working Life Conference 2016 for their constructive feedback on earlier versions of this manuscript. Last, we would like to acknowledge Davide Nicolini's support in helping us to apply a practice-based approach to pricing.

Introduction

Setting the right price is an important task for an organization because it has a major direct effect on profits (Hinterhuber & Bertini, 2011; Hinterhuber & Liozu, 2012). Pricing however is a complex task that involves multiple parts of the organization (Dutta, Zbaracki, & Bergen, 2003). For instance, it is dependent on learning from the market (Bloomfield & Luft, 2006) and on the intelligent use of cost data (Cardinaels et al., 2004). Pricing, further, often must be dynamic and must consider unforeseen events (Ellström & Larsson, 2017).

This complexity generates three problems in the management of pricing decisions. First, there is an information-processing problem. Pricing information is difficult to evaluate because customer information is incomplete and uncertain (Anderson, Kumar, & Narus, 2007; Spender, 1989) and cost information may bias decisions (Bloomfield & Luft, 2006). Second, there is a coordination problem because the pricing decision must account for information about capacity, cost, customers, strategies, and so forth, and this information involves employees located in different departments and geographies. The disparate sets of information may affect the profitability of pricing decisions and therefore should be transferred and collocated. Third, pricing is subject to a control problem. The interests of the different parties affecting pricing decisions, such as sales, the pricing function, production, and marketing, are often not aligned and lead to decisions that potentially reduce firm profitability. These problems have been analyzed from two overarching perspectives: the accounting and control view, and the market view.

The accounting and control literature focuses on the decentralization level of pricing decisions and the use of cost information in the pricing process. One stream of research investigates how different types of cost information (activity-based and full cost) affect pricing decisions (Cardinaels et al., 2004; Drake & Haka, 2008; Hsu, 2011; Lucas, 2003; Van den Abbeele et al., 2009) and how cost information may affect firms' ability to learn from the market (Bloomfield & Luft, 2006). A second approach investigates the optimal level of decentralization to the sales force, given that sales have superior knowledge of customers but may have interests

that are not aligned with strategic objectives (Balan, 2016; Homburg et al., 2012; Jensen & Meckling, 1995). The accounting and control view generally employs experimental, survey- or modelling-based approaches to develop optimal levels of decentralization and use of different types of cost data. This neglects the control processes and practices through which situated actors use cost information, coordinate, and generate accountability for pricing decisions. A perspective that considers processes of organizing can extend this research.

The market view focuses on identifying which information – customer value, cost, or competitor – to use in the pricing decision and on how this information is processed. According to the market view, using market information about customers' value perceptions yields superior results (Anderson & Narus, 1998; Hinterhuber, 2004; Ingenbleek et al., 2003; Ingenbleek & van der Lans, 2013). Also according to this approach, the information used is processed, and intuition or rational processing of pricing information has differential impacts on decision quality (Iyer et al., 2015; Kahneman & Klein, 2009; Kahneman et al., 1986). The market view, however, can be extended in many ways. While there are a few notable exceptions (e.g., Zbaracki & Bergen, 2010), the literature historically views the pricing decision as being performed by one individual who processes customer information either intuitionally or rationally. It therefore deemphasizes the processes and practices through which the multiple organizational entities that possess pricing-relevant information interact share and interpret information.

In this paper we employ an interdisciplinary, practice-based approach that draws on both the market and the accounting literatures to explore firms' pricing processes. A practice-based approach to pricing takes practices as the unit of analysis (Nicolini & Monteiro, 2017). The approach focuses on the informal, routinized patterns of interactions and activities that compose pricing processes. However, this approach considers processes – such as pricing decision-making – as a social, not an individual, matter. Thus, we respond to calls for further studies on the micro-foundations and behavioral aspects of pricing and to claims that the literature does not provide "sufficient detail to understand how companies organize for pricing" (Carricano et al., 2010, p. 468). Specifically, we seek to answer the following research question: *How are pricing practices interlinked in the process of making sales price decisions?*

We investigate this research question through analysis of two case studies of the business-to-business (B2B) pricing process. Our analysis shows that four practices are used in pricing decision-making: information processing, interaction with the pricing system, communication, and accountability and control practices. Actors employ these practices to address information, coordination and control problems, ultimately reducing complexity. A pricing decision then

results from the numerous interlinked practices that enable organizational actors to process relevant information, coordinate the multiple actors involved in the process and control pricing decisions.

With its development of an interdisciplinary, practice-based approach to pricing, this paper contributes to existing pricing research in four ways. First, by generating a detailed overview of micro-level practices, we suggest that pricing is a complex organizational process made of multiple interlinked practices and their inherent activities. Second, we extend the extant literature's focus on how individuals process information by illustrating that the actor's intuitive and rational processing of cost and value information depends on and is interlinked with other activities and practices. Information is processed at multiple stages before a pricing decision is made. Third, we illustrate how the delegation of pricing authority is not just a structure of clearly defined decisions rights. Accountability structures are based on interactions in which relations of authority are sometimes blurry and become defined in processes. Fourth, access to cost and capacity information is not dichotomous – either present, biasing decisions (Bloomfield & Luft, 2006), or absent, reducing profits (Cardinaels et al., 2004). Different entities have different access to cost information, and their interaction determines how cost information affects decisions.

The paper is structured as follows. First, we develop the three problems of pricing and discuss our approach to studying pricing practices. Second, we present the research methods including the four pricing practices. Third, we analyze how pricing practices are used by looking at the pricing processes of two firms. Finally, we discuss the findings and offer conclusions.

Review of literature

Information, coordination and control problems in pricing

In the following, we develop the three pricing problems, drawing on both the market and the accounting and control literatures. The information problem is caused by difficulties in evaluating pricing-relevant information. Customer value information is incomplete and uncertain because customers are seldom willing to disclose their willingness-to-pay (Anderson et al., 2007; Spender, 1989). Dutta et al. (2003) noted that firms "face considerable uncertainty about the price elasticity and the relative profitability of these different groups of customers" (p. 628). Competitor information is often inaccurate because the discounts given off known list prices vary greatly, and these are often not part of published price catalogs but negotiated individually with the customer. Also, when salespeople aim to collect competitive pricing information, buyers often falsely claim

to have received lower price offers from competitors, biasing salespeople's views of competitors' prices (Nagle, Hogan, & Zale, 2016).

The use of cost information is another important information-processing problem. One discussion centers on the use of marginal cost as preferred; however, many firms still employ full cost models (Lucas, 2003; Lucas & Rafferty, 2008). A particular problem here is determining the variability of capacity (Lucas, 2003), and as demand variability increases, full cost allocation becomes less precise because it does not reflect marginal cost (Hsu, 2011). Another discussion relates to the extent to which sales should have access to cost information. This literature discusses relations between cost information and learning from the market. Cardinaels et al. (2004) found that in informative markets (i.e., where competitors set prices correctly), market information can rule out effects of biased cost information. However, activity-based costing information is superior when market information is imprecise (Cardinaels et al., 2004). Bloomfield and Luft (2006) investigated how faulty cost data may lead to the winner's curse (i.e., that the winning seller loses profits through bidding too low) and how learning from the market can reduce this effect. Wilken, Cornelißen, Backhaus, & Schmitz (2010) found that sellers with undifferentiated cost information set higher prices.

A different aspect of the information problem relates to how information is processed by the decision maker (Hallberg, 2017b). Prospect theory and the literature on the use of intuition focus more on how individuals interpret information and suggest that intuitive processing[7] and rational processing of pricing information have different qualities (Artinger, Petersen, Gigerenzer, & Weibler, 2015; Kahneman & Klein, 2009; Kruglanski & Gigerenzer, 2011). The need to make fast decisions makes it problematic for pricing managers to rely solely on rational processing because of the increased time used to collect and analyze data (Dane & Pratt, 2007; Dörfler & Ackermann, 2012). The use of heuristics to make decisions, however, is prone to bias. Artinger et al. (2015) therefore argued that in uncertain environments, complex decision algorithms potentially incur larger errors due to the inability to correct for noise in the data. On the other hand, "a simple heuristic instead incurs error in prediction owing to its bias but is much less sensitive to fluctuations in the environment, which can make it a robust and high-performing strategy" (Artinger et al., 2015, p. 47).

[7] Intuition is defined as "affectively charged judgments that arise through rapid, nonconscious, and holistic associations" (Dane & Pratt, 2007, p. 40).

The information problem, then, involves three issues. First, market information is uncertain and difficult to obtain. Second, the use of cost data is problematic, as it may reduce the ability to learn from the market, and third, the use of both intuitive and rational processing of information is potentially important. The studies discussed here, however, mainly used experiments, modelling and surveys in their investigations – it is therefore unclear how market and cost information is used in decision-making processes in organizations, and how intuitive and rational processing of information interrelate in concrete organizational processes.

The coordination problem is based on the dispersed nature of pricing information. The pricing decision relies on information that is located in "different parts of the firm, who have different sets of information" (Dutta et al., 2003, p. 628). Information about cost and capacity may not be freely available in IT systems, such as Enterprise Resource Planning, across firms' organizational units. Likewise, demand and logistical information may be scattered around the organization. In principle, IT and pricing systems could handle these problems, but a fully automated pricing process may generate further issues, especially because information may be imprecise and inaccurate. To base pricing decisions on the relevant, available information in the organization, coordination of pricing decisions is necessary. Extant literature is not well developed in relation to the coordination problem.

The control problem arises because the different departments and entities in an organization are not necessarily aligned when it comes to the pricing decision. In particular, the performance of the sales functions is still often measured and incentivized based on revenues, not profit (Homburg et al., 2012). Further, customers exert pressure to increase discounts (Joseph, 2001; Lancioni, 2005; Stephenson et al., 1979), and sales may follow the "path of least resistance and grant higher discounts" (Wilken et al., 2010, p. 78). The sales force, however, typically has superior knowledge of customers, their willingness-to-pay, and the competition (Frenzen et al., 2010). On the other hand, pricing and general managers have superior internal information, such as information on strategy, capacity, and cost. Balancing the use of the sales force's local knowledge and handling agency problems is therefore key in pricing (Homburg et al., 2012; Jensen & Meckling, 1995). Literature on the price delegation issue, though, is unclear on how actors in processes share pricing information and does not investigate organizational processes in depth. Table 6.1 summarizes the three problems.

Table 6.1: Key problems in price decision-making

	Information problem	Coordination problem	Control problem
Key challenge	How to interpret equivocal and ambiguous market and cost information	Making decisions based on all available information in the organization. Linking of cost, capacity, (market) value and strategic information	Using salespeople's knowledge while ensuring that decisions are consistent with strategic objectives
Elements	Intuitive and rational processing of information	Communication processes	Local knowledge; incentives; strategic objectives
Theoretical sources	Prospect theory; cost and behavioral accounting	Capability-based view; coordination theory	Principal-agent problem (agency theory)

A practice-based approach to pricing

In the following we discuss how a practice-based approach may shed further light on how firms address these problems. The practice-based approach supplies pertinent theoretical means for understanding the phenomenon in question, as it reveals "the fine details of how people use the resources available to them to accomplish intelligent actions, and how they give those actions sense and meaning" (Gherardi, 2012, p. 2). The practice approach treats practices as the unit of analysis (Korica et al., 2017), but practice-based studies "do not investigate practices as abstract entities, but rather they praxeologize phenomena, turning the study of decision-making into the study of decision-making practices" (Nicolini & Monteiro, 2017, p. 18). A practice is defined as a "'bundle' of activities" (Schatzki, 2002, p. 71); in other words, it consists of various activities.

Different traditions define practices differently (Nicolini & Monteiro, 2017). To develop a relatively grounded understanding of practices, we focus on the commonalities identified by Nicolini and Monteiro (2017) rather than the more specific theorization of practices by, for example, Jørgensen and Messner (2010). In this paper, we take "orderly materially mediated doings and sayings ('practices') and their aggregations as central for the understanding of organizational and social phenomena" (Nicolini & Monteiro, 2017, p. 2). This approach focuses on the social character of processes and their enactment to solve problems. Practices, then, are "not personal qualities" but are shared among organizational participants. Practitioners are the carriers of practices; however, practices exist only virtually outside of praxis (Jarzabkowski, Kaplan, Seidl, & Whittington, 2016), meaning that they become meaningful when studied in specific contexts.

The practice-based approach transcends merely defining practices (Nicolini & Monteiro, 2017). In a similar vein, Jarzabkowski et al. (2016) argued that researchers should consider three

elements: the what, who, and how of a practice. This brief discussion leads to the following implications for the current study: it requires an investigation of the practices and the actors executing the practices as well as how the identified practices shape the pricing processes and impact sales pricing decisions.

Method

Because pricing practices have been studied only to a limited extent, we applied an exploratory case-study approach (Stake, 1995). The research process is characterized by an abductive logic (Dubois & Gadde, 2002), meaning that the researchers, after an initial open non-theoretical data-collection process, constantly move between the data, analysis and theory from the literature iteratively and non-linearly. This approach helps us achieve the depth required not only to identify and define pricing practices of the case firms but also to understand how they are utilized, interlinked and given meaning in processes. Further, this approach enables us to zoom in and out on the practices studied (Gherardi, 2012; Nicolini, 2009, 2012). Here, zooming in refers to looking at the details of a practice in its specific, local situation; zooming out refers to taking a broader view of a practice (e.g., in its wider organizational or processual context). Switching between these two perspectives helps us discover new aspects of the phenomenon under investigation (Nicolini, 2009). Put differently, through "magnifying or blowing up the details of practice, […] certain aspects are fore-grounded, and others are temporarily sent to the background" (Nicolini, 2009, p. 1412).

Cases and case selection

The two cases – DAN Cargo and DAN Communication – were selected based on the following criteria. It was important that both case companies had competence in pricing and that they prioritize pricing activities in the business. We sought firms whose sales force did not have full pricing authority, or the freedom to set any price above marginal cost. Only 11% of the companies examined by Hansen, Joseph, and Krafft (2008) gave salespeople full pricing authority. We were interested in cases with no or limited pricing authority, as this represents the majority of firms, meaning we were not seeking extreme cases (28% and 61% of the companies, respectively; Hansen et al., 2008). Regarding differences, we sought a service and a manufacturing company operating in diverse industries. To gain insight into the role of pricing systems, we chose one company using a complex revenue management system (RMS) and one using a self-built

Microsoft Excel tool, as is often used in practice. Another important criterion was access to data. Accessing firms' pricing processes can be problematic but was vital for this research. The authors knew stakeholders in the two case companies from previous projects and conferences, and one of the researchers is employed by DAN Communication. These existing relationships and the top management's commitment allowed better access. Three potential cases were excluded due to difficulties in securing full access.

The first case company, DAN Cargo, is a freight forwarder connected to a large airline carrier. DAN Cargo is responsible for utilizing the carrier's freight capacity but is managed independently. The company performs sales-price-setting daily upon requests from customers. The complexity of setting prices based on demand information (high volatility) and capacity planning is high.

The second case company, DAN Communication, is a manufacturer of communication devices sold in B2B markets. The firm faces challenges in coordinating pricing decisions, and there is strong pressure for discounts from customers. The analysis on DAN Communication focuses on the practices for sales transactions, that is, sales prices and not market/list prices, due to the everyday character of the pricing decisions and the similarity to the pricing decision made by DAN Cargo.

Data collection and analysis

Multiple data-collection methods were employed, ensuring triangulation of the data (Silverman, 2012; Stake, 1995): 21 transcribed interviews, four pricing meetings, one shadowing of a pricing system user (Czarniawska, 2007; see Table 6.2 for overview of primary data), and 22 pricing documents of direct relevance were included in the analysis. We conducted semi-structured interviews with employees across different hierarchy levels and regions. In many of the interviews, the interviewees described and demonstrated how they use specific tools on their computers, shared recent examples of pricing decision-making, and presented e-mail conversations with customers and colleagues involved in the process. Additional subject-related interviews (not transcribed) on pricing were conducted at DAN Communication.

Table 6.2: Overview of primary data collection

Interview	Company	Function(s)
1	DAN Cargo	President & CEO, Director Network & Revenue Manager, Strategic Pricing Manager
2	DAN Cargo	President & CEO, Director Network & Revenue Manager,
3	DAN Cargo	Strategic Pricing Manager
4	DAN Cargo	Route Analyst 1 and 2
5	DAN Cargo	Regional Sales Manager
6	DAN Cargo	Route Analyst 1 and 2
7	DAN Cargo	Route Analyst 1
8	DAN Communication	Head of Sales Operations
9	DAN Communication	Sales Manager, Nordics
10	DAN Communication	Head of Product Management
11	DAN Communication	Senior Director of Sales, ANZ (Australia/New Zealand)
12	DAN Communication	Sales Director, Western Europe
13	DAN Communication	Sales Director, APAC (Asia-pacific)
14	DAN Communication	Managing Director, Central Europe
15*	DAN Communication	Sales Manager, DACH (Germany, Austria, and Switzerland)
16*	DAN Communication	Sales Manager, Retail DACH
17	DAN Communication	Vice President (For a Product Category)
18*	DAN Communication	CFO
19*	DAN Communication	Vice President Sales & Operations, Europe, Middle East, Africa, Central and Latin America
20*	DAN Communication	Channel Support Specialist
21*	DAN Communication	Channel Program Manager
Meeting* **	**Company**	**Function(s)**
1**	DAN Cargo	President & CEO, Director Network & Revenue Manager, Strategic Pricing Manager, Route Analyst 1 and 2, Sales Force
2*	DAN Communication	Head of Business Development
3*	DAN Communication	CFO, Head of Channel & Sales Management, IT Staff, Procurement Manager
4*	DAN Communication	CFO, Head of Channel & Sales Management, IT Staff, Procurement Manager
Shadowing	**Company**	**Function(s)**
1**	DAN Cargo	Route Analyst 1

* Interviews and meetings were recorded and analyzed, but not transcribed and coded.
** Only notes were taken.
*** Meetings were held after the data were collected.

We participated in several meetings after the data were collected and analyzed to verify the analysis. In a meeting at DAN Cargo, the results were partly presented and verified, and new pricing issues of DAN Cargo were discussed. Here, all previous interview participants of the case firm, plus the entire sales force, were present. At DAN Communication, the results were shared

with and presented to various stakeholders. The head of business development took our report to the CEO. A few months later, it was decided that a new pricing system was needed. Subsequently, the researcher employed by the firm attended two meetings where the purchase and implementation of a configure-price-quote system were being discussed to speed up the sales pricing approval processes, making them faster and more data driven.

We also observed practices and collected documents on site. At DAN Cargo, one researcher shadowed a pricing system user to clarify and better comprehend the findings from the first interviews. We deemed this necessary given the complexity of their RMS. Further, we received screenshots of the system to support our analysis of the interview data. At DAN Communication, we were given a copy of the pricing system and shown how they use it in the interview. We had access to all sales data thanks to the employment of one co-author. Thus, we could check the actual performance numbers of the salespeople interviewed to verify and better understand the information provided. We focused on documents that serve as guidelines, policies and descriptions of relevant processes. The secondary data helped us to compensate for the weaknesses of the primary data.

The process of collecting and analyzing the data and consulting the pricing literature was iterative: we analyzed interviews, and then we returned to the case firms to conduct more interviews. Following authors such as Dutta et al. (2003) and Zbaracki and Bergen (2010), we treated pricing as a process. Therefore, in both cases, we first conducted explorative interviews to get an understanding of the overall pricing decision-making process. From the beginning, we emphasized praxeologizing our questions (Korica et al., 2017). The co-authors read, discussed, and analyzed the initial interviews in various sessions. Actions and processes, rather than themes and structures, were identified and analyzed (Charmaz, 2010). The guide for the semi-structured interviews was revised continuously and developed further based on the preliminary data, findings, and new literature. For example, it soon became apparent that the processing of pricing information was paramount, so we reviewed the literature on intuition and individual judgment, and then returned to the case firm to probe this subject further. Revisions to the guide were primarily based on the previous interviews and the literature we consulted throughout the research process.

The data analysis then proceeded in a more systematic, but still iterative mode (Miles & Huberman, 1994). To structure the data and grasp the specific and broader contexts, we first coded for the process steps, which we perceived as useful for zooming in and out of practices (praxis). After mapping the process, we identified the practices and their corresponding activities in the

data (practices). Third, we coded for the actors involved (practitioners) and materials, mostly in the form of pricing systems. To gain further insights into the context and complexity (praxis), we also coded for issues and challenges encountered in the processes.

Coding was performed in NVivo and yielded a practice coding scheme. Early versions of the scheme were challenged and revised. This process was repeated several times until the coding scheme was sufficiently comprehensive and relevant to the subject. After the coding scheme was finalized, the interviews were again coded twofold in NVivo, meaning coded independently by two researchers. The results were compared, and each coded line of all the transcripts was reviewed. For all the interviews, the intercoder reliability[8] was 87% (DAN Communication) and 80% (DAN Cargo) in the last testing round, which was deemed sufficient. Disagreements were discussed and resolved in this process.

Coding scheme: Practices

Based on the described methodological process, we identified and validated the practices and accompanying activities used in the sales price decision-making processes at the two case companies. The practice scheme (see Table 6.3) that emerged includes four practices: information processing, interaction with the system, communication, and control and accountability.

As argued earlier, the practice approach implies that practices are the unit of analysis, moving empirical research away from the individual (e.g., salespeople) as the primary focus (Geiger & Kelly, 2014). The scheme indicates the activities that compose a specific practice and the related problem. With regard to the three elements of practices, the scheme (Table 6.3) in isolation answers the "what" at a rather general level, and the "who" and "how" to an even lesser extent. To gain more insight into this, we use the scheme in the subsequent case analysis, which explores in particular how practitioners are enacting the practices in praxis to address the three key problems of information, coordination and control (Jarzabkowski et al., 2016).

[8] The intercoder reliability test is used to measure the level of agreement between two coders. Intercoder reliability is calculated as the number of agreements divided by the total number of agreements and disagreements. Intercoder reliability adds objectivity and reduces errors (Miles & Huberman, 1994). Miles and Huberman (1994) argued that intercoder reliability should be at least 70%.

Table 6.3: Coding scheme – practices

Practice	Activity	Description	Problem type
Information-processing practice	Adjusting pricing information	Adjustment of pricing information before it is further communicated or used (e.g., added to the pricing system)	**Information problem**
	Rational processing	Conscious analysis of pricing information	
	Intuitive processing	Rapid, non-conscious judgements about pricing information	
Interaction with system practice	Using the pricing system	Usage of the pricing system (e.g., filling in the blanks with data to receive an output from the system)	**Information problem**
	Tuning the pricing system	Changing the pricing system (e.g., manually modifying or correcting formulas or parameters)	
	Overruling the pricing system	Making human decisions to overrule the pricing system's suggestion (output) due to, consideration of factors disregarded by the system	
Communication practice	Discussing the price or pricing information	A discussion of a pricing case for a sales transaction by two human actors inside the selling firm	**Coordination problem**
	Forwarding pricing information	One actor forwarding pricing information to another	
	Challenging an actor	A challenge from one actor to another in the pricing process	
Control and accountability practice	(Dis-)approving the price	Approval or disapproval of the price for a sales transaction by an actor in the selling firm	**Control problem**
	Verifying pricing information	Verification of received pricing information	
	Sharing pricing responsibility	Sharing of pricing responsibility with another actor	
	Passing on pricing responsibility	Assignment of pricing responsibility to another actor	
	Guiding an actor	Provision of pricing information to guide the recipient	

DAN Cargo analysis

Introduction

DAN Cargo is a leading air cargo carrier in Scandinavia. The airfreight market is influenced by various seasonal and geographic trends, many irregular conditions, and high volatility. This fast-paced environment and the resulting variations in demand and capacity create high complexity in

pricing decisions. A key challenge was the way that clients pressured the sales force. A route analyst explains:

> There's a danger that you might put a price too low because you are good friends with the customer … maybe select a wrong price because you know the customer or because you do not know the customer. The system helps you with this – it might, though, never take over 100% – but at least, it can help and guide you. You get a more helicopter view on the pricing because then it's not just emotions, but it is also facts that go into the price calculation. [Route analyst 1]

To reduce the negative effects of relational pressure and emotional decision-making, the company implemented a new RMS and centralized pricing decision-making authority. The system is built on algorithms, enabling fast *rational processing of market information* with the purpose of *guiding the system users.* In this process the system users are crucial because they evaluate the system's input and output and make the pricing decision.

The system defines a hurdle rate, which can be considered to be the price floor and price anchor. The hurdle rate helps users decide which capacity should be sold to whom and when and at what price to achieve maximum profitability and revenue for a flight. If demand is high, prices will increase; if demand is low, prices decrease because the capacity for airfreight is fixed and relatively independent of demand. Considerable energy is devoted here to analyzing demand and capacity information. The RMS thus analyzes pricing information, coordinates decisions through collocating information and allocating capacity, and controls the sales force through the production of a minimum price.

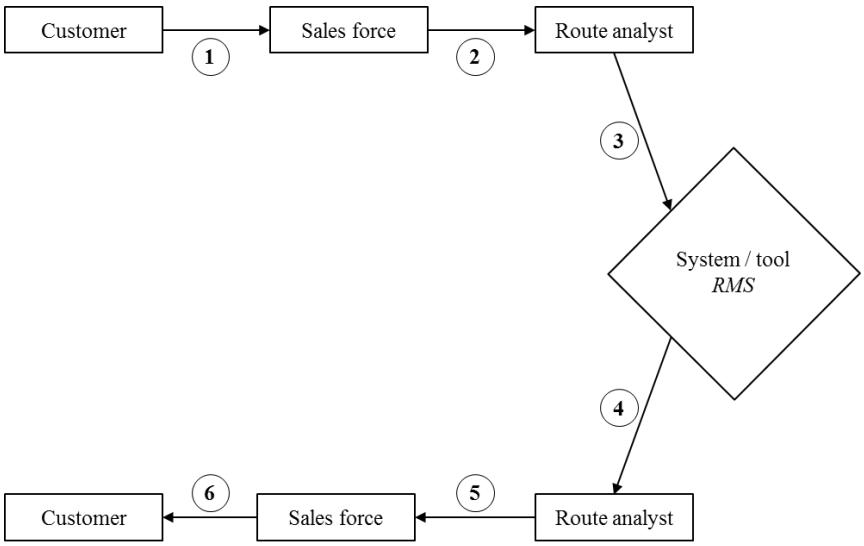


Figure 6.1: DAN Cargo pricing process for sales transactions.

Based on the empirical analysis, we designed a process flow chart to illustrate the pricing process for a specific sales transaction. The structure is based on the interactions of the various actors, and also systems, in the pricing process. Figure 6.1 illustrates the process steps that the company follows to address the information problem (evaluating demand), coordination (allocation of capacity) and control (reducing price discounting based on relational pressure).

Customer—Sales Representative (Step 1)

Under DAN Cargo's more centralized decision-making paradigm, direct negotiations were minimized, and the sales representative (SR) was more caretaker than price setter. The new roles require holding customer meetings and gathering customer information, for two purposes. First, an increased focus on service should mitigate the potential negative effects on sales revenues from the lack of negotiation opportunities. Second, market information should be gathered to serve as input for the RMS:

> For example, [in] Copenhagen, fur auctions have sold a lot of fur. Then we hear, "The auction went well, so there will probably be much fur cargo 14 days from now." It is those feelings you get, when you are out and talk to the customer. [Regional sales manager]

This quotation shows that the company creates an understanding of what is happening in the market by collecting relevant information from customers. The regional sales manager identifies input as specific occurrences in the market which could increase or decrease market demand for airfreight. The data gathered by the sales force are mostly qualitative and therefore support non-quantified expectations.

Sales Representative—Route Analyst (Step 2)

In the first process step, the information provided by customers and observations made in the market serve as the starting point for the pricing decision. The information is next forwarded to the route analysts at headquarters, who are using the RMS (henceforth called system users). System users are central in the pricing process because of their placement between the sales force and the system.

The information from the sales force is forwarded to and discussed in weekly meetings, dialogues, and discussions by the system users:

> It is typically our salespeople that have their fingers on the pulse. And in addition, we have organized meetings, so we have weekly sales meetings with all our regions. .... We have

> lost this one customer, or we have found a potential new customer that increases demand. Or now, we believe that Lufthansa will cancel three days next week, so that means there will be some extra demand. Or now, Norwegian will come in and start flying somewhere in the United States. …. What should we do about it?...Well, there are many different types of information." [Strategic pricing manager]

The company's planning and forecasting are heavily dependent on receiving input from the sales force because they have a major role *in forwarding information* and *guiding the system users.* The system users informally *discuss pricing information* with the sales force every day to ensure that they are always well informed and up to date.

The system users must be cautious about demand input because salespeople compete for capacity on flights and exaggerate demand. The system users are aware of this conflict of interest and often *adjust information* to remove potential biases. System users use various sources of information, and when these sources with different interests make similar statements, the *information is considered to be verified* and more believable. Confirmation from other people in the organization increases the perceived need for the system users to take action. A second approach to *processing information* in a rational manner is through experience-based intuition:

> When there are at least two or three [people] that begin to mention the same thing to me, that's when my stomach starts to say: "Then, we have to do something. … Now there is a lot, or now there is a little, right?" Then I can tune it that way. ... So, if they say to me, "I have to rely on something down from Germany, and it is average pallets with 2 tons" – then, no. My gut tells me – and now I have been sitting on this for many years – that it's not 2 tons. This is a volume of only 1,650 kilos, so I assume that it's only 1,650 kg. [Route analyst 1]

Such qualitative data need to be converted into a quantity that can be entered into the system. Today, no algorithm or similar tool can perform this task. Instead, the system users rely on the information received, listen to their gut feelings to understand what the effect will be, and then act accordingly (Step 3). Therefore, the system users *process intuitively* to transform the input from the sales force into a quantifiable value in an algorithmic parameter of the RMS.

In summary, the *practices of information processing* and *communication* are key in this step of the pricing decision-making process. The system users carefully consider the *information forwarded* by the sales force because of the potential for biased information. Thus, DAN Cargo's information-processing practice is characterized by the activities of *verifying and adjusting information.* In doing this, the system users *rationally and intuitively process* the received inputs before entering them into the system. The *practice of communication* is vital in this step given the necessity of *forwarding and discussing information.*

Route Analyst—System (Step 3)

The system forecasts and deploys the available capacity, which is matched with the anticipated demand by the system's optimization algorithm. The different inputs are combined to determine the hurdle rate and eventually suggest a price to the system users. Thus, the system must be used in price setting. The automated forecast must be changed manually if the system's demand forecast contradicts the organization's expectations. The automation of the pricing decision through the RMS makes verifying pricing information even more important:

> It [RMS] can calculate a lot and can anticipate a lot based on some statistics and things like that. But the manual input may become even more important in the future, the more you leave [for] the system to calculate. [Regional sales manager]

The system can calculate the hurdle rate through its algorithms, but a human actor must tune it manually.

> So you can tune ... . If you know that demand will go up ... let's say there is a factory. They need [to send] something to a factory in the United States. Then you can go to our RMS and tune on demand on the OD – origin destination – where it flies off and on. … And that helps to tune up the price because we expect there to be more. [Route analyst 1]

In many instances, it is not sufficient to simply *use the system*; instead, system users must actively *tune the parameters of the RMS* (e.g., turn up the demand). The system's algorithm is then reconstructed to produce the hurdle rates in relation to new demand information.

The system also has problems with non-recurrent incidents. They are not removed automatically, resulting in a bias which must be eliminated by tuning the system:

> Historical data need help, and sometimes, a market may change, which makes history obsolete. And then, you have to adjust for that, and then, you can tell the system what you think is happening. We could not forecast the ash cloud [which grounded airplanes for six days in 2010], but the system has historical data, and we need to remove that. [Route analyst 2]

The system does not always produce valid forecasts, which affects its suggested prices because of its *rational processing.* The system also does not automatically reject historical information of irregular variances, and system users therefore must *tune the parameters* when *interacting with the system.*

In sum, after processing the information (Step 2), the system users start the practice of *interacting with the RMS.* The *system is often tuned* while being *used by the system users,* for example by correcting the algorithms for producing forecasts when historical data are an invalid basis for predicting the future.

System—Route Analyst (Step 4)

The produced system output is evaluated and sometimes corrected. The system's capability to make or to support adequate decisions is dependent on being operated by the system users:

> Either you are someone who expects the system to take all the decisions for you. And if that's what your expectation is, then the system expects that you tune it optimally. Or are you one of those who use a bit of what the system spits out and then use a little of your gut feeling and then say: "We must try this, and then we will see what result we get out of it." And then we can then afterwards use it in, perhaps, tune it up after the experience we have made, right? [Route analyst 2]

> You must know how your system works, and you should know what it is your system can not do for you. Where are the weaknesses in the system? And this is what I should know to be better able to help. If you do not understand how the system works, then it becomes too hard because then you do not trust the system. The system must be the work of average things running through, and then there are all the exceptions. [Route analyst 1]

This quotation shows that the *system guides the system users* but also highlights that the system is reliant on both manual input and evaluation of the output. The system produces accurate forecasts in some areas. However, its price calculations sometimes do not account for the specificity of particular transactions:

> If we are to fly a car, a car weighs maybe not very much, but it is mega hassle to get in and out of an airplane, right? So it should not just be priced with a per-kilo rate. … If for example this is a red Ferrari, then one cannot just put Danfoss pumps on top of it, right? [Regional sales manager]

The price and cost output of the RMS are corrected to reflect the specific transaction. The system outputs are analyzed to consider the particularities of specific transactions. The system's output is thus overruled to meet the requirements of the specific freight, if necessary:

> I trust the system when it has got the right inputs, and the inputs have to come from me, among others. [Regional sales manager]

The system cannot automatically make accurate decisions in all instances. The system users' gatekeeper function is to *overrule the system* based on *rational and intuitive processing* of the system's information outputs (practice of information processing) when doing so is deemed necessary. The *practice of interacting with the system* (using, tuning, and overruling the system) eventually determines the pricing output.

Route Analyst—Sales Representative and Sales Representative—Customer (Steps 5 and 6)

So far, the dialogue between the system users and the sales force has been on customer information (Step 2). Now, the process reverses. After *approving the system output* (the minimum price), *the system users forward it* to the sales force:

> We start with a negotiating point and a desired rate … and then, they [the customer] say "yes", or they say "no". And then the question is what it is the customer is willing to pay. [Regional sales manager]

Before the sales force can begin negotiating with the *customer, the price is internally forwarded to and discussed* with the sales force. The input, which primarily is a transformation of the initial information at the beginning of the flowchart, has gone from unspecific talk to a specific minimum price. This guidance delineates the safe area in which the SR is allowed to play, or alternatively, the *transaction is disapproved,* and no sale is completed, for example due to a lack of capacity.

Conclusion of DAN Cargo analysis

In conclusion, transaction pricing at DAN Cargo is centrally organized and led. The sales force cannot propose a price in negotiations before they receive authorization from the system users. Thus, pricing responsibility is ultimately passed on to the system users, who seek to coordinate capacity between geographies and salespeople and to control the sales force's pricing behavior. The main task of the sales force is to estimate demand. Their forwarded or adjusted input, however, is not inserted directly into the RMS. Instead, the input is first verified, for example by comparing it with information from other markets, or is intuitively processed and then adjusted. System users tune the system and work with the algorithms to produce more realistic forecasts and, thereby, make better pricing decisions. They overrule the system's outputs when these seem out of tune with demand or if specific transactions warrant it. The system itself cannot guarantee the accuracy of decisions made. Instead, the RMS becomes a purposeful part of the pricing process only once human actors tune the system. The system output further triggers the actors' practices, such as overriding the system. Generally, at DAN Cargo, the main practice of interacting with the system is highly dependent on the practices of communication and information processing and their related activities. Once these practices are enacted, the system's rational processing of information can produce prices that are, in the eyes of the firm, optimized.

DAN Communication analysis

Introduction

The second case company, DAN Communication, is a global manufacturer of hearing and communication devices. A few years ago, the firm started a new business division with consumer products that today accounts for 35 percent of its total revenue. The products are specifically developed for the mass market and sold primarily through consumer electronics and specialty distributors and stores. The interviewed staff members have responsibilities within this division only. The focus of this analysis is on the sales prices for its B2B customers.

Customer—Sales Representative (Step 1) and definition of process

In most of the transaction deals, SRs transact by selling at or higher than the internally defined minimum price. Thus, they can "reach the decision within the same meeting" (sales manager, Nordics). However, in many cases, the sales price process becomes more complex as a result of a need for coordination and control. Typically, this happens when a customer requests a price lower than the minimum price or has specific requirements for discounts, rebates or marketing support that often greatly affect profitability. Generally, one "should never expect them [customer] to do anything else than pressure us" (head of product management), and the profitability and margin targets of the deal is often at stake. A sales manager (SM, including sales managers and sales directors) argues:

> Customers always just want money off, money off, money off. … So, in a way, by them [SRs] not having the ability to do that, it means that they don't get in a difficult situation where they feel that maybe they've got to offer it. Because they can't. They have to say, "I will go back and ask the business". [Senior director of sales, ANZ]

The customer exerts relational pressure. The quote implies that salespeople might be tempted to close the deal in certain situations, such as when sales are needed at the end of the quarter.

Here, customers use their close relationships with SRs to push for price reductions:

> If they go way back, and they've done each other favors in the past, so you remember, "I did this for you." "Yeah, I remember that". "So now you do this for me". That's for sure a part of the game. [Head of sales operations]

Past favors in the relationship enable customers to *challenge the SRs.* Salespeople are hired because of their industry networks, and over time they become further embedded in relationships

with customers. Over the long term, however, these relationships might not always benefit the selling firm. Sales discounting behavior is therefore subject to control.

The chain of command for sales price approvals involves various actors at the local and central levels. There is often only a thin line between discussing a price and passing on responsibility, because DAN Communication has no clear rules for when and how employees must ask for approval. Throughout the analysis, it is shown that the approval procedure is a mechanism for governing the sales transaction process. This broadly defined governance allows flexibility and serves three purposes: 1) assembling information from different parts of the organization, 2) making coordinated decisions, and 3) controlling the discounts given by SRs. Figure 6.2 maps the approval process.

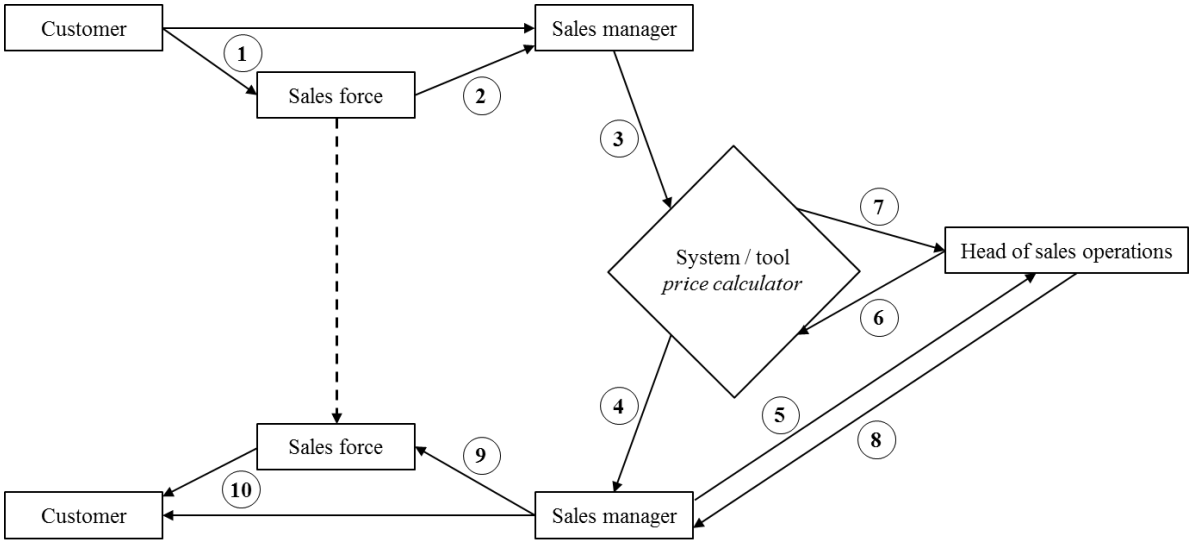


Figure 6.2: Price approval process at DAN Communication.

In routine, simple cases (about 70%), approval is not needed and the SR immediately sets the price in the negotiations. This situation is represented by the dotted line and is not the focus of our analysis. In the other cases, with potentially big impacts on profits and margins, other actors are involved, as the figure illustrates. These are our focus.

Sales Representative—Sales Manager (Step 2)

The SR involves the SM when in doubt about the price decision:

> If the colleague is a bit more experienced, then they usually know roughly what they have to play around with in terms of discounts or marketing support. But if it's a new case for

> them or if it's a fairly new employee, then they usually turn to their manager. [Sales manager, Nordics]

The SM gets involved in the customer interaction and determines whether the customer is eligible for a special price, for example due to a larger order volume. Experience tells SMs whether they can "feel comfortable that the customer can actually handle that extra volume" (sales manager, Nordics). Knowing which customers can and which cannot is a matter that the SMs "basically just learn over time" (sales manager, Nordics). SMs, therefore, use experience-based intuition to gauge the effects of discounts. However, the sales decisions are often analytically driven, as stressed by a SM:

> There's nothing there that's just available to offer. … Every dollar and every cent counts, so it has to be justified. [Senior director of sales, ANZ]

The firm seems to expect a rational decision – in other words, a profitable deal based on margin requirements. The SRs, however, are deliberately not given the relevant tools and cost information to evaluate whether a certain price less than the minimum price is still a good price from a marginal point of view (Step 3).[9] Thus, the SRs cannot use the potential contribution margin (CM) of the transaction as a justification.

In summary, the SRs have the role of *forwarding relevant information* to their SMs. It is not fully defined what information is necessary and what justifications are acceptable, but through experience and regular practicing, the SRs get a better understanding of what they need to provide to their superiors.

Sales Manager—System and System—Sales Manager (Steps 3 and 4)

Based on the received information, the SMs begin to interact with the price calculator.[10] If the calculated CM is higher than a certain percentage, the number turns green to indicate a healthy or good margin. When the CM percentage is too low, the number turns red, suggesting disapproval of the deal. After using the system, the SMs evaluate whether the system tells the full story and what further actions to take.

---

[9] Bloomfield and Luft (2006) discussed how responsibility for cost may hinder learning and document that salespeople who do not have access to cost have superior results. In this case, other reasons for reducing the information to salespeople are also important—in particular, coordination issues, discussed below.

[10] The system is a Microsoft Excel tool, internally known as the price calculator. System users can insert the volume and the price being negotiated with the customer into the tool. Among other outputs, the tool calculates the contribution margin to indicate the financial attractiveness of the potential deal.

The system has limitations and might offer misleading suggestions. According to a SM, the system is faulty because green does not always indicate a good deal, and red does not always mean that a deal should not be approved:

> There might be products which are old where, if you use a price calculator, and you wait until the price gets green, the price will still be so high that the customer will not buy the product. So, for example, product [name withheld]. That's a very expensive product for us, and it's an old product, so we cannot sell this product anymore, in most cases, with a healthy margin. So, based on the price calculator, we should always say "no" to the customer [while in reality it is still sold]. [Sales director, Western Europe]

From a governance point of view, the calculator exists to *rationally process information* for the business's success, but when *using the system,* the output is often reasonable only at first sight. The system's output *guides the system users,* although the SMs also *challenge the system* by drawing on other types of information, such as the product's lifecycle stage. The system users coordinate different decisions by considering various types of information and strategies not available on the local level.

Many SMs believe that they perform a guardian role in using the system. The SMs deliberately do not give the SRs access to the tool:

> I don't even think they [SRs] think that way. They think, "Oh, green must be good, so I can sell at 30%", which I think should not be the case. I think we have to be strict about it. [Sales director, Western Europe]

From the SMs' perspective, the SRs probably rely too much on the system and do not know how to correctly interpret its output. The SRs might also be inclined to sell at the lowest margin possible to take the path of least customer resistance (Frenzen et al., 2010). In other words, the SMs think the SRs should be controlled.

The price calculator is an important tool for the SMs because it *rationally* calculates the CM, which is a key criterion for approval of decisions, although it is certainly not the only parameter considered by many managers. The SMs are the only local users of the price calculator and therefore possess knowledge that the SRs might not have, such as insight into the CM or the system's limitations. A grey or dangerous area is a matter that is perceived differently by every SM. Depending on such interpretations, the SMs may decide to involve the head of sales operations (HSO) at the headquarters level.

When it is believed that the calculated CM is red or in a grey area, the SMs have to be very confident that approving or disapproving the price still falls within their responsibility. The SMs have the flexibility to decide when to *pass on the pricing responsibility,* as it is not "overly clearly

defined when I can make a decision and when not" (sales director, Western Europe). If the SMs are uncertain, they can use the system output to send the information to the HSO. The system output, thus, *guides the SMs* and determines the next activity and practice, such as *passing on responsibility* and *forwarding information* to the HSO.

Sales Manager—Head of Sales Operations (Step 5)

The centrally located HSO is the next person in the chain of command and has final decision-making authority. If the SMs feel uncomfortable approving a deal or believe it exceeds their responsibilities, they involve the HSO to ask for approval or further guidance:

> I also have a pretty good understanding of roughly what we can do, but then, I usually like to have it double-checked by the HSO. [Sales manager, Nordics]

The lack of clarity in the governance mechanism leads to a feeling of insecurity, increasing the complexity of the pricing process. By reaching out to the HSO "just in case" (sales director, Western Europe), the SMs stay "on the safe side" (sales manager, Nordics) because, in this way, the "four-eye principle" (managing director, Central Europe) is maintained; in other words, the *pricing responsibility is shared or even fully passed* on to the HSO.

Although the SMs potentially have more insights than the SRs at this stage, the SMs also encounter problems with information asymmetry:

> It's very difficult for us in sales to have a good overview and understanding of what HSO is sitting on in terms of production and sales forecast. [Sales manager, Nordics]

In his eyes, the HSO has other sources of information (e.g., global overview of inventory, global demand) which can aid in making a coordinated decision for the overall benefit of the company. It is argued that the HSO has the best perspective for approving the price of a deal.

When the SMs reach out to the HSO, they often give their opinion of why they approve of the deal or what about it concerns them because, ultimately, the SMs need to justify why they are asking for a special price. In other words, they sometimes sell the deal to the HSO. In such instances, the information is adjusted by the SMs when it is provided. Briefly put, the SMs describe the case in an e-mail, often with the price calculator and the current numbers attached to it.

> If he doesn't know the customer, I may briefly describe the customer. Also highlighting, if it's a customer that I clearly feel very confident with. [Sales manager, Nordics]

This quotation shows that intangible factors, such as expressions of opinions and feelings, are highly important, so such *information needs to be forwarded.*

The HSO draws together diverse sets of information and coordinates decisions. Also, the *information must be adjusted* because the HSO might be unfamiliar with the local environment, such as customer type. Involving the HSO activates the next person in the chain of command, which implies a shift in the delegation of authority to approve decisions.

Head of Sales Operations—System and System—Head of Sales Operations (Steps 6 and 7)

With the information from the SMs, the HSO can evaluate the numbers and "do the math contribution-wise" (HSO). Like the SMs (see steps 3 and 4), the HSO considers more factors than just the CM. The HSO explains that his practice of interacting with the system has changed because of the experience he has gained:

> In the beginning, if the number turned red, if the figure turned red in my Excel spreadsheet, I immediately said, "No". But today, I look at the number, and I say, "Okay, fine, so is this an end-of-life product? Yes? No? Do we have tons of inventory that we essentially need to get rid of? Yes? No?... Will we shortly introduce a new packaging, so essentially we would like to deplete this inventory in order for us to introduce the new packaging as soon as possible?" Then, I'm also more motivated to say, "Yes". [Head of sales operations]

The HSO makes judgements primarily based on the global profit-and-loss statement and the need to meet the global CM targets, but he also looks for potential reasons to dismiss the output and *overrule it.* Overriding the system can also mean that a transaction shown as green in the tool is disapproved. The arguments against the system's recommendation cannot be found in the price calculator but become visible when the human actor considers "a number of circumstances around the product" (HSO). The HSO further elaborates:

> That's the beautiful thing about a human brain. You can juggle these 15 different kinds of small and big pieces of information that are all part of the whole picture, right? You can juggle those in a couple of seconds, and all these things you cannot put into a pricing calculator, even though we would love to do that. [Head of sales operations]

The HSO uses the tool but may overrule its suggestion when he believes that other factors should be weighted higher than the price calculator. These factors serve as a sort of "mental check" (sales director, Western Europe) that does not exist in writing. This mental check consists mainly of domain-specific and experience-based *intuition,* developed over time in combination with *rational processing of information.*

Whereas the human actor develops higher intuition with greater experience and learning, the system does not get smarter over time unless it is tuned by a human (see "DAN Cargo Analysis"). However, DAN Communication maintains and updates but does not change its tool. The HSO argues:

> I think the benefit is that it [the process] has a human touch to it. I think the benefit is that we have a conversation about many of the cases, and during those conversations, everything that cannot be weighted and put into an Excel spreadsheet and turned into something that is plus–minus, XYZ, that comes out. And I think that's a value in the process or in the structure. It's also a time-consuming process because every inquiry needs to be taken, sort of, in hand and hand-carried through, but I still think that it's worth it. [Head of sales operations]

The practice of communicating between different actors is necessary for the HSO to make the decision. As a result, he decides to continuously question and, consequently, in specific instances, to override the system and to *discuss pricing* with the SMs.

In sum, the HSO communicates extensively with other parts of the organization and uses both rational and intuitive processing to gauge system output and to (dis-)approve prices. When outputs are interpreted to be invalid, the system is overruled.

Head of Sales Operations—Sales Manager (Step 8)

From this step onward, the flow is reversed toward local sales and customers. Triggered by the system's proposal and the evaluation of the system output, along with various other business factors, the HSO decides what and how to tell the SMs. Often, he provides not only the decision but also further information:

> I will tell him, so I will be very open about that: "You can do this, but you should know that this is going to pull down your overall contribution from your business. Hence, you need to find some other business that pulls it up again in order for you to hit your contribution margin target". [Head of sales operations]

As illustrated in this quotation, the HSO forwards supplementary information to the SM. With this warning, the HSO not only *challenges but also guides* the SMs. A SM further adds:

> I think that the HSO is also doing a great job in that, challenging us in sales and asking us about the dynamics and what we should sort of take into consideration … And then usually, the end result is that I am given a sort of a small price range that he tells me: "Okay, ideally, this is the price you should go for. However, if it's really tricky and tough competition, this is the absolute minimum price". … And then I do my best to land somewhere in between. [Sales manager, Nordics]

The HSO *forwards relevant information,* which the SMs then take into consideration. This also serves a safeguarding purpose for the HSO, which again relates to the practice of control and accountability. By reaching an agreement together, the actors (are perceived to) *share pricing responsibility*.

Sales Manager—Sales Representative and Sales Representative—Customer (Steps 9 and 10)

The newly given price or price range is now the safe playground for the SMs. They feel more comfortable because the involvement of the HSO has reduced their personal risks and responsibility. Now, the SMs pass the information on to the SRs:

> The customer wanted $12, but I would tell my SR a higher price to try to get him to close it higher first. I will tell them: "Try and sell it at $13 first". And then, if they come back and say, also give me some reasons … Then, I know, okay, we have tried our best, and then I will let it go at the lower price. [Sales director, APAC]

> It depends on how much I know about the customer and about the SR. Some sales guys, I know 100% that it's the truth. Some other guys, I will say, "I can't do it. Can you go back and maybe see if you can increase it from 40 to 45?" And they say, "Okay, we will try". So, actually, the latter I do most. I always ask, "Can you try for a bit more?" And sometimes, they come back and say, "No, it was really … the maximum they are willing to pay". [Sales director, Western Europe]

In this step, depending on the SMs' previous performance and experience with the SRs, the SMs often *challenge the SRs* to push the customer a bit harder – making one last attempt to raise the price above what the customer sought.

In conjunction with the previous step, the reversion of the process to the customer is intended to stimulate and control the next actor in line to reduce discounts. The information provided to the HSO is *adjusted* for this purpose. Thus, the SMs are also gatekeepers in this step, even as they also have a *guiding role.* The data show that a salesperson's confidence increases with the "sense of knowing and understanding" (senior director of sales, ANZ) and the approved pricing playground.

Conclusion of DAN Communication analysis

Overall, the case analysis shows how DAN Communication addresses the challenge of meeting customers' price expectations while controlling discounting. To alleviate the pressure of salespeople and managers' uncertainty in the process, employees follow a chain of command. When a customer requests a price lower than the perceived minimum, the pricing decision is

controlled and coordinated across the hierarchy, especially because important information is not accessible at the lower levels. SRs do not have access to cost information and therefore cannot judge profitability of specific deals. Because of this, an approval process is started that is rather informal. It is further characterized by tacit knowledge rather than clearly defined rules in relation to the practice of control and accountability.

Discussion

Case findings

This section presents the findings of the cases (see Table 6.4) and relates these to the literature to highlight the study's contributions. The pricing process in both firms was an interactive chain of practices across the organization. The analyzed pricing practices are durable activities which organizational actors share and use to resolve the information, coordination and control problems. In the cases studied, price setting for a specific sales transaction is therefore not always a single decision made by one individual; it is also a collective effort achieved through a bundle of activities, belonging to certain practices that together lead to the pricing decision.

Table 6.4: Practices of case companies

	DAN Cargo	DAN Communication
Key problems in pricing processes	• Information problem: Uncertainty about information and complexity in information sources between local units and headquarters • Control and coordination problem: Reducing relational pressure and transferring demand information to central pricing so that prices can be coordinated	• Control problem: Ensuring that relational pressure does not lead to margin leakage • Coordination problem: coordination of inventory, product introductions and across markets • Information problem: Sales are not distracted by cost and capacity information. This information is evaluated in the accountability process
Key practices	• Interaction with system	• Control and accountability
Practices supporting primary practice	• Communication • Information processing	• Information processing • Communication
Key interaction between practices	• Practice of interacting with the system (tuning and overruling), dependent on the practices of information processing (adjusting, and intuition) and communication (forwarding and guiding) and accountability and control practices (verifying information)	• Practice of control and accountability is linked to the practices of information processing (adjusting, rationality, and intuition) and communicating (discussing, forwarding and challenging)

In the pricing processes studied, "practices exist in configurations" (Nicolini & Monteiro, 2017, p. 4), as also argued by other practice researchers such as Jarzabkowski et al. (2016) and Gherardi (2012). This means that a practice cannot be found in isolation, as it is bound and related to other practices. At DAN Cargo, the key practice of interacting with the system was interrelated with communication and information-processing practices – information is collected, communicated, verified and fed to the system, and the system output is analyzed and corrected. At DAN Communication, the main activities related to the practice of control and accountability were informal and occurred in relation to practices of communication and information processing.

The context in the pricing process is rather dynamic, indicating that practitioners who enact a practice need to adapt to new situations and that practices are "neither mindless repetition nor complete invention" (Nicolini & Monteiro, 2017, p. 6). Additionally, this paper supports the argument of Jarzabkowski et al. (2016) that, in practice-based research, it is key to focus on the "interaction of the what, who, and how of practices" (p. 250). Investigating these three elements in isolation, or only listing the practices, would have not yielded the same results.

This finding extends the market view. The market-based literature analyzes pricing practices very generally, focusing on the information used (Ingenbleek et al., 2003; Ingenbleek & van der Lans, 2013). The practices developed here are finer-grained[11] than the three price-setting practices which use cost, competitor, and value information (Ingenbleek & van der Lans, 2013). We also illustrate how various types of qualitative and quantitative information (e.g., capacity, cost or value) are used by interlinked practices. Furthermore, information is not trusted per se. Multiple actors verify and check information, adjust it, process it via calculations or RMS and finally overrule calculations and systems output. Information is thus an uncertain resource that is processed and controlled through multiple interlinked practices.

The study also extends behavioral market research that focuses on determining whether intuition or rational processing is optimal in pricing. The pricing process is a series of interconnected practices in which intuitive and rational information-processing are dependent on and interlinked with other practices. Intuitive and rational processing, thus, are not performed by isolated individuals but are embedded in practices that affect and feed judgements. For example,

[11] It may be argued that the micro-level practices are close to being routines. As explained by Reckwitz (2002), in some respects "social practices are routines: routines of moving the body, of understanding and wanting, of using things, interconnected in a practice" (p. 255). While a practice-based approach to the embedded routines may be another fruitful research area for studying this phenomenon, it is beyond the scope of this paper. Rather, our purpose is to study what Schatzki (2002) defined as "doings and sayings" (p. 87) and "bundles of activities" (p. 71). Further, we explore, and advocate for, the practice-based view for pricing process research.

the ability of a RMS to rationally predict demand and set prices is potentially flawed. The practice of communication and the activities related to the practice of interacting with the system, such as tuning the system and overriding its output, are found to be necessary in the case of DAN Cargo. Furthermore, we document situations in which intuitive feelings determine subsequent practices and activities, for example when the system users experience doubt and decide to verify information or when the SMs at DAN Communication have an instinct that tells them not to approve the price but to pass the responsibility to the HSO. In this way, individuals' usage of rationality and intuition is spun into a web of social practices. The effects of rational and intuitive information-processing should be judged not solely from a cognitive perspective but also in their social context and through their interconnections with other practices.

This case study's findings also extend the accounting and control research on pricing delegation, which is mostly experimental and normative. Our analysis of processes occurs in a context in which the core issue of pricing delegation is present: on one hand, individual sellers have direct access to market information but might be tempted to offer customers too-low prices in response to relational pressure and reward structures. On the other hand, the central staff has insights into capacity and cost information, which justifies centralization. We add to this literature through analyzing the processes by which firms address the problem in actual processes.

The central levels in the firms deliberately do not share cost and capacity information, as discussed in Bloomfield and Luft (2006) and Wilken et al. (2010). We extend their research by illustrating how information and accountability are shared and where sellers are tested on their requests for discounts for their customers and their input regarding demand. Our findings indicate that studying the pricing process in terms of choice of a structure and access to cost and market information alone is too narrow – pricing practices verify information, share accountability and coordinate throughout the process. Sales price decision-making is thus not just a structure or a singular decision but a process involving multiple activities and practices that enable actors to progress despite uncertainty and problems with information, coordination and control. In other words, we extend the pricing delegation literature by shedding light on the practices and corresponding activities that make a given level of formal centralization of the pricing decision-making work.

Managerial implications

The study results have two main managerial implications. First, developing insights into firms' pricing practices is key for managers seeking to understand their own pricing processes. The rich description and critical reflection on practices can empower practitioners (Gherardi, 2012). As advocated by Nicolini and Monteiro (2017), the best practice that researchers can follow to help "practitioners refine their practice is to offer them rich examples they can use" (p. 16), as this, for example, may establish new possibilities for abductive learning. In line with Eikeland and Nicolini (2011), we believe that the practices of the two cases support managers in questioning their own conventional practices and thinking about new ways of doing and saying. For instance, many companies aim to set up new governance mechanisms and approval levels to address price erosion, customer relational pressure, margin leakage, and price discount behavior. Considering such issues from a practice-based view can give managers further insights and inspiration for establishing, engineering, and developing such pricing structures.

Second, this research shows how the ability to address complexity is related to the multiple practices used to make pricing decisions. These practices are social and shared among groups of organizational members. Reconfiguring the pricing process, therefore, is difficult because of the multiple elements and practices to be changed. This analysis points to a number of important questions for analyzing and changing pricing processes: Which communication patterns are especially important for coordinating pricing information? To what extent are employees' experience and intuition important for pricing decisions? What are the limitations of the rational pricing system, and how can they be overcome? How should pricing authority be delegated, and are informal practices important for making the pricing process work? How can existing practices be used in a new process or structure to reduce potential resistance?

Limitations and future research

The current study has a number of limitations that future research could address. First, it uses a relatively bottom-up empirical research approach to the two case firms. Other researchers from the pricing domain may wish to test the relevance of these practices in larger, quantitative studies.

Second, this study focuses on how actors within the firm share and adjust information for making pricing decisions, assuming that the information is already located inside the firm. Future research could begin one step earlier and address the practices that companies and, in particular, salespeople use to gather pricing information from the external environment (e.g., customers,

competition, markets). Doing so would make the research approach potentially more network-based.

Third, we have focused on complex decisions and the parts of the pricing process where pricing was problematic, leaving simple, routine decisions unstudied. Thus, our findings are not relevant for routine decisions. However, the types of decisions studied in extant research (e.g., Bloomfield & Luft, 2006; Van den Abbeele et al., 2009) are hardly simple or routine given the complexity of the decisions they study. Furthermore, the decisions studied in the market literature are also not simple or routine, as this literature directly problematizes the use of cost, competitor and value information.

Conclusion

Pricing is a complex organizational process requiring the interaction of a multitude of practices to make decisions. No isolated individual makes complex pricing decisions. Rather, the interactions and sequences of certain practices, enacted by multiple practitioners and mediated by pricing systems, shape firms' sales price decisions. Pricing, thus, is a collective effort. The practices used can broadly be categorized as information processing, interaction with system, communication, and control and accountability. These practices and their associated activities help firms address pricing complexity. More specifically, as studied in this paper, the practices are enacted to overcome the three outlined key problems and their attendant challenges, such as information asymmetry and relational pressure from customers. Understanding these practices and their interactions is crucial to shedding light on how firms actually price their products and services.

7. PAPER II – *DEVELOPING A PRICE DISCOUNT MODEL: A PROCESS PERSPECTIVE*

Abstract

Price discounting is a critical and complex task affecting sellers' profit margins and revenues in business-to-business markets. An inherent challenge relates to whether pricing authority for negotiating price discounts shall be centralized or delegated to the local sales function. While the literature discusses this problem by describing the different scenarios of price delegation, it is rather silent on how companies actually address this issue in practice, particularly how a firm goes about changing its current approach to price discounting. To address this gap, this case study investigates how a global manufacturing firm develops a new, rather centralized price discount model. To study the phenomenon in question, this longitudinal study on price discounting applies a process perspective. The findings contribute to extant pricing research by shedding light on the complexity of developing pricing structures and authority levels. It provides insights into the process steps, which are characterized by several dilemmas and different ways of integrating local knowledge and global objectives into the model specificities. Further, the study suggests that the identified underlying elements of pricing unfairness, risks and costs impact the evolution of tensions among the project members.

Keywords: Pricing, sales, price discounting, delegation of pricing authority, change management.

Acknowledgements

I wish to thank Susi Geiger and Thomas Frandsen for their constructive comments on an earlier version of this study. It helped me greatly to improve the quality of this paper. Further, I would like to thank the other participants of my second work-in-progress seminar for sharing their valuable thoughts and suggestions.

Introduction

"Implementing new strategic pricing is one of the most challenging activities facing commercial leaders today because there are so many pieces to the puzzle"
—Nagle, Hogan, and Zale (2016, p. 180)

Realizing the vast potential of pricing (Hinterhuber, 2004; Hinterhuber & Liozu, 2014; Monroe, 2003; Nagle & Müller, 2018; Rao, 1984), companies are increasingly prioritizing pricing activities but also face challenges, particularly in relation to the sales force (Hinterhuber & Liozu, 2016; Liozu, 2016a). Pricing management, for example strategies, tactics, and structures, has developed and changed in many firms across industries.

Pricing management is highly complex (Dolan & Simon, 1996). A key challenge is the behavior and resistance of the sales unit, which often leads to conflicts in pricing (Johansson, Keränen, Hinterhuber, Liozu, & Andersson, 2015; Lancioni et al., 2005). A particular issue is price discounting to customers (Carricano et al., 2010). It can have big effects on profits and on customer perceptions of value and fairness. Many companies are believed to lose bottom-line profits due to the sales force's discounting behavior (Hallberg & Andersson, 2013; Johansson, et al., 2012; Pollono, 2016). Firms may need to reorganize and may decide to implement new structures and authority levels for controlling discounts and delegating pricing authority.

Companies need to decide how much freedom they are willing to give their sales force for negotiating prices and discounts with customers. The literature on delegation of pricing authority describes this as a dilemma, since centralization (low freedom) and decentralization (high freedom) of decision rights come with both advantages and disadvantages. A choice needs to be made. Centralization of pricing authority implies that the specific knowledge the local level has about customers, their willingness-to-pay and competition can only to a limited extent be taken into consideration when making a pricing decision (Dolan & Simon, 1996; Hallberg, 2017a; Jensen & Meckling, 1995). Decentralizing pricing authority, on the contrary, may lead to decisions that are not aligned with central management's objectives, as the sales force might enact opportunistic behavior and, for example, close deals at lower and less profitable prices (Joseph, 2001; Lancioni et al., 2005; Stephenson et al., 1979).

There is a lack of research examining how pricing structures and authority levels in terms of price discounting are actually being developed in practice. Moreover, the pricing literature is rather silent on such internal control mechanisms and has generally neglected the role of

organizational control (Hallberg, 2017a; Hallberg & Andersson, 2013). So far the research on price delegation mostly discusses the different choices, for example, low and high delegation of pricing authority to the sales force, assuming they were successfully implemented. However, the change and transition from one scenario to another, and the development of new structures and authority, is being disregarded. Due to the complex nature of pricing, particular in relation to the sales function, this is likely to be a challenging task for managers.

This paper replies to calls for more empirical research on delegation of pricing authority (Balan, 2016; Frenzen et al., 2010; Homburg et al., 2012; Joseph, 2001). Balan (2016) called for more studies to "shed light on the practices of delegating pricing authority to the sales force and to provide better ground to firms' decisions" (p. 190). Further, this paper has the objective of extending our understanding of intra-organizational issues in sales management (Geiger & Guenzi, 2009) and change management in pricing (Liozu, 2015a, 2016a). With regard to the latter, it is assumed that around 70 percent of all change initiatives fail (Judge & Douglas 2009), and changes in pricing management are believed not to be an exemption (Liozu, 2014). This study has the objective of addressing this deficiency in pricing and providing more insights from a change management perspective. Given this grounding, the study examines how a business-to-business company manages the development of a new price discount model[12] in practice. It aims to shed light on the phenomenon in question by applying a process perspective that helps further unravel this organizational pricing issue. As a result, the two research questions are as follows:

1. How is the development of a new price discount model impacted by the issue of local knowledge and global objectives?

2. How do the opposing forces and resulting tensions affect and unfold in the development process?

The findings of the study suggest that developing a price discount model is a challenging task, where piecing together the puzzle – to refer back to the quote by Nagle and colleagues (2016) that opens this paper – is not straightforward and without struggle. A key contribution of the paper is the creation of a more process-oriented perspective that acknowledges and unravels the complexity of the phenomenon under investigation and, thereby, adds to the more agency-theory-dominated literature of price delegation and price discounting. This empirical account gives insights into the encountered dilemmas, rooted in opposing forces, and details how the project

[12] In this study, the "price discount model" entails implications on the pricing structure and delegation of pricing authority. It determines when a customer is entitled to receive a specific price discount.

team aims to build a price discount model that is based on both local knowledge and the global objectives. Last, the study suggests that the factors of pricing unfairness, risks and costs help explain the tensions that evolved among the project team members.

The paper is structured as follows. Next, the theoretical approach is described. This is followed by an outline of the research methods applied in this study, and subsequently, the analysis is shown. After this, the theoretical and managerial implications of the empirical findings are discussed. At the end, the limitations and avenues for future research are elaborated on.

Theoretical approach

In this section, the conceptual framework of this paper is described. It is mostly based on the literature streams of delegation of pricing authority and organizational change.

Price discounting and delegation of pricing authority

"Nowhere else is pricing excellence more visible or absent than in selling"
—Hinterhuber and Liozu (2016, p. 3)

Given the importance of discounting in business-to-business markets, the sales function is absolutely critical for pricing success (Liozu, 2015a, 2015b). However, in daily operations the relationship between pricing and selling is usually not an easy one. Lancioni et al. (2005) examined "internal 'roadblocks' that managers must face as […] they attempt to develop and modify pricing strategies" (p. 124). Here, the authors identified obstacles in relation to sales, for example sales' tendency to do quick price cuts, to use heavy discounts to complete transactions, or to close individual deals with customers.

The literature provides many reasons for this behavior. Often the sales force feels the need to please customers (Johansson et al., 2015) or to overbid the competitive offer. Furthermore, they are not able to deal with customers who "become more professional at exerting price pressure" (Homburg et al., 2012, p. 64), or they take the "path of least resistance and grant higher discounts" (Wilken et al., 2010, p. 78) instead of focusing on positively influencing value perceptions and willingness-to-pay (Hohenschwert & Geiger, 2015; Johansson et al., 2012). Nagle and Cressman (2002) argued that although inconsistent pricing decisions are made in order to resolve short-term issues, they have long-term repercussions that include "conflict not only within the firm, but also between the firm and customers who become aware of the inconsistency" (p. 31). The

consequences of such behavior are that profits will most likely go down, customers' value perceptions and relationships can be negatively impacted, and price wars may even begin.

The literature on delegation of pricing authority to the sales force deals with the above challenges between pricing and selling in relation to discounting. Pricing delegation relates to the authority given to the sales force, allowing deviation from the list price by giving discounts to complete a transaction with a customer (Pollono, 2016). In other words, it is "the extent to which local sales people are independent […] in their pricing decisions during negotiations with customers" (Homburg et al., 2012, p. 50). According to the literature, there seem to be three main classifications for price delegation: no/low, intermediate and high price delegation. For example, no price delegation may mean that prices are set centrally and cannot be negotiated by the sales force. However, definitions of the three levels remain rather inconsistent across studies and books (see Balan, 2016).

This literature is rooted in the discussion of centralizing or decentralizing authority and decision-making power (Kruisinga, 1954; Simon, 1954) and agency theory (Krafft & Hansen, 2011). The latter looks into the relationship between a principal and an agent. This concept is present in sales-price-setting as the principal, for example corporate headquarters, is dependent on the agent, for example local sales management, to undertake an action, for example the price and discount negotiations with a customer, on the principal's behalf (Bergen, Dutta, & Walker, 1992; Krafft, 1999).

The literature particularly discusses the roles of specific knowledge, organizational structure and problems with agents. The more specific the relevant knowledge is, the costlier it is to transfer within the organization. This is because "storing, processing, transmitting, and receiving knowledge are costly activities" (p. 5) due to the limited mental capabilities of humans (Jensen & Meckling, 1995). It takes time to handle the information, which can also lead to delays and, thus, the loss of opportunities (Jensen & Meckling, 1995). When delegating decision-making authority to the person with the relevant knowledge, there is a risk that decisions are made that are not aligned with the corporate and strategic objectives determined by top management. The optimal level for decentralizing decisions is a balancing act between the "costs of bad decisions due to poor information and those due to inconsistent objectives" (Jensen & Meckling, 1995, p. 12). Generally, the cost of bad decisions is high with centralization, and the cost due to inconsistent objectives is high with decentralization.

Finding the optimal balance for delegating pricing decision rights is difficult, and various reasons exist for centralizing as well as decentralizing pricing decisions. The main factors with

regard to this are outlined next (see Balan, 2016, or Krafft & Hansen, 2011, for a full overview), namely information asymmetry, customer heterogeneity, environmental uncertainty, sales function's risk aversion and effort–price trade-offs (Frenzen et al., 2010). The first and one of the most discussed aspects is information asymmetry. More centrally located managers have superior internal information, for example on strategic objectives and cost information (Frenzen et al., 2010), whereas the local sales force typically has superior knowledge of customers, for example on their willingness-to-pay and preferences (Geiger & Turley, 2005). However, studies show that full decentralization leads to lower profits, as the sales force gives too-large discounts (Joseph, 2001; Mishra & Prasad, 2005). This is in line with the described findings of Lancioni et al. (2005) on cross-departmental conflicts about pricing strategies and the general thoughts of Jensen and Meckling (1995) on costs of knowledge transfer and organizational structure. Homburg and colleagues (2012) supported earlier findings, arguing that price delegation is a "twofold issue" (p. 65).

The second variable is customer heterogeneity. The more diverse customers are, the better it is to give local sales the decision power, so that they can meet the individual needs of specific customers (Frenzen et al., 2010; Lal, 1986; Stephenson et al., 1979). Local knowledge is specific and vital to making the decision.

The third determinant is market uncertainty. Delegating pricing authority to the sales force in uncertain environments is beneficial, as the corporate costs of gathering information to reduce uncertainty are high (Nagar, 2002), and it minimizes the inefficiencies and costs of transmitting information inside the firms, such as leaks (Keren & Levhari, 1989) and delays (Radner, 1993; Van Zandt, 1998).

The fourth and fifth aspects refer to the sales representatives' behavior. They might be rather risk averse and trade off effort and price. The sales force may want to "play it safe to get the order" (Nimer, 1971, p. 48) by reducing the price. Furthermore, to close the deal, the sales force might be tempted to offer a lower price rather than defend the value of the initial price offering, as this requires less selling effort. In other words, there might be "suboptimal tradeoffs between price and effort" (Joseph, 2001, p. 62), which is what other authors, such as Lancioni et al. (2005) and Wilken et al. (2010), also pointed to in their work.

The literature on delegation of pricing authority has greatly contributed to research on price discounting by drawing upon agency theory. It provides a useful lens for examining and understanding issues around price discounting, pricing structures, the delegation of pricing authority and the relationship between key actors in pricing and sales management. However, it

also has limitations. First, it focuses only on establishing the most efficient contract between the two parties, often by using incentives as a vehicle (Eisenhardt, 1989). Second, and most importantly, agency theory might restrict the discovery opportunities for exploring the development process of a new price discount model, as it is simply not intended for process studies. It treats centralization as a singular, structural decision and not as a process. The dominance of agency theory in this literature may explain why it is rather silent on how new price discount models are actually being developed and changed in practice. This then might also explain the lack of focus in this literature stream on how local pricing knowledge is transferred within the actors of the firm. It focuses more on comparing different structural levels of pricing authority. Derived from the above, a more process-oriented approach is needed to examine how price discount models are developed in companies, and who actually develops such structures and levels of pricing authority. Further, it is critical to analyze how local knowledge and central objectives are used and incorporated for that purpose.

Participation and acceptance

The literature on price discounting and delegation of pricing authority does not provide insights into who determines pricing structures and authority levels, given its structural focus. Overall, research on change management in pricing is limited, and this counts even more for change-related studies on development and implementations of pricing projects. Therefore, to gain further insights, the general change literature was additionally consulted as well as related studies on key account management (KAM) and customer relationship management (CRM) implementation.

It can be derived from literature that the inclusion of pricing and sales personnel is recommended and beneficial for running pricing projects successfully. Typically, pricing managers have, or should have, profound expertise and capabilities needed for leading initiatives (Liozu, 2016a). Further, Liozu (2015a) argued that when the sales force is not on board with a pricing initiative, the project will likely fail. In other words, involving the sales force greatly increases the chances of adoption, and thereby the success of the pricing initiative. The sales force does not like to receive new pricing programs, methods or tools without having been involved or consulted in their development (Liozu, 2016a).

In relation to the work of Lancioni et al. (2005) on conflicts between pricing and the sales function, Liozu (2015a, 2016a) argued that middle-management groups are particularly likely to resist the proposed changes. Liozu (2015a) explained that this is “because they prospered under

the old rules of the game, [and] convincing them that those old rules were a mistake can be a huge challenge" (p. 156). It can be derived that pricing projects will not succeed without the support, collaboration and commitment of the sales function, as they ultimately possess in-depth customer knowledge and deal with customers and prices (Liozu, 2015a). This also refers back to the aforementioned aspect of global objectives and local knowledge (Jensen & Meckling, 1995).

Generally, establishing cross-functional project teams is a popular approach in many firms (Denison, Hart, & Kahn, 1996). The rather broad concept of involvement, which can be viewed as a term equivalent to participation (Lawler, 1991), basically means that employees have influence over the organization of their work and how it is carried out (Fenton-O'Creevy, 2001; Morgan & Zeffane, 2003). Pass, Evans, and Schlacter (2004) explained that many companies see value in involving the sales force for projects on CRM information systems, as they are the key employees facing the customers and requiring the information from the system. Some studies also considered the inclusion of the users of a new system in the project. As stated by Ives and Olson (1984), "It is almost an axiom of the MIS [management information systems] literature that user involvement is a necessary condition for successful development of computer-based information systems" (p. 586). Similar to this, Marcos-Cuevas, Nätti, Palo, and Ryals (2014) argued for the involvement of customers in KAM projects, as KAM programs are focused on adding customer value. In relation to this, the change management literature argued strongly for pilot studies (Turner, 2005), as this may reduce resistance and increase chances of acceptance. With regard to pricing, Liozu (2015a) also argued for testing, as the "risk of failure is too great" (p. 39) in a big bang approach.

Thus, when defining a new price discount model, the literature appears to recommend setting up a team consisting of specialized pricing employees, if available, and sales staff, that is, both sales management and sales force. A price discount model clearly relies on the expert knowledge of both pricing and sales. However, as described before, these two positions might also have contradictory viewpoints in terms of price discounting, which must be addressed in such a project. This means that making decisions and integrating opposing views is a potentially difficult task in such a project. Involving key stakeholders increases the chances that the pricing project will succeed, but, as discussed earlier, tensions along the way will still mostly likely be discovered. The sales force in particular will deal with the model on a daily basis. This would also be true for the customer, who must purchase the products complying with the new discount scheme. Given the critical role of the various employees, the Analysis section pays particular attention to the actors involved in the price discounting project.

Tensions, dilemma and dialectic

As detailed in the change-oriented literature, tensions may arise when opposing positions are encountered (Putnam et al., 2016). The concept of tension is rather broad and is defined as "stress, anxiety, discomfort, or tightness in making choices, responding to, and moving forward in organizational situations" (Putnam et al., 2016, p. 69). Tensions may surface due to discontinuities that arise because of competing directions and conflicting opposites (Fairhurst & Putnam, 2014). For example, when employees realize the existence and evolution of opposing forces in a project context, tensions may result.

When talking about opposing forces, several constructs, such as dilemmas or dialectics, are relevant (see Putnam et al., 2016, for an overview). Dilemmas are competing choices – either-or choices – where each alternative has advantages and disadvantages (McGrath, 1982; Smith & Lewis, 2011). The options may be mutually attractive or unattractive (Cameron & Quinn, 1988). This probably also depends on the perceptions of the specific person viewing it, for example the sales force or a central pricing manager. Dilemmas are usually "one-shot encounters in which actors weigh pros and cons, and make trade-offs" (Putnam et al., 2016, p. 73). Although one alternative is supposed to be chosen, the options are not necessarily incompatible (Smith & Lewis, 2011).

Jensen and Meckling (1995) pointed to this notion by arguing that global objectives and local knowledge, the embodiments of centralization and decentralization respectively in their view, can be balanced. Balancing means combining a bit of both rather than incorporating both sides completely (see Figure 7.1). Basically, a choice of a concrete level of pricing structure between centralization and decentralization is made (black line in Figure 7.1), which entails a trade-off between local knowledge and global objectives. If a more decentralized structural choice is made, the more local knowledge is used, but the less it is aligned with global objectives. Consequently, tensions may exist because of the difficulty of making a choice, or because people are not in favor of the choice made and advocate another option.

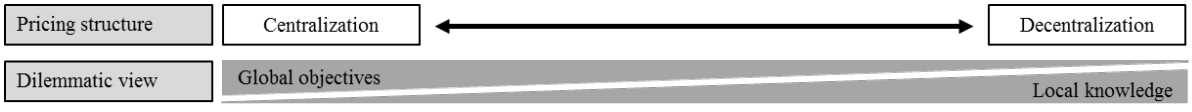


Figure 7.1: Dilemmatic view of local knowledge and global objectives.

The process-oriented change literature, however, has a somewhat different viewpoint and suggests treating it more as a dialectic than as a dilemma between local knowledge and global objectives. Dialectics, like dilemmas, focus on opposing positions (Smith & Lewis, 2011) and are "always looking for contradictions within people or situations as the main guide to what is going on and what is likely to happen" (Rowan, 1981, p. 130). These contradictions are interdependent or mutually exclusive and push-pull on each other, like a rubber band (Putnam et al., 2016). Dialectics[13] differ from dilemmas, as they are characterized by resolving conflicts through integration rather than an either-or choice. As an example, A (thesis) and B (antithesis) are in contradiction, and lead to a conflict, which then is solved through integrating A and B into C (synthesis; Smith & Lewis, 2011; Van de Ven & Poole, 1995). The argument here is that the solution to the problem must be developed in a process and that opposing views are integrated.

For illustration, the project team members might have opposing viewpoints on whether the new model should be based on local knowledge or global objectives, and they would aim to solve this conflict in the development process by fully or partially integrating both opposing forces. Recall from the previous section that considering and addressing opposing positions is important for reducing resistance, ensuring buy-in and increasing chances of acceptance. While the synthesis can be seen as a novel construction, it may also be that the thesis or antithesis will become the synthesis by defeating the opposing force, for example through the higher power of one entity (Van de Ven & Poole, 1995).

Both constructs can apply a "both-and approach" (Putnam et al., 2016, p. 126). A dilemma is an either-or choice, but the competing forces can also find a balance or an equilibrium point. This is also true for dialectics, but here the focus is on the integration process that may also allow the full integration of both opposing forces, rather than just a middle ground as demonstrated in Figure 7.1. In comparison, the agency theoretical perspective, which treats it more as a dilemmatic, structural choice, is more restricted, as it limits the way options may be constructed along the lines of global objectives and local knowledge. In other words, whereas one literature suggests that involving employees and integrating their views will solve issues, the other literature argues that among the contradictory opinions one can only trade off the options and make an either-or choice.

[13] The notion of dialectic is used in this paper to emphasize the aspect of integrating confronting forces rather than choosing between them. The focus is more on the integration process, and less on the outcome in the form of a synthesis.

In sum, the concepts being used further in this study are global objectives and local knowledge derived from the price discounting and price delegation literature as well as the concepts of actors, opposing forces, tensions, dilemma and dialectic from the reviewed change management literature.

Method

Research design

As the phenomenon of price discount model development has not been examined before, using an in-depth single case study is recommended (Yin, 2009). Single case research can achieve a deeper level of contextual insight (Järvensivu & Törnroos, 2010). It can serve as a "very powerful example" (Siggelkow, 2007, p. 20) and be a strong means of gathering insights from process data (Langley, 1999). Further, qualitative research is useful for understanding the phenomenon from the perspective of the people being studied as well as for examining and thereafter articulating processes (Pratt, 2009). Kienzler and Kowalkowski (2017) also encouraged more qualitative research designs in pricing research for gaining "first-hand, in-depth understanding of the intricate, context-specific processes" (p. 106).

For this study the case was selected purposefully (Miles & Huberman, 1994). More specifically, a single significant case was chosen that is an exemplar of the phenomenon of interest (Patton, 2015). This strategy is applicable when examining "an issue in depth and over time through a single case that manifests the important major dimensions of the issue and that is accessible for intense longitudinal study" (Patton, 2015, p. 266).

Given the motivation of the study, a set of criteria for selecting the case firm were defined, as commonly done in case-study research. However, it should be noted that I am employed by the case company as an industrial PhD student. Therefore, the case selection criteria were used not to select the firm but to assess the suitability and quality of the company for my research intentions. First, I felt it to be important to study a well-established company with a history of negotiating price discounts with customers that is currently aiming to change its price discounting practices and to develop a new price discount model. Second and third, good access over the duration of the project and the opportunity to truly be a part of the project, further explained later, were other key criteria. Generally, being allowed to investigate issues around the very sensitive topic of pricing inside a firm is rare but absolutely critical for a study such as this one. Hansen et al. (2008) reported that 61 percent of the companies they studied provide limited pricing authority to their

sales force (11% have full authority; 28% have no authority). Therefore, a fourth criterion was a company with limited price delegation, to better position this case as an exemplar (Patton, 2015) and an illustrative one (Stake, 2000). This increases the possibility that other firms will relate to the study and derive learnings from the findings for their own pricing experience. Even though the number of firms employing specialized central pricing managers is still very low, it is certainly increasing and is expected to continue increasing in the next years (Carricano et al., 2010; Liozu, 2016d). For this reason, the fifth criterion was to select a case that has an established pricing function at a central level.

Case company and project team

The selected case company is a global manufacturer (abbreviated as GLOCOM) of communication devices with around 5,000 employees worldwide and headquartered in Europe. 17 years ago it acquired a U.S.-based communication device company (abbreviated as USCOM), which solely operates in North America. Today, USCOM still sells products under its own brand and makes up around 20 percent of revenues of the overall global business of GLOCOM. All products sold by USCOM are manufactured by GLOCOM; therefore, USCOM can be considered a local sales organization of GLOCOM.

The customers of USCOM are exclusive retailers. Thus, they sell only USCOM products, and the stores carry the sign and logos of USCOM, similar to a franchise model. USCOM employs a partnership philosophy with its customers. The sales force acts more like "operational consultants" (sales representative and sales director). They review with customers their performance based on data gathered from a shared operating IT system, they train client staff, and they even provide best practices for answering phone calls and getting potential users from the website into the stores. All of this is done with the goal of helping the customers improve their business, as this eventually also benefits USCOM.

The core project team for developing the new price discount model at USCOM consisted of local and central staff, plus one external consultant (see Figure 7.2). The external consultant had been hired for years by the central pricing team, and had been to USCOM for a previous pricing project. From the headquarters the central pricing manager, a pricing analyst, and I, as a pricing and value analyst and industrial PhD student, joined the team. USCOM was represented by the head of marketing, the head of sales and the sales director. Other local USCOM staff were at times

involved, such as the president, head of finance, head of product development, IT systems manager and sales representatives.

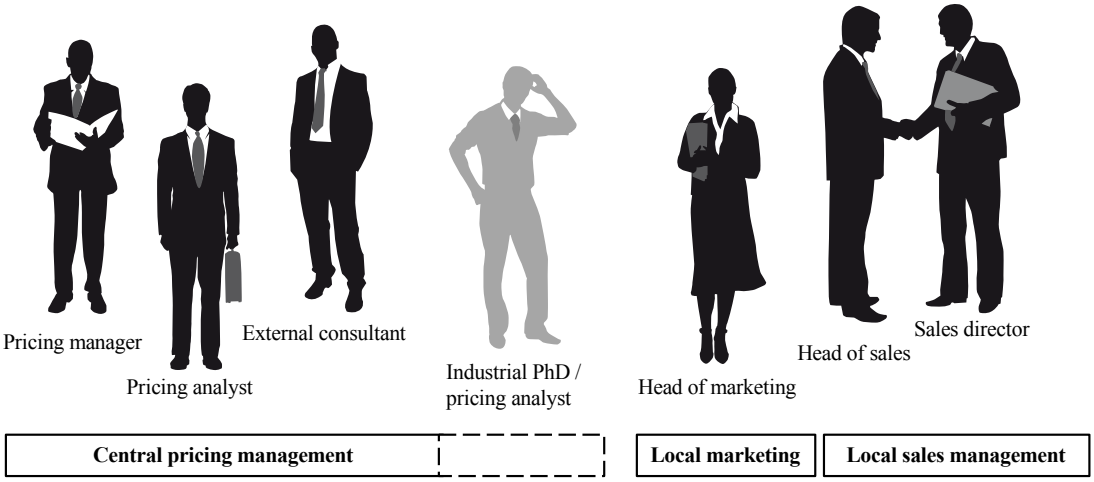


Figure 7.2: Core project team.

Researcher's role, data collection and analysis

I was hired as an industrial PhD student and pricing and value analyst at GLOCOM for a period of 3 years to further support the improvement of their pricing management. As a result, I also belonged to the project team for the development of the new price discount model at USCOM from the beginning to its end. Given my employment and membership on the project team, I had very good access to data. Thus, my process research questions took me "into a conceptual terrain of events, episodes, activity and temporal ordering, fluidity and change" (Langley et al., 2013, p. 10).

Most of the data collection (participant observation, interviews and shadowing) took place during three visits to the U.S. subsidiary. Between those visits, online meetings took place, mails were sent and files exchanged. The overall project lasted around 9 months (see also Figure 7.3). As argued by Langley, Smallman, Tsoukas, and Van de Ven (2013), it is not the sample size that matters but the number of temporal observations. Given my prolonged involvement I was able to build interactional expertise and to be close to events and practices (Langley et al., 2013). This deep engagement with the project and its team members enabled me to develop a deep understanding of the development process.

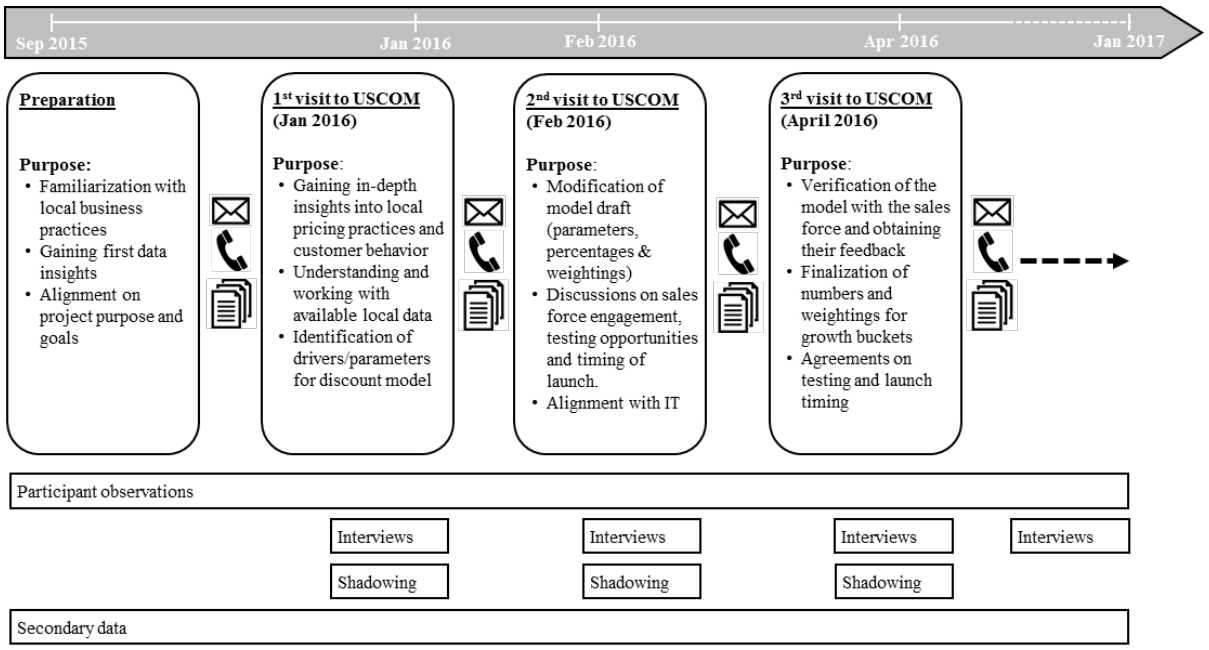


Figure 7.3: Project timeline.

The collection of primary data took place in three main ways (Table 7.1). In particular, I joined the project meetings as a participant observer. Additionally, meetings and phone calls were recorded. Most observations took place during the three visits to USCOM. Usually, a meeting was held in the beginning with the core project members to kick off the visit and to align again on the purpose of the visit and the plan for the next days. Types of meetings and who was present varied greatly. Some took place with all project members, and sometimes only the pricing manager would sit and talk with the sales director. When visiting, the central team members, including me, got their own "central office" to work in, which was a meeting room booked for the duration of the visit for the central team members. Thus, after meetings with local project members, the central team members would return to the central office and informally follow up and reflect upon the meeting. I also listened to many informal discussions during dinners at the hotel or over a cup of coffee at the airport. To a greater extent, only project members at the headquarters, including the external consultant, were present at such gatherings, as I was travelling with them. The local staff might have had similar conversations, for example in the hallway before or after visits of the central team members, but I did not observe these.

Table 7.1: Overview of primary data collection

Main mode of primary data collection	Number of hours of primary data collection
Participant observation (e.g., meetings, workshops, phone calls and informal gatherings, such as hallway conversations, lunches, dinners, flights)	24.7
19 semi-structured interviews	10.2
Shadowing (e.g., work on MS Excel model, IT/SAP requirements)	7.4
Total hours of recordings	40.3
Total hours transcribed & coded	32.2

It became apparent that I did not have the same access to the local team members. To try to compensate for this, I conducted short, semi-structured face-to-face interviews with local members of the project team. Some of them I interviewed more than once during the project. I revised the interview guides during the project to better probe the challenges and the process. Generally speaking, at the start the key purpose of the interviews was to get a detailed understanding of team members' current role in terms of pricing and their view on it (e.g., local sales management and sales force). Once the project began and progressed, the purpose of the interviews was to document the interviewees' current perceptions and reflections about the project, its development, challenges and next critical steps for moving forward. In such interviews, some questions I asked drew from my observations of previous meetings and workshops. These interviews were mostly conducted with the local core project members. I also interviewed central team members as well as the previous CEO and CFO of GLOCOM (Table 7.2). The latter two I interviewed to understand more about the general history of pricing at the case firm and the relationship between GLOCOM and USCOM.

Next to participant observations and interviews, I did shadowing (Gherardi, 2012; Czarniawska, 2007, 2014). For instance, I shadowed the central pricing manager, analyst and consultant to understand how they were actually developing the model in MS Excel. In the central office at USCOM, often one person working on the model would connect his computer to the screen and think aloud while others would chip in and comment when needed. It often felt like a group sensemaking (Weick, 1979) session on how to best enter the requirements of all central and local project members into the model. At other times, I would simply sit next to the person working on the model and look over his shoulder. This helped me understand how the business requirements derived from the meetings were incorporated into the design and technicalities of the model. I also shadowed a sales representative in a workshop on how he made sense of and

worked with the newly suggested discount model to see whether the model was easy to comprehend and use. The new model affected every customer, and the sales director attended several meetings with me in which we reviewed its effects on each of the more than 180 customers. The purpose was to see how the model would affect their specific prices, and then to categorize the customers depending on how difficult it will be to transition them to the new model.

Table 7.2: Semi-structured interviews

No.	Interviewee	Unit	No.	Interviewee	Unit
1	Sales representative 1	Local (USCOM)	9/10/11	Sales director	Local (USCOM)
2	Sales representative 2	Local (USCOM)	12/13	Head of sales	Local (USCOM)
3	Sales representative 3	Local (USCOM)	14/15	Head of product management	Local (USCOM)
4	Sales representative 4	Local (USCOM)	16	Consultant	Central (GLOCOM)
5	Sales representative 5	Local (USCOM)	17	Pricing manager	Central (GLOCOM)
6	Sales representative 6	Local (USCOM)	18	Former CFO	Central (GLOCOM)
7/8	Head of marketing	Local (USCOM)	19	Former CEO	Central (GLOCOM)

In addition to primary data, I collected more than a gigabyte of secondary data to ensure data triangulation[14] (Silverman, 2012; Stake, 1995; Yin, 2009). More specifically, I collected 41 MS PowerPoint presentations, more than 35 MS Excel files, around 15 MS word and PDF files and 261 mails captured in MS Outlook. For example, USCOM had several special pricing agreements in place with customers, which were limited to a certain time frame. However, the responses from different people about the duration of these agreements varied greatly, and some were unaware of the time limits. Therefore, I collected some of the special pricing agreements and reviewed them in relation to their expiration date.

With respect to my engagement and my data collection, a bias existed in that I was seen by local employees as a headquarters representative. This might have affected the responses of the locals in the interviews; for example, they might have been more closed and diplomatic to me. To diminish this potential research issue, I constantly stressed my role in this project as a rather independent university researcher writing a study on change management in pricing. Everyone involved was informed by me, the local president and the central pricing manager that my purpose in the project was to listen and to make notes in order to derive learnings and best practices. Thus,

[14] Obviously, much more primary and secondary data on pricing were collected over the 3 years of my employment and research collaboration. For simplicity's sake, however, only data directly relevant to this specific project are displayed in this section.

I was not actively involved in developing the model and remained rather silent in calls and meetings. Although I made comments and asked questions to further probe and clarify, this study was not action research.

This research is based on a somewhat abductive logic, allowing for search and discovery in the data (Dubois & Gadde, 2002; Reichertz, 2007). I always reflected on and thought about the data just collected, for example after every visit or online meeting. I constantly read relevant literature during the data collection and analysis. However, there was no iterative movement between collection and in-depth analysis of data. A thorough analysis was conducted once 95 percent of the data gathering was completed, except for a few follow-up emails and office chats for clarification of content and preliminary findings.

In preparation for the data analysis, selected record files were fully transcribed after careful listening in NVivo. The transcriptions account for 32.2 hours of recordings. To explore the data – transcribed recordings and field notes – in an open and unrestricted manner and leaving room for discovery of surprises, coding began in NVivo without a pre-determined coding scheme. While reviewing the data and making additional notes, I asked some key questions: What was the process overall like? Why was the model not implemented yet? What seems to have worked well or not so well? What seems strange about the project and its project members? What surprises me, and why?

After a few rounds of reading and open coding, it became apparent, as problems arose, that this project was not sailing smoothly, which I had already expected based on my reading in the literature. To analyze the data in further detail, I did additional coding by paying particular attention to the constructs, which were identified based on the iterative and non-linear movement between the literature and exploratory data analysis. In particular, I looked at and coded for the opposing positions, tensions, dilemma as well as dialectic of local knowledge and global objectives. Then the actors were coded: for example, sales management position, U.S. local team. To provide a structure for the model development process, I then coded the relevant data based on the timing: first visit, second visit, calls between first and second visit, and so forth. In this round of coding, I was guided by questions such as: How does the pricing structure potentially change with the new model? What are the global objectives in this project context? What is the role of local knowledge, and what exactly is it? How is it used for the model? Are there tensions, and if yes, why, and what opposing arguments and viewpoints are expressed? To analyze the secondary data, I partially uploaded to NVivo and analyzed the collected emails and MS

PowerPoint presentations. I examined the different versions of the MS Excel model by comparing how the model changed over the duration of the project, for example the discount percentages.

Analysis

The following sections of the analysis discuss the issues the project team had to address throughout the development of the price discount model. These pertain to the specific elements of the development process, namely rejecting the status quo, developing model technicalities by integrating local knowledge and global objectives, gathering local knowledge through user engagement and testing, and developing a launch plan.

0. Rejecting the status quo

GLOCOM's pricing journey began in 2012 after a company-wide restructuring. As part of the turnover strategy, a central pricing manager and pricing analyst were hired and a price board, consisting of the CEO, CFO, regional senior vice presidents, head of global marketing and the pricing manager, was established. It soon became evident that the pricing was "all over the place" (previous CEO of GLOCOM). In the following years, new processes and structures for list price setting of new and existing products were established and implemented globally. The central pricing team was thus mainly concerned with the setting of list prices for new product launches. List prices were proposed for each country in strong collaboration with the local sales subsidiaries and thereafter approved by the price board. Further, the pricing unit controlled and monitored pricing on a global scale. The central pricing function did offer guidelines for discounting off the list prices to arrive at sales prices. Deviations and compliance were not monitored at this stage. However, the pricing team analyzed the development of the average sales prices.

When the average sales prices decreased in the United States, the CEO asked the pricing manager to investigate this downturn. It turned out that the sales prices that customers were paying, and thus the discount they received from the list price, varied greatly. Some customers received more than an 80 percent discount. It was believed that the case company was missing a sophisticated structure and authority levels for controlling sales prices. Based on the insights gained from a status quo analysis of current discounting behavior and sales price deviations in the United States, the CEO and the pricing manager agreed in 2015 to begin a price discount model project to avoid further margin leakage and to gain better control over sales prices. They agreed to begin piloting in North America at USCOM, a key market for GLOCOM.

When the project team met for the first time at the U.S. premises, the goal was to understand the local pricing practices in more detail. This meant comprehending the stories and behaviors behind the sales and revenue numbers, which could already be collected at the headquarters prior to the trip to the United States. In the past, USCOM had offered only volume discounts, but more recently, the company had begun offering special pricing. This means their agreements with customers offered special – lower – prices for specific products. This practice grew "from a few guys having it to just about everybody has it now" (local head of marketing). Most customers had various special price agreements, for example for different products or different shops. Often customers were under pressure due to intense competition from a big and lower-priced retail chain, and USCOM sought to help them to survive and grow:

> We looked at their marketing needs, at the competition. We said "hey, tell us what you retail prices are and tell us what volume discount you want and we will look at the margin and see if it is a win-win". We used the special pricing to push them to a certain product mix, to increase their volume and to expand. We always tried to make it a win-win. Then, if they didn't do … like we thought, we would take the special pricing away and say "gosh, you don't deserve that" (Local sales director)

They always built a business case around an agreement, aiming for "win-win situations" (local sales director). Developing cases and approving them was a time-consuming process with high administrative costs and caused customer complaints about the wait time, as explained by the local sales director and one sales representative. The local head of marketing stated: "It's totally like a hamster just turning. It's absolutely insane".

The current approach came with high costs of transferring the local knowledge of heterogeneous customers to the head of sales and sales director. Costs in this case refer also to sales management spending time and effort designing business cases and approving special deals, and to lost orders due to the slow approval process. Costs also occurred because agreements were not monitored thoroughly. For example, customers continued receiving special prices even when these agreements had expired or the goals of the business were not met. Although the sales director and head of sales claimed differently, it became apparent that sales management was not monitoring and reviewing the agreements and their expiration dates well enough. They were simply unable to cope with these tasks given the lack of resources and the high number of special pricing agreements in place. The local head of marketing, who was "tired of playing the pricing police in this company," summarized the situation as follows and concluded with the overall goal:

> Too many one offs, too many exceptions. Too much non-management. That's what happened. ... It's also part of why we're bad executers right now. The things that we create here are not being practices to help you drive business.

The local sales management appeared to lack control over its price realization and the resulting profit implications. The special pricing approach had led to huge price deviations among customers and perceptions of unfairness, but also to less profitable pricing as argued by central pricing management and local head of marketing. Each special pricing agreement had clear objectives and durations. Often they were meant just to help a customer survive a short rough patch, but it seemed that they had significant consequences for USCOM.

It became clear early on that the new price discount model would imply the discontinuation of special pricing, meaning no more inconsistent and individualized prices. As strongly suggested by the central project members, all customers were supposed to follow a new, more structured discount scheme that would treat all customers equally. This was also requested by the new president. In this way, transparency and governance would help ensure profitability. However, this worried the head of sales and sales director. They would have liked to continue with special pricing alongside the new price discount model. The local head of sales expressed his concerns:

> But I don't know that people [other project members] understand the gravity of the special pricing. I know you guys are sick of me talking about it, but that's my number one concern.
>
> We really need to get on the same page with this, guys. We cannot afford to just go willy-nilly with this thing. Once this ball rolls, it's going … I've been knocking my head for two weeks. I'm like, "How is [central pricing management] gonna do this?" I have no idea. We can't change – Yeah. You guys are smarter than I am. I have no idea how you're gonna do it.

With the special pricing, they felt they had more possibilities to address the pricing needs of their customers. They tried many times to convince the other project members of the benefits of special pricing. Moreover, they feared that some customers would heavily resist and would even need to close their business if the special agreements were discontinued. The local head of sales tried to anticipate the reactions of customers to the implementation of a new model:

> Everyone's [customers] gonna raise their hands and say, "That doesn't apply to me, right? I'm special, right?"

While the local head of sales and sales director always argued for considering the customers' perspective, for example their reaction to the discontinuation of special pricing or their acceptance of a different approach, it was also, particularly for the local head of sales, a personal matter:

> Yeah, it's good. I just ... I only spent ten years of my life building something. I'd hate to see it— (Local head of sales)
>
> We'll just flush it out [jokingly]. (Central consultant)
>
> Don't worry! (Central pricing manager)
>
> Nah, don't worry. Tell me not to worry. I'm worried, I'm worried. (Local head of sales)

During the first visit to USCOM it was relatively quickly decided, in strong collaboration with the president, that special pricing would be discontinued. Local sales management seemed to have no choice but to accept this decision. It was agreed, though, that the sales team would look at it at case by case. The sales team had the right to say that some customers would not fall directly into the new model. Rather, these customers would be onboarded over time to allow for a smooth transition from special pricing deals to the new discount scheme. Each customer transition would be agreed on and monitored by the president.

Taking a closer look at the practice of special pricing, it becomes evident that local sales management had tried to ensure profitability and prevent opportunistic behavior by the sales force through developing business cases and incorporating approval levels. Whereas the sales force had more specific customer knowledge, sales management had the skills to develop business cases and greater insights into more strategic objectives and numbers, such as contribution margins. As the data show, local sales management had good intentions to support customers and to make the decisions that met the firm's higher objectives. However, this behavior had also resulted in inconsistent pricing and decreasing average sales prices, as argued by central pricing management.

These outcomes were not in accordance with corporate intentions and ambitions. Hence, it was decided to create more transparency and to gain more control by sending the corporate pricing function to re-work the local pricing practices and establish a more standardized pricing approach, allowing for less price deviations. The local sales management had trouble picturing how a possibly more standardized and rather fixed pricing model could cater to the needs of all customers. They were used to treating each customer individually for pricing. Many customers received special prices due to the intense competition in their specific operating environment. A particular issue was a very large retail chain that was heavily expanding across the United States and offering its products at very low prices. Thus, previously the local sales management had perceived their customer base as rather heterogeneous. Thinking about changing the practice of special pricing made them wary of a new price discount model. Although the new model and approach were not defined at this stage, tensions arose because it would be different from special

pricing and would very likely bring a shift towards more centralization. Overall, this clearly demonstrates that local sales management believed in the importance of the special pricing practice for price discounting.

From this section it can be derived that the problem pertained to having a rather but not fully decentralized structure that emphasized the use of local customer information, such as willingness-to-pay and competitive environments, with outcomes that were not fully in line with corporate objectives. The sales management was in favor of special pricing, and tensions from their side existed about moving away from it. It was perceived as an either-or choice – a dilemma – with the second option being chosen, although it was not that clearly defined (yet). However, it was commonly understood that there would be a shift towards a more centralized model.

1. Developing model technicalities by integrating local knowledge and global objectives

The previous section described the departure point for the project team; hence, the task now was to develop a price discount model that ideally worked for all parties involved. In other words, a model was needed that central and local project members could accept as the best way to move forward. In correspondence with the local president and the central pricing manager, the central consultant suggested implementing a performance-based discount model (further explained below). As it turned out, USCOM was at that time in particular need of a restructuring of their sales pricing process. The newly appointed local president explained the reasoning by outlining that customers had begun talking to each other, realizing that they were paying different prices:

> … when I first came in and was getting feedback from the customers ... You've all heard it too ... It's this, "I want to be treated fairly ... Why does this person get this and that ... How come one person ..." They all talk ... You know that ... "Why is this person getting this or why did that person get this" ... This [price discount model] will eliminate all of that mystery.

To regain the lost trust and increase pricing fairness perceptions, she saw the need for a consistent and transparent pricing approach. Therefore, she strongly supported the development of a new price discount model. In this vein, the local head of marketing further explained:

> Credibility and transparency is really important for us. We have to create that. In order to do that we have to look at where we are today and try to unravel some of these practices that we've been having.

Given the above, it was a clear objective that the new model should help increase customers' fairness perceptions and drive the business in the right direction, meaning that USCOM should focus again more on profit implications.

1.1 Performance parameters

The idea was to turn the price discount scheme into a model that rewards customers for performance. In the beginning the local team was not clear on the discounts. They held many internal discussions to understand what they actually wanted, and ultimately suggested too many parameters, which would have increased the model's complexity. Based on the local inputs, the central consultant and pricing manager suggested three parameters: units sold, product mix, and growth. Units sold rewards purchasing volume and therefore recognizes large customers. Product mix stimulates upselling and the sales of high-end products, which also offer higher margins for USCOM. Growth pertains to year-to-year increase in units. Having only three parameters also ensured simplicity. While the project members of USCOM generally agreed to this, and supported reducing the amount of discounts, they had particular concerns about the growth parameter. The local head of sales argued:

> The one that gives us the most heartburn is the growth. The reason it does is because it adds volatility to the whole model and it's harder to maintain growth. They'll cry unfair. You're penalizing our larger guys because they can't grow as fast as a smaller guy can.

In gaining more local knowledge about customers, the project team realized that some customers were growing heavily, while others, often larger customers or family-owned businesses, were operating a more stable business with no fast growth intentions. Therefore, they doubted that this parameter would benefit all customers. In return, it was argued that the growth parameter would be very attractive for the organization, as it would also stimulate growth independently of the unit parameter and would reward risk-taking. This argumentation convinced the local head of sales. Additionally, it was agreed that all parameters could be incorporated into the model because they could be weighted so that the growth parameter created less of an impact than the other two parameters (see next section). This way of integrating the growth parameter, at least at first sight, seemed to reduce the risk perception of the head of sales and to solve the tension. Overall, the parameters were mostly discussed in relation to local knowledge and what USCOM and GLOCOM aimed to achieve with the discounting practice, whilst ensuring that it was aligned with

the global objectives. Hence, it was a dialectical approach that aimed to integrate the conflicting factors of global objectives and local knowledge.

1.2 Percentages and weightings

Now the task was "to do the math" (central consultant) and to develop the model in MS Excel. In more detail, this meant calculating the weighting factors of the three parameters and determining the numbers and discount percentages for the buckets for each parameter (see Figure 7.4). The discount percentages for all three buckets, depending on the customer, were then added to determine the total discount from the list price for a specific customer across the entire product portfolio for a given period, such as month or quarter. For example, a customer buying 200 units with a product mix above 60 percent and a growth rate above 15 percent would receive a 35 percent discount from the list prices across all products for a given period. To reinforce the trust of the customers and increase their perceptions of fairness, the project team agreed to share this model with the customers. In this way, they could also use the tool to estimate and plan purchases and the (potential) discounts to be received.

Again, the "ultimate goal" of the model was "to get [customers] moving in the right direction" and to offer both USCOM and customers a "win-win situation" (local sales director). The goal was not to more make money with the model but to offer a structured and transparent price discount model. Having a performance-based discount model would, over time, increase average sales prices and revenues again, and the visibility gained would help control sales prices better than the special pricing model had. Therefore, the central consultant stressed multiple times that the project team needed to ensure "that the square is somewhat the same size as the round hole": customers should end up close to their current pricing. In other words, the model should not deviate much from the current pricing, to avoid forcing some customers to suddenly pay far more or far less than under the old model. This further complicated the model development. A few weeks after the initial visit, the GLOCOM team members visited USCOM again to present, discuss and further develop the first draft.

Units Discount	Below 10	From 10 to 50	From 50 to 250	From 250 to 700	Above 700
	3,0%	**7,0%**	**14,0%**	**17,0%**	**20,0%**
Mix Discount	Below 20%	From 20% to 40%	From 40% to 50%	From 50% to 60%	Above 60%
	0,0%	**4,0%**	**8,0%**	**12,0%**	**16,0%**
Growth Discount	Below -5%	From -5% to 5%	From 5% to 10%	From 10% to 15%	Above 15%
	0,0%	**2,0%**	**3,0%**	**4,0%**	**5,0%**

Figure 7.4: Example of price discount matrix (not actual percentages).

Overall, the central and local team members were very dependent on each other. The GLOCOM team had the skills to do the math and develop the model from an analytical point of view. However, they needed local knowledge from the local members to make sure the numbers made sense from a business perspective. Throughout the visit and the project duration, the numbers were constantly changed. The local team was missing the feeling for the model, as they did not do the math behind it. They lacked in confidence somewhat and always found new reasons to change the numbers, mostly when looking at specific customer cases. Local sales management always tried to adapt the numbers, so that there "were less 'losers' … and more 'winners'" (local head of sales). The GLOCOM project team had a more general view of the customers and the model than the local team members did. The local sales director further elaborated:

> … the analytical data that we have is cut and dry. It's black and white, but there's so much subjective parts to this that we got to keep in mind, and which you (GLOCOM team members) all are very open to, so that's appreciated.
>
> I think there's a lot of factors outside of the spreadsheet that fall into play.

The local team was not as distanced as the GLOCOM team; they were always thinking about their specific customers, the relationship and negotiations, and thus aiming for numbers they perceived to be more feasible for the customers to reach. The main discussion was about the growth bucket. In particular, the head of sales and the sales director had difficulty understanding how customers would perceive this bucket and how they would work with it, as explained by the local head of sales:

> This is an interesting one, because we have a series of troubled accounts, right? If you penalize them and don't give them the higher discounts, then you're just adding to the demise quicker, right? ... Those are the guys that you're going to actually kill them, and hurt them, because they'll just spiral downward faster.

Given the discussion and conflict, the central pricing manager felt the need to re-emphasize the power relationship of the project members:

> We can model this wherever you guys want to have it, as much success as you want here. We've created what made sense mathematically, trying to put some business into it, but then you guys can decide which criteria is more important for you, where you want to drive it, and then we will remodel it based on that. But this is very flexible to cater for your needs.

However, they would, of course, not agree to numbers that would most likely hurt the overall business. So there were also clearly boundaries on what the central team members would accept. Ultimately, the growth bucket was weighted lowest and the unit bucket was weighted the highest, which made local sales management feel more comfortable. Overall, going back and forth, continuously improving the model by balancing the analytics and the business sides, was perceived as a natural process, but it did not seem to have an end with a final decision. Even after the three visits, numbers were being changed and concerns were being raised by the local sales management. Thus, it was not a clearly defined conflict; new potential issues repeatedly emerged that the local sales management thought worth considering and resolving. The local team appreciated that the central team members could translate their business requirements into the math and formulas in the model. At some point, it was observed that the central pricing manager and consultant were growing increasingly impatient. For example, this was expressed by the central consultant to the pricing manager in an informal discussion after a meeting with all project members:

> I'm [thinking] like, "Come on guys, you can't keep discussing this, make a decision God damn it".

It became clear that setting the percentages for the discount buckets and the weightings of the performance parameters was difficult for the local sales management. Problems with how to best measure customers' performance were encountered. The firm aimed to close knowledge gaps to further modify the model. On one hand, the local team members were the closest to the local businesses and therefore had superior knowledge of the market and customers. On the other hand, the GLOCOM team members had the technical and analytical skills required to understand data

on sales numbers and sales behavior and to develop the model in MS Excel. Thus, the GLOCOM team members had superior information and insights.

As this section shows, a key challenge in creating a solid discount model based on local knowledge was to match the numerical and analytical local data (GLOCOM team) with the specific and comprehensive local knowledge (local sales management). Both local USCOM and GLOCOM members aimed to close the information gaps and to transfer the knowledge to the other party. They were in an interdependent relationship. Understanding and incorporating local knowledge was always the first step; the next step was to "do the math". This meant creating a model based on local input and then developing it to align with global objectives. Overall, this was the dialectical approach for the model itself. It was characterized by integrating rather than choosing between the opposing forces of local knowledge and global objectives.

The three parameters were suggested based on local knowledge of the local project team members, but indecisiveness about the growth parameter remained. It was difficult to agree on the right weightings and numbers because the customers varied in size, which meant that for some it was easier to grow than for others. In addition, initially customers complained about the variation in prices paid. Moving towards a more standardized approach to pricing with these parameters, however, might also lead to perceptions of unfairness. The customer heterogeneity further complicated the decision-making, as it might lead to losing customers or having them buy less. Therefore, the growth parameter was perceived as a potential risk in the new model.

2. Gathering local knowledge through user engagement and testing

Besides gathering local knowledge from the project members as well from the databases, such as sales numbers, the core project members also discussed involving the sales force and testing the model before rolling it out to the entire customer base in North America.

2.1 Sales force engagement

On the core project team, the only members from the local sales department who were involved in developing the model development were the head of sales and the sales director. Whether and how the sales force should take part in the project had been a subject of discussion. The central GLOCOM project team argued heavily throughout the project's first months that the sales force's input was essential for developing the discount scheme. They knew the most about the customers and would use the model in their daily practice. The central project team proposed involving the

sales force throughout the project, meaning their inclusion in discussions of the performance parameters and numbers and weightings. The local head of sales understood the consultant's thinking why engaging the sales force might benefit the model development but shared again his rather personal concerns:

> I'm really nervous about your conversations with the sales team. I'm really nervous about it. It could create a big problem for me.
>
> Yeah. Guess what? If our guys start puking on this, or they start getting nervous, it causes disruption, defocus. The market grew 8 percent, we grew at 2 percent because we had a lot of disruption and defocusing. I can't afford to do that 2 years in a row. I won't be here. You'll be talking to a new guy. And I know that. All right?

The head of sales and the sales director argued that they knew the customers well enough and that the sales force would not bring value to the discussion but would only add confusion and noise. The central consultant, realizing the perceived risk of the head of sales, tried to find different possibilities for engaging the sales force and again tried to argue for his position by also stressing the importance of change management:

> … If I've been part of designing it, it's a better chance that I'll start loving it. But of course you need to weigh it up against your concerns and consult …

Although the local head of sales generally saw value in doing so, he argued thus:

> I think they should be part of it, but I think the risks outweigh the benefit in my mind at the moment.

Next to the outlined risks above, the head of sales also feared that the sales force might start talking to the customers about this new model being developed. This is something they sought to avoid, as it might affect their buying behavior negatively. As explained earlier, the local team generally liked the idea of the new model but had difficulty anticipating its impact on their customers, particularly in relation to the numbers and weightings of the growth performance parameter. Given this indecisiveness and, thus, their lack of confidence in and familiarity with the model, local sales management shifted their position, eventually agreeing to bring in the sales force. The head of sales explained this turn:

> I think that the next step, which in the beginning I was diametrically opposed to, is to bring in the sales team and really get their feedback and do the exercise we're going to do at the end of April. We're committed to doing that, because I really want these guys to look at each account one by one with this team … They need to look at every single account, see who's excluded, see how they think they're going to react, see how close they are to the

> next level, and see if they can sell it and feel comfortable with it. Then supply any changes or recommendations that they may suggest.

During the third visit to the United States, a somewhat final model was explained to and discussed with all six sales representatives to ensure their buy-in of an almost fully developed model. The head of sales and the sales director emphasized many times that a final model was being presented to the sales force, to prevent their thinking that it remained in development and was subject to their further influence. In the workshop, the sales representatives reviewed each customer in their territory to see how the new model would affect them compared with the previous model. Each customer was marked in green (easy to onboard to new model), yellow (tough discussion, but doable) or red (potential loss of customer). After this run-through, the sales representatives shared their thoughts from the exercise and provided comments for further improvement. This exercise was also done by the sales director each time the percentages and weightings were changed throughout the process. While he was very confident in assigning each customer a color, he also felt that the sales force could still provide additional input by doing the same exercise. The local sales director explained after the workshop:

> We initially weren't going to go down this road but we felt for us to really look at this as a serious implementation we needed to get some serious feedback [from the sales force].

Bringing the customer-facing sales force into the model development was – as afterwards also admitted by the head of sales – necessary to increase the robustness of the model. All project members perceived the feedback from the sales force as important and useful. The central consultant later reflected with other central team members on the engaging discussions with the local sales management and sales force by saying that they "massaged them into it." Among the central project members the phrase "massaging into acceptance" (central pricing manager / consultant) was used frequently, meaning one had to be patient and persistent in getting the local members to accept the model. After the run-through with the sales force, it was believed that all local members now felt like they had been part of the development process and had actively contributed to the model. Further, it was believed that they now trusted the model and the central team, which was perceived as a vital step towards a successful project.

From a local knowledge perspective, the sales force's opinions were useful for developing the model, and it might have saved time and effort to involve them earlier in the development process. They worked with customers daily and had local knowledge of the customers that was arguably superior to that of the project members. However, as stressed by local sales management,

exposing the sales representatives to this project was risky. The sales force might be confused by the new price discount model, which would affect their selling behavior. The same might be true for the customers if the sales force were to share information about the new price discount model being developed. The perceived risk was that customers might get distracted and cautious, eventually buying less. This would affect the success of the firm, but it might also have personal implications, such as job loss for the head of sales. This also explains to some extent why the head of sales was at first extremely emotional about and vehemently opposed to the suggestion.

The workshop with the sales force was conducted in April. At this late stage, it was still assumed that the model would be implemented within the next 2 months. This limited the perceived risk of the local sales management, as the time between the potential exposure and actual implementation was short. Furthermore, only an almost finalized model was presented, and the sales force was being tested to see how they would use the model and how their customers might react. So rather than a development exercise, this workshop was in the end more about testing. In this way, local knowledge from the sales force could still be integrated, and local sales management reduced the risks of losing face in front of the sales force and the noise that might occur if the model were communicated to customers. The head of sales and the sales director clearly treated this topic as a dilemma by arguing against the engagement of the sales force. After realizing that the sales force was needed, however, they changed their decision and opted for the other option. As a result, the local knowledge of the sales force could be used to further modify the model.

2.2 Testing the model

After the local knowledge of the sales force was incorporated and the math behind the model was redone to ensure profitability, it was believed that the new percentages and weightings were rather finalized. It was time to more thoroughly discuss and agree on a potential testing of the model.

The central GLOCOM project team saw testing the model before launching it completely as vital. Mistakes with a big impact could thus be avoided or at least reduced by obtaining customer and sales force feedback in practice, as there would “always be something we didn’t foresee” (central consultant). The head of sales and sales director were nervous about testing the model and argued against it. While they generally saw value in doing so, they feared the consequences. A pilot study would create confusion and noise in the customer network – the same argument against bringing in the sales force.

It was an ongoing discussion where the local project team continuously changed their mind. Sometimes they agreed to a test, and then again they were completely against it, arguing for a full implementation, as a "test is almost like ripping the band-aid off slowly" (local head of marketing). The latter option of a complete rollout without a test was also the one agreed upon at last during the third visit, but doubts remained, as expressed in phone calls afterwards. The GLOCOM project team always stressed the reasoning behind the testing, and suggested different ways of testing, but felt that the local team should decide this matter. Rolling it out to the entire network had the advantage of preventing rumors that would cause distraction and confusion beforehand.

By involving the customers through testing, the central project members aimed to get access to even more specific knowledge that would help improve the model. The sales force and customers would have to work with the new price discount model daily; thus, their feedback was crucial to the successful development of the model as explained by the external consultant. In addition, a test would indicate well whether the model achieved the desired results in practice with regard to global and financial objectives. However, from a local sales management perspective, this threatened high risk of exposure. Testing the new model in practice meant that at least certain customers would be made aware of it. This could affect customers' purchasing behavior negatively. While this is an argument against testing the model, the factor of specific knowledge would have clearly argued for a test. The central team members suggested different ways of testing, but in the end local sales management decided against running a test. Thus, local knowledge of the customer could not be integrated into the model.

3. Developing a launch plan

3.1 Timing of launch

The GLOCOM team had a strong interest in rolling the model out as soon as possible given customers' mistrust and perceptions of pricing unfairness. Launching the model in the summer of 2016 meant that the change impact would already be visible by the end of the year. This would have also been a strong sign to the top management at headquarters, as they had initially requested this pricing management change initiative. The local team stressed many times that there had been much change in the U.S. subsidiary and that therefore they did not feel comfortable agreeing to an early launch. The product launch had been postponed, the head of marketing and the head of sales had left / were leaving the company, and many newly hired sales representatives lacked the

"horsepower" (local sales director), that is, the lack of knowledge and relationship with the customer, needed to roll the model out. It was clear that the local team needed to think about its financial impact, as the local sales director explained:

> There's just a lot transpiring right now. The more that, you know, change … the more that we do that throughout the year, the harder it is to drive consistent sales, drive that performance that we need.

They needed to provide good performance numbers by the end of the year and were afraid that too much change would lead to poorer results. Sales management was considering here their targets and objectives, and the potential risk of not meeting them when conducting a test or launching at an inconvenient time. In the eyes of the consultant, local sales management wanted to wait for the perfect time to launch the model, which simply never existed, in his opinion. Most of the discussion related to local knowledge as it was in relation to the launch of the new product family: Should the model be launched with the new product, before (if yes, how much before?), or after (if yes, how much after the product launch?), or in the new year to have a clear start? For many months it had been agreed that the launch of the model would take place in June or July 2016. However, in May 2016 the central GLOCOM team was notified that it had been locally decided in accordance with the local president to not launch the model until November 2016. However, that date was also pulled back, and no specific month or timeframe was mentioned. Overall, the fact that no real decision could be made on the timing, and the time it took to discuss the issue of testing, confirms again the lack of trust and confidence of the local sales management. They appeared to want to make a choice between the different timing options but simply did not manage to make one.

3.2 No implementation

After the third visit in April 2016, the USCOM team continued revising the percentages and weightings of the growth parameters. Additionally, they went back and forth about the launch timing and also testing at times. Biweekly calls were conducted to further manage the development. The GLOCOM team felt that throughout the project the head of sales and sales director came up with "bad excuses" (central pricing manager / consultant), delaying the finalization and implementation of the model. They kept requesting changes to the model, which were perceived by GLOCOM as unnecessary but time-consuming tasks. Maybe they were not unnecessary, but the head of sales and sales director were still not confident in the model and how

to successfully use it in practice for their own and the customers' benefit. While initially the central team members were empathetic and could understand the local sales management's concerns about the model, they became increasingly annoyed and frustrated by the locals' indecisiveness, which led to interpersonal conflicts (see Table 7.3). Their philosophy of "massaging them into acceptance" clearly had its boundaries, particularly when local sales management continued making changes after the third visit.

Table 7.3: Supporting quotes on central frustration

Supporting quote	Project member
"[Head of sales] is just an excuse for himself. I was like come on 'stand up tall man, God damn it'".	Central consultant
"I really get the feeling now that the guys in the US are just a bunch of assholes".	Central pricing manager
"You [the author] should really write the paper not just about change management, but the resistance and all the time this 'pro' and 'con' from the US guys … changing their mind all the time".	Central pricing manager
"To be honest, I am so fed up with the [USCOM] guys".	Central pricing manager

As of this writing, the model has not been implemented and the project is somewhat "on hold" and has "failed" (central pricing manager). The biweekly calls ended at some point, and none of the project members are making serious attempts to implement the model. A few months later, as mentioned, the local head of marketing and head of sales were no longer working at USCOM. Further, the budget for the external consultant was gone and the pricing manager took on a new role outside of pricing in the company. One might conclude that no one from central management dared to continue pushing towards an implementation.

Towards the end of the project, it was clear that local sales management still favored current pricing practices. They took on a dilemmatic view, as they had to either implement the basically finalized model, which carried risks, such as customer or job loss, or resist with the purpose of postponing the implementation and maintaining the special pricing status quo. Both options were believed to have benefits and disadvantages, as described previously. At first sight it might seem that the local sales management "won". They resisted by restricting access or being indecisive and thereby managed to avoid implementing a model that they themselves had helped to develop. Tensions were not resolved and interpersonal conflicts emerged. The project, with its purpose of creating a more profitable, consistent, standardized and fairer approach to pricing, had failed; there was no winner. An overview of the key findings can be found in Table 7.4.

Table 7.4: Summary of data findings

Process element	Central viewpoint	Local viewpoint	Agreement/decision
0. Rejecting the status quo			
	Inconsistent pricing and approach of special pricing is not beneficial for the firm.	Special pricing is important for helping customers with their specific situations.	The decision was made to discontinue special pricing. This choice was pushed by the local president.
1. Developing model technicalities by integrating local knowledge and global objectives			
1.1 Performance parameters	Suggestion to base the model on the three performance parameters of units, product mix and growth.	Indecisiveness about the inclusion of the growth parameter.	Agreement on units, product mix and growth as the parameters, but with considerations on 1.2. Growth parameter continued being an issue.
1.2 Percentage numbers and weightings	Ambitious numbers that drive for high performance, particularly growth.	Feasible weightings and numbers that support customers.	Agreement made on weighting for growth bucket is reduced and unit bucket has the highest weighting.
2. Gathering local knowledge through user engagement and testing			
2.1 Sales force engagement	Sales force should be included in the process of developing the model.	Sales force should not be part of the development and also not be informed about the project.	Decision made to present a matured, but not yet finalized model to the sales force to receive their feedback.
2.2. Testing the model	Running a pilot study is of vital importance for a successful development and implementation of the model.	Indecisiveness if and how to conduct a test in the market.	Last decision made was to make a "big bang" rollout without a pilot test, but doubts remained by USCOM.
3. Developing a launch plan			
3.1 Timing of launch	Early rollout desired to see changes and results by the end of the year.	Insecurity about best timing of the launch given other changes in the company, e.g., new product launch.	No choice was made as the local project members kept changing the launch dates.
3.2 No implementation	Perceived annoyance of behavior of local team members led into interpersonal conflicts.	Indecisiveness about finalization of model, and implementing at the wrong time might harm the business.	Decision was continuously postponed by local sales management, and no expected data was mentioned. Project "faded out".

Discussion

Theoretical implications

While making pricing decisions is complex and often problematic, this is also certainly the case for developing a discounting model, as demonstrated with this empirical account. By exploring

how the firm addressed the challenging task of developing a new price discount model, this study contributes to existing pricing research in three main ways, as further elaborated on below. First, the study contributes to a processual understanding of price discount development. Second, the findings suggest that the development of a price discount model can be characterized neither solely as a dilemma nor as a dialectic. It provides insights into the different ways that local knowledge and global objectives may be integrated to define pricing structures and authority, such as a price discount model. Third, the study identifies that pricing unfairness, risks and costs further influenced the emergence of tensions in the project.

It is a social process, not just a structural choice

The research findings extend pricing research on price delegation and discounting by suggesting that it is a social process rather than a choice between pre-existing structural choices that leads to a new price discount model. Figure 7.5 illustrates the process and its key phases, further explained below.

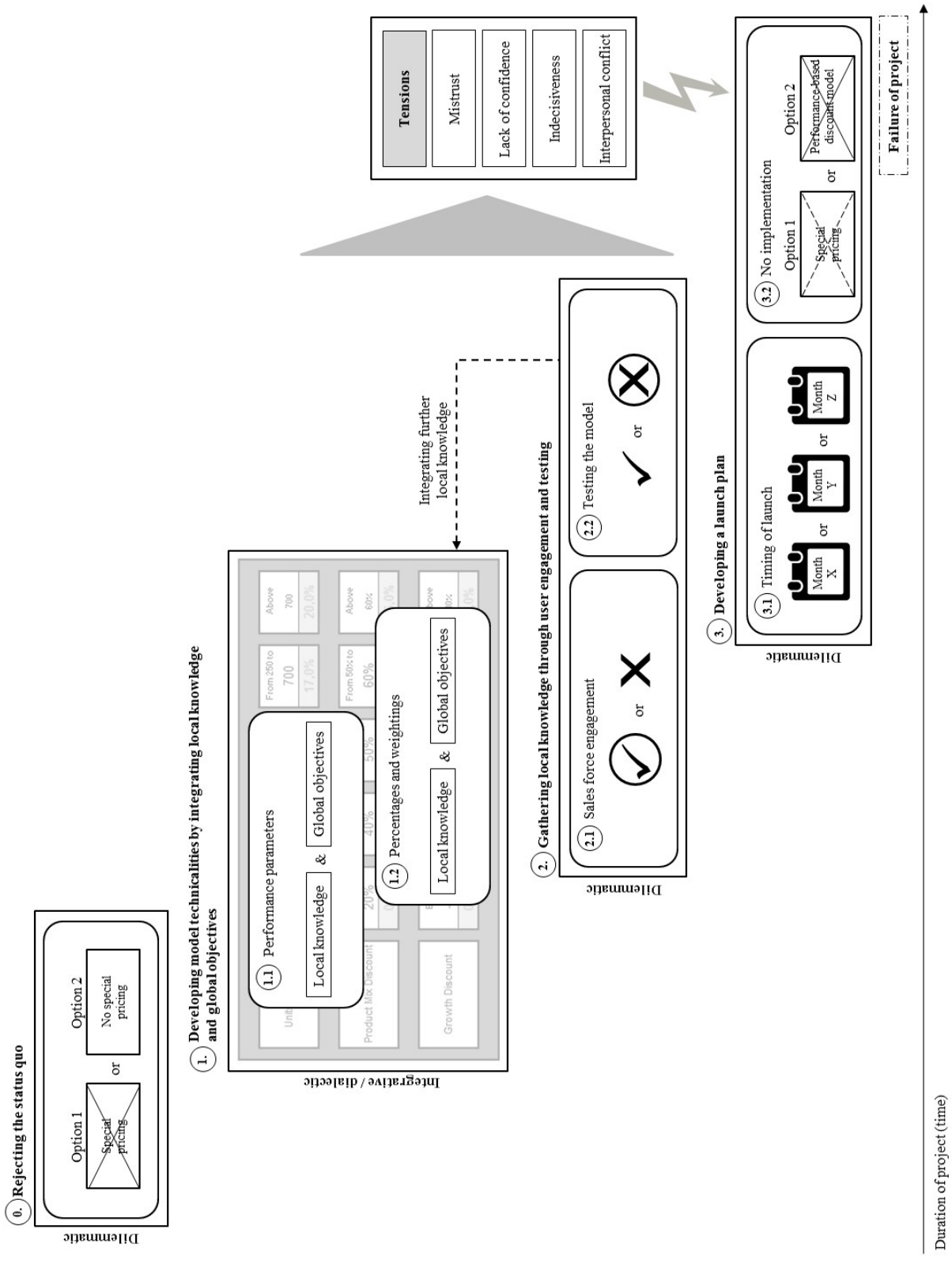


Figure 7.5: Development process.

Compared with most studies in this area, this study offers novelty in two ways. First, it employs a process and change rather than an agency perspective. Second, it is qualitative and longitudinal. The researcher was part of the entire process and able to go far beyond ad-hoc surveys and interviews. Most studies in this field are based on experiments and surveys (Balan, 2016). Through this approach, the study creates a more processual and dynamic understanding of this phenomenon. The literature on price delegation is dominated by agency theory and treats the price discounting problem as a structural choice, for example for balancing costs (Jensen & Meckling, 1995). This study goes one step earlier and sheds light on how a choice (option 2 in Figure 7.5) is developed through a process.

This study thereby extends research suggesting that the process comprises four distinctive steps. First, the status quo of pricing was being rejected. Second, the technicalities of the new model needed to be developed. In this case, this relates to the performance parameters as well as to their respective discount percentages and weightings. Third, to further improve the model, the project members, mostly the central members, aimed to gather more local knowledge that could not be provided by the core project team and the data available from IT systems. In particular, this refers to the engagement of the sales force and the testing of the model in practice, which also meant exposure of the project to (some) customers. Fourth, after integrating the new insights into the technicalities of the model, a launch plan had to be developed, which required a decision about the launch time. This overall indicates that structures and authority, such as a price discount model, need to be developed in a process.

Facing dilemmas and integrating local knowledge and global objective

Considering the overall project, the findings suggest that during a price discount development dilemmatic choices have to be faced but also that the opposing forces of local knowledge and global objectives may be integrated. The project began with a difficult either-or decision, requiring a choice between the current practice of special pricing (option 1) and its discontinuation (option 2; see Figure 7.5). The choice made was based on local knowledge, such as customer complaints, and global objectives, such as unfair and inconsistent pricing. The second option was not clearly defined at this stage, and the process then continued as the second option was developed in more detail.

The findings suggest that the development of a price discount model is a dialectic between global objectives and local knowledge rather than a dilemma. The model being developed was

characterized by a shift towards more centralization. In the more agency theoretical and dilemmatic view (e.g., Jensen & Meckling, 1995; Lal, 1986; Mishra & Prasad, 2004, 2005; Weinberg, 1975), this change would have meant a trade-off, meaning that less local knowledge would be used in the new model given its direction towards global objectives and centralization. However, throughout the project the team members continuously embedded local specific knowledge and corporate objectives into the model, which was a complex activity. Overall, it was an exercise of integrating rather than trading-off.

The project team worked in the process towards diminishing encountered oppositions through integration. To use Putnam et al.'s (2016) illustration again, the rubber band effect had then pulled the firm towards the opposites. This means that when local knowledge was incorporated, the central project members felt the need to align with global objectives. The same effect occurred when local sales management shared and used local knowledge to argue against certain specifics of the model technicalities, such as the growth parameter. It was a process of going back and forth between local knowledge and global objectives. The price discount model clearly developed and matured over time through the continuous exchange and interaction of the central and local project members. Throughout the project the GLOCOM team members gained more and more specific knowledge about local business practices. It was mostly USCOM team members who transferred specific local knowledge to the central team members. However, GLOCOM, having superior analytical skills, also transferred knowledge on local data insights.

During the process of defining the technicalities of the model, the tacit local knowledge became more and more explicit. The project team tried to incorporate local knowledge from various sources to a high extent and then "did the math" to integrate this knowledge into the model and, subsequently, align it with the global objectives. They saw the need and value in incorporating local specific knowledge into the model. Only in this way could a sustainable and profitable price discount model be built in their view. This seems logical, meaning that a model not built on local knowledge will very likely not be accepted by local sales management and customers (Liozu, 2016a), and therefore cannot be consistent with the global objective of profitable pricing. Hence, they constantly pushed to involve the sales force and the customers in the project.

When the team discussed the collection of more local knowledge, two new dilemmas arose. Involving the sales force and testing the model with the sales force and customers had clear disadvantages and advantages: risk of exposure, and the gathering of new valuable local data to further modify the model. The data indicated that decisions had to be made, as there seemed no

possibility of integrating the two forces. Local sales management aimed to build a wall of resistance that would restrict central pricing management's access to local knowledge at the level of the local sales force and customers (see Figure 7.6). The risk perceptions of local sales management and the resulting resistance made the inclusion of local knowledge at the sales force level difficult and, at the customer level, impossible. The imposed barrier to involving customers could never be overcome in this project.

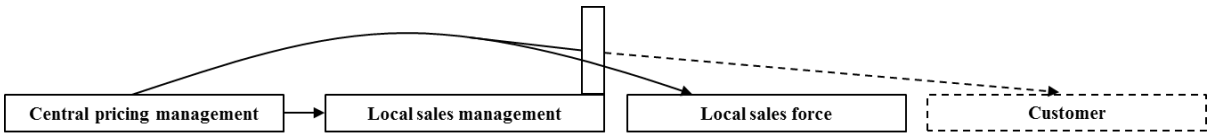


Figure 7.6: Accessing local knowledge.

Towards the end, again two dilemmas were encountered. Local sales management had the option of choosing between several months for launching the model but could not reach a decision. Further, when the new model was basically fully developed, the next logical step was to implement it. The local sales management team still seemed to oppose the implementation of the new model for the outlined reasons. The approach of integrating the opposing forces when developing the technicalities of the model had the goal of making the either-or choice between the two models an easy one, and not a tough dilemma. However, local sales management remained indecisive about some aspects of the model and its implementation. While the central team members preferred the new model, local sales management was still not in favor of it compared with the current pricing approach. They still seemed to clearly prefer maintaining the status quo of special pricing.

In sum, this extends the agency theoretical view on price delegation and price discounting by showing that while certainly dilemmas were being faced during the project, the notion of local knowledge and global objectives was not a dilemma per se, as both opposing forces might be integrated. The study further illustrates that even though the change management literature promotes the involvement of the sales force and customers, some disadvantages can eventually prevent the engagement. Thus, while local knowledge can be integrated, the access to such knowledge is characterized by dilemmas in this case. Moreover, even though the team engaged in detailed discussions to make dilemmatic choices and tried to integrate the opposing views, the conflicts and existing tensions could not always be resolved.

Pricing unfairness, risk and costs

The findings further suggest that pricing unfairness, risks and costs are the underlying drivers of change and resistance in this case company. These factors help explain why the decisions to be faced were perceived as dilemmatic and not simple choices, which further led to tensions. Initially, the drivers show why the firm sought to abandon special pricing and make a change. They also help demonstrate why the local sales management was concerned about the new model and resisted the change and the model's implementation.

With the current model customers began complaining about being treated unfairly. The local sales management was used to treating customers individually through special pricing agreements. It was hard for them to believe that a single standardized price discount model could address all the needs of their heterogeneous customers. Therefore, they believed that the customers might also perceive the new model as unfair, and that it might affect their purchasing behavior negatively. This factor helped in dismissing the status quo, but it also influenced discussions on the technicalities of the new model, for example in relation to the growth parameter.

The findings suggest that the encountered tensions and respective discussions were shaped by the risk perceptions expressed by local sales management. The literature has so far considered risk aversion in terms of the sales force granting high discounts to more easily close a transaction (Frenzen et al., 2010; Nimer, 1971). In this study, this is true for the initial situation and the local sales management's beginning resistance to discontinue special pricing. Moving away from special pricing to a more standardized approach carries a customer risk. However, since they were already complaining about special pricing, maintaining the status quo also seemed very risky.

The role of risk, particularly in relation to exposure, became critical at various times when the firm aimed to include more local knowledge. Risk seemed to exist on three levels: customer, commercial and personal. The local sales management feared that customers would reject the new model or that it would negatively affect their satisfaction and purchasing behavior (customer level). This would eventually lead to lower unit sales, revenues, and, potentially, profits (commercial level). This might in turn have personal consequences, as illustrated by the head of sales, who feared that he might lose his job if sales targets were not being met (personal level). The personal level is more subjective; the other two are more objective. This also indicates that it is extremely important to ensure customer acceptance, as this is the trigger for affecting the other two levels.

This process study sheds light on how a firm aims to solve the problem of balancing costs. Jensen and Meckling (1995) argued that a company needs to balance the "costs of bad decisions due to poor information and those due to inconsistent objectives" (p. 12). Looking at the initial situations, revealed two key problems. First, discount decisions were historically based on "good" information, but it was a time-consuming and costly approval process, as specific knowledge had to be forwarded from the sales force to the sales director and head of sales. They built the business case around the special pricing agreements, aiming to comply with higher-level objectives. However, customers were dissatisfied with the long approval process and inconsistent pricing approach. Second, the decisions made by local sales management did not result in desirable behavior and outcomes in the view of GLOCOM. Overall, this meant high costs.

The new model provided a performance-based pricing scheme that is fixed and standardized. Thus, approvals would no longer be needed, and specific knowledge might not be transferred, either from the sales force to sales management or from sales management to central pricing management. Overall, this could potentially lead to a reduction of those costs. As described by Jensen and Meckling (1995), companies run a risk of making decisions with inconsistent objectives. In this project, however, staff from headquarters were involved in designing the price discount model, particularly the mathematical part, to ensure that this would not be the case in the future. However, there were surely costs involved in developing the model, such as hiring the consultant or visiting the USCOM premises multiple times. Those can be considered up-front costs. They were required to develop a model based on "good" local knowledge and in alignment with the corporate objectives to reduce the costs in daily pricing operations. Through this process and the resulting rather centralized model, the central team members hoped that the costs and problems would be reduced in daily practice and provide a better solution than the previous pricing approach.

Managerial implications

This empirical case study demonstrates that designing a price discount model is challenging for managers, and it has a number of practical implications. First, it is important to include central and local staff in the development process to gain their perspectives and thoughts on global objectives and local knowledge; ideally, one would also include the users of the new model that are affected by it, such as the sales force and customers. Managers must therefore evaluate who in their firm is best able and willing to supply knowledge about global objectives and local

business practices. In this case, the local knowledge was primarily supplied by the local project team members and drawn from quantitative sales data. Given the potential difficultly of gathering local knowledge from other sources, assuring and discussing this access in the first place is recommended. Purely centrally developed discount models are likely to fail.

Second, this study provides managers involved in pricing projects insights into the opposing positions on different aspects that might lead to tensions. In this study the project team faced several dilemmas. It is vital that managers understand the respective advantages and disadvantages of each choice. This study demonstrates that involving the sales force and customers in pricing projects is controversial. There are benefits and disadvantages, and the project timeline must allow a thorough discussion of these if the project wants to achieve buy-in from all stakeholders. Furthermore, as shown with local knowledge and global objectives, it may be possible to integrate the opposing forces. Thus, managers are advised to not think of either-or choices but to instead apply a dialectic view with the goal of integrating both positions in creative and innovative ways through social interaction.

Third, local knowledge and global objectives are key to developing new price discount models. In addition, the identified elements of pricing fairness, risks and costs will further help identify and analyze issues of the current price discounting status quo. It then also guides the way forward for understanding conflicting interests, which in turn provides insights on solving the issues.

Fourth, as Liozu (2015a) stated, “It is natural to want to hit the brakes when driving through fog” (p. 58). This is what happened in this case study. Local sales management could not picture the model in actual practice and therefore resisted. Change is not easy. This might be especially true for discount and other pricing projects that affect the daily practices of the sales function. Pricing is, after all, a sensitive topic in firms. Here, it is important to think about the employees and external stakeholders, such as customers, being affected by such change. Detailed change management initiatives for getting commitment and making external stakeholders feel safe must therefore be planned and well executed. The future must appear transparent with the lowest possible risk. Local sales management hesitated to adopt the model, because its future customer, commercial, and, thus, personal implications were difficult to predict.

Fifth, agency theory would argue that issues such as resistance can be solved via incentives. In this project, the topic of incentives was never raised. It was only promised that incentives might be adjusted, depending on what the model looked like once implemented. One could argue that using incentive mechanisms might have increased the chances of this project’s success. For

example, changing incentives and ensuring a stable salary might ensure that local sales management did not perceive such a high personal risk when implementing a new model. However, this study also illustrates that tensions existed, such as lack of confidence and mistrust, that are believed to be difficult to resolve through incentives. However, these can be considered barriers to a successful rollout. Hence, deeper engagement from a change management perspective, including a careful redrafting of performance measures and rewards, might be fruitful.

Limitations and future research

More research is needed to confirm, complement and challenge the findings of this exploratory study. First, the case company studied is a manufacturer selling products to its retail network. Similar to a franchise model, the customers are solely selling the products of the manufacturer. As with all single case studies, they might become "too context-specific, which limits the possibilities to generalize to other settings" (Aaboen, Dubois, & Lind, 2012, p. 236). Thus, if generalization is desired, further studies with multiple cases may be conducted. Second, it is also worth highlighting the potential researcher biases this study may have been exposed to as described in the Method section. I am employed at the headquarters, which could potentially have influenced the findings of this study, for example the responses of local staff during the interviews. Third, in this paper the case firm actually fails to implement the model. While studies on failure are valuable for shaping our understanding of the complexity of price discounting, so are success stories.

In this paper it was demonstrated how the local sales management interacted in practice with the central pricing function during a rather strategic price discount project. Many companies are establishing such central pricing teams that engage with local sales management to improve pricing management. However, we still know little about how they interact or about the role of sales management in strategic pricing management choices and decision-making. The extant pricing literature primarily looks at the sales function on a tactical and operational level when it comes to pricing. Also, studying the interaction between pricing and sales functions in daily pricing operations seems to be a fruitful area for empirical research.

It is worth pointing to the internal uncertainty about fairness perceptions of customers. Initially, customer complaints about the price variations emerged across customers, but at the same time local sales management believed that the more standardized approach would also be

perceived as unfair. This likely highlights the importance of involving customers in such projects to gain more clarity on the pricing fairness aspect. While previous general research, for example on inequity aversion and distributive and procedural fairness (e.g., Ferguson, Ellen, & Bearden, 2014; Herrmann, Xia, Monroe, & Huber, 2007), might explain some of the outlined concerns, there is certainly room for further studies on fairness perceptions in relation to price discounting and the delegation of pricing authority.

The data also indicate that below the surface of this project there might be a more deep-seated conflict among the project members. To recall, USCOM was bought by GLOCOM initially. Based on this history, an interesting avenue for future research would be to study agency and power struggles, for example by drawing on the work of Giddens (1984). Such a perspective potentially allows the researcher to dig deeper and derive findings that transcend the boundaries of the pricing project.

Another limitation pertains to the cultural dimension, which was not investigated in this study. Culture might refer not only to the nationalities of the project members but also to the culture of the specific company and work function. The means of culture in sales have been discussed before (Geiger & Guenzi, 2009; Töytäri et al., 2017), and the data from this study point towards the role of such cultures, such as customer-centric sales culture (Trailer & Dickie, 2006). In pricing this aspect has been touched upon on several times (e.g., Hinterhuber & Bertini, 2011; Indounas, 2015; Lancioni et al., 2005; Liozu, 2015a) but has not been thoroughly explored.

Conclusion

Several dilemmas were encountered in the process, some of them making the inclusion of local knowledge troublesome, thereby also potentially making the modification of the price discount model more difficult. In addition to this, the encountered tensions and opposing views throughout the process could not fully be solved in this project. The associated uncertainty about pricing fairness and, more importantly, high risk perceptions were present throughout. These identified elements, including cost considerations, helped shed more light on the motivations of the project members, particularly the local sales force management. They remained indecisive, such as about the growth parameter or the timing of the launch. This indecisiveness was strongly related to and shaped by their mistrust of and lack of confidence in the new model. However, trust and confidence were prerequisites to implementing the model in practice and enforcing its prices. Without trust, confidence and willingness to take risks, the local sales management continued

practicing resistance. This was the case throughout the project duration. In the end, this also led to interpersonal conflicts where central pricing management was fed up with the local sales management's behavior, which was characterized by resistance and indecisiveness.

Overall, this study shows how difficult and complex it is for a project team to design a model that is based on local knowledge and global objectives, and that is then accepted by the stakeholders. The development process for such a model, characterized by multiple dilemmas and a dialectic of local knowledge and global objectives, is far from straightforward, as much more is going on below the surface that must first be discovered and addressed.

8. PAPER III – *VALUE DISCOVERY AND LEARNING: CAPABILITIES FOR VALUE-BASED PRICING AND SELLING OF INDUSTRIAL SERVICES AND SOLUTIONS*[15]

Abstract

Many manufacturers invest in services and solutions to achieve superior customer value. However, little research has examined the capabilities for value-based pricing and selling (VBP&S) in relation to such offerings. This article explores (1) what capabilities firms seek to develop for VBP&S of industrial services and solutions and (2) how learning influences the development of these capabilities, so they may be modified and reconfigured. VBP&S capabilities are best conceived of as operational (how you earn your living in the present) and supportive of the development of dynamic capabilities (how you alter the way your living is made). Drawing on Helfat and Winter's (2011) concept of "integrative capability", the authors conduct an in-depth exploratory study of two global market leaders in their respective industries. Based on an analysis of in-depth interviews with 58 respondents in the firms and 11 interviews with customer and supplier informants, the authors identify important capabilities for VBP&S. In addition, they find that VBP&S is constituted through embedded processes of learning and that it is through a dialogue with customers over time that value is discovered, which forms the basis for VBP&S.

Keywords: value-based pricing and selling (VBP&S), integrative capabilities, value discovery, learning, industrial services and solutions

Acknowledgements

The work presented here was undertaken at Copenhagen Business School, as part of the "Driving Competitiveness through Servitization" project, which is supported by the Danish Industry Foundation (Project number: 2014-0095). We would like to acknowledge the research support provided by Lauren Pflueger, Hendrike Dawidowsky and Kai Inga Basner. We are also indebted

[15] This article is currently under second round of review at *Journal of Business Research.* It is co-authored by Jawwad Z. Raja, Thomas Frandsen, Christian Kowalkowski, and Sof Thrane.

to Susi Geiger, the three anonymous reviewers, and other colleagues for their useful comments on earlier versions of this paper. And lastly, we would like to thank the respondents in each of our case firms for their generosity, both in their time and the depth and extent of the insights provided, during the research.

Introduction

Increasing attention is being directed towards the integration of products and services into comprehensive offerings or customized solutions that address specific customer needs (Kindström & Kowalkowski, 2015; Tuli, Kohli, & Bharadwaj, 2007; Storbacka, 2011). Of particular interest is the development of value-based pricing and selling (VBP&S) capabilities for services and solutions, with which industrial companies continue to struggle (Hallberg, 2017a; Hinterhuber, 2008, 2017; Hinterhuber & Liozu, 2017; Töytäri et al., 2015; Töytäri, Keränen, & Rajala, 2017). The growing importance of this area is reflected in recent practitioner publications that discuss different pricing approaches and strategies to achieve better earnings (see, e.g., Chan et al., 2015; Smith, 2016). Managers perceive a strong need to develop capabilities in order to succeed with VBP&S, as evidenced by professional associations such as the Professional Pricing Society (PPS) that provide dedicated presentations, workshops, and courses focused on capability development. Much research has found that firms are subject to uncertainty during assessment of customer value (Hinterhuber, 2008; Sawhney, 2006; Töytäri et al., 2015) and that developing an offer and documenting the value delivered over the lifetime of the contract are complex tasks (Sawhney, 2006).

The literature tends to either deal with value-based pricing (VBP) (e.g., Dost & Geiger, 2017; Kienzler, 2018; Liozu & Hinterhuber, 2014) or value-based selling (VBS) (e.g., Terho, Eggert, Haas, & Ulaga, 2015; Terho, Haas, Eggert, & Ulaga, 2012; Töytäri et al., 2011). Töytäri et al. (2015) make a notable contribution, exploring the interconnections between VBP and VBS and arguing that, in order for VBP to be successful, customer value perceptions need to be proactively influenced through sales processes. At the same time, VBS activities strongly depend on effective corresponding revenue mechanisms or profit formulae in order to capture a share of the value created (Johnson, Christensen, & Kagermann, 2008; Töytäri et al., 2015). This interdependency provides a fertile ground for further research, especially for industrial firms providing services and solutions.

Although VBP&S has received significant attention in recent years, there remain challenges to understanding the pricing and selling capabilities necessary for industrial services and solutions, which are crucial for profit generation (Dutta et al., 2003; Liozu, 2016c; Liozu & Hinterhuber, 2013a, 2013b, 2014). Whilst the literature is beginning to increase our understanding of the development of VBP&S-specific capabilities, it assumes that these capabilities are fairly static and does not pay sufficient attention to how firms may modify routines for different operating environments (i.e., dynamic capabilities) (Teece, 2007; Teece et al., 1997). There is a need to consider both operational capabilities (ordinary or zero-order) and dynamic capabilities (first-order) (Collis, 1994; Winter, 2003). Operational capabilities are described as "how you earn your living" and dynamic capabilities as "how you change your operational routines" (Helfat & Peteraf, 2003; Winter, 2003). However, it is worth noting that the line between operational and dynamic capabilities is unavoidably blurred and that some "capabilities can be used for both operational and dynamic purposes" (Helfat & Winter, 2011, p. 1245). Following Helfat and Winter (2011), we contend that VBP&S capabilities should be viewed as integrative, allowing a firm to earn a living but also modifying and reconfiguring for different operating contexts.

The aim of this paper is to address the gap in the literature by exploring VBP&S capabilities in the context of industrial services and solutions. In so doing, we extend the notable but limited research that has touched on the intersection between VBP *and* VBS (Liinamaa et al., 2016; Töytäri et al., 2015). By drawing on an exploratory study of two global market leaders, we identify the different capabilities required for VBP&S as well as the role of learning in developing these capabilities so they may be modified and reconfigured for different contexts. The following research questions are addressed:

1. What capabilities do firms seek to develop for VBP&S for industrial service and solution offerings?

2. How does learning influence VBP&S for industrial services and solutions?

In addressing these questions, the study makes two important contributions. First, it identifies a comprehensive set of capabilities and illustrates how these support pricing and selling. Second, it explains how the operational capabilities identified for VBP&S support the development of higher-level capabilities. For this, embedded processes of learning play a crucial role, whereby the provider attempts to engage in – and actively include customers in – value discovery through a dialogue over an extended period. Such learning processes underpin the ability to sense, seize, and transform opportunities. Thus, we argue that firms should recognize

the ability of VBP&S to provide important insights into customers' value perceptions, which can be used to reconfigure service offerings to deliver value.

The paper is structured as follows. The next section provides the theoretical background of this research, discussing VBP&S literature with a specific focus on industrial services and solutions. Then, we draw upon the literature on capabilities and the implications for VBP&S are considered. Section 3 presents the adopted research methodology and an overview of the research cases. In Section 4, the findings of the studies are presented. Lastly, In section 5, the findings are discussed and conclusions are presented.

Theoretical background

In this section, we provide the theoretical background of the study. First, we provide an overview of VBP&S literature. Second, we present a brief overview of the strategic management literature on capabilities, with a focused discussion about (i) capabilities for industrial services and solutions and (ii) capabilities literature on VBP&S. Third, we argue that there is a need to reconsider the nature of capabilities as integrative and the role of learning in modifying and reconfiguring capabilities.

Value-based pricing and selling

Hinterhuber (2008) defines VBP as "the value a product or service delivers to a pre-defined segment of customers as the main factor for setting prices" (p. 48). Extending this, Töytäri et al. (2017) explain that "[v]alue-based pricing logic requires a profound understanding of a customer's business model, business drivers, and processes, and ultimately, what customers value, instead of focusing on product/service attributes and a supplier's competitive position" (p. 238). In terms of profit potential, research stresses the superiority of the VBP approach over cost- and competition-based approaches[16] (Liozu & Hinterhuber, 2013c; Morris & Fuller, 1989). VBS, a "sales approach that builds on identification, quantification, communication, and verification of customer value", is closely linked to VBP (Töytäri & Rajala, 2015, p. 101). The VBS approach focuses on communicating to the customer that the offered service or solution is valuable so that, eventually,

[16] In a cost-based pricing approach, a firm sets prices based on costs in order to generate a certain return on investment or markup on costs (Liozu, 2015a). The competition-based approach is predicated on competitors' behaviors, price levels, and positioning (Liozu, 2015a; Nagle et al., 2016).

the customer's willingness-to-pay will be influenced and the price will be justified (Terho et al., 2012).

VBS is an important means for VBP as it represents a firm's ability to capture the value promised to the customer (Bowman & Ambrosini, 2000; Töytäri et al., 2015; Töytäri & Rajala, 2015). As such, the two are "inextricably linked" as "one does not exist without the other" (Moorman, 2013, p. 335). This is reflected in the argument that a customer's business model is part of VBP and VBS (Terho et al., 2012; Töytäri & Rajala, 2015). Within the industrial services and solutions context, this is particularly relevant since it is often difficult for the seller to understand and quantify value perceptions before entering the actual selling process. It is thus surprising that the academic literature tends to discuss VBP and VBS separately rather than together, with some recent notable exceptions (see Liinamaa et al., 2016; Töytäri et al., 2015).

The capabilities perspective

The literature on organizational capabilities is rooted in the resource-based view (RBV) of the firm (Wernerfelt, 1984) and argues that organizations require appropriate capabilities to carry out activities (Richardson, 1972). Helfat and Peteraf (2003) state that "organizational capability refers to the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular result" (p. 999). Organizations develop such capabilities by assembling available resources into specific and unique configurations so that the input is transformed into an output of greater worth (Amit & Schoemaker, 1993).

According to the RBV, the possession of non-imitable, firm-specific resources provides an organization with a competitive advantage (Barney, 1991). Based on this, several authors (e.g., Dutta et al., 2003; Liozu & Hinterhuber, 2013a; Moorman, 2013) debate how VBP&S capabilities can provide a competitive advantage, even though they are difficult to imitate and substitute (cf. Töytäri & Rajala, 2015). Of particular relevance here is the literature on dynamic capabilities, which argues that it is not necessarily the organization's resources that are important, but its ability to reconfigure routines for various environments (Teece & Pisano, 1994; Teece et al., 1997). Dynamic capabilities "enable business enterprise to create, deploy, and protect the intangible assets that support superior long-run business performance" and can be separated into three important components (Teece, 2007, p. 1319):

(i) Sensing, which entails the identification and assessment of opportunities in a business environment;

(ii) Seizing, which pertains to the internal and external deployment of resources to create value from the sensed opportunities and to capture value; and

(iii) Transforming/Reconfiguring, which refer to the continuous renewal of the organization in response to necessary changes.

These three components are of interest for those attempting to understand the processes of transition to industrial services and solutions (see Gebauer, 2011) and the necessary capabilities for VBP&S.

Capabilities for industrial services and solutions

Within industrial services and solutions literature, much attention has been given to the development of capabilities.[17] Ulaga and Reinartz (2011), for example, propose a resource-capability framework and identify five capabilities essential to successful deployment of hybrid offerings: the ability to process service-related data, assess and mitigate service-specific risks, design offerings around service and not technology, sell solutions as opposed to products, as well as effective service deployment. Relatedly, Steiner, Eggert, Ulaga, and Backhaus (2016) find that advanced marketing capabilities – such as understanding, documenting, and communicating customer value – are required if manufacturers are to profitably sell industrial services. The literature on integrated solutions typically regards systems integration – the ability to design and integrate technical systems using internal and external sources of product and service supply – as the core capability (Brady, Davies, & Gann, 2005; Hobday, Davies, & Prencipe, 2005; Prencipe, Davies, & Hobday, 2003). In addition, Davies (2004) identifies operational services, business consultancy, and financing to be critical.

Applying a dynamic capabilities perspective, others have made notable contributions and consider service innovation- and development-related capabilities to be necessary for services and solutions (Den Hertog, Van der Aa, & De Jong, 2010; Fischer, Gebauer, Gregory, Ren, & Fleisch, 2010; Story, Raddats, Burton, Zolkiewski, & Baines, 2017). Utilizing the sensing, seizing, and reconfiguring/transforming components of dynamic capabilities, Gebauer (2011) finds that manufacturers should not focus exclusively on building service and integration capabilities but also consider management innovation to sustain a competitive advantage. At the firm level, the

[17] See Eloranta and Turunen (2015) for a detailed systematic review of strategic capabilities literature pertaining to servitization, service infusion, and solutions.

evolution of dynamic capabilities typically follows a sequence of sensing, seizing, and reconfiguring.

Kindström, Kowalkowski, and Sandberg (2013) draw on the framework developed by Teece (2007) when analyzing capabilities for successful service growth in manufacturing firms. They find eleven critical service capabilities, each of which is linked to sensing, seizing, or reconfiguring/transforming. However, the focus of the study is service innovation, and except for adaptation of new (value-based) revenue mechanisms as a capability, the study does not further investigate VBP&S.

Capabilities for value-based pricing and selling

Building on the capability view, numerous scholars have highlighted the strategic significance of pricing capabilities (Dutta et al., 2002; Liozu & Hinterhuber, 2013a; Johansson et al., 2012). As Liozu (2015b) points out, as opposed to resources, capabilities cannot be bought, but are embedded in the organization and must be developed over time. In their seminal article, Dutta et al. (2003) define price-setting capabilities as a set of complex routines, skills, systems, coordination, mechanisms, and complementary resources. Similarly, Liozu and Hinterhuber (2013c) state that pricing capabilities are a "resource and activity configuration that [...] enables a firm to build a competitive advantage and to achieve superior profitability as a result of pricing activities" (pp. 608–609). Johansson et al. (2012) explain that, once realized, "pricing is an organizational effort, the routines and processes, and thus the capabilities, become fundamental factors in being successful with pricing" (p. 10).

This view also exists in the literature on industrial services and solutions, which has focused on the pricing capabilities necessary for such services and solutions (Rappaccini, 2015). The solutions literature tends to discuss VBP in terms of quantity of usage and quality of customer outcome (Sawhney, 2006; Sharma & Iyer, 2011). Traditional input-based contracts focus on quantitative measures, such as service hours delivered or units sold, whereas outcome-based pricing also relies on qualitative measures. The former is used in performance-based contracting (PBC), whereby the buyer pays based on usage (e.g., per unit or time; Bonnemeier, Burianek, & Reichwald, 2010; Hünerberg & Hüttmann, 2003; Liinamaa et al., 2016).

Hinterhuber (2017) contrasts VBP and performance-based pricing approaches, arguing that they are two different constructs. First, whereas in the former case customers take on the full risk, in performance-based pricing, the risk is shared. Second, it is not a given that firms using

performance-based approaches set indicators based on value. Traditionally, prices may be based on cost, competitors, or value information and be used to set performance indicators. In other words, there is an intersection between VBP and performance-based pricing when the indicators are aligned with customer value (e.g., cost or time savings).

The broader literature on solution selling is also relevant to this discussion (e.g., Davies, Brady, & Hobday, 2007; Levihn & Levihn, 2016; Storbacka, Polsa, & Sääksjärvi, 2011; Terho et al., 2012). Notably, it generally takes a longer period of time to sell solutions (Tuli et al., 2007), and the increased need, process, and outcome uncertainty exists (Ulaga & Kohli, 2018). As such, dialogue and interaction with the customer is a crucial consideration in the relational selling approach, for which it is argued that further research is needed (Terho et al., 2012). Storbacka (2011) identifies 12 categories of capabilities, including 64 different capabilities that are necessary for solutions, some of which specifically pertain to selling solutions. Others have also emphasized the need for selling capabilities for industrial services and solutions (e.g., Kindström et al., 2015; Ulaga & Loveland, 2014). For example, service and solution sales capability is one of the five distinctive capabilities that Ulaga and Reinartz (2011) argue provide a platform for generating revenue from services.

Whilst pricing and selling are considered operational capabilities, we contend that they can support the development of dynamic capabilities. Next, we focus on integrative capabilities for VBP&S.

Integrative capabilities and learning for value-based pricing and selling

An operational capability "enables a firm to perform an activity on an on-going basis using more or less the same techniques on the same scale to support existing products and services for the same customer population", whereas dynamic capabilities "enable a firm to alter how it currently makes its living" (Helfat & Winter, 2011, p. 1244). In the context of VBP&S capabilities for industrial services and solutions, this distinction is problematic; the way in which a firm earns revenue at one point in time is not necessarily the same way in which it will earn revenue in the future. VBP&S necessitates a change in operational routine. In this respect, VBP&S capabilities need to be configured to allow the development of dynamic processes and routines from which a firm can gain a competitive advantage. Moreover, it is possible that "some types of capabilities can be used for both operational and dynamic purposes, either because they have different variants (some are operationally oriented and some more dynamic), or because one capability

simultaneously serves both dynamic and operational purposes. This again makes it difficult to draw a sharp line between dynamic and operational capabilities" (Helfat & Winter, 2011, p. 1248).

Helfat and Winter (2011) argue that "an integrative capability may be dynamic or operational, depending on the nature and intended use" (p. 1248). They describe an example of a brand manager who may have to manage existing and well-established as well as new brands, and in such a situation, "it is difficult to divide brand management neatly into operational and dynamic components" (p. 1248); for both, the responsible manager may rely on many of the same routines and processes to promote the products. In the case of industrial services and solutions, a manager is also likely to follow previously used and defined procedures and practices to price new offerings. One often-mentioned example is that of Rolls Royce and their change to a "power-by-the-hour" approach, whereby they generate revenues based on the value delivered (engine flying hours) to the customer (Teece, 2018). This suggests that integrative capabilities were used for VBP&S since the firm changed how it operates for industrial services and solutions.

Easterby-Smith and Prieto (2008) argue that capabilities are rooted in organizational learning. Organizational learning processes enable firms to identify opportunities, develop offerings, and reconfigure the organization in relation to new modes of value creation, delivery, and capture. In this respect, Zollo and Winter (2002) define a dynamic (or integrative) capability as "a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in the pursuit of improved effectiveness" (p. 340). Put simply, learning plays an integrative role in developing capabilities that provide sustained competitive advantages. To date, however, integrative capabilities as learning processes embedded within the VBP&S context have not been studied. Thus, further research is needed.

Research methodology

VBP&S has received increased attention recently, yet a greater understanding is required given the complexity of adopting and implementing such an approach. It was thus deemed appropriate to adopt an in-depth exploratory case-based research approach (Yin, 2009). An abductive research process was undertaken (Dubois & Gadde, 2002), entailing iterative movement between the literature and the empirical observations obtained during the research. Access to two firms was negotiated as part of a larger research project examining the competitiveness of leading multinational organizations of Danish origin, with particular focus on traditional manufacturing

organizations moving towards service business models. Over the course of the study, empirical findings led us to further explore VBP&S for industrial services and solutions, one of the major issues with which the case organizations – Alpha and Beta (pseudonyms) – actively grappled. We consulted the VBP&S literature to inform our data collection, with insights informing subsequent steps.

Sample considerations

We applied a purposeful sampling approach (Miles & Huberman, 1994; Patton, 2015). Of the many different sampling strategies available (see Patton, 2015), we adopted emergent theory sampling, whereby we examined constructs and elaborated upon them (Miles & Huberman, 1994). We began by adopting an exploratory approach with Alpha, identifying emergent issues and associated literature. We then purposefully incorporated the Beta case to sharpen the theory analysis process (Patton, 2015).

Miles and Huberman (1994) describe two important actions in qualitative sampling, which were performed in this study. First, clear boundaries must be set for the cases based on the available means and time required. We needed a high level of access and openness from the case companies to explore VBP&S, which many firms are reluctant to grant given the sensitivity of the required information. This meant that we needed to build trust with the firms over an extended period of time. Second, a frame should be created to support the uncovering, confirmation, or qualification of the basic processes or constructs within a research study. In a study such as ours, which constantly moves between data and theory in an abductive manner (Dubois & Gadde, 2002), emergent insights must be progressively combined with theoretical concepts to extend understanding (Strauss & Corbin, 1990).

The cases were selected based on specific criteria. The case companies (i) were changing their business models to become more service- and solution-oriented, (ii) had adopted a value-driven mindset for their offerings, (iii) recognized the importance of VBP&S, (iv) were actively developing capabilities and processes to support its implementation, and (v) provided a high level of access to key informants, secondary data sources, and their customer and supplier firms.

Case overviews

The two studied organizations, Alpha and Beta are global market leaders in their respective industries.

Alpha is a large engineering firm in the maritime industry that has been in operation for more than thirty years. It provides high-tech installations to firms in marine, shipbuilding, and wind industries throughout the world. In this study, data were collected within a large division of the company that provided systems for onshore and offshore telecommunications and firefighting and was responsible for its own profit and loss. The division employs approximately 220 employees, and while its shift towards services has been fairly recent (previously, service support was provided by project engineers), it has operated a fully functioning service department for several years. Alpha has been able to successfully sell value-based service agreements comprising comprehensive services to implement integrated solutions in the offshore wind industry.

Beta is a large engineering firm that provide whole plants for the mining and cement industries and has been in operation for over one hundred years. It also owns a number of product companies that provide capital-intensive equipment for those industries. It is considered a leading brand and has built a reputation for engineering excellence. The organization has grown significantly in recent years, primarily through acquisitions. The company has a matrix structure with four main divisions, each with profit-and-loss responsibilities. It is very dependent on large projects, as is typical of companies operating in the mining and cement industries, though it is also susceptible to the cyclical demand for projects based on commodity prices in those industries. Since the latest global financial crisis, the mining and cement industries have been experiencing a decrease in demand, which has limited the number of large projects in most markets. As a result, services and solutions have received greater attention as a potential way to cushion the effects of decreased demand for large projects by providing through-life value to customers. The firm's service portfolio ranges from provision and management of spare parts to consulting and training customers' employees. In addition, Beta provides operation and maintenance solutions over an extended period or throughout the life of a plant. Today, the company is successfully selling comprehensive service agreements ranging from services tied to specific equipment to full operation and maintenance agreements for entire plants.

Table 8.1 provides an overview of both focal firms and some of their key supplier and service customer firms. Suppliers include providers of firefighting systems (Gamma and Delta) as well as telecommunication equipment (Epsilon), and customers include energy utility companies (Zeta and Theta) as well as a drilling operator (Eta). Interviews with the supplier and customer firms provided important additional insights and improved our understanding of VBP&S.

Table 8.1: Overview of case firms

Firm	Core business/sector	Typical services	Number of employees	Turnover	% Turnover from services
Alpha	Systems integration, manufacture of firefighting and telecommunication equipment	Support and service contracts, service hotline, installation and commission, repair and maintenance, system monitoring, remote support, preventative maintenance, training services, e-learning, maintenance strategy development	Approx. 1,200 employees	Approx. 225 million USD	Approx. 20% (45 million USD)
Beta	Cement and mining plants	Operations and maintenance contracts (O&M), shutdown services, spare parts delivery, training institute, remote monitoring, preventative and predicative maintenance	Approx. 12,000 employees	Approx. 2.7 billion USD	Approx. 56% (1.5 billion USD)
Gamma	Firefighting systems	Repair and maintenance, spare parts, technical support, periodic service, service agreements	Approx. 60 employees	Gross profit Approx. 9 million USD	Not available
Delta	Firefighting systems	Training, technical support	Approx. 400 employees	Approx. 100 million USD	Not available
Epsilon	Telecommunication equipment	Not applicable	Approx. 50 employees	Gross profit Approx. 9 million USD	Not applicable
Zeta	Energy utility	Not applicable	Approx. 5,700 employees	Approx. 10 billion USD	Not applicable
Eta	Drilling operator	Not applicable	Not available	Approx. 2 billion USD	Not applicable
Theta	Energy utility	Not applicable	Approx. 20,000 employees	Approx. 17 billion USD	Not applicable

Data-collection process

At Alpha, the first round of interviews was conducted on-site over a number of days in May 2015. The interviews were exploratory in nature and were intended to understand Alpha's shift towards service provision and the associated challenges (see Appendix A for interview guide). During these interviews, the issues of pricing and selling emerged as highly significant to Alpha. Following the initial round of data collection, the researchers delved into the relevant VBP&S literature, with particular focus on industrial services and solutions. Subsequent data collection was undertaken in December 2015 and systematically addressed pricing issues. Again, unexpected and relevant observations were collected. Data collection continued until an in-depth understanding of the issues was achieved (Denzin & Lincoln, 2000). Data were collected primarily through semi-structured interviews. In total, 18 interviews were conducted within one division of Alpha. In addition, access to documentation, presentations, and field notes based on informal communications were provided and considered as data sources. Regular feedback sessions (informal sessions and day-long workshops) were held with key gatekeepers.

At Beta, data collection has been ongoing since December 2015. We built on the interview template developed during data collection at Alpha. As new insights emerged, we consulted the literature and explored issues with respondents. This stage can be described as highly abductive as there was constant movement between empirical data and theory. Data collection at Beta entailed 40 semi-structured interviews with employees from the different regions in which the company operates. Table 8.2 lists the respondents and duration of interviews. In addition, a researcher was based at the company's headquarters for a large part of the study, during which other key respondents and further opportunities for data collection were identified. The researcher was granted access to internal systems, meetings, corporate buildings, and other facilities where employees worked. The researcher also took extensive field notes. As in the case of Alpha, both informal and formal feedback sessions were undertaken, validating the research findings.

In addition, a number of "adjunct" interviews (see Piekkari et al., 2009) with supplier and customer organizations of Alpha were conducted. Such interviews enabled a more holistic view of the topic as well as validation of the findings (both upstream and downstream). Eleven interviews were conducted with respondents from a total of six firms. Table 8.2 provides an overview of all the interviews and workshops conducted in the main and adjunct firms. Figure 8.1 provides an overview of the research process, including the case firms and timeline.

Table 8.2: Data sources

Case firm	Data source (interview, workshop, etc.)	Position of informant	No. of interviews/ workshops	Duration of interviews (mins)*
Alpha	Interviews	Vice Presidents	3	[68, 47, 61]
	Interviews	Sales Managers (Area Manager, After-Sales)	2	[59, 63]
	Interviews	Service Manager and Coordinators	3	[88, 49, 88]
	Interviews	Project Managers	2	[71, 50]
	Interviews	Service Engineers	3	[49, 61, 46]
	Interviews	Managers (Senior Manager, Bid & Proposal, Procurement, Product Responsible)	4	[56, 57, 69, 53]
	Interview	Logistics Assistant	1	[51]
	Group interview	Department Head, Service Managers	1	[175]
	Workshop	Vice Presidents, Service Managers, Sales Managers	2	[240†, 120]
Beta	Interviews	Vice Presidents	7	[57, 101, 61, 58, 57, 72, 61]
	Interviews	Director of Services	3	[60, 71, 96]
	Interviews	Department Heads	4	[108, 71, 83]
	Interviews	General Managers	8	[58, 57, 64, 55, 77, 66, 69, 69]
	Interviews	R&D Function (Technical, Innovation, Project Managers and Engineers)	9	[115, 58, 71, 48, 36, 47, 32, 39, 65]
	Interviews	Sales Managers	5	[76, 64, 79, 101, 93]
	Interviews	Service Managers	4	[67, 76, 59, 70]
	Group interviews	Innovation, Technical Managers	3	[60, 67, 60]
	Workshops	Vice Presidents, Managers	2	[116, 180†]
Gamma (supplier)	Interviews	Sales Manager	1	[57]
		Global Supply Chain Manager	1	[47]
		Commercial Manager	1	[37]
Delta (supplier)	Interviews	Sales & Marketing Manager	1	[67]
		Service Manager	1	[67]
Epsilon (supplier)	Interviews	Key Account Manager	1	[57]
		Sales Manager	1	[60]
Zeta (customer)	Interviews	Procurement Manager	1	[54]
		Senior Manager	1	[60]
Eta (customer)	Interview	Communication Engineer	1	[50]

Case firm	Data source (interview, workshop, etc.)	Position of informant	No. of interviews/ workshops	Duration of interviews (mins)*
Theta (customer)	Interview	Manager	1	[94]

*Actual duration of audio recordings
†Audio was not recorded, but detailed notes were taken.

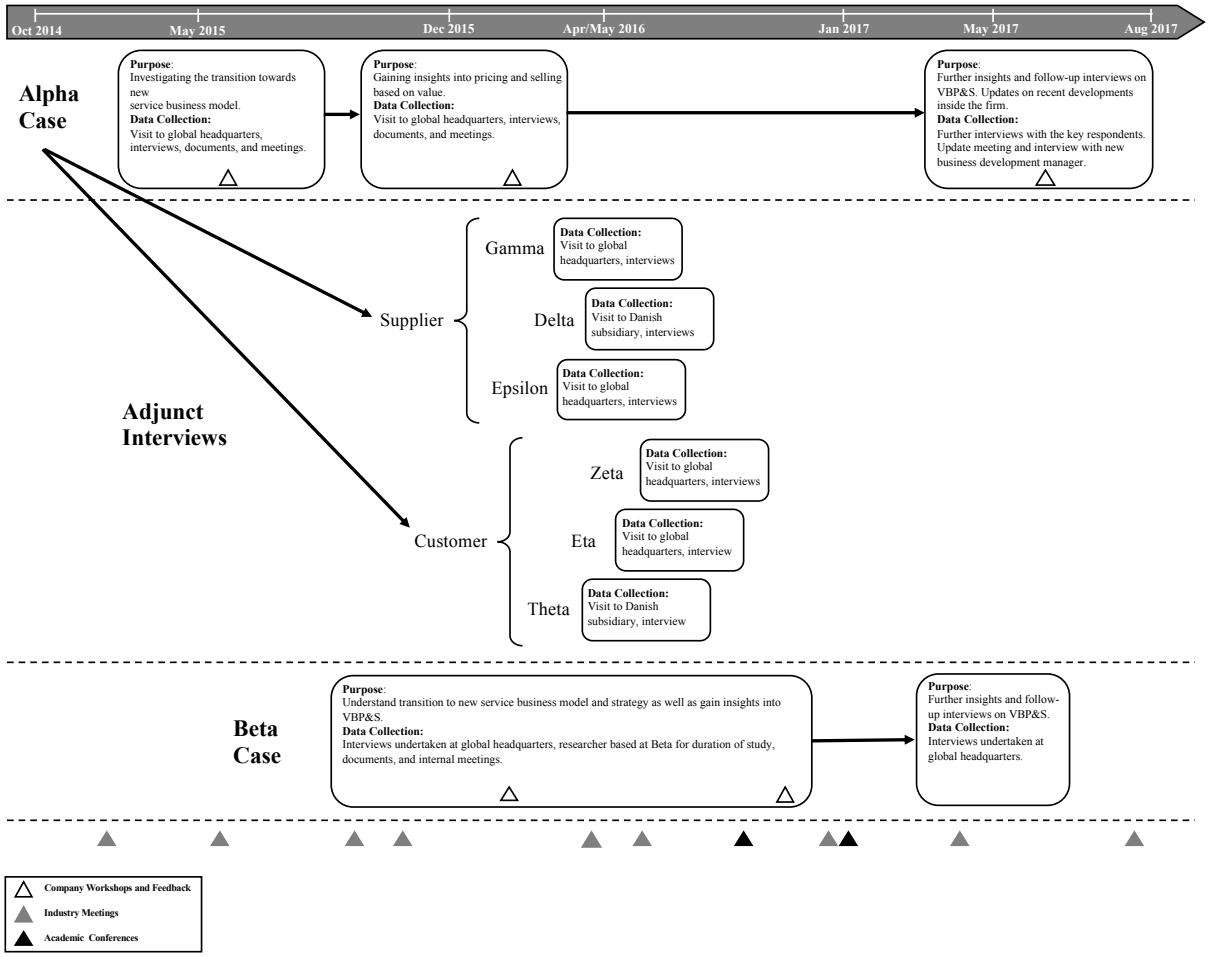


Figure 8.2: Research process and timeline.

Data analysis

As mentioned previously, we adopted an abductive approach to this study, with data analysis performed throughout the duration of the study. All data were organized and coded by multiple researchers using NVivo software. First, in-case analysis of Alpha was conducted by the research team, followed by coding and analysis of Beta. The initial coding template was developed based on the VBP&S and capabilities literature. As the coding and data analysis progressed over the duration of the study, codes were inserted, deleted, and redefined (King, 2004; Strauss & Corbin,

1990). Data were coded separately by two researchers involved in data collection and a third independent coder (cf. Miles & Huberman, 1994). The three coders extensively discussed the codes and coding structure. Disagreements were discussed with the other researchers involved in the project until agreement regarding the codes and labels was reached. Thus, the research team was in constant dialogue during the coding process, discussing and debating similarities and differences between the empirical findings and extant literature. The final coding structure is presented in Figure 8.3, and the findings obtained from the coding process are presented in detail in the Findings section of this paper. Although this is likely to give an impression of a somewhat structured, linear process, in reality the analysis process was more non-linear and entailed simultaneous collection, coding, and analysis of data (Strauss & Corbin, 1990). We constantly moved between emerging insights and the literature while analyzing and re-analyzing data.

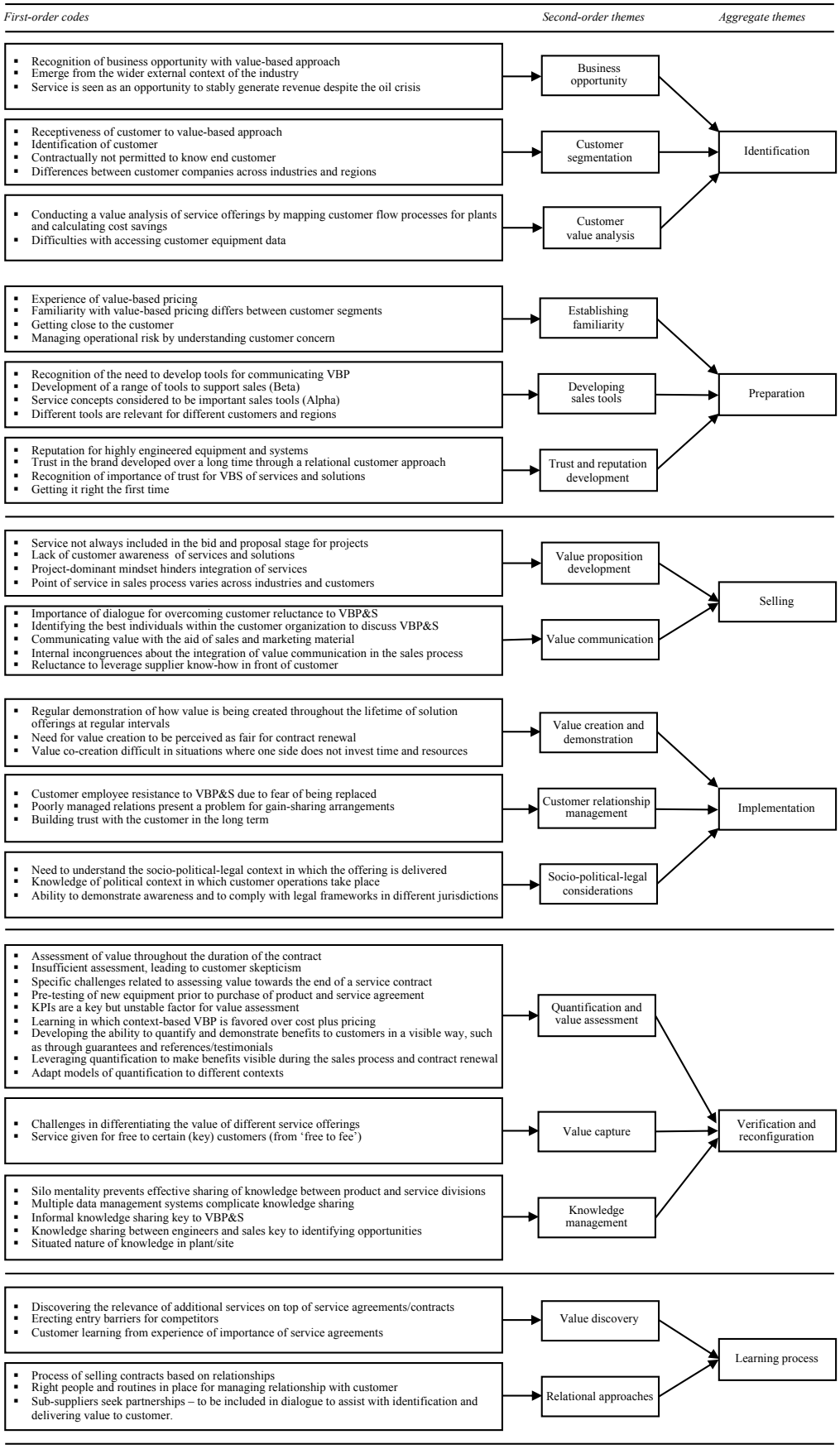


Figure 8.3: Data structure.

Reliability, validity, and trustworthiness

Common concerns about qualitative research are related to its reliability, trustworthiness, and validity. In order to ensure these aspects were satisfied, the collected data and resulting analysis were assessed according to established criteria proposed for qualitative research (see Table 8.3).

Table 8.3: Criteria for assessing reliability, trustworthiness, and validity of research

Criteria	Method of addressing this in our study	References
Credibility Degree to which the findings are an adequate representation of the data	• Triangulation of data (interviews, documents, observations, field notes). • Iterative process adopted between literature and emergent findings throughout the research process. • Case reports provided to Alpha and Beta for comments and discussion. • Regular feedback workshops conducted with Alpha and Beta. • Ongoing meetings with representatives throughout the research. • Feedback from case company employees at academic conferences.	Lincoln & Guba (1985); Miles & Huberman (1994)
Transferability Extent to which findings can be applied to another context	• Analytical generalizability of findings to other company contexts. This was achieved through presentation and discussion of findings with other Danish firms in an industry core group established as part of a wider research project.	Lincoln & Guba (1985); McCracken (1988); Goffin et al. (2012); Eisenhardt & Graebner (2007)
Dependability Extent to which the findings are reliable and consistent	• Data-collection log maintained throughout the research process. • Detailed record of all data sources maintained to allow for tracking. • Multiple rounds of coding by a team of researchers. • Documentation and recording of feedback provided in workshops.	Lincoln & Guba (1985); Halldorsson & Aastrup (2003)
Confirmability The interpretation of data in a logical manner, demonstrating a clear link between data and findings	• Interviews conducted at different levels, locations, functions, and times in Alpha and Beta. • Multiple researchers used to reduce researcher bias. • Findings discussed with interviewees and senior management of Alpha and Beta. • Findings audited and discussed by experts and other researchers.	Lincoln & Guba (1985); Miles & Huberman (1994); Valle, King, & Halling (1989); Riege (2003)

Criteria	Method of addressing this in our study	References
Integrity and generality Extent to which interpretations are not biased by interviewees through inflated accounts, misinformation or withholding of information. The use of multiple perspectives to understand phenomenon being researched	• Interviewees provided briefing notes prior to interviews to allay any concerns and provide background for project. • Rapport built with interviewees. • Interviewees guaranteed anonymity. • Multiple rounds of interviews to check for inconsistencies in explanations. • Researchers immersed to varying degrees in Alpha and Beta. • Utilization of other data sources, including observations of meetings (departmental, sales, project-specific), documentation (including pricing information, marketing material). • Interviews conducted with customers and suppliers of Alpha to externally corroborate (triangulate) accounts. • Provision by one of the researchers, who has work experience as a value and pricing analyst and pricing consultant and is a regular speaker at pricing manager conferences such as those of the Professional Pricing Society, of external practical know-how.	Wallendorf & Belk (1989); Strauss & Corbin (1990); Flint, Woodruff, & Gardial (2002)
Fit Extent to which the findings fit within the area of study	• Careful selection of cases to provide comprehensive picture of VBP&S in the context of industrial offerings. • In-depth interviews with specific individuals working with VBP&S in Alpha and Beta (e.g., salespeople, marketing personnel, pricing and sales tool developers, business development team, etc.).	Strauss & Corbin (1990); Flint et al. (2002)
Understanding Extent to which findings are accurate representations of the reality experienced by participants	• Findings presented and discussed at Alpha and Beta throughout research process. • Findings presented at two academic conferences. • Findings found to be relevant by other companies at industry meetings and academic conferences.	Strauss & Corbin (1990); Flint et al. (2002)

Findings

In this section, we provide detailed descriptions and analysis of our findings and draw parallels between them and extant theoretical literature according to Teece's (2007) sensing, seizing, and transforming framework. Each sub-section is accompanied with supporting quotes from the coding process (see Tables 8.4–8.6).

Sensing

Rather than referring to the pre-implementation phase of VBP&S as the "planning" phase, our data analysis suggested two distinct categories in the sensing component of the framework: (1) *identification* (involving business opportunities, customer segmentation, and value analysis) and

(2) *preparation* (involving establishment of familiarity, development of sales tools, and trust and reputation).

Identification

Business opportunities

In both firms, industrial services and solutions were considered to represent a significant opportunity for growth, although Beta has progressed further in the journey towards providing integrated offerings given its longer history. Recent economic turbulence coupled with declining oil prices and new competitors has caused both firms to suffer from a lack of demand from their traditional customer base. Service presented an alternative means of more stable revenue generation without vulnerability to the peaks and troughs of the project-based nature of the industries in which both firms operate.

Our research highlights that both firms considered a VBP&S approach to be a potential way in which to move away from simply discussing prices with customers. Both firms recognized that there was a need to identify opportunities for delivering value to existing and new customers and that those employees that spent time on offshore facilities or customer plants might be best able to identify those opportunities. Whilst the opportunities produced by a VBP&S approach were clearly acknowledged, we found that identifying the appropriate customer segment to target with the approach and determining customer receptivity were challenging.

Customer segmentation

Töytäri and Rajala (2015) highlight the common practice of customer process analysis for identifying influential stakeholders within a target firm, which enables the creation of segment-specific value propositions. Our data supports this claim but also suggests that target segment and stakeholder identification are interrelated and form an essential part of the identification stage. Determining which stakeholder groups to target was challenging for both firms. Beta seemed to clearly segment its customer base and was better able to identify which customers may be interested in a VBP&S approach. However, customer segmentation proved challenging due to differences, such as customer ownership structure and level of maturity, across the industries and regions in which Beta operated. Alpha faced different challenges: a lack of knowledge about the end customer or lack of ability to engage in dialogue with the end customer.

The extent to which delivered services added value for Alpha and Beta's customers varied significantly. Both firms recognized the importance of considering technological competency and attitudes towards maintenance and service activities when segmenting customers; a customer must be able to understand why advanced industrial services might be needed as well as open to allowing the provider to deliver those services. Thus, in addition to revenue, an understanding of customers' competency and propensity to value advanced industrial services should be a guiding factor in more traditional approaches to segmentation. Moreover, it is essential that the building blocks for coherent service portfolios are based on a solid foundation of customer insight so that subsequent reconfiguration actually addresses areas of significant value.

Customer value analysis

Firms engaging in VBP&S processes commonly seek to gain thorough insight into their customers' production and value creation processes in order to identify opportunities for improvement (cf. Töytäri & Rajala, 2015). Beta conducted a detailed value analysis of its customers' processes, fully mapping the customer flow processes for plants. In so doing, it was possible to deduce, for each individual customer, which processes could be made more efficient, how much value could be added, and which possible solutions could be presented to the customer. In order to conduct a similar value analysis, Alpha needed access to customer equipment data. This was not always possible, and so Alpha was prevented from conducting thorough analyses of all its customers.

Collecting data from customers is a time-consuming and challenging process, but it is essential to the pricing and selling process. We found that both firms were aware that high-level access to customers was vital for customer value analyses.

Preparation

Establishment of familiarity

Lack of customer familiarity with use of value information presents a key challenge when firms seek to introduce VBP&S to generate revenue (cf. Hinterhuber, 2008; Sawhney, 2006). While some customers seem receptive, others may be less familiar or lack the requisite maturity to fully comprehend the approach and so resist it (cf. Töytäri et al., 2015). The following illustrates the challenge of discussing the VBP&S approach with customers:

> I get 20 minutes with the plant manager and … he snaps his fingers, "price?" Just forget about your PowerPoints and value-based. It's also like that in many markets, they say, "Listen, if you cannot sell it for 12,000 or 10,000, just forget about it". (Department Head, Beta)

Alpha faced internal lack of familiarity with VBP&S, yet respondents from the firm expressed interest in its implementation: "In the long run we maybe need to be more clever in what is the value of the service that we provide. You know McKinsey has the value pricing thing, which we may be able to understand some day in terms of service also, but we do not understand it quite yet" (Vice President, Workshop, Alpha). Alpha employees were clearly aware that the approach could be useful yet, at the time of the study, its implementation for services was still at an early stage due in part to a lack of knowledge and resources.

Development of sales tools

Both Alpha and Beta recognized that it was important to possess the necessary tools to communicate the value of service and solution offerings to customers when moving towards a VBP&S approach. In some parts of its business, Beta developed instruments to support sales, ranging from marketing materials (such as brochures explaining the full flowsheet capabilities) to technology-enabled devices, that included plans for service innovations and tools for calculating the total cost of ownership (TCO) for projects delivered over their lifetime. Some tools were developed solely for sales, but their use differed across regions. For example, one of Beta's European offices produced a computer-animated movie to demonstrate what is required when tendering for a complicated service contract, whilst those at the company's Danish headquarters used 3D-printed models of equipment to better explain to customers what a certain service entailed. In other regions, sensors and other technologies were integrated into wear parts in order to predict failure rates and use the accrued knowledge to sell new parts and plant overhaul services. However, these sales tools were not leveraged globally, and certain tools were considered irrelevant or challenging for certain regions and customers. For example, 3D printing requires investment in equipment and specialized knowledge, which is not available in all locations. Likewise, creating an animated movie is expensive, time-consuming, and not appropriate for all customers.

Alpha and Beta both needed to develop new sales tools for services that differed from those used for project sales. In order to effectively communicate what the offerings entail and define value for the customer, it was necessary to standardize service concepts, which are considered

important tools for VBP&S of services. In Alpha, VBP&S was complicated by the absence of sufficiently standardized service concepts, although the urgent need to develop such concepts was recognized. In order to address this need and communicate services internally and externally, a global service portfolio is gradually being developed based on the identified needs of customers. Töytäri and Rajala (2015) emphasize the need for specific tools to support VBP&S processes. Additionally, Hallberg (2017b) notes the importance of IT-based systems as commercial decision resources for value appropriation. We found support for these claims as well as the need to demonstrate the context-dependent nature of sales tools and VBP&S processes.

Development of trust and reputation

Development of trust and reputation was found to be especially important for firms using a VBP&S approach as it provides access to critical information about customer processes and impacts perceptions of fairness. Unlike Töytäri and Rajala (2015), however, we find that this key capability begins in the preparation stage rather than occurring solely in the implementation stage; before engaging in an active service sales process, trust and credibility must be developed through brand image and reputation. Both Alpha and Beta have reputations for delivering highly engineered equipment and systems due to the development of customers' trust in the brands over many years through a relational approach. Additionally, the ability to demonstrate a history of exceptional delivery was important. We also found that, in addition to customers' general trust in a provider's capabilities, relationships with and the performance of individual service engineers have the potential to develop trust. Conversely, in the event of an engineer error or failure, trust can be negatively impacted.

Table 8.4. Second-order themes and supporting quotes

Second-order theme	Supporting quotes
Business opportunities	• "… [country X] has been a bit of a Blue Ocean, here we can charge twice for some of our services … there's growth in [country X], they have seen the value of our services…". (Head of Department, Plant Service Maintenance, Beta) • "The margins are something all of us know, fly higher in the customer service, so my role is helping, maximizing the profit we get out of the plants which are already there. Maximizing, even looking into how we can support competitor plants". (Innovation Manager, R&D, Beta)
Customer segmentation	• "The dimensions that we are segmenting on are recurrent based business with the client and also the size of the client, especially the size of the business. We exclude some areas, and mainly for political reasons, if we are uncertain that we can get the money and if we are not sure … that our employees can stay safe in the area". (Vice President, Alpha)
Customer value analysis	• "… if you spend $½ million … and … they [the customers] … go, 'Where's the value in that? It's not worth $½ million.' And we say, 'Well, by providing it, we'll be able to reduce your operating costs by half to $1 million a year,' and so they see the value. So, we would value price it, rather than just look at what it costs us and add a margin to it". (General Manager, Beta)
Establishment of familiarity	• "Sometimes I'm allowed to talk about it. It depends on the mood [of] the plant manager, the people I meet on site and so it's very much about getting a sense of where are we on this medium. …That's about having an eye for that. If I can have this dialogue with a customer then they're not even going to think about the small local competitors because then they perceive us as someone who is able to add more than just value on a single service". (Department Head, Beta)
Development of sales tools	• "I look at the TCO tool and, eh, what we can do now is that at least we have better forecasting capability in terms of […] making sure we have the spares that we need when we need them". (General Manager, Beta)
Development of trust and reputation	• "They've got to trust you, so you've got to get close to the customer. They have to understand who your organization is, where you've done things before. So, it's a different type of selling model…". (General Manager, Beta) • "… They [service engineers] are talking to the customer, and the customer trusts them because they are out on a visit, they are always solving a problem and it's a good way trusting people". (Service Manager, Alpha)

Seizing

The seizing of opportunities involves (1) *selling* (that is, value proposition development and value communication) and (2) *implementation* (that is, value creation and demonstration, customer relationship management, and socio-political-legal considerations).

Selling

Value proposition

Both Alpha and Beta recognized that a key challenge of selling services and solutions stemmed from a lack of full integration in the value proposition provided to the customer during the sale of large projects. Services were rarely included in the bid and proposal stage unless specifically required in the tender. This had clear implications for the firms' ability to grow their service business as customers remained unaware of the value propositions and potential benefits. The challenges were selling services at a later stage (which was considered more difficult) and changing the organizations' mindset towards introducing services as part of the value proposition at an earlier stage in the process:

> The service products should be designed into the solutions that we sell. Right. But that takes the core company to understand the concept of selling service as part of our complete business. Right now they are very project focused. (Sales Manager, Workshop, Alpha)

To address these challenges, Alpha has developed routines to include service engineers earlier in the process, such as in the tendering phase and factory acceptance test, in which customer representatives are typically present to receive the system and can be made aware of the benefits. Additional obstacles arose when projects were undertaken through intermediaries, such as engineering, procurement, and construction (EPC) contracts, and from certain project clauses, which required the identity of the end customer to be withheld. Contractual prohibition on interaction with the end customer is an obstacle to the introduction of value propositions for services and solutions. When the end buyer is known, it is far easier to engage and outline the benefits of the offering in relation to the specific customer process and context. This is straightforward given the fact that the customers' willingness-to-pay is determined by value perceptions (cf. Nagle & Müller, 2018).

Value communication

Communication of value to the customer is an essential part of the VBP&S process (cf. Hinterhuber, 2008; Terho et al., 2012; Töytäri et al., 2015). Respondents suggested that value communication needs to start early in the sales process, prior to the implementation phase, and emphasized the need to ensure effective internal communication about value.

It was evident in both Alpha and Beta that the individual (or individuals) most centrally involved in decision-making within a customer's buying center needs to be identified. However,

even if that person is identified, access to them may be limited or impossible. In addition, communication must be tailored to the contact's level of technical expertise, but this may not be possible if the company possesses insufficient knowledge: "You have to match the tender to the people you expect to read it. And … you are quite often able to see when you receive the RFQ (request for quotation) the level of the customers" (Bid and Proposal Manager, Alpha). In order to start a conversation with a customer about what Alpha and Beta could offer, it was necessary to show where value could be created. This was highlighted by customers to be particularly important: "This is what we do. This is how we do it. And this is what this gains to you as a client" (Manager, Theta). Providing clear messages requires value-based sales and marketing material, yet that was not always available or, in some cases, not yet developed. Beta has developed, and used on an ad-hoc basis, marketing material in parts of its business to communicate value, but it did not provide a complete overview of what could be delivered.

We found internal incongruences and difficulties in understanding how services should be priced and sold based on value within Alpha and Beta. In addition, there was insufficient internal communication between departments. To address this, both firms established headquarter-based initiatives through which specialists and senior-level managers are developing and communicating service offerings as well as developing a technological infrastructure to support advanced services.

Implementation

Value creation and demonstration

For Alpha and Beta, demonstrating value creation to the customer is an essential part of the implementation phase. Given that the service and solutions offerings are typically provided over a long period of time, it is necessary to demonstrate how value is created at regular intervals. For example, it was common for respondents to mention that customers could be quick to forget the benefits of what was being delivered, such as engineers' technical expertise, which is translated into cost savings for customers via saved time, effort, and resources. The firms learned that merely creating value through capabilities was not enough to satisfy customers; value had to be demonstrated as well. However, the distribution of the created value needed to be perceived by the customer as fair. Otherwise, it had ramifications for service contract renewal.

Customer relationship management

Management of customer relations was an important part of the implementation process, though it was not entirely limited to this category. The associated challenges included employee resistance to value-based service offerings and management of relationships. Customer employees commonly resisted change, partly because they feared replacement by personnel from the firm providing the service. Beta respondents mentioned the need to "tread delicately" in a customer organization: *"...we have a maintenance superintendent who didn't want us on site. He saw [us] stepping into his area to prove that he was unqualified to do his job"* (General Manager, Beta). Failure to adequately manage the customer firm and/or its employees may have implications for gain-sharing arrangements as customer employees may sabotage the relationship or prevent realization of the full benefits of a service or solution. To address this issue, both firms are leveraging and nurturing their relationships with individuals involved in service sales and delivery. They are aware of the limitations of relationships at lower levels in customer organizations and the need to build on these with face-to-face meetings when establishing relationships at higher levels.

Socio-political-legal considerations

There is also a need to understand the socio-political-legal context in which the offering is to be delivered. When pricing and selling based on value, certain conditions that may impact profitability and ability to deliver must be considered, such as the legal confines of different geographies. In addition, for example, it can be problematic to realize increases in efficiency when it is not possible to achieve numerical flexibility in the size of the workforce at a plant due to socio-political considerations. Other considerations include the makeup of the workforce in particular locations, which may prevent a change of personnel, especially if the employees are local workers with protected rights. In other cases, local hiring is an essential prerequisite for delivering a project. Particularly in remote areas, customers wished to support local workers who would not be able to find other employment. In such cases, bringing in an external workforce would mean the destruction of local communities. Further, if workers are required to obtain visas to work, the companies' ability to deliver on the agreed value is hindered as human resources are not available.

Legal considerations in certain regions and countries could enable value creation. Providing knowledge about, and limitations specific to, the country in which customers execute their

projects is a highly valued service. We found that both firms recognize that any value-based offering needs to account for the socio-political-legal context.

Table 8.5. Second-order themes and supporting quotes

Second-order theme	Supporting quotes
Value proposition	• "I typically do this drawing when I'm up against local competitors [pointing at drawing on the white board] … A bottleneck over here, I think you have potential issues in your roll mill because the way you burn your clinker indicates you're running the roll mill wrongly. … this is about linking our full flow sheet capabilities to some of our single services simply to make a value proposition that [the] local competitor … cannot talk". (Department Head, Beta)
Value communication	• "… actually get the customer involved in the test work, get them to understand what the process is that we're supplying them, give them examples of where its worked before, so references… if you're providing something on a value-base, the customer has to have a comfort level that there is no risk around it". (General Manager, Beta) • "… it is complicated to explain to the customers what they really get before they are paying". (Bid and Proposal Manager, Alpha)
Value creation and demonstration	• "I think you need to create value for the customer. I think you need to be able show what value you're creating, I think that's the first thing you have to do. If you get that right, then it doesn't really matter what you do". (Innovation Manager, R&D, Beta) • "… when you have no description of what we're getting and we have no knowledge of what value it is this brings and … then you'll never get somebody paying for it". (Manager, Theta)
Customer relationship management	• "To try to do an impact, you've got to be part of the team at site". (Innovation Manager, R&D Beta) • "We need to go to the site. We need to go to talk with the superintendents, the managers, [to] get information about what they are thinking". (Service Manager, Beta)
Socio-political-legal considerations	• "It's a huge cultural and social issue. And it has to be managed properly or it can lead to riots, it can lead to [Beta] name being thrown around as a company that takes local people out of jobs". (Director of Services, Beta) • "If they have knowledge about, limitations or, or regulations in German waters, they should have put them forward to us. And say, 'Well, here it is. Here's some that German law says you're only allowed to transmit with one watt of power, if you do this system that, if you do not have a license for using this radio'". (Senior Manager, Zeta)

Transforming

Notwithstanding the aforementioned challenges, both Alpha and Beta have experienced a degree of success in implementing VBP&S in certain parts of their businesses. However, it is also necessary to consider their ability to reconfigure for different contexts and industries. In order to transform operational VBP&S capabilities, *verification and reconfiguration* (that is, quantification and value assessment, value capture, and knowledge management) emerge as important foci. They are elaborated on below.

Verification and reconfiguration

Quantification and value assessment

In both Alpha and Beta, when reconfiguring pricing for different customers, it was necessary to quantify the benefits and make them visible. Of course, both noted that this was easier said than done. Provision of guarantees and references was one means by which delivered value was made visible to the customer. Moreover, documentation of the services delivered reminded the customer what was being provided and kept the service (and its provision) visible, thereby assisting in the re-sale process. TCO tools also enable quantification of the value of the delivered services and solutions for the customer. However, it is important for providers to realize that a customer's perception of value can change with an adapting business environment. This is highlighted in the following quote, which illustrates how providers tying outcome-based contracts to specific key performance indicators (KPIs) need to be sensitive to their perceived value and anticipate changes:

> These KPIs change quite rapidly. Right now, we have a contract in Norway. We had the discussions with them, everything was good and they were selling quite well. Now the oil prices has just gone to the bottom, […] now they had one stop, which were longer than we thought. (Innovation Manager, R&D, Beta)

We found that it is essential for providers to quantify and make visible the value of the offering. Since value does not exist as a static and objective object, quantification requires one to understand the fluid nature of customer perception of value creation while providing the offering and take it into consideration when using specific tools, such as TCO.

Typically, value is assessed throughout implementation and is especially important towards the end of a contract. Insufficient assessment of the delivered services may lead to customer skepticism regarding overall benefit of the service contract. In Alpha's case, for example, it was common for customers to be permitted to use new technology on a test basis to assess the value. This formed the basis for a discussion about price.

KPIs are also crucial for value assessment. However, due to the changing nature of the industries in which Alpha and Beta operate, assignment of KPIs is difficult. They can change at short notice, and all that was assessed previously may suddenly have no weight. This also means that VBP&S may not be appropriate in all situations, implying that profitability is dependent upon context.

In some cases, it may be best to sell services on a cost-plus basis. A number of respondents mentioned that selling services based on value or output can incur dramatic losses, especially

when the underlying contract is not appropriately designed (cf. Liinamaa et al., 2016). Thus, there is a need to understand and learn, on an ongoing basis, what is appropriate in a given context with a particular customer.

Value capture

One of the most crucial aspects of VBP&S for the provider is capturing a fair share of the value created for the customer (Töytäri et al., 2015). However, the shift from providing certain services for free to charging for the same is often difficult (Witell & Löfgren, 2013). To create and ensure sufficient profit from services, a company needs to enforce and realize its prices. Alpha representatives found it difficult to significantly differentiate the value of its service contracts from the value delivered by non-contractual services. The value created by a service contract does not necessarily add much to the customer-perceived value when the customer can get the same service for less money and without a binding agreement, which decreases the customer's willingness-to-pay. It was common for Alpha to provide services free of charge to important customers with whom it had long-term relationships. In this sense, customer relationship management strategies aimed at building trust and stability influenced the pricing of services. Although providing services for free strengthened the bond between Alpha and its customers, it made it harder for the company to differentiate the value of its service offerings from that of free of charge services. As a consequence, we found that not only was profit decreased due to missed opportunities but also Alpha often found it difficult to convince its customers to engage in service contracts as they did not see the added value when an equal standard of service may be, and historically had been, provided for free.

Knowledge management

The sharing of knowledge is critical for organizational learning and capability development (Easterby-Smith & Prieto, 2008). Among the project, product, and service divisions of both Alpha and Beta, a silo mentality existed, preventing effective sharing of knowledge. This, in turn, impacted the firms' ability to price and sell services. In addition, there were vast differences between different parts of the businesses due to their different histories of acquisitions for growth. These factors made sharing knowledge a difficult task.

Each company had at its disposal a range of computer software tools that could be used by engineers on-site to support knowledge sharing and capture customer needs. Whilst these tools

might be useful for determining what is of value to a customer, the most valuable means of sharing customer insights and "best" practices was on an informal basis between employees within situated settings. For example, one respondent commented,

> So all the knowledge on the market is inside of the head of people. … of course we are still people and we still talk but it is a major challenge for the market side that we do not have a complete overview. And if we lay off people, we lay off knowledge. (Vice President, Workshop, Alpha)

Language differences prevented certain parts of the businesses from exchanging ideas with other divisions. Furthermore, VBP&S for services was impaired by divisions' unfamiliarity with the capabilities of other divisions and departments. For example, engineers from one division were unable to recognize VBP&S opportunities for other divisions because they did not know what types of services were offered. To address these issues, initiatives were launched by both firms to identify opportunities for transferring services developed with specific customers to other regions and divisions. In order to realize this knowledge transfer, the headquarters of both firms identified local service innovations and included them in the development of global service programs.

Table 8.6: Second-order themes and supporting quotes

Second-order theme	Supporting quotes
Quantification and value assessment	• "That's also extremely important so we can put the documentation into our maintenance system, saying on a later stage, if we have an issue with the area we have been working in, then we can pull out a report and show to our clients, 'Well, it was by a qualified welder, and here's his welding certificate, and all was good'". (Procurement Manager, Zeta) • "… you can look at the entire budget for our system and say, well how much are you willing to pay per year for this service? But how much? … I think it should be based on the, yeah, what time does it require. And then set a price for that because, yeah, there's two ways you can sell things. You can sell it based on the cost. And you can say, sell it based on the value". (Manager, Theta)
Value capture	• "[T]hat's really one of the biggest problems in the Service Department, that we are helping them for free, when they are phoning in". (Service Manager, Alpha)

Second-order theme	Supporting quotes
Knowledge management	• "...usually the site manager is a mechanical engineer of some kind. He has no knowledge whatsoever about these kind of systems, so usually it's really hard to persuade them to do a service and maintenance contract because they have no idea what they're getting or what they are buying. And, this has been also one of the learnings I think that you can get from [Alpha], it has been quite hard to get [us] to sign these service contracts". (Communication Engineer, Eta) • "...our customer relationship management tool provided by Microsoft, now has service management tool that's part of it. So we think that we're going to be getting that very soon. We're looking forward to that and hoping that that's going to help us to manage our global service resources a lot better. … Scheduling, providing location to track skills, development, providing a location for a knowledge center to keep all kinds of documents, drawings and instructions manuals, all of that at easy reach for the field engineers". (Vice President, Beta)

Table 8.7 summarizes how each of the second-order themes relate to VBP and VBS. Although the literature makes a relatively clear distinction between the two, we find in practice that the two are interrelated and impact one another. There is also continuous interplay between the identified capabilities. Moreover, the process of developing and deploying such capabilities should not be conceived of as linear, but an iterative process.

Table 8.7 also describes the integrative characteristics of the identified capabilities (second-order themes). We find that the different capabilities can have "dual purposes", thereby extending beyond purely operational capabilities (cf. Helfat and Winter, 2011). For each of the capabilities, it is important to recognize that, in some situations, they can help modify, extend, and reconfigure businesses. For example, customer segmentation is operational as it matches current service offerings and prices to existing customers. However, customer segmentation can have an integrative aspect when used to selectively increase existing customers' maturity, making them more receptive to value-based approaches. In consequence, existing customers are effectively used as a way to create a new market for value-based offerings.

Taken cumulatively, the different VBP&S capabilities are related to embedded learning processes underpinned by value discovery and relational approaches. Next, we elaborate on the role of learning in development of these capabilities.

Table 8.7: Identified capabilities for VBP and VBS and their integrative characteristics

Value-based pricing	Value-based selling	Integrative characteristics
Identification		
Business opportunities: a shift from discussing product and service prices to discussing value. An outside-inside approach starting with the customer offers new opportunities, such as those based on value instead of cost, for pricing services and solutions.	*Business opportunities:* selling value-adding services and solutions enables differentiation from competitors and not simply competition for increasingly commoditized offerings. Customer-facing operational staff at customer sites are best placed in order to best identify new opportunities.	Opportunities for value creation in collaboration with existing and new customers are identified to enable the development of new services.
Customer segmentation: a means of exploring and identifying specific target groups for value-based offerings. Based on the service portfolios that determine how to bundle services and customize them for specific segments.	*Customer segmentation:* based on the maturity level, technological competency, and receptiveness of the target group and involves segmentation based on, for example, private equity firms, governments, or small or large enterprises.	Profitable customer segments for new services and solutions are identified and relationships with existing customers are developed to help them shift from purchasing goods/systems/plants to purchasing customized services and solutions.
Customer value analysis: understanding customer processes and operations is a means of knowing where value can be provided and charged for rather than pricing based on internal costs and mark-ups. For example, real-time monitoring and/or use of sensors to conduct ongoing analyses, when possible, allows one to use value information for pricing purposes.	*Customer value analysis:* sales personnel gain more insights from sales activities as they have specific, detailed individual understandings of customer operations.	A better understanding of the value information needed to craft new revenue mechanisms is obtained and VBP&S is employed for existing services.
Preparation		
Establishment of familiarity: internally with a firm's own personnel and externally with customers about the benefits of VBP.	*Establishment of familiarity:* dominant mindset in customer organizations for prices based on cost/market prices rather than value, which impacts the selling process. Thus, it is important to establish familiarity when an opportunity for dialogue with the customer presents itself.	Sensitivity and trust are required to change pricing dialogue with customers to involve value and to manage change internally.

Value-based pricing	Value-based selling	Integrative characteristics
Development of sales tools: internally (e.g., pricing function) developed tools needed to forecast, plan, and calculate risks based on different scenarios. Sales tools need to be aligned with the costs and margin requirements of the provider. One must have a clear service portfolio and service concepts that are priced based on abovementioned analyses.	*Development of sales tools:* sales personnel should be armed with tools and devices, such as TCO, animated movies, 3D scans, and models, to clearly illustrate value creation through services. They must convincingly demonstrate alternative outcomes of the customer's choice and service delivery.	Sales tools for pricing purposes are developed to allow one to understand different value configurations. Application of these tools with customers enable the organization to be more customer-specific and develop an understanding of value creation that is contingent on the customer's context.
Development of trust and reputation: involves technical know-how and the brand's pricing history. One needs to be cogent of pricing fairness and the impact on customers' perceptions about the trustworthiness and reputation of the firm.	*Development of trust and reputation:* in many instances, in order for a VBS approach to be successful, a firm must develop a close dialogue with key decision-makers over time by demonstrating know-how and the ability to execute projects in ways that enhance customer value beyond what can be achieved through one-off transactions.	The trust and reputational capital developed over the history of the firm are leveraged. A coherent and convincing narrative of the firm's value-creating capabilities based on its track record and ability to configure resources (people, technologies, and networks) is created.
Selling		
Value proposition: when developing value propositions, the potential benefits (e.g., bundling) for the customer need to be aligned with the customer's willingness-to-pay and with internal costs and margins to allow for both profit and customer value generation.	*Value proposition:* services and solutions need to be part of the sale of products and projects (e.g., in the tendering process) with a clear outline of the benefits.	Service development involves (re-)configuring products and services in new value propositions with clear benefits that match customers' needs.
Value communication: a clear overview of different services in order to more accurately price them based on customer needs. Ways of communicating the pricing options must be developed so that customers can select value propositions that match their needs.	*Value communication:* clearly outlines the benefits for the customer both orally and in writing for their specific context. This entails explaining the benefits that result from the offering, not its features.	Creating means for communicating value expands and refines the organization's ability to price and sell service and solution offerings based on value.

Value-based pricing	Value-based selling	Integrative characteristics
Implementation		
Value creation and demonstration: the pricing of contracts needs to be perceived as fair by customers as it may affect their willingness-to-pay in the future (e.g., during contract renewal). Sales and operational staff need to be trained to demonstrate value to the customer throughout the project to positively influence the customer's value perceptions and, thereby, willingness-to-pay.	*Value creation and demonstration:* sales personnel need to be able to demonstrate the (potential) value created for the customer in order to sell and/or renew contracts, which is contingent on the customer's perception of fairness. Sales and operational staff need to be cognizant of or trained on the importance of demonstrating value at regular intervals.	Means of demonstrating value creation are essential for a successful shift towards a more value-oriented approach to customers.
Customer relationship management: the quality and degree of relationships with customers can impact their willingness-to-pay via positive and negative effects on value perceptions.	*Customer relationship management:* important for overcoming customer employees' insecurities about their jobs and for fostering willingness to share risks associated with performance-based contracts.	Both existing and new relationships with customers need to be managed. A focus on services may also require that relationships with other (new) divisions of customers be established.
Socio-political-legal considerations: benefits and risks need to be considered when pricing offerings for customers in their particular contexts. For example, efficiency gains can reduce emissions and ensure business continuity. However, efficiency gains delivered may result in redundancies in the local firm in some parts of the world potentially causing civil unrest.	*Socio-political-legal considerations:* awareness of different legal and regulatory requirements need to be considered throughout the implementation of value-based offerings. Depending on the customer and location, VBS cannot be detrimental to the local workforce/community.	In the globalized economy, attentiveness to the socio-political-legal implications of offerings is important for identifying opportunities and evaluating the consequences of new services and solutions.
Verification and reconfiguration		
Quantification and value assessment: an ongoing analytical process to evaluate the value delivered to the customer through service contracts and the provider's profit from the service contracts. Such assessments may have an impact on the KPIs and thus may be subject to change.	*Quantification and value assessment:* an important analytical means for making the delivered benefits visible to the customer. Showcasing that it was worth buying the service from provider. Providers need to be able to quantify the results from service provision, enabling value assessment.	Quantifying and assessing value is not only a normative issue of identifying value "out there" but also, importantly, shapes the conditions that impact value.
Value capture: the ability to receive a price that is commensurable with the value delivered.	*Value capture:* the ability to (re-)negotiate and agree on service contracts to ensure that the price matches the customer's willingness-to-pay and reflects a fair share of the value created.	Capturing value is essential to the commercial success of new offerings as it represents the provider's ability to realize prices and, thereby, generate the expected revenue from the offering.

Value-based pricing	Value-based selling	Integrative characteristics
Knowledge management: sharing and facilitation of knowledge in relation to pricing aspects is key for improving a (new) offering (e.g., KPIs for gain-sharing purposes). For example, knowledge transfer from service technicians to sales and business development to price offerings and contracts based on identified customer needs.	*Knowledge management:* across divisions and departments, it is important to identify new business opportunities and to create/extend the sales of services and products (e.g., engineers can capture know-how from customer operations for bids and proposals, sales personnel to use). For example, VBS opportunities can be identified based on the experiences of personnel involved in delivery of a service.	Sharing knowledge related to best practices and learning is critical for establishing and leveraging the value-based approach throughout a firm's product and service portfolio.

Value discovery and relational approaches: The importance of learning for VBP&S

Although many of the capabilities related to VBP&S are typically considered operational, we find that they support the development of higher-level capabilities. This is related to the importance of learning for VBP&S and, specifically, how value discovery and relational approaches have implications that extend beyond pricing and selling, enabling reconfiguration of offerings and service delivery. The discovery of value is a learning process that involves realization of missed and potential opportunities and thus can have far-reaching effects. For example, one respondent commented, "Then we calculated the value for these, and it was something like two hundred million DKK [33 USD million] a year in savings, and we did it for free" (Innovation Manager, R&D, Beta). In this case, it was discovered through a relational approach that the service being provided for free was adding high value to the customer. These detailed insights into customer operations enabled Beta to modify its approach to pricing and selling its services.

It may take a few years to introduce and implement value-based approaches for large contracts, and the case firms described their organizations as being "on a learning journey". This implies that learning plays an integrative role in the different components of the sensing, seizing, and transforming framework. However, it is challenging to engage in, and gradually shift, the dialogue with customers to include higher-value-adding services (i.e., for industrial services, activities that the customer would have otherwise performed themselves). Consequently, there is an intricate relationship between identified value and value demonstrated through service delivery (i.e., the customer gradually realizes the provider's capabilities). This process of value discovery is exemplified in the following quote:

> We are dealing with customers that have a long history and tradition in doing all the things that we want to do, which they of course, and with some right, think that they're doing better than we can do. So, that's a question about the building of confidence in the market,

> and that's a heavy task I would say, but we can do it, but with – you were again asking about different steps, and I think it's combining also these, if you have Field Service Engineers, assistance through contracts over years, for key machinery, and you have – I mentioned the wear parts, you have some shutdown support, and you have these turnkey services, you know, up to $5, $10 million services, they're spot services actually, but it can take three to four months, or a week or two weeks …. it takes a few years too, the process of selling such a contract, I would say. (Department Head, Beta)

For providers, learning involves developing the ability to sell additional services on top of existing contracts as customers gradually become experienced with services and solutions. Such learning allows for the sale of value-based service agreements, as described in the following:

> … we have actually sold additional services for approximately 30% to 40% of the contract value on top of the service agreement. Maybe that's at least an internal learning … We've actually created an additional sales and at the same time, made sure that we build up entry-barriers for some of our competitors because they have a service agreement with [Beta]. (General Manager, Beta)

Similarly, customers explained that there is growing awareness of the need to understand how they can further benefit from a provider's offerings after complex equipment is in operation. This provides a greater scope for service agreements to address customers' needs and erect entry barriers for competitors.

A key learning from realizing such contracts, which we identified in our research, is the importance for the provider to manage the relationship with the customers in the process of selling contracts. Moreover, not only the relationship between providers and customers but also engagement between providers and sub-suppliers are essential. Concerns about sharing information about value and cost were highlighted in our research by providers, sub-suppliers, and customers. However, they did seem to recognize the potential for partnerships and joint learning. While we were primarily concerned with the efforts of the focal firms, the findings suggest that, for VBP&S, it may be important to include sub-suppliers in dialogues in order to assist with discovery and delivery of value. More comprehensive industrial services and solutions could benefit if suppliers support providers, as illustrated in the following:

> I want you to look good in front of your customer. So whatever we can do to help support you on site meetings – coming without any [supplier] badges or anything, just come along to see it and answer technical questions or do a short presentation – we're willing to do that. (Sales & Marketing Manager, Delta)

We found that value discovery and relational approaches are essential for integrative capabilities for VBP&S and learning. This is important for two reasons. First, such learning has implications beyond pricing and selling, impacting market access by redefining the dialogue with

customers and providing the input needed to reconfigure services and solutions. Second, it underscores the role of scalable and replicable learning routines in a firm's ability to employ its capabilities in other contexts, despite the contextual and customized nature of industrial services and solutions.

Discussion and conclusions

Theoretical implications

We contribute to the understanding of VBP&S by studying two leading global industrial firms that provide services and solutions and performing adjunct interviews with customers and suppliers. Specifically, this study extends the understanding by (i) exploring capabilities related to VBP&S and how they are interlinked and (ii) illustrating the integrative nature of these capabilities as they are underpinned by embedded learning processes that occur through dialogue with customers and allow for value discovery. We elaborate on both contributions below.

Previous studies have already indicated the important role of capabilities for VBP&S in industrial services and solutions, but they tend to separate these capabilities into those related to pricing (Rapaccini, 2015; Sharma & Iyer, 2011) or selling (Kindström, et al., 2015; Ulaga & Kohli, 2018; Ulaga & Loveland, 2014) or discuss them as part of a larger research framework (e.g., Storbacka, 2011; Ulaga & Reinatrz, 2011). Building on this important research, our study provides further empirical insights by examining *both* pricing and selling capabilities. We explicate how these capabilities are undergirded by the sensing, seizing, and transforming framework developed by Teece (2007). Specifically, the capabilities under this framework are organized into the following aggregate themes: (i) sensing: *identification* and *preparation*, (ii) seizing: *selling* and *implementation*, and (3) transforming: *verification* and *reconfiguration*. Within each aspect, we explore how they are underpinned by specific operational capabilities (second-order themes).

In our study, we show how the capabilities for VBP&S are interlinked and support firms' transition towards VBP&S. For example, development of sales tools for customer TCO analysis during the preparation phase is important for VBP as it enables a better understanding of the potential ways in which offerings can contribute to value creation. Moreover, sales tools support the application of a TCO model in dialogue with customers at an operational level, which is important for making value commensurable to the customer during the selling process. While it is possible to make a distinction between the pricing and selling purposes of tools such as TCO,

we find that it is important to recognize how these purposes are interlinked. Moreover, these tools are refined over time based on their usage in practice, demonstrating the important link between VBP and VBS (see Table 8.7). This study contributes to the literature by exploring the relationship between VBP and VBS for the identified capabilities and extends the few studies that explore the relationship between the two (Liinamaa et al., 2016; Töytäri et al., 2015).

Our second contribution, in line with extant literature on pricing (Dutta et al., 2003; Liozu & Hinterhuber, 2014) and selling capabilities (Töytäri & Rajala, 2015), is our finding that VBP&S capabilities may have a strategically important role. Helfat and Winter (2011) suggest that some capabilities can have multiple variants or dual purpose (i.e., operational and dynamic). Whilst pricing capabilities are considered operational, our findings suggest that it is difficult to always clearly demarcate between the operational and dynamic aspects of VBP&S capabilities, and that operational capabilities may support the development of higher-order capabilities. VBP&S capabilities do not necessarily allow a firm to earn a living in the present, but necessitate ongoing efforts and reconfiguration of operational routines over an extended period. As such, they support the development of dynamic capabilities (how one alters the way in which one's living is made) (Helfat & Peteraf, 2003; Winter, 2003) and therefore the ability to transition to a service-based business model (Gebauer, 2011). Thus, in this context, we contend that VBP&S may constitute integrative capabilities underpinned by embedded learning processes for value discovery. For example, while the development of the sales tools discussed above is an operational capability enabling VBP&S, the construction of tools such as TCO allow for understanding of different value configurations, and their application can play an important role in the discovery of value with customers.

While it is both important and difficult to quantify value (Hinterhuber, 2017; Storbacka, 2011), another essential part of the process is identification of value. In the context of industrial services and solutions, value does not exist objectively "out there" to be discovered. Rather, our findings suggest that value can be described as a relational learning process in which the provider and customer jointly realize potential values. Such value is related to redefinition of how industrial services and solutions can improve a customer's operations by establishing access and developing opportunities to engage in value discovery. As both cases show, this type of redefinition involved developing relationships with new parts of the customer organizations as well as acquiring access to higher-level decision-making in the customer firms. Both the discovery and delivery of value involve changing the *modus operandi* of the firm, suggesting that VBP&S requires "learning-by-doing" (Zollo & Winter, 2002). This observation is important because it suggests that firms have

the potential to develop the pricing and selling capabilities necessary to repeatedly modify and reconfigure the business based on value discovery with customers.

It is also important to draw attention to an often-overlooked aspect of VBP&S: modifying capabilities for new contexts. Rather than ad-hoc sales efforts for specific customers, development of VBP&S is an important method of learning and improving the sales process as well as industrializing service delivery (Kowalkowski, Windahl, Kindström, & Gebauer, 2015). Both are key challenges for manufacturers pursuing service growth. We extend the understanding of the role of pricing and selling capabilities by showing how reconfiguration is essential to industrial services and solutions and adapting VBP&S to different contexts. Consequently, we suggest that it is insufficient to simply develop capabilities for VBP&S (e.g., Hinterhuber, 2017; Liozu & Hinterhuber, 2013a, 2013c; Töytäri et al., 2015; Töytäri & Rajala, 2015) as the ability to reconfigure capabilities for different contexts is crucial. In other words, VBP&S capabilities need to support the development of higher-level capabilities that enable the organization to sense and seize opportunities as well as reconfigure capabilities for different operating contexts that account for local factors.

Managerial implications

Both practitioners and the academic literature generally appreciate the difficulty of implementing VBP&S in the context of industrial services and solutions. The identified capabilities (see Table 8.7) can be used by firms to approach implementation from a holistic perspective that recognizes the importance of developing capabilities and understanding the role of learning in VBP&S. For managers, thinking in terms of the *sensing*, *seizing*, and *transforming* components may be one way to consider how VBP&S capabilities may be mobilized in more strategic ways to support the transition towards service growth. More specifically, managers should consider how each of the identified capabilities relate to both pricing and selling within the context of their firm. Furthermore, our framework, which is based on successful pricing and selling in market-leading firms, illustrates how each of the capabilities can contribute to the development of the business.

Table 8.7 provides managers with a basis for determining how to mobilize efforts and investments to develop capabilities for VBP&S. By no means are such capabilities simply acquired; rather, they emerge from continuous efforts over a prolonged period of time via close dialogue with customers and suppliers about the ability to successfully deliver solutions to problems.

Our findings also suggest that managers can benefit from understanding the wider implications of VBP&S, including how its implementation is interlinked with other functions of the firm. Importantly, for industrial services and solutions, we find that reconfiguration of the delivery of services should be closely linked to the discovery of value. This means that VBP&S becomes a key input for new service development and hinges upon the ability to realize value (Liozu, 2015a; Johansson et al., 2015). For industrial firms, successful engagement in VBP&S can enable redefinition of markets in two ways: first, by changing the target decision-makers within the customer organization and, second, by recombining services to form novel solutions to customer-specific problems.

However, customers do not simply engage in dialogues about VBP; implementing a value-based approach requires substantial effort by the provider. Extending the dialogue to include higher-value offerings depends on evidence of the firm's ability to deliver value by solving customers' problems. To effectively do so, capabilities and routines that can be modified and made scalable for other contexts must be developed. The role of sharing knowledge and learning from past experiences is therefore important, and reliance on ad-hoc problem-solving is insufficient.

Limitations and further research

This study is not without limitations. It is based on an in-depth study of two organizations, which allows for only a certain degree of analytical generalizability. Future studies may therefore explore VBP&S capabilities in a broader range of industries and contexts. There is also a need to explore the role of sub-suppliers and the implications for VBP&S in greater depth. Likewise, following Kienzler and Kowalkowski's (2017) call for more business studies of the demand side of pricing, studies employing the buyer perspective would obtain unique insights into customers' perceptions of value. Such studies would likely require other approaches to understand pricing decision-making, such as conjoint analysis or the repertory grid technique. In any further research, it will be important to determine the extent to which and under what conditions the findings presented in this paper apply to organizations in other industries. Scholars could also investigate in greater depth the learning processes in which organizations engage to implement VBP&S. We hope scholars will build on this research to enhance the theoretical and managerial understanding for academic and practitioner communities.

Appendix: Sample interview guide

Organizational and personal history

- Can you tell us about your background and how you came to work in your current role?
- Can you describe the organizational structure? Has it changed in recent times?

Strategic overview

- How would you describe the development of the global market in your industry over the last 10 years?
- What challenges have the company experienced in adapting to new markets?
- What are the strategic priorities of your company?
- How would you describe your business model(s)?
- Can you describe the markets in which you operate? What changes have you seen over time?

Provision of industrial services and solutions

- What products does your company provide? Please describe the different contexts in which your products are used.
- What services does your company provide? How do you categorize services?
- How do you define customer solutions?
- How do you integrate products and services to provide customer solutions? What new capabilities do you require to provide solutions?

Pricing and selling – products, services, and solutions

- In your position, how do you engage in pricing and selling?
- How do you price and sell your products?
- How do you price services? How do you price solutions?
    - Please tell us about the last time you were involved in a price decision.
    - Do prices differ, for example, among customers? Why?
- Please describe the sales process for a service and solution from start to end based on a recent example.
- What factors do you think are important for making a price decision?
- What challenges do you encounter when pricing and selling offerings?
- What do you do when you encounter uncertainty or doubt?
- What kind of justification is frequently used in the pricing and selling process?
- Please elaborate on the role of value in pricing and selling.
    - How do you define VBP&S?
- To what extent have you adopted and implemented VBP&S?
    - What are the risks and difficulties of doing so?
    - What role does the customer play in VBP&S?
- How do you assess and demonstrate value to your customers?
- What pricing tools/systems/rules/guidelines are in place?
- Please elaborate on your practices for monitoring and controlling prices and sales numbers.

Others

Is there anything we have overlooked? Is there anything you would like to add?

9. DISCUSSION

In this chapter, the contributions and managerial implications of the dissertation are discussed. Subsequently, the limitations are listed and avenues for future research are suggested. The chapter and dissertation finish with some closing thoughts.

Theoretical implications

This dissertation was an empirical attempt to provide detailed insights into the terrain of organizing for pricing.[18] By drawing on particular aspects and foci in each study a deeper and finer-grained understanding of the phenomenon under investigation was created.

Overall, the process view taken in this dissertation "invites us to acknowledge, rather than reduce, the complexity of the world" (Langley & Tsoukas, 2010, p. 2). The findings of this empirical thesis further document and prove that pricing is indeed "not … a series of quick 'knee-jerk' decisions" (Lancioni, 2005, p. 183) but instead consists of complex organizational processes. The studies illustrated that pricing processes are far from simple, costless and straightforward, which is in line with previous findings and assumptions (e.g., Ingenbleek et al., 2003; Ingenbleek et al., 2007; Liozu, 2015a; Rao et al., 2000; Zbaracki & Bergen, 2010). In this dissertation three pricing processes with regard to sales prices of transactions were studied with three different lenses and foci: the approval of sales prices via a practice-based approach (paper I), price discounting and the development of a discount model by applying a processual and organizational change perspective (paper II), and value-based pricing and selling of industrial services and solutions by considering the dynamic capability-based view (paper III).

Returning to the initial motivation for this research (see chapter 1), this thesis aimed to answer the research question *How do firms organize for pricing?* In this dissertation the relevant elements of organizing for pricing that firms deploy were identified and studied in depth. Firms mobilize the four elements, that is, practices and activities, structures and authority, actors and systems and capabilities, to create temporary states and entities of the pricing organization. However, firms use these elements not only for stabilization purposes but also for continuous

[18] Recall that organizing in relation to pricing is defined as an information-intense process, characterized by the deployment of practices and activities, actors and systems, and capabilities within organizational structures and levels of authority (see chapter 3).

development and modification to advance and move the pricing organization further ahead. After all, "pricing is a journey, not a destination" (Liozu, 2015a, p. 199).

The findings therefore suggest that from the outside we "see" only the labels of the organizing elements, such as pricing practices, although their "content" is always exposed to redefinitions and modifications (Hernes & Weik, 2007). This could be confirmed for the case of pricing through the application of the organizing perspective, which allowed us to get a deeper, inside view of the pricing components. The changes in the elements, which even count for structures and defined levels of pricing authority that appear rather fixed, are leveraged by factors, such as learning and experience (papers I, III), and caused by internal challenges, for example information asymmetry (paper I), and external obstacles, for example customer complaints on pricing fairness (paper II).

As discussed in chapter 3, Whittington and Melin (2003) argued that having the structures in place is not sufficient for organizing; firms also need to have the abilities to reinvent them. This dissertation also documented that this is the case for organizing for pricing. It is suggested that the elements of organizing for pricing are in an interdependent relationship. Some elements, such as the temporary states of structures, help increase stability and form current entities of other elements (paper I). Then, in turn, it is individual actors who, although limited by structures, also use and redefine them (Scott & Davis, 2015). It is not just actors but also systems, practices and capabilities that are required for redefining pricing structures and decision rights (paper II).

We as researchers need to acknowledge the continuously ongoing, moving change in pricing organizations and unpack the interlinked organizing elements by engaging with them more on the inside and in context-specific situations. Such a perspective and mindset, focusing on "the organization of the organization" (Grey, 2012, p. 15; see also chapter 3 of this dissertation), is needed when we seek to understand a firm's pricing management in greater detail and support them for making arguably smarter, more profitable and efficient pricing decisions.

The preliminary framework presented in chapter 3 has been revised based on the empirical findings in this dissertation (see Figure 9.1). The revised framework aims to draw the big picture of this thesis by incorporating the three studies and displaying its key contributions. Compared with the initial framework, more empirical flesh has been added to the bones, meaning that the organizing elements now contain richer details based on the empirics.

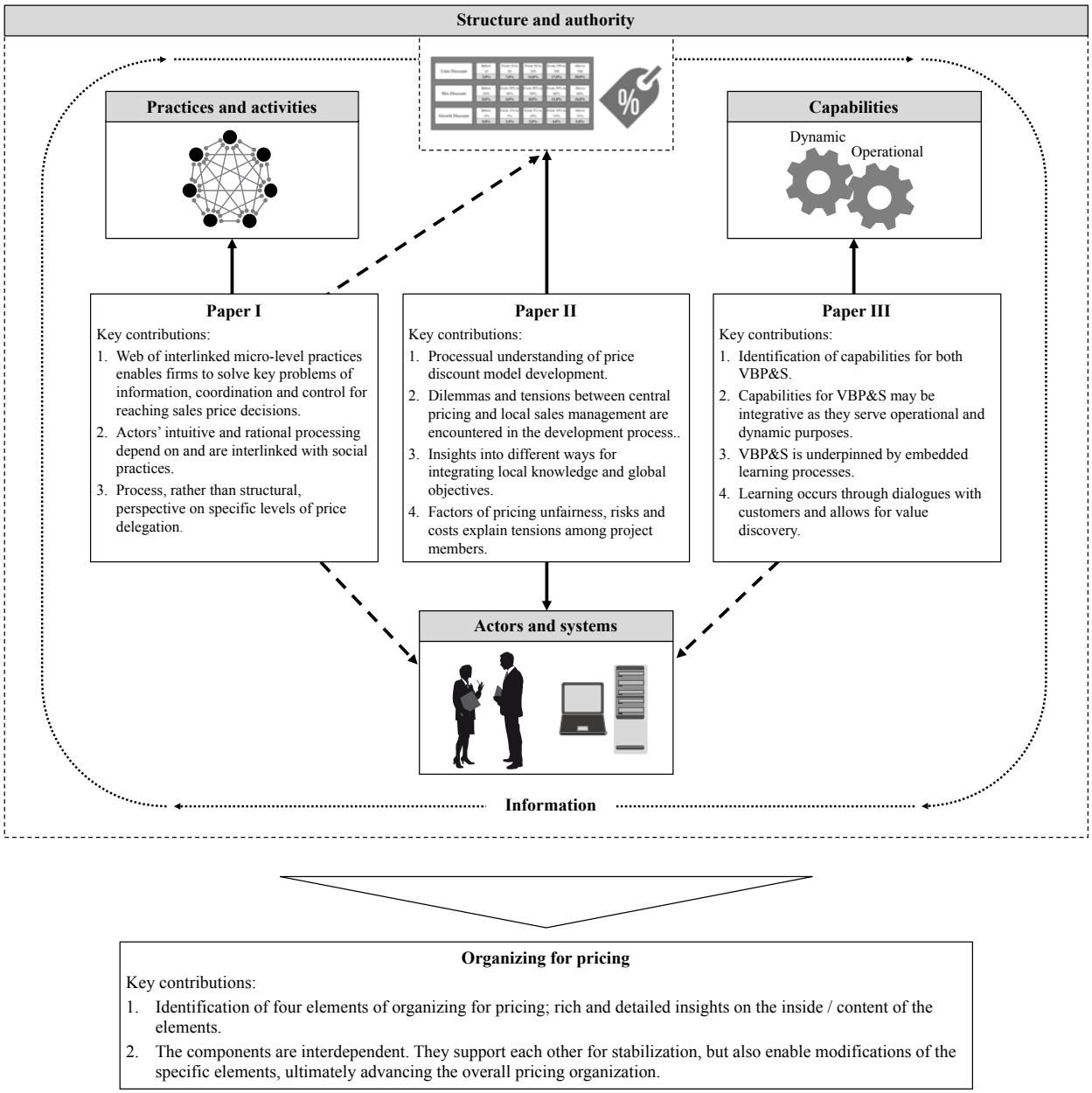


Figure 9.1: Revised organizing framework of thesis.

In the rest of this section I discuss and outline the contributions with respect to the elements of organizing and their interlinkages. Some additional findings in terms of challenges and of the inputs and outputs of pricing processes are highlighted.

Practices and activities

The first paper demonstrates how practices, in a more micro sense than previous studies (e.g., Ingenbleek et al., 2003), and their inherent activities are needed and used for overcoming problems

of information, coordination and control. It displays the interlinkages among practices and suggests that it is multiple, interconnected practices that lead to the pricing decision. Practices are required to make a given process work that is shaped by rules of authority and structures.

While the second paper clearly focuses on the problematic development of a price discount model, it also provides insights on activities. It demonstrates how the project members interact and engage to close information and knowledge gaps, for example by collecting local sales data. Specifically, the study illustrates how activities relate to the integration of local knowledge and global objectives. For example, workshops with the sales force were run to gather additional local knowledge, and the members needed to "do the math" in MS Excel to align the model with global objectives.

Although the third paper focuses more on capabilities, it also gives insights into the activities required for value-based selling and pricing of industrial services. This is not that surprising, as capabilities convert inputs into outputs (Dutta et al., 2005). They are the capacity to perform an activity (Grant, 1991; Helfat & Peteraf, 2003). For example, activities then may pertain to the calculation of total cost of ownership (TCO) in relation to developing sales tools. Further, another activity also regards the visiting of the customer's operation premises with the purpose of learning how value can be added through the provider's potential service delivery. The dynamic nature of these capabilities and learning also may lead to changes and new ways to enact practices and carry out its activities.

In all studies, it was documented that practices and activities play a crucial role and are inevitable when organizing for pricing. This dissertation adds to previous research on pricing practices (e.g., Ingenbleek et al., 2003) and practice-based approaches to pricing (e.g., Zbaracki & Bergen, 2010). The first paper, by applying a practice-based perspective for studying processes for arriving at sales prices, demonstrated that practices are interlinked. This empirical account demonstrated that in pricing, practices are "neither mindless repetition nor complete invention" (Nicolini & Monteiro, 2017, p. 6). While they may become more routinized activities, they are not – and should not – be carved in stone. This is important, as this study finds that practices need to be adapted to new situations. To make pricing decisions and to advance the pricing organization, modifications of practices may be needed, for example due to changes of other organizing elements or in the environment.

Structures and authority

Paper I finds that the enactment of practices is shaped by structures and authority levels. Moreover, it also shows how a lack of clearly defined authority levels affects the pricing process and the other organizing elements. The organizational pricing structure and pricing authority often determines and frames how actors and systems engage with each other. It also strongly influences how and what practices and activities are carried out, where, and by whom.

In the second study it is investigated how a new price discount model is developed to improve the pricing organization. While it is surely a system (discussed later in this chapter), it has implications for the pricing structure and delegation of pricing authority. In this study, the relationship between structure and authority and the other organizing elements is somewhat reversed. Here, people interact, use capabilities and engage in various activities to develop a new structure and a different way of delegating pricing authority – even though, as also demonstrated, the development and project are influenced by the past experiences and the setup of the old structure and authority configuration.

So far, pricing structures and authority have been considered in a structural and static way (e.g., Hansen, Joseph, & Krafft, 2008; Lal, 1986; Mishra & Prasad, 2004, 2005; Stephenson et al., 1979; Weinberg, 1975). The literature did not provide rich contextual insights into how firms arrive at sales prices within certain structures and levels of authority or about how such means of governance are developed in organizations. This dissertation contributes to the literature on delegation of pricing authority in three ways: first, by showing, in depth, how the pricing organization arrives at sales prices within specific, defined or undefined, structures and levels of pricing authority; second, by showing that structures and levels of pricing authority are developed in complex social processes; and third, by suggesting that even structures and levels of authority, which at first appear very stable, are always subject to change and redefinitions, for example because of the need to respond to evolving challenges. In other words, even though structure and authority form the operating frame of the other organizing elements, it is also those elements that redefine structure and authority. Hence the dashed line for the box of structure and authority (see Figure 9.1).

Capabilities

The literature on pricing capabilities already pointed to the fact that capabilities may need to be dynamic for pricing and selling to become a competitive advantage (Liozu, 2016c). Exploring the

dynamic nature of pricing and selling capabilities in the context of industrial services and solutions reveals that such capabilities are serving both dynamic and operational purposes, depending on the context and use (paper III). The operational aspect refers to how firms make a living now, and the dynamic aspect extends and modifies how a living may be earned in the future (Helfat & Winter, 2011). Distinguishing between operational and dynamic is often impossible, as the line is perceived to be rather blurry (Helfat & Winter, 2011).

The findings of paper III extend previous research on pricing and selling capabilities (see, e.g., Liozu & Hinterhuber, 2014; Liozu et al., 2014; Töytäri & Rajala, 2015). Thus far, capabilities have been considered more as operational and presented as rather static. Research centered more on identifying and describing the required or desired pricing capabilities for specific purposes, for example value-based pricing or value quantification (Hinterhuber, 2017). The main contributions are made by exploring jointly pricing and selling capabilities and by illustrating their integrative characteristic. It is suggested that the operational capabilities for VBP&S support the development of higher-level capabilities that allow for the reconfiguration of VBP&S capabilities for new operating contexts and the overall transition towards a service-oriented business model. This means that the capabilities for VBP&S, are being reconfigured and transformed and thus, only temporarily chiseled, so to speak. It allows a firm, based on the underpinned learning processes, to continuously develop and adapt the pricing organization.

Actors and systems

It is worth stressing that various actors are involved, meaning that pricing is a collective rather than an individual or company effort, as often presented in a simplified way by the fields of economics or behavioral economics. The empirical findings are in line with findings of previous studies, (e.g., Dutta et al., 2003; Hallberg, 2017b) that human actors gather, possess, interpret, and use information as an input, give meaning to it, and are the key force for reaching a pricing decision. They interact, which is key in organizing (Langley & Tsoukas, 2010; Weick, 1979), and exchange knowledge relevant for making the pricing decision. Organizing for pricing is hence a collective effort, as multiple actors are involved.

The roles that actors, often coming from different business functions or even from the customer side (paper III), take in pricing processes are documented in vast detail in this dissertation, thereby adding to previous research. In the first study, the “chain of command” is examined across different hierarchy levels and locations. The second study explores the setup of

the project team and how they interact to improve price discounting. The third paper emphasizes the important role of customers in the process when pricing and selling based on value. Their engagement and collaboration is required for determining the right pricing KPIs. Moreover, pricing research in relation to the sales function (e.g., Lancioni et al., 2005) is extended by indicating and demonstrating the importance of sales management and the sales force in the various pricing processes studied, such as for forwarding pricing information to decision-makers (paper I), supplying local knowledge (paper II) or communicating value to customers (paper III). In particular, paper II takes more of an inside view, exploring the viewpoints and the resulting tensions and interpersonal conflicts. Here, the study focuses on the opinions and considerations of not only the central pricing function but also of local sales management. So far, the latter actor's opinions have been rather neglected in pricing research, specifically in terms of delegation of pricing authority (Yuksel & Sutton-Brady, 2006) and price discounting. Considering the aspects of the sales function permits the drawing of a more thorough picture and a better understanding of the relationships between the functions involved in pricing processes and projects.

While previous research has outlined that tools and systems are part of pricing, for example with regard to pricing capabilities (see, e.g., Johansson, et al., 2015; Johansson et al., 2012; Liozu & Hinterhuber, 2014), it has not described in rich detail how such IT-based means are actually used in pricing processes. This dissertation extends previous research by documenting how humans and systems interact and how tools are being used when organizing for pricing. In all studies, the pricing decisions are eventually made or at least approved by humans. Depending on the process and firm, they make use of systems and tools to further evaluate and process information, aiming to make well-informed and rational decisions.

We have also seen that systems in themselves cannot function accurately and correctly without the control and adjustments of humans (paper I). The complexity of the information taken as input and the difficulty in making it usable in the pricing process implies that both humans and systems are beneficial for making pricing decisions. While systems can often work with massive amounts of data more quickly, humans can outperform systems due to their experience, intuition and interpersonal skills (paper I).

Furthermore, systems are not only used for calculating profits, for example contribution margins in terms of purchase prices and number of units. Other information needs to be calculated, too, such as capacity and demand (paper I), inventory levels (paper I) or TCO as part of VBP&S tools (paper III).

With the insights gained, this dissertation responded to calls for further research on IT systems as commercial decision resources (Hallberg, 2017a) and on how material objects are used in sales contexts (Geiger & Kelly, 2014). It extends previous pricing research by providing a detailed account of how people interact with pricing systems (paper I), but also how a system, in this case a price discount model, is developed and may be used (paper II). It shows how systems can guide and support the actors in the pricing process by providing valuable help to make better-informed and potentially smarter decisions (papers I, II, and III).

Multiple actors and systems are key elements of organizing for pricing. They are constantly influenced by experience and learning, which impacts both rational and intuitive processing of information in pricing processes. Pricing systems are rather static and stable, but it is particularly the changes in interaction between actors and systems, such as tuning a system (paper I), that gives systems a more fluid character, making them also subject to modifications.

Interlinkages of organizing elements

The empirics suggest that the organizing elements of practices and activities, actors and systems, capabilities, and structures and authority are closely interlinked. Even though the interlinkages are not explicitly investigated in this dissertation, important empirical insights are gained.

People are carriers of pricing practices (Jarzabkowski et al., 2016), and it is important to consider the practitioners when studying practices of pricing. A practice is, loosely said, a set of activities (Ingenbleek et al., 2003) or the "doings and sayings" (Schatzki, 2002, p. 87). The practice lens helps reveal and unfold how companies are organizing for pricing. It is believed that this is particularly true when looking at the more micro-level practices, or when narrowing and breaking down the high-level practices into greater depth and detail (paper I).

This dissertation details how people take actions and how these are given meaning in a process (Gherardi, 2012). Without people, practices and activities of pricing will be inoperable and meaningless. The same might be argued for context. For example, practices can exist only in praxis (Jarzabkowski et al., 2016), meaning that without being in praxis, that is, in a given context, they are empty. Contexts are in turn brought into meaning by the people involved in the process (paper I).

Capabilities enable the multiple actors to carry out the required activities in the pricing processes (Amit & Schoemaker, 1993; Grant, 1991). This definition indicates its relation to actors as well as practices and its activities. Practices and capabilities may be linked in several ways.

First, one can focus on the actors enacting, developing and modifying the capabilities. If we adopt the definition of Ingenbleek et al. (2003), a pricing practice is "the set of activities executed by an organization's managers that lead to a price decision" (p. 290). Then, capabilities are important for understanding how companies organize for pricing, since a capability is the capacity to perform a task or an activity (Grant, 1991). Trying to carry out activities without capabilities will thus not lead to the desired results. Second, practices may be considered organization-specific routines[19] that underlie and underpin pricing and are also related to selling capabilities.[20] Paper III points towards this by studying the operational nature of the capabilities, and providing insights into the related activities, which may be routinized or not due to the shift towards the new service-oriented business model and the unfamiliarity with VBP&S. The critical role of routinized behavior and routines in relation to price setting is also expressed by Dutta et al. (2003) and Zbaracki and Bergen (2010).

While we often talk about organizational capabilities, we know that organization is an achieved entity, basically an outcome of the process of organizing (Langley & Tsoukas, 2010; Weick, 1979). This is done by individuals as they make up the organization (Felin & Foss, 2005), being supported by systems and other technical tools (papers I, II, and III). Although systems may not necessarily be considered an inevitable element of organizing for pricing, it is suggested that they have a crucial role as a commercial decision resource (Hallberg, 2017a), such as for processing and analyzing pricing information (papers I and II). Therefore, we agree with other pricing researchers, such as Dutta et al. (2003), Johannsson et al. (2012), and Liozu and Hinterhuber (2014), that systems and tools are linked to pricing capabilities, as they potentially enable firms, and thereby also people, to improve pricing processes.

The findings suggest that structures and authority levels are important for formalizing how pricing is organized. In particular, the authority levels determine which actors and systems are part of the pricing process, at what time, and to what extent. Such means of governance frame how pricing is organized and indicate boundaries but are potentially also subject to being organized. Structures and defined authority levels help in turning what might appear first to be random practices into routinized behavior and help stabilize capabilities.

[19] A routine in relation to organizational capabilities may then be considered a "repetitive pattern of activity" (Nelson & Winter, 1982, p. 97).

[20] I owe this insight to the valuable feedback of Constance E. Helfat, who has helped me in clarifying the link between practices and capabilities.

As elaborated on previously, this dissertation illustrates that structures and authority levels may not simply be chosen but must be developed in a process. Here, specific capabilities and practices are required by the actors to develop structures and authority levels suitable for the business (paper II). Capabilities are important for overcoming external and internal information asymmetries that may exist due to organizational structures and rules (Johannsson et al., 2012). The same then also counts for practices (paper II).

To conclude, the identified and described elements are critical, interlinked and must be considered when studying how firms organize for pricing. They rely on and support each other for stabilization as well as modification and reorganization, to ultimately enable and improve the firm's pricing decision-making. This finding extends pricing research, as it has thus far mostly considered these elements in isolation; they were predominantly studied in separate literature streams, such as the stream on pricing capabilities (e.g., Liozu & Hinterhuber, 2014) or delegation of pricing authority (e.g., Homburg et al., 2012). Further, these streams explored the elements mainly in quantitative research studies, neglecting contextual insights.

Challenges

Numerous challenges arise when organizing for pricing, which are documented in the respective studies. Some of these challenges may be specific to the examined type of pricing process, but others are present in multiple studies. It is evident that to reach the desired outcome, these challenges must be overcome. The studied case companies try to do so by organizing and using the inherent elements of organizing. For example, in paper I the case firms face the challenge that decision-makers do not possess the relevant customer information. Therefore, micro-level practices are used to process pricing information and close information asymmetry gaps.

Some researchers have already begun focusing on the challenges and barriers to particular pricing problems (e.g., Hinterhuber, 2008; Lancioni et al., 2005; Töytäri et al, 2015; Töytäri et al., 2017). This dissertation adds to this research area by documenting new challenges, for example the inaccuracy of pricing systems and the need to overrule their outputs (paper I) or the type of resistance that might arise during price discount model development (paper II). Moreover, already-known challenges were documented in new pricing contexts, such as information asymmetry in price discount model development (paper II).

Further, to some of the previous issues, this dissertation adds more ground. For example, Lancioni et al. (2005) mentioned the sales force's tendency to grant high discounts, leading to

lower profits. The sales force might hinder the execution of prices and capture of value with this behavior, which was also the initial situation of the case company in paper II. It has been demonstrated how this can happen without the so-called bad intentions of the sales function (e.g., development of business cases aiming for win-win situations, but lacking control and visibility over agreements). Here, we see that the firm wanted to help their customers with special price agreements, as they were facing high competition. Whereas in paper II the seller, the case company, was not facing intense competitive pressure, indicated as a reason by Lancioni et al. (2005) for granting higher discounts, the buyer did. The competition, a large retail chain, was offering low prices to end users. To sustain its margins and business, the buyer was required to purchase at lower prices from the case company. Thus, when aiming to understand the sales force's problematic discounting behavior, it is important to consider not only the seller's but also the customer's external and competitive environment.

Pricing process: Inputs and outputs

It can generally be said that pricing processes take information as an input to create an output, such as a sales price. In terms of information taken as input in the process, this thesis documents that firms often do not follow a clear approach to pricing, that is, cost-, competitor- or customer-based, as often assumed in other studies (Hinterhuber, 2004; Ingenbleek et al., 2003; Liozu & Hinterhuber, 2013c). While one of these three types of information may be dominant, it is often not used as the only type of information (see, e.g., paper I). Independent of the pricing approach being used, this dissertation proves that often soft factors are relevant for the decisions that are not directly related to profitability at first sight. Many of the different types of information used by the studied firms and impacting the pricing process are also rather implicit and less tangible, such as the strategic importance of a customer (paper I) or fairness considerations (paper II).

The outcome is generally a sales price for a transaction in this dissertation, but, as demonstrated, it can also be expressed more specifically for each pricing process. In the first study this pertains to having a sales price approved and confirmed or to employees being told along the chain of command at what price the product or service can be sold. The second study aims at setting a discounted sales price or deciding on a percentage discount off the list price. Additionally, the objective is to develop a new price discount model for structuring discounts of transactions, which relates to pricing structure and delegation of pricing authority. The third paper explores the objective of a provider to price and sell industrial services and solutions based on

value. A final price is usually not the very first outcome, as the pricing in this field is outcome- and performance-based, meaning that payment is done ex post (Hinterhuber, 2017). Thus, the outcome is more about defining a variable pricing model or the pricing KPIs for a specific project that then are eventually leading to a final price, once the service is delivered and the project completed.

The findings not only enhance our understanding of the internal organization with regard to pricing but also generate further insights into the inputs, that is, the information being used, and outputs in context. While all studies explicitly address processes of pricing, they are each context-specific, have a distinctive objective and aim to reach a specific outcome. The inputs and outputs receive their meanings and importance from the different contexts of the case firms. They demonstrate in detail that there may be different inputs and outputs in sales-price-setting, and that the inputs are being processed via the organizing elements. This again suggests that the organizing elements need to be dynamic and agile in order to deal with changes and the variety of inputs.

This dissertation responds to a call for more qualitative and context-specific pricing research (Kienzler & Kowalkowski, 2017) and adds to this domain by investigating, in depth and context, different kinds of inputs and outputs of pricing processes, displaying its diversity and complexity, for example, with regard to the tacit and hard-to-quantify information being used. Many studies, often quantitative, present pricing processes as very generic or as simplified processes, sometimes consisting of a number of high-level steps. Many do not clarify whether these processes pertain to centrally set list or sales prices. While these results are usually informative (see Ingenbleek, 2007, for an overview), they lack profound insights into the *how* of setting prices and *why* a particular price is chosen. Qualitative studies on detailed and context-specific pricing processes are still rare but have delivered rich insights in this regard (e.g., Dutta et al., 2003; Hallberg, 2008; Hallberg & Andersson, 2013; Reen, 2014; Zbaracki & Bergen, 2010).

Managerial implications

The findings of this study are particularly relevant for managers who either aim to start organizing for pricing or who want to reorganize for improving pricing management. Pricing management is still a rather new managerial task and business function for firms. Many managers enter positions with no or only limited pricing experience. They “learn it by doing” and by “trial and error”. This dissertation had the purpose of creating a more practice-oriented and thus more realistic picture

for such managers and to show them what they should expect when working on particular aspects of pricing.

Organizing elements

When defining or modifying pricing processes, it is not enough to simply describe inputs and outputs. Organizing for pricing means considering people and systems, practices and activities, capabilities as well as structure and authority. These must be considered together, given their interdependence, and not in isolation. For instance, managers who only define the required activities for a given process are unlikely to succeed if they do not assess and develop the capabilities needed to carry out such activities (paper III). Another example may relate to system capabilities, such as evaluating complex data sets (paper I). If employees are unable to enact the right practices and activities, such as tuning and using a system, the capabilities of the pricing system are rather meaningless (paper I). Therefore, practitioners are encouraged to look at pricing through the lenses of these elements and to predict and assess their influence on one another.

Stakeholder management and people development

Pricing is composed of social and collective processes, and pricing managers are expected to manage and influence the various actors and stakeholders involved. Without wanting to repeat what was thoroughly described in the book *Pricing and Human Capital* (Liozu, 2016d), and elsewhere, the critical role of stakeholder management and collaboration must be stressed and should not be underestimated by practitioners. We have seen in all three studies that the actors inside (papers I, II and III) and outside the firm, such as customers (paper III), often determine whether pricing processes are realized, desired outputs are achieved and projects are successfully implemented. Mapping the key stakeholders, engaging them, gathering their opinions, discussing their interest and continuously keeping them in the loop is vital. Change management is a critical means of managing stakeholders.

As emphasized earlier, certain soft skills, such as experience (paper I) and learning (paper III), are required by practitioners involved in pricing processes and projects (Hallberg, 2017b; Liozu, 2016d). While experience is nothing that can necessarily be taught and developed, it is something that should also be appreciated in firms. Paper I demonstrates how intuition based on experience was used to enact certain practices and, ultimately, make better pricing decisions. Research also showed that in specific situations intuition might actually lead to better results

(Dane & Pratt, 2007). Moreover, organizations are encouraged to create a learning environment where people are willing to openly share their experiences, best practices and, ideally, also failures, so that others, such as new employees, can learn faster and better. Paper I demonstrates how learning over time and gained experience affected and changed people's pricing decision-making. Further, the empirical findings suggest that learning is important for pricing and selling capabilities (paper III). Thus, I conclude that companies that are good at managing pricing stakeholders and developing the soft skills of the managerial actors, such as mindful pricing or change management (Liozu et al., 2012), are more likely to succeed with their pricing initiatives.

Information

Input in pricing processes refers to information deemed relevant and necessary for making a pricing decision. The three key types are cost, competitor and customer information (Ingenbleek et al., 2003). While the literature often simplifies this distinction by arguing that firms predominately use one type, this study shows that it is often not that straightforward. Firms may consider all three information types at the same time. Furthermore, information is often imprecise, difficult to obtain and hard to process. In relation to the organizing elements, managers are advised to clearly define the needed information input and then to outline how the organizing elements can help, or are even required, to effectively gather, process, evaluate, interpret and use the information along the process. It is thus important to look at the status quo and to then define gaps for developing actors, systems, capabilities, activities and structures, so that the information can lead through organizing in the best and most efficient way to a well-informed pricing decision. This is a very difficult task, as pricing-relevant information is usually not "black and white" but tacit and hard to articulate, such as the strategic importance of the customer, making it difficult to measure. Moreover, perceptions among the actors may differ significantly. This stresses the importance of gathering opinions, explaining why certain information is needed, and training people to create a shared pricing mindset (Liozu, 2015a, 2016b).

Challenges

In pricing management, many challenges will surface along the way. We identify and explain some of the obstacles that managers need to face, such as resistance from sales (paper II) or information asymmetry (papers I, II and III). We describe how and why these challenges were encountered. Further, we show how firms aim to address these specific issues. Some of the

examples in this dissertation show how managers overcame them by using the organizing elements; other examples demonstrate what did not work. Managers are advised to carefully consider the potential obstacles and to plan ahead for how challenges may be overcome through organizing and its inherent elements, or through developing and modifying the elements, for example by developing new capabilities for dealing with a specific challenge.

Overall, with these insights, practitioners have been given an opportunity to learn from others and to reflect on what the findings mean for their own work. With regard to practices, Nicolini and Monteiro (2017) stressed that rich representations and examples are promising tools for managers for reflection and they may help them "see through conventional ways of doing and saying" (p. 15). It has been my aspiration to achieve this across the three studies conducted in this dissertation. With this being said, I truly hope that practitioners are more sensitive to and feel more knowledgeable, about the subject matter and have received some inspirations and ideas for how to (re-)organize pricing within their firms.

Limitations and future research

There are many opportunities to study the phenomenon of organizing for pricing in more depth and breadth. In this dissertation three pricing processes are studied, each within its own very context on how firms arrive at sales prices. However, pricing processes vary in firms, and there are many other processes aside from sales-price-setting. It seems natural and worthwhile to also investigate how firms make list price decisions, or how they define pricing objectives.

In a similar vein, it is worth considering the business strategy and objectives of the firm and its subsidiaries when studying how firms organize for pricing. While this was at times part of the dissertation, for example papers II and III, a more explicit focus on these higher-level goals seems fruitful for further research. For example, a firm aiming to expand a certain product category within a specified area is likely to derive implications for its pricing activities.

Whittington and Melin (2003) argued that "in terms of organization, the key is not to arrive at a final chapter … , but to achieve a permanently flexible form, capable of responding fast and appropriately to a wide variety of changes" (p. 38). As we know from previous pricing research, managers are expected to respond quickly to changes in the market, both opportunities and threats, to sustain competitive positions. Therefore, pricing organizations need to be agile. Further research is suggested on the less stable, but more fluid and constantly moving phenomena in

pricing, such as dynamic capabilities, that enable pricing organizations to be more agile, responsive, and even proactive.

In pricing the customer plays an increasingly critical role, particularly because firms are moving towards a more value-driven approach and therefore depend on the information supplied by customers for pricing products and services. Hence, I suggest extending research on organizing by considering the customer's perspective to a greater extent. A future avenue here might be to focus more on bridging purchasing and pricing. We know much about value-based pricing, but within the pricing domain we are still unaware of how firms purchase on value. So far, these two streams are rather isolated from each other, although there is arguably much overlap. For example, the pricing literature discusses TCO as a selling tool, and the domain on purchasing studies TCO with regard to buying. Bridging pricing and purchasing with regard to a value-based approach seems a promising area for further research.

Pricing managers are also using more and more technology, such as MS Excel tools for controlling prices or dashboards for sales reviews. As also noted by Hallberg (2017a) and by Geiger and Kelly (2014), we still lack a thorough understanding of how such material objects and technological tools are used in pricing and other related processes. In this vein, interesting questions to be answered in greater detail are: What kinds of tools are being used? Who uses them, how, and when? Who develops such material objects, and how are they being developed?

Studying pricing processes and how firms organize for pricing through qualitative case-study research has proved to be useful. In this dissertation, except for paper II, I was not employed at all the firms studied, and data were mostly gathered via semi-structured interviews. Such research would benefit also from other methods of inquiry, for instance ethnography (Hammersley & Atkinson, 2007), the interview to the double (Nicolini, 2009), shadowing (Czarniawska, 2007; Gherardi, 2012) or videography (Borghini, Carù, & Cova, 2010). I believe such methods for studying pricing phenomena may help us understand in more detail what is *really* happening inside firms, enabling researchers potentially to dig deeper and below the surface level.

Closing thoughts

"If you don't know, now you know"
—Christopher George Latore Wallace

Academics and practitioners are now more articulate and better informed about the phenomenon of organizing for pricing, and about pricing processes in general. I truly hope readers feel towards the end of this dissertation more knowledgeable about the subject matter. In this dissertation, I have offered the reader "thick descriptions and interpretations" (Denzin, 1989; Ponterotto, 2006). As argued by Flyvbjerg (2004), however, the aim of a case study is also to allow the study to be different things to different people, and I very much agree that "readers will have to discover their own path and truth inside the case[s]" (p. 430).

As most thought leaders in pricing argue, much has been achieved, but there is still more to be explored, clarified and viewed from different angles. I feel that particularly borrowing and combining theories and concepts from other disciplines, such as psychology or sociology, will help us to shed more light on the strange and complex world of pricing. I also hope that there will be not only more dialogue about pricing between academics from various disciplines but also closer collaboration among academics, practitioners, consultants and associations (Liozu, 2016d).

Pricing is indeed a journey in practice and academia (Liozu, 2015a). This journey will surely continue as many new opportunities and challenges arise in the future. There are constant economic and global changes and technological advancements, like online cross-border trade, digitalization, and the Internet of Things, to name a few. Furthermore, pricing management as well as the selling and buying of goods and services are and will remain to the greatest extent human activities and decisions that are subject to irrational behavior.

After being part of this journey and studying it as part of my PhD for 3 years, I still have not had enough. Not even the several crises that come with a PhD dissertation have smothered the pricing fire inside of me. As the saying goes, the journey is the destination and reward, and I look forward to being part of it in the future.

REFERENCES

Aaboen, L., Dubois, A., & Lind, F. (2012). Capturing processes in longitudinal multiple case studies. *Industrial Marketing Management, 41,* 235–246.

Amit, R., & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. *Strategic Management Journal, 14,* 33–46.

Anderson, J. C., & Narus, J. A. (1998). Business marketing: Understand what customers value. *Harvard Business Review, 76,* 53–67.

Anderson, J. C., Kumar, N., & Narus, J. A. (2007). *Value merchants: Demonstrating and documenting superior value in business markets.* Boston, MA: Harvard Business Review.

Artinger, F., Petersen, M., Gigerenzer, G., & Weibler, J. (2015). Heuristics as adaptive decision strategies in management. *Journal of Organizational Behavior, 36,* 33–52.

Baker, W. L., Marn, M. V., & Zawada, C.C. (2010). *The price advantage.* Hoboken, NJ: Wiley.

Bakken, T., & Hernes, T. (2006). Organizing is both a verb and a noun: Weick meets Whitehead. *Organization Studies, 27,* 1599–1616.

Balan, C. (2016). Delegating pricing authority to the sales force: The need for a turnaround in research and practice. In A. Hinterhuber & S. M. Liozu (Eds.), *Pricing and the sales force* (pp. 172–196). New York, NY: Routledge.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13,* 544–559.

Berg, B. B. (2007). *Qualitative research methods for the social sciences* (6th ed.). Boston, MA: Pearson Education.

Bergen, M., Dutta, S., & Walker, O. C. Jr. (1992). Agency relationships in marketing: A review of the implications and applications of agency and related theories. *Journal of Marketing, 56,* 1–24.

Bloomfield, R., & Luft, J. L. (2006). Responsibility for cost management hinders learning to avoid the winner's curse. *The Accounting Review, 81,* 29–47.

Bonnemeier, S., Burianek, F., & Reichwald, R. (2010). Revenue models for integrated customer solutions: Concept and organizational implementation. *Journal of Revenue and Pricing Management, 9,* 228–238.

Borghini, S., Carù, A., & Cova, B. (2010). Representing BtoB reality in case study research: Challenges and new opportunities. *Industrial Marketing Management, 39,* 16–24.

Bowman, C., & Ambrosini, V. (2000). Value creation versus value capture: towards a coherent definition of value in strategy. *British Journal of Management*, *11*(1), 1–15.

Brady, T., Davies, A., & Gann, D. M. (2005). Creating value by delivering integrated solutions. *International Journal of Project Management, 23*(5), 360–365.

Brown, J. S., & Duguid, P. (2001). Knowledge and organization: A social-practice perspective. *Organization Science, 12,* 198–213.

Burkert, M., Ivens, B. S., Henneberg, S., & Schradi, P. (2017). Organizing for value appropriation: Configurations and performance outcomes of price management. *Industrial Marketing Management, 61,* 194–209.

Cameron, K. S., & Quinn, R. E. (1988). Organizational paradox and transformation. In R. E. Quinn & K. S. Cameron (Eds.), *Paradox and transformation: Toward a theory of change in organization and management* (pp. 1–18). Cambridge, MA: Ballinger.

Cardinaels, E., Roodhooft, F., & Warlop, L. (2004). The value of activity-based costing in competitive pricing decisions. *Journal of Management Accounting Research, 16,* 133–148.

Carricano, M., Trinqueste, J.-F., & Mondejar, J.-A. (2010). The rise of the pricing function: Origins and perspectives. *Journal of Product & Brand Management, 19,* 468–476.

Cepeda, G., & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research*, *60*(5), 426–437.

Charmaz, K. (2010). Studying the experience of chronic illness through grounded theory. In G. Scambler & S. Scambler (Eds.), *Assaults on the lifeworld: New directions in the sociology of chronic and disabling conditions.* London, UK: Palgrave.

Collis, D. J. (1994). Research note: how valuable are organizational capabilities? *Strategic Management Journal, 15,* 143–152.

Cressman, G. E. (1999). Commentary on: "Industrial pricing: Theory and managerial practice." *Marketing Science, 18,* 455–457.

Cressman, G. E. (2012). Value-based pricing: A state-of-the-art review. In G. L. Lilien & R. Grewal (Eds.), *Handbook of business-to-business marketing* (pp. 246–274). Cheltenham, UK: Edward Elgar.

Czarniawska, B. (2007). *Shadowing: And other techniques for doing fieldwork in modern societies.* Copenhagen, Denmark: Liber and Copenhagen Business School Press.

Czarniawska, B. (2014). Why I think shadowing is the best field technique in management and organization studies. *Qualitative Research in Organizations and Management: An International Journal, 9,* 90–93.

Dane, E., & Pratt, M. G. (2007). Exploring intuition and its role in managerial decision-making. *Academy of Management Review, 32,* 33–54.

Davies, A. (2004). Moving Base into High-value Integrated Solutions: A Value Stream Approach. *Industrial and Corporate Change, 13,* 727–756.

Davies, A., Brady, T., & Hobday, M. (2007). Organizing for solutions: Systems seller vs. systems integrator. *Industrial Marketing Management, 36*(2), 183–193.

Den Hertog, P., Van der Aa, W., & De Jong, M. W. (2010). Capabilities for managing service innovation: towards a conceptual framework. *Journal of Service Management, 21*(4), 490–514.

Denison, D. R., Hart, S. L., & Kahn, J. A. (1996). From chimneys to cross-functional teams: Developing and validating a diagnostic model. *Academy of Management Journal, 39,* 1005–1023.

Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods.* Englewood Cliffs, NJ: Prentice Hall.

Denzin, N. K., & Lincoln, Y. S. (2000). Introduction: The discipline and practice of qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.; pp. 1–29). Thousand Oaks, CA: Sage.

Dolan, R., & Simon, H. (1996). *Power pricing: How managing price transforms the bottom line.* Boston, MA: Free Press.

Dost, F., & Geiger, I. (2017). Value-based pricing in competitive situations with the help of multi-product price response maps. *Journal of Business Research, 76,* 219–236.

Drake, A. R., & Haka, S. F. (2008). Does ABC information exacerbate hold-up problems in buyer-supplier negotiations? *The Accounting Review, 83,* 29–60.

Dubois, A., & Araujo, L. (2004). Research methods in industrial marketing studies. In H. Håkansson, D. Harrison, & A. Waluszewski (Eds.), *Rethinking marketing: Developing a new understanding of markets* (pp. 207−227). Chichester, UK: Wiley.

Dubois, A., & Gadde, L. E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research, 55,* 553–560.

Dutta, S., Bergen, M., Levy, D., Ritson, M., & Zbaracki, M. (2002). Pricing as a strategic capability. *MIT Sloan Management Review, 43*(3), 61–66.

Dutta, S., Zbaracki, M., & Bergen, M. (2003). Pricing process as a capability: A resource-based perspective. *Strategic Management Journal, 24,* 615–630.

Dörfler, V., & Ackermann, F. (2012). Understanding intuition: The case for two forms of intuition. *Management Learning, 43,* 545–564.

Easterby-Smith, M., & Prieto, I. M. (2008). Dynamic capabilities and knowledge management: An integrative role for learning? *British Journal of Management, 19,* 235–249.

Easton, G. (1992). *Learning from case studies* (2nd ed.). New York, NY: Prentice Hall.

Eikeland, O., & Nicolini, D. (2011). Turning practically: Broadening the horizon. *Journal of Organizational Change Management, 24,* 164–174.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14,* 532–550.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal, 50,* 25–32.

Ellström, D., & Larsson, M. H. (2017). Dynamic and static pricing in open-book accounting. *Qualitative Research in Accounting & Management, 14,* 21–37.

Fairhurst, G. T., & Putnam, L. L. (2014). Organizational discourse analysis. In L. L. Putnam & D. K. Mumby (Eds.), *The SAGE handbook of organizational communication: Advances in theory, research, and methods* (3rd ed., pp. 271–296). Thousand Oaks, CA: Sage.

Felin, T., & Foss, N. J. (2005). Strategic organization: A field in search of micro-foundations. *Strategic Organization, 3,* 441–455.

Fenton-O'Creevy. M. (2001) Employee involvement and the middle manager: Saboteur or scapegoat? *Human Resource Management Journal, 11*(1), 24–40.

Ferguson, J. L., Ellen, P. S., & Bearden, W. O. (2014). Procedural and distributive fairness: Determinants of overall price fairness. *Journal of Business Ethics, 121,* 217–231.

Fischer, T., Gebauer, H., Gregory, M., Ren, G., & Fleisch, E. (2010). Exploitation or exploration in service business development? Insights from a dynamic capabilities perspective. *Journal of Service Management, 21,* 591–624.

Flick, U. (1998). *An introduction to qualitative research: Theory, method and applications.* London, UK: Sage.

Flint, D. J., Woodruff, R. B., & Gardial, S. F. (2002). Exploring the phenomenon of customers' desired value change in a business-to-business context. *Journal of Marketing, 66*(4), 102–117.

Flyvbjerg, B. (2004). Five misunderstandings about case-study research. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 420–434). Thousand Oaks, CA: Sage.

Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed.; pp. 301–316). Thousand Oaks, CA: Sage.

Forman, H., & Hunt, J. M. (2005). Managing the influence of internal and external determinants on international pricing strategies. *Industrial Marketing Management, 34,* 133–146.

Frenzen, H., Hansen, A.-K., Krafft, M., Mantrala, M. K., & Schmidt, S. (2010). Delegation of pricing authority to the sales force: An agency-theoretic perspective of its determinants and impact on performance. *International Journal of Research in Marketing, 27,* 58–68.

Gebauer, H. (2011). Exploring the contribution of management innovation to the evolution of dynamic capabilities. *Industrial Marketing Management, 40,* 1238–1250.

Geiger, S., & Guenzi, P. (2009). The sales function in the twenty-first century: Where are we and where do we go from here? *European Journal of Marketing, 43,* 873–889.

Geiger, S., & Kelly, S. (2014). Sales-as-practice: An introduction and methodological outline. *Journal of Personal Selling & Sales Management, 34,* 223–231.

Geiger, S., & Turley, D. (2005). Personal selling as a knowledge-based activity: Communities of practice in the sales force. *Irish Journal of Management, 26*(1), 61–70.

Gerring, J. (2007). *Case study research: Principles and practices.* Cambridge, UK: Cambridge University Press.

Gherardi, S. (2001). From organizational learning to practice-based knowing. *Human Relations, 54,* 131–139.

Gherardi, S. (2012). *How to conduct a practice-based study: Problems and methods.* Cheltenham, UK: Edward Elgar.

Giddens, A. (1984). *The constitution of society: An outline of the theory of structuration.* Cambridge, UK: Polity.

Gigerenzer, G. (2007). *Gut feelings: The intelligence of the unconscious.* New York, NY: Viking.

Gioia, D. A., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *Academy of management review*, *15*(4), 584–602.

Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review, 33*(3), 114–135.

Grey, C. (2012). *Decoding organization: Bletchley Park, codebreaking and organization studies.* Cambridge, UK: Cambridge University Press.

Hagan, F. E. (2006). *Research methods in criminal justice and criminology* (7th ed.). London, UK: Allyn and Bacon.

Halinen, A., & Törnroos, J. Å. (2005). Using case methods in the study of contemporary business networks. *Journal of Business Research, 58,* 1285–1297.

Hallberg, N. L. (2008). *Pricing capability and its strategic dimensions.* Lund, Sweden: Lund Business Press.

Hallberg, N. L. (2017a). Managing value appropriation in buyer–supplier relationships: The role of commercial decision resources. *European Management Journal,* forthcoming.

Hallberg, N. L. (2017b). The micro-foundations of pricing strategy in industrial markets: A case study in the European packaging industry. *Journal of Business Research, 76,* 179–188.

Hallberg, N. L., & Andersson, L. (2013). Organizational barriers and the implementation of customer value map analysis: A case study of a global manufacturing firm in the polymer technology industry. In A. Hinterhuber & S. M. Liozu (Eds.), *Innovation in pricing: Contemporary theories and best practices* (pp. 46–66). New York: Routledge.

Halldorsson, A., & Aastrup, J. (2003). Quality criteria for qualitative inquiries in logistics. *European Journal of Operational Research, 144,* 321–332.

Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice.* Oxford, UK: Routledge.

Hammersley, M., & Gomm, R. (2009). Introduction. In R. Gomm, M. Hammersley, & P. Foster (Eds.), *Case study method* (pp. 1–16). London, UK: Sage.

Hansen, A., Joseph, K., & Krafft, M. (2008). Price delegation in sales organizations. *Business Research, 1,* 94–104.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal, 24,* 997–1010.

Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capabilities: Strategy for the (n)ever-changing world. *Strategic Management Journal, 32,* 1243–1250.

Hernes, T. (2008). *Understanding organization as process: Theory for a tangled world.* London, UK: Routledge.

Hernes, T., & Weik, E. (2007). Organization as process: Drawing a line between endogenous and exogenous views. *Scandinavian Journal of Management, 23,* 251–264.

Herrmann, A., Xia, L., Monroe, K. B., & Huber, F. (2007). The influence of price fairness on customer satisfaction: An empirical test in the context of automobile purchases. *Journal of Product & Brand Management, 16*(1), 49–58.

Hinterhuber, A. (2004). Towards value-based pricing—An integrative framework for decision-making. *Industrial Marketing Management, 33,* 765–778.

Hinterhuber, A. (2008). Customer value-based pricing strategies: Why companies resist. *Journal of Business Strategy, 29*(4), 41–50.

Hinterhuber, A. (2015). Violations of rational choice principles in pricing decisions. *Industrial Marketing Management, 47,* 65–74.

Hinterhuber, A. (2017). Value quantification capabilities in industrial markets. *Journal of Business Research, 76,* 163–178.

Hinterhuber, A., & Bertini, M. (2011). Profiting when customers choose value over price. *Business Strategy Review, 22*(1), 46–49.

Hinterhuber, A., & Liozu, S. (2012). Is it time to rethink your pricing strategy? *MIT Sloan Management Review, 53*(4), 69–77.

Hinterhuber, A., & Liozu, S. M. (2014). Is innovation in pricing your next source of competitive advantage? *Business Horizons, 57,* 413–423.

Hinterhuber, A., & Liozu, S. M. (2015). Editorial—Behavioral and psychological aspects of B2B pricing. *Industrial Marketing Management, 47,* 4–5.

Hinterhuber, A., & Liozu, S. M. (2016). Introduction. In A. Hinterhuber & S. M. Liozu (Eds.), *Pricing and the sales force* (pp. 3–8). New York, NY: Routledge.

Hinterhuber, A., & Liozu, S. M. (2017). Editorial: The micro-foundations of pricing. *Journal of Business Research, 76,* 159–162.

Hobday, M., Davies, A., & Prencipe, A. (2005). Systems integration: A core capability of the modern corporation. *Industrial and Corporate Change, 14,* 1109–1143.

Hohenschwert, L., & Geiger, S. (2015). Interpersonal influence strategies in complex B2B sales and the socio-cognitive construction of relationship value. *Industrial Marketing Management, 49,* 139–150.

Homburg, C., Jensen, O., & Hahn, A. (2012). How to organize pricing? Vertical delegation and horizontal dispersion of pricing authority. *Journal of Marketing, 76*(5), 49–69.

Hsu, S. H. (2011). Cost information and pricing: Empirical evidence. *Contemporary Accounting Research, 28,* 554–579.

Hünerberg, R., & Hüttmann, A. (2003). Performance as a basis for price-setting in the capital goods industry: Concepts and empirical evidence. *European Management Journal, 21,* 717–730.

Indounas, K. (2015). The adoption of strategic pricing by industrial service firms. *Journal of Business & Industrial Marketing, 30,* 521–535.

Ingenbleek, P. (2007). Value-informed pricing in its organizational context: Literature review, conceptual framework, and directions for future research. *Journal of Product & Brand Management, 16,* 441–458.

Ingenbleek, P., DeBruyne, M., Frambach, R. T., & Verhallen, T. M. M. (2003). Successful new product pricing practices: A contingency approach. *Marketing Letters, 14,* 289–305.

Ingenbleek, P., & van der Lans, I. (2013). Relating price strategies and price-setting practices. *European Journal of Marketing, 47,* 27–48.

Ives, B., & Olson, M. H. (1984). User involvement and MIS success: A review of research. *Management Science, 30*(5), 586–603.

Iyer, G. R., Xiao, S. H., Sharma, A., & Nicholson, M. (2015). Behavioral issues in price setting in business-to-business marketing: A framework for analysis. *Industrial Marketing Management, 47,* 6–16.

Jarzabkowski, P., Kaplan, S., Seidl, D., & Whittington, R. (2016). On the risk of studying practices in isolation: Linking what, who and how in strategy research. *Strategic Organization, 14,* 248–259.

Jensen, M. C., & Meckling, W. H. (1995). Specific and general knowledge, and organizational structure. *Journal of Applied Corporate Finance, 8*(2), 4–18.

Johansson, M., Hallberg, N., Hinterhuber, A., Zbaracki, M., & Liozu, S. M. (2012). Pricing strategies and pricing capabilities. *Journal of Revenue and Pricing Management, 11,* 4–11.

Johansson, M., Keränen, J., Hinterhuber, A., Liozu, S. M., & Andersson, L. (2015). Value assessment and pricing capabilities – How to profit from value. *Journal of Revenue and Pricing Management, 14,* 178–197.

Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review, 86*(12), 57–68.

Joseph, K. (2001). On the optimality of delegating optimality pricing authority. *Journal of Marketing, 65*(1), 62–70.

Judge, W., & Douglas, T. (2009). Organizational change capacity: The systematic development of a scale. *Journal of Organizational Change Management, 22,* 635–649.

Järvensivu, T., & Törnroos, J.-A. (2010). Case study research with moderate constructionism: Conceptualization and practical illustration. *Industrial Marketing Management, 39,* 100–108.

Jørgensen, B., & Messner, M. (2010). Accounting and strategising: A case study from new product development. *Accounting, Organizations & Society, 35,* 184–204.

Kachelmeier, S. J., & Towry, K. L. (2002). Negotiated transfer pricing: Is fairness easier said than done? *The Accounting Review, 77,* 571–593.

Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist, 58,* 697–720.

Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist, 64,* 515–526.

Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. *Psychological Review, 80,* 237–251.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47,* 263–291.

Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American Psychologist, 39,* 341–350.

Kahneman, D., Knetsch, J. L., & Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *The American Economic Review, 76,* 728–741.

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and status quo bias. *The Journal of Economic Perspectives, 5*(1), 193–206.

Keren, M., & Levhari, D. (1989). Decentralization, aggregation, control loss and costs in a hierarchical model of the firm. *Journal of Economic Behavior & Organization, 11,* 213–236.

Kienzler, M. (2017). Does managerial personality influence pricing practices under uncertainty? *Journal of Product & Brand Management, 26,* 771–784.

Kienzler, M. (20178). Value-based pricing and cognitive biases: An overview for business markets. *Industrial Marketing Management, 68,* 86–94.

Kienzler, M., & Kowalkowski, C. (2017). Pricing strategy: A review of 22 years of marketing research. *Journal of Business Research, 78,* 101–110.

Kindstöm, D., & Kowalkowski, C. (2015). Service-driven business model innovation: Organizing the shift from a product-based to a service-centric business model. In N. J. Foss & T. Saebi (Eds.), *Business model innovation: The organizational dimension* (pp. 191–216). Oxford, UK: Oxford University Press.

Kindström, D., Kowalkowski, C., & Alejandro, T. B. (2015). Adding services to product-based portfolios: An exploration of the implications for the sales function. *Journal of Service Management, 26,* 372–393.

Kindström, D., Kowalkowski, C., & Sandberg, E. (2013). Enabling service innovation: A dynamic capabilities approach. *Journal of Business Research, 66,* 1063–1073.

King, N. (2004). Template analysis. In G. Symon & C. Cassell (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 256–270). Thousand Oaks, CA: Sage.

Korica, M., Nicolini, D., & Johnson, B. (2017). In search of "managerial work": Past, present and future of an analytical category. *International Journal of Management Reviews, 19,* 151–174.

Koschate-Fischer, N., & Wüllner, K. (2017). New developments in behavioral pricing research. *Journal of Business Economics, 87,* 809–875.

Kowalkowski, C., Windahl, C., Kindström, D., & Gebauer, H. (2015). What service transition? Rethinking established assumptions about manufacturers' service-led growth strategies. *Industrial Marketing Management, 45,* 59–69.

Krafft, M. (1999). An empirical investigation of the antecedents of salesforce control system. *Journal of Marketing,* 63(3), 120–134.

Krafft, M., & Hansen, A.-K. (2011). Delegation of pricing authority to salespeople. In P. Guenzi & S. Geiger (Eds.), *Sales management—A multinational perspective* (pp. 97–114). New York, NY: Palgrave Macmillan.

Krohmer, H., Homburg, C., & Workman, J. P. (2002). Should marketing be cross-functional? Conceptual development and international empirical evidence. *Journal of Business Research, 55,* 451–65.

Kruglanski, A. W., & Gigerenzer, G. (2011). Intuitive and deliberate judgments are based on common principles. *Psychological Review, 118,* 97–109.

Kruisinga, H. J. (1954). *The balance between centralization and decentralization in managerial control.* Leiden, Netherlands: HE Stenfert Kroese.

Lal, R. (1986). Delegating pricing responsibility to the salesforce. *Marketing Science, 5,* 159–168.

Lancioni, R. (2005). A strategic approach to industrial product pricing: The pricing plan. *Industrial Marketing Management, 34,* 177–183.

Lancioni, R., Schau, H. J., & Smith, M. F. (2005). Intraorganizational influences on business-to-business pricing strategies: A political economy perspective. *Industrial Marketing Management, 34,* 123–131.

Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review, 24,* 691–710.

Langley, A., & Tsoukas, H. (2010). Introducing "Perspectives on process organization studies." In T. Hernes & S. Maitlis (Eds.), *Process, sensemaking, and organizing* (pp. 1–26). Oxford, UK: Oxford University Press,

Langley, A., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal, 56,* 1–13.

LaPlaca, P. J. (1997). Contributions to marketing theory and practice from industrial marketing management. *Journal of Business Research, 38,* 179–198.

Lawler, E. E. (1991). *High-involvement management.* San Francisco, CA: Jossey-Bass.

Leone, R. P., Robinson, L. M., Bragge, J., & Somervuori, O. (2012). A citation and profiling analysis of pricing research from 1980 to 2010. *Journal of Business Research, 65,* 1010–1024.

Levihn, U., & Levihn, F. (2016). The transition from product to solution selling: The role and organization of employees engaged in current business. *Journal of Business-to-Business Marketing, 23,* 207–219.

Lewis, M. W., & Grimes, A. I. (1999). Metatriangulation: Building theory from multiple paradigms. *Academy of management review, 24*(4), 672–690.

Liinamaa, J., Viljanen, M., Hurmerinta, A., Ivanova-Gongne, M., Luotola, H., & Gustafsson, M. (2016). Performance-based and functional contracting in value-based solution selling. *Industrial Marketing Management, 59,* 37–49.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage.

Liozu, S. M. (2014, February). Change management and pricing. *Pricing Advisor,* pp. 6–10.

Liozu, S. M. (2015a). *The pricing journey: The organizational transformation toward pricing excellence.* Stanford, CA: Stanford University Press.

Liozu, S. M. (2015b). Pricing superheroes: How a confident sales team can influence firm performance. *Industrial Marketing Management, 47,* 26–38.

Liozu, S. M. (2016a). Change management in pricing: getting the sales force on board. In A. Hinterhuber & S. M. Liozu (Eds.), *Pricing and the sales force* (pp. 41–48). New York, NY: Routledge.

Liozu, S. M. (2016b). *Dollarizing differentiation value: A practical guide for the quantification and the capture of customer value in B2B markets.* Sewickley, PA: Value Innoruption Advisors.

Liozu, S. M. (2016c). The evolution and future of pricing capabilities. *Journal of Revenue and Pricing Management, 15,* 306–316.

Liozu, S. M. (2016d). *Pricing and human capital: A guide to developing a pricing career, managing pricing teams, and developing pricing skills.* New York, NY: Routledge.

Liozu, S. M., & Ecker, K. (2013). The organizational design of the pricing function in firms: A center-led management approach. In A. Hinterhuber, & S. Loizu (Eds.), *Innovation in pricing: Contemporary theories and best practices* (pp. 27–45). New York, NY: Routledge.

Liozu, S. M., & Hinterhuber, A. (2012). Industrial product pricing: A value-based approach. *Journal of Business Strategy, 33*(4), 28–39.

Liozu, S. M., & Hinterhuber, A. (2013a). CEO championing of pricing, pricing capabilities and firm performance in industrial firms. *Industrial Marketing Management, 42,* 633–643.

Liozu, S. M., & Hinterhuber, A. (2013b). The confidence factor in pricing: Driving firm performance. *Journal of Business Strategy, 34*(4), 11–21.

Liozu, S. M., & Hinterhuber, A. (2013c). Pricing orientation, pricing capabilities, and firm performance. *Management Decision, 51,* 594–614.

Liozu, S. M., & Hinterhuber, A. (2014). Pricing capabilities: The design, development, and validation of a scale. *Management Decision, 52,* 144–158.

Liozu, S. M., & Hinterhuber, A. (2017). Organizing for pricing excellence [Call for papers]. https://www.journals.elsevier.com/industrial-marketing-management/calls-for-papers/organizing-for-pricing-excellence

Liozu, S. M., Hinterhuber, A., Perelli, S., & Boland, R. (2012). Mindful pricing: Transforming organizations through value-based pricing. *Journal of Strategic Marketing, 20,* 197–209.

Liozu, S. M., Hinterhuber, A., & Somers, T. (2014). Organizational design and pricing capabilities for superior firm performance. *Management Decision, 52,* 54–78.

Lucas, M. R. (2003). Pricing decisions and the neoclassical theory of the firm. *Management Accounting Research, 14,* 201–217.

Lucas, M., & Rafferty, J. (2008). Cost analysis for pricing: Exploring the gap between theory and practice. *The British Accounting Review, 40,* 148–160.

Luft, J., & Libby, R. (1997). Profit comparisons, market prices and managers' judgments about negotiated transfer prices. *The Accounting Review, 72,* 217–229.

Luft, J., & Shields, M. D. (2010). Psychology models of management accounting. *Foundations and Trends® in Accounting, 4*(3–4), 199–345.

Mantrala, M. K., Albers, S., Caldieraro, F., Jensen, O., Joseph, K., Krafft, M., . . . Lodish, L. (2010). Sales force modeling: State of the field and research agenda. *Marketing Letters, 21,* 255–272.

March, J., & Simon, H. (1958). *Organizations.* New York, NY: Wiley.

Marcos-Cuevas, J., Nätti, S., Palo, T., & Ryals, L. J. (2014). Implementing key account management: Intraorganizational practices and associated dilemmas. *Industrial Marketing Management, 43,* 1216–1224.

Matzler, K., Uzelac, B., & Bauer, F. (2014). Intuition: The missing ingredient for good managerial decision-making. *Journal of Business Strategy, 35*(6), 31–40.

McCracken, G. (1988). *The long interview* (4th ed.). Newbury Park, CA: Sage.

McGrath, J. (1982). Dilemmatics: The study of research choices and dilemmas. In J. McGrath, J. Martin, & R. A. Kulka (Eds.), *Judgement calls in research* (pp. 69–80). Beverly Hills, CA: Sage.

Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Miller, P. (2006). Management accounting and sociology. *Handbooks of Management Accounting Research, 1,* 285–295.

Mishra, B. K., & Prasad, A. (2004). Centralized pricing versus delegating pricing to the salesforce under information asymmetry. *Marketing Science, 23,* 21–27.

Mishra, B. K., & Prasad, A. (2005). Delegating pricing decisions in competitive markets with symmetric and asymmetric information. *Marketing Science, 24,* 490–497.

Monroe, K. B. (2003). *Pricing: Making profitable decisions.* New York, NY: McGraw-Hill.

Monroe, K. B., Rikala, V., & Somervuori, O. (2015). Examining the application of behavioral price research in business-to-business markets. *Industrial Marketing Management, 47,* 17–25.

Moorman, M. (2013). Winning on the margin: The B2B value imperative. In A. Hinterhuber & S. M. Liozu (Eds.), *Innovation in pricing: Contemporary theories and best practices* (pp. 323–343). New York, NY: Routledge.

Morgan, D. E., & Zeffane, E. (2003). Employee involvement, organizational change and trust in management. *International Journal of Human Resource Management, 14,* 55–75.

Morris, M. H., & Fuller, D. A. (1989). Pricing an industrial service. *Industrial Marketing Management, 18,* 139–146.

Nagar, V. (2002). Delegation and incentive compensation. *Accounting Review, 77,* 379–395.

Nagle, T. T., & Cressman, G. E. Jr. (2002). Don't just set prices, manage them. *Marketing Management, 11*(6), 29–33.

Nagle, T. T., Hogan, J., & Zale, J. (2016). *The strategy and tactics of pricing: A guide to growing more profitably* (5th ed.). New York, NY: Routledge.

Nagle, T. T., & Müller, G. (2018). *The strategy and tactics of pricing* (6th ed.). New York, NY: Routledge.

Nelson, R., & Winter, S. (1982). *An evolutionary theory of economic change.* Cambridge, MA: Harvard University Press.

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

Nicolini, D. (2012). *Practice theory, work, and organization: An introduction.* Oxford, UK: Oxford University Press.

Nicolini, D., & Monteiro, P. (2017). The practice approach in organizational and management studies. In H. Tsoukas & A. Langley (Eds.), *The SAGE handbook of process organization studies.* London, UK: Sage.

Nimer, D. (1971). Nimer on pricing. *Industrial Marketing Management, 1,* 48–51.

Noble, P. M., & Gruca, T. S. (1999). Industrial pricing: Theory and managerial practice. *Marketing Science, 18,* 435–454.

Oxenfeldt, A. R. (1973). A decision-making structure for price decisions. *Journal of Marketing, 37*(1), 48–59.

Pass, M. W., Evans, K. R., & Schlacter, J. L. (2004). Sales force involvement in CRM information systems: Participation, support, and focus. *Journal of Personal Selling & Sales Management, 24,* 229–234.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Thousand Oaks, CA: Sage.

Pettigrew, A. M. (1990). Longitudinal field research: Theory and practice. *Organization Science, 1,* 267−292.

Piekkari, R., Plakoyiannaki, E., & Welch, C. (2010). "Good" case research in industrial marketing: Insights from research practice. *Industrial Marketing Management, 39,* 109–

Piekkari, R., Welch, C., & Paavilainen, E. (2009). The case study as disciplinary convention: Evidence from international business journals. *Organizational Research Methods, 12,* 567–589.

Pollono, E. (2016). Pricing delegation and sales force compensation. In A. Hinterhuber & S. M. Liozu (Eds.), *Pricing and the sales force* (pp. 161–171). New York, NY: Routledge.

Ponterotto, J. G. (2006). Brief note on the origins, evolution, and meaning of the qualitative research concept thick description. *The Qualitative Report, 11,* 538–549.

Pratt, M. G. (2009). From the editors: For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *The Academy of Management Journal, 52,* 856–862.

Prencipe, A., Davies, A., & Hobday, M. (Eds.). (2003). *The business of systems integration*. Oxford, UK: Oxford University Publishing.

Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals, 10,* 65–171.

Radner, R. (1993). The organization in decentralized information processing. *Econometrica, 61,* 1109–1146.

Rao, A., Bergen, M., & Davis, S. (2000). How to fight a price war. *Harvard Business Review, 78*(2), 107–116.

Rao, V. R. (1984). Pricing research in marketing: The state of the art. *Journal of Business, 57*(1), 39–60.

Rao, V. R., & Kartono, B. (2009). Pricing objectives and strategies: A cross-country survey. In V. R. Rao (Ed.), *Handbook of pricing research in marketing* (pp. 9–36). Cheltenham, UK: Edward Elgar.

Rapaccini, M. (2015). Pricing strategies of service offerings in manufacturing companies: A literature review and empirical investigation. *Production Planning & Control, 26,* 1247–1263.

Reckwitz, A. (2002). Toward a theory of social practices. *European Journal of Social Theory, 5,* 243–263.

Reen, N. (2014). *The pricing of industrial services.* Åbo, Finland: Åbo Akademi University Press.

Reichertz, J. (2007). *Abduction: The logic of discovery of grounded theory* (pp. 214–228). London, UK: Sage.

Reid, D. A., & Plank, R. E. (2000). Business marketing comes of age: A comprehensive review of the literature. *Journal of Business-to-Business Marketing, 7*(2–3), 9–186.

Richardson, G. B. (1972). The organization of industry. *The Economic Journal, 82,* 883–896.

Riege, A. M. (2003). Validity and reliability tests in case study research: A literature review with "hands-on" applications for each research phase. *Qualitative Market Research: An International Journal, 6*(2), 75–86.

Rowan, J. (1981). A Dialectical Paradigm for Research. In P. Reason & J. Rowan (Eds.), *Human inquiry: A sourcebook of new paradigm research* (pp. 93–112). New York, NY: Routledge.

Rusetski, A. (2014). Pricing by intuition: Managerial choices with limited information. *Journal of Business Research, 67,* 1733–1743.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). Essex, UK: Pearson Education.

Sawhney, M. (2006). Going beyond the product: Defining, designing and delivering customer solutions. In R. F. Lusch & S. L. Vargo (Eds.), *The service dominant logic of marketing: Dialog, debate, and directions* (pp. 365–380). Armonk, NY: Sharpe.

Schatzki, T. R. (2002). *The site of the social: A philosophical account of the constitution of social life and change.* University Park, PA: Pennsylvania State University Press.

Schatzki, T. R., Knorr Cetina, K., & von Savigny, E. (2001). *The practice turn in contemporary theory.* London: Routledge.

Scott, W. R., & Davis, G. F. (2015). *Organizations and organizing: Rational, natural and open systems perspectives.* London: Routledge.

Sharma, A., & Iyer, G. R. (2011). Are pricing policies an impediment to the success of customer solutions? *Industrial Marketing Management, 40,* 723–729.

Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal, 50,* 20–24.

Sil, R., & Katzenstein, P. J. (2010). Analytic eclecticism in the study of world politics: Reconfiguring problems and mechanisms across research traditions. *Perspectives on Politics, 8*(2), 411–431.

Silverman, D. (2012). *Interpreting qualitative data: Methods for analyzing talk, text and interaction.* London, UK: Sage.

Simon, H. (1992). Pricing opportunities and how to exploit them. *Sloan Management Review, 33*(2), 52–62.

Simon, H. A. (1954). *Centralization vs. decentralization in organizing the controller's department: A research study and report* (No. 4). Controllership Foundation.

Sleeping giant. (2017). In *Merriam-Webster's online dictionary* (11th ed.) Retrieved from https://www.merriam-webster.com/dictionary/sleeping%20giant

Smith, G. E. (1995). Managerial pricing orientation: The process of making pricing decisions. *Pricing Strategy and Practice, 3*(3), 28–39.

Smith, T. J. (2016). *Pricing done right: The pricing framework proven successful by the world's most profitable companies.* Hoboken, NJ: Wiley.

Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review, 36,* 381–403.

Somervuori, O. (2014). Profiling behavioral pricing research in marketing. *Journal of Product and Brand Management, 23,* 462–474.

Spender, J. C. (1989). *Industry recipes: An enquiry into the nature and sources of managerial judgment.* Oxford, UK: Basil Blackwell.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

Stake, R. E. (2000). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 435–454). Thousand Oaks, CA: Sage.

Stake, R. E. (2009). The case study method in social inquiry. In R. Gomm, M. Hammersley, & P. Foster (Eds.), *Case study method* (pp. 18–26). London: Sage.

Steiner, M., Eggert, A., Ulaga, W., & Backhaus, K. (2016). Do customized service packages impede value capture in industrial markets? *Journal of the Academy of Marketing Science, 44,* 151–165.

Stengers, I. (1997). *Power and invention: situating science.* Minneapolis, MN: University of Minnesota Press.

Stephenson, R., Cron, W. L., & Frazier, G. L. (1979). Delegating pricing authority to the sales force: The effect on sales and profit performance. *Journal of Marketing, 43*(2), 21–28.

Storbacka, K. (2011). A solution business model: Capabilities and management practices for integrated solutions. *Industrial Marketing Management, 40,* 699–711.

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.

Story, V. M., Raddats, C., Burton, J., Zolkiewski, J., & Baines, T. (2017). Capabilities for advanced services: A multi-actor perspective. *Industrial Marketing Management, 60,* 54–68.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Teece, D., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction. *Industrial and Corporate Change, 3,* 537–556.

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28,* 1319–1350.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning, 51,* 40–49.

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

Tellis, G. J. (1986). Beyond the many faces of price: An integration of pricing strategies. *Journal of Marketing, 50*(4), 146–160.

Terho, H., Eggert, A., Haas, A., & Ulaga, W. (2015). How sales strategy translates into performance: The role of salesperson customer orientation and value-based selling. *Industrial Marketing Management, 45,* 12–21.

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,* 174–185.

Trailer, B., & Dickie, J. (2006). Understanding what your sales manager is up against. *Harvard Business Review, 84*(7/8), 48–55.

Tuli, K. R., Kohli, A. K., & Bharadwaj, S. G. (2007). Rethinking customer solutions: from product bundles to relational processes. *Journal of Marketing, 71*(3), 1–17.

Turner, J. R. (2005). The role of pilot studies in reducing risk on projects and programmes. *International Journal of Project Management, 23*(1), 1–6.

Tversky, A., & Kahneman, D. (1974). Judgments under uncertainty: Heuristics and biases. *Science, 185,* 1124–31.

Töytäri, P., Alejandro, T. B., Parvinen, P., Ollila, I., & Rosendahl, N. (2011). Bridging the theory to application gap in value-based selling. *Journal of Business & Industrial Marketing, 26*(7), 493–502.

Töytäri, P., Keränen, J., & Rajala, R. (2017). Barriers to implementing value-based pricing in industrial markets: A micro-foundations perspective. *Journal of Business Research, 76,* 237–246.

Töytäri, P., & Rajala, R. (2015). Value-based selling: An organizational capability perspective. *Industrial Marketing Management, 45,* 101–112.

Töytäri, P., Rajala, R., & Alejandro, T. B. (2015). Organizational and institutional barriers to value-based pricing in industrial relationships. *Industrial Marketing Management, 47,* 53–64.

Ulaga, W., & Kohli, A. K. (2018). The role of a solutions salesperson: Reducing uncertainty and fostering adaptiveness. *Industrial Marketing Management*. Forthcoming.

Ulaga, W., & Loveland, J. M. (2014). Transitioning from product to service-led growth in manufacturing firms: Emergent challenges in selecting and managing the industrial sales force. *Industrial Marketing Management, 43,* 113–125.

Ulaga, W., & Reinartz, W. J. (2011). Hybrid offerings: How manufacturing firms combine goods and services successfully. *Journal of Marketing, 75*(6), 5–23.

Valle, R. S., King, M., & Halling, S. (1989). An introduction to existential-phenomenology thought in psychology. In R. S. Valle & S. Halling (Eds.), *Existential-phenomenological perspectives in psychology* (pp. 3–16). New York, NY: Plenum.

Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review, 20,* 510–540.

Van den Abbeele, A., Roodhooft, F., & Warlop, L. (2009). The effect of cost information on buyer–supplier negotiations in different power settings. *Accounting, Organizations and Society, 34,* 245–266.

Van Zandt, T. (1998). Organizations with an endogenous number of information processing agents. In M. Majumdar (Ed.), *Organizations with incomplete information* (pp. 239–305). Cambridge, UK: Cambridge University Press.

Wallendorf, M., & Belk, R. W. (1989). Assessing trustworthiness in naturalistic consumer research. In E. Hirschman (Ed.), *Interpretive consumer research* (pp. 69–84). Provo, UT: Association for Consumer Research,

Weaver, G. R., & Gioia, D. A. (1994). Paradigms lost: incommensurability vs structurationist inquiry. *Organization Studies*, *15*(4), 565–589.

Weick, K. E. (1979). *The social psychology of organizing.* Reading, MA: Addison-Wesley.

Weinberg, C. B. (1975). An optimal commission plan for salesmen's control over price. *Management Science, 21,* 937–943.

Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2011). Theorising from case studies: Towards a pluralist future for international business research. *Journal of International Business Studies, 42,* 740–762.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5,* 171–180.

Whittington, R., & Melin, L. (2003). The challenge of organizing/strategizing. In A. M. Pettigrew, R. Whittington, L. Melin, C. Sánchez-Runde, F. A. J. van den Bosch, & W. Ruigrok (Eds.), *Innovative forms of organizing* (pp. 35–48). Thousand Oaks, CA: Sage.

Wilken, R., Cornelißen, M., Backhaus, K., & Schmitz, C. (2010). Steering sales reps through cost information: An investigation into the black box of cognitive references and negotiation behavior. *International Journal of Research in Marketing, 27,* 69–82.

Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal, 24,* 991–995.

Witell, L., & Löfgren, M. (2013). From service for free to service for fee: business model innovation in manufacturing firms. *Journal of Service Management, 24,* 520–533.

Woodside, A. G. (2015). The general theory of behavioral pricing: Applying complexity theory to explicate heterogeneity and achieve high-predictive validity. *Industrial Marketing Management, 47,* 39–52.

Woodside, A. G., & Wilson, E. J. (2003). Case study research method for theory building. *Journal of Business & Industrial Marketing, 18,* 493−508.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Yuksel, U., & Sutton-Brady, C. (2006). To delegate or not to delegate? That is the question of pricing authority. *Journal of Business & Economics Research, 4*(2), 35–44.

Zbaracki, M. J., & Bergen, M. (2010). When truces collapse: A longitudinal study of price-adjustment routines. *Organization Science, 21,* 955–972.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science, 13,* 339–351.

"Cash rules everything around me: CREAM,

get the money. Dollar, dollar bill y'all"

Wu-Tang Clan

Thankfully, cash does not rule everything around me. I wish to emphasize here as a side note that this thesis has not the purpose of exploiting customers and mechanisms of pricing in order to make more money as a seller and maximize profits. Rather, my interest is in understanding pricing processes and the elements of organizing for pricing, and in contributing to this research field. The ultimate goal for me with regard to pricing research is to educate and help firms and managers to make smarter, more transparent and fairer pricing decisions. It is my strong belief that the more we study and learn about pricing, the more potential that both sellers and buyers can benefit.

Also, when writing a PhD thesis one simply needs to have some fun. And listening to Wu-Tang helps at times.

TITLER I PH.D.SERIEN:

2004

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management

2. Thomas Basbøll
LIKENESS
A Philosophical Investigation

3. Morten Knudsen
Beslutningens vaklen
En systemteoretisk analyse of moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000

4. Lars Bo Jeppesen
Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers

5. Barbara Dragsted
SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process

6. Jeanet Hardis
Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet

7. Henriette Hallberg Thygesen
System Dynamics in Action

8. Carsten Mejer Plath
Strategisk Økonomistyring

9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing
– a Field Study of the Rise and Fall of a Bottom-Up Process

10. Knut Arne Hovdal
De profesjonelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur

11. Søren Jeppesen
Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa
– A Critical Realist Approach

12. Lars Frode Frederiksen
Industriel forskningsledelse
– på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder

13. Martin Jes Iversen
The Governance of GN Great Nordic
– in an age of strategic and structural transitions 1939-1988

14. Lars Pynt Andersen
The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony

15. Jakob Rasmussen
Business Perspectives on E-learning

16. Sof Thrane
The Social and Economic Dynamics of Networks
– a Weberian Analysis of Three Formalised Horizontal Networks

17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca

18. S.J Valstad
Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets

20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice

21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation

22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis

23. Pernille Schnoor
Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv

24. Sidsel Fabech
Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser

25. Klavs Odgaard Christensen
Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada

26. Dana B. Minbaeva
Human Resource Practices and Knowledge Transfer in Multinational Corporations

27. Holger Højlund
Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003

28. Christine Mølgaard Frandsen
A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten

29. Sine Nørholm Just
The Constitution of Meaning – A Meaningful Constitution?
Legitimacy, identity, and public opinion in the debate on the future of Europe

2005

1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development

2. Helle Hedegaard Hein
Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker

3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development

4. Søren Buhl Pedersen
Making space
An outline of place branding

5. Camilla Funck Ellehave
Differences that Matter
An analysis of practices of gender and organizing in contemporary workplaces

6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger

7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains

8. Caroline Aggestam-Pontoppidan
From an idea to a standard
The UN and the global governance of accountants' competence

9. Norsk ph.d.

10. Vivienne Heng Ker-ni
An Experimental Field Study on the

Effectiveness of Grocer Media Advertising
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales

11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives

12. Remo Stefano Chiari
Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo

13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003

14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks

15 Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour

16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change

17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa

18. Signe Jarlov
Konstruktioner af offentlig ledelse

19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language
An empirical study employing data elicited from Danish EFL learners

20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information

21. Marianne Thejls Fischer
Egos and Ethics of Management Consultants

22. Annie Bekke Kjær
Performance management i Proces-innovation
– belyst i et social-konstruktivistisk perspektiv

23. Suzanne Dee Pedersen
GENTAGELSENS METAMORFOSE
Om organisering af den kreative gøren i den kunstneriske arbejdspraksis

24. Benedikte Dorte Rosenbrink
Revenue Management
Økonomiske, konkurrencemæssige & organisatoriske konsekvenser

25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees

26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users' Adoption Decisions

27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgtes fornyende rolle

28. Gitte Thit Nielsen
Remerger
– skabende ledelseskræfter i fusion og opkøb

29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS

30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdslederes meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter

31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske
læringsnettverk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur

32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring

33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan proaktiv proceshåndtering kan forbedre praksis i virtuelle læringsmiljøer

34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals

35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under
1. verdenskrig

36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery

37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management

2006

1. Christian Vintergaard
Early Phases of Corporate Venturing

2. Niels Rom-Poulsen
Essays in Computational Finance

3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production

4. Mette Rosenkrands Johansen
Practice at the top
– how top managers mobilise and use non-financial performance measures

5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj

6. Susan Aagaard Petersen
Culture's Influence on Performance Management: The Case of a Danish Company in China

7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff

8. Cynthia Selin
Volatile Visions: Transactons in Anticipatory Knowledge

9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies

10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What's the Difference and does it Matter?

11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions

A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy

12. Mikkel Flyverbom
Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks

13. Anette Grønning
Personen bag
Tilstedeværer i e-mail som interaktionsform mellem kunde og medarbejder i dansk forsikringskontekst

14. Jørn Helder
One Company – One Language?
The NN-case

15. Lars Bjerregaard Mikkelsen
Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets

16. Lise Granerud
Exploring Learning
Technological learning within small manufacturers in South Africa

17. Esben Rahbek Pedersen
Between Hopes and Realities: Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)

18. Ramona Samson
The Cultural Integration Model and European Transformation.
The Case of Romania

2007

1. Jakob Vestergaard
Discipline in The Global Economy
Panopticism and the Post-Washington Consensus

2. Heidi Lund Hansen
Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices

3. Sudhanshu Rai
Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; "Where process becomes the objective"

4. Norsk ph.d.
Ej til salg gennem Samfundslitteratur

5. Serden Ozcan
EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective

6. Kim Sundtoft Hald
Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships

7. Tobias Lindeberg
Evaluative Technologies
Quality and the Multiplicity of Performance

8. Merete Wedell-Wedellsborg
Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisationer

9. Lars Frederiksen
Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays

10. Jonas Gabrielsen
Retorisk toposlære – fra statisk 'sted' til persuasiv aktivitet

11. Christian Moldt-Jørgensen
Fra meningsløs til meningsfuld evaluering.
Anvendelsen af studentertilfredshedsmålinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv

12. Ping Gao
Extending the application of actor-network theory
Cases of innovation in the telecommunications industry

13. Peter Mejlby
Frihed og fængsel, en del af den samme drøm?
Et phronetisk baseret casestudie af frigørelsens og kontrollens sameksistens i værdibaseret ledelse!

14. Kristina Birch
Statistical Modelling in Marketing

15. Signe Poulsen
Sense and sensibility:
The language of emotional appeals in insurance marketing

16. Anders Bjerre Trolle
Essays on derivatives pricing and dynamic asset allocation

17. Peter Feldhütter
Empirical Studies of Bond and Credit Markets

18. Jens Henrik Eggert Christensen
Default and Recovery Risk Modeling and Estimation

19. Maria Theresa Larsen
Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?
Four papers on the long-term implications of increasing industry involvement and commercialization in academia

20. Morten Wellendorf
Postimplementering af teknologi i den offentlige forvaltning
Analyser af en organisations kontinuerlige arbejde med informationsteknologi

21. Ekaterina Mhaanna
Concept Relations for Terminological Process Analysis

22. Stefan Ring Thorbjørnsen
Forsvaret i forandring
Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring

23. Christa Breum Amhøj
Det selvskabte medlemskab om managementstaten, dens styringsteknologier og indbyggere

24. Karoline Bromose
Between Technological Turbulence and Operational Stability
– An empirical case study of corporate venturing in TDC

25. Susanne Justesen
Navigating the Paradoxes of Diversity in Innovation Practice
– A Longitudinal study of six very different innovation processes – in practice

26. Luise Noring Henler
Conceptualising successful supply chain partnerships
– Viewing supply chain partnerships from an organisational culture perspective

27. Mark Mau
Kampen om telefonen
Det danske telefonvæsen under den tyske besættelse 1940-45

28. Jakob Halskov
The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered

on the WWW – an implementation and evaluation

29. Gergana Koleva
European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative

30. Christian Geisler Asmussen
Global Strategy and International Diversity: A Double-Edged Sword?

31. Christina Holm-Petersen
Stolthed og fordom
Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion

32. Hans Peter Olsen
Hybrid Governance of Standardized States
Causes and Contours of the Global Regulation of Government Auditing

33. Lars Bøge Sørensen
Risk Management in the Supply Chain

34. Peter Aagaard
Det unikkes dynamikker
De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde

35. Yun Mi Antorini
Brand Community Innovation
An Intrinsic Case Study of the Adult Fans of LEGO Community

36. Joachim Lynggaard Boll
Labor Related Corporate Social Performance in Denmark
Organizational and Institutional Perspectives

2008

1. Frederik Christian Vinten
Essays on Private Equity

2. Jesper Clement
Visual Influence of Packaging Design on In-Store Buying Decisions

3. Marius Brostrøm Kousgaard
Tid til kvalitetsmåling?
– Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren

4. Irene Skovgaard Smith
Management Consulting in Action
Value creation and ambiguity in client-consultant relations

5. Anders Rom
Management accounting and integrated information systems
How to exploit the potential for management accounting of information technology

6. Marina Candi
Aesthetic Design as an Element of Service Innovation in New Technology-based Firms

7. Morten Schnack
Teknologi og tværfaglighed
– en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling

8. Helene Balslev Clausen
Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano

9. Lise Justesen
Kunsten at skrive revisionsrapporter. En beretning om forvaltningsrevisionens beretninger

10. Michael E. Hansen
The politics of corporate responsibility: CSR and the governance of child labor and core labor rights in the 1990s

11. Anne Roepstorff
Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR

12. Claus Bajlum
Essays on Credit Risk and Credit Derivatives

13. Anders Bojesen
The Performative Power of Competence – an Inquiry into Subjectivity and Social Technologies at Work

14. Satu Reijonen
Green and Fragile
A Study on Markets and the Natural Environment

15. Ilduara Busta
Corporate Governance in Banking
A European Study

16. Kristian Anders Hvass
A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models
The Winning Hybrid: A case study of isomorphism in the airline industry

17. Trine Paludan
De uvidende og de udviklingsparate
Identitet som mulighed og restriktion blandt fabriksarbejdere på det aftayloriserede fabriksgulv

18. Kristian Jakobsen
Foreign market entry in transition economies: Entry timing and mode choice

19. Jakob Elming
Syntactic reordering in statistical machine translation

20. Lars Brømsøe Termansen
Regional Computable General Equilibrium Models for Denmark
Three papers laying the foundation for regional CGE models with agglomeration characteristics

21. Mia Reinholt
The Motivational Foundations of Knowledge Sharing

22. Frederikke Krogh-Meibom
The Co-Evolution of Institutions and Technology
– A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times

23. Peter D. Ørberg Jensen
OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS

24. Pham Thi Song Hanh
Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers

25. Mads Vangkilde
Why wait?
An Exploration of first-mover advantages among Danish e-grocers through a resource perspective

26. Hubert Buch-Hansen
Rethinking the History of European Level Merger Control
A Critical Political Economy Perspective

2009

1. Vivian Lindhardsen
From Independent Ratings to Communal Ratings: A Study of CWA Raters' Decision-Making Behaviours

2. Guðrið Weihe
Public-Private Partnerships: Meaning and Practice

3. Chris Nøkkentved
Enabling Supply Networks with Collaborative Information Infrastructures
An Empirical Investigation of Business Model Innovation in Supplier Relationship Management

4. Sara Louise Muhr
Wound, Interrupted – On the Vulnerability of Diversity Management

5. Christine Sestoft
Forbrugeradfærd i et Stats- og Livsformsteoretisk perspektiv

6. Michael Pedersen
Tune in, Breakdown, and Reboot: On the production of the stress-fit self-managing employee

7. Salla Lutz
Position and Reposition in Networks – Exemplified by the Transformation of the Danish Pine Furniture Manufacturers

8. Jens Forssbæck
Essays on market discipline in commercial and central banking

9. Tine Murphy
Sense from Silence – A Basis for Organised Action
How do Sensemaking Processes with Minimal Sharing Relate to the Reproduction of Organised Action?

10. Sara Malou Strandvad
Inspirations for a new sociology of art: A sociomaterial study of development processes in the Danish film industry

11. Nicolaas Mouton
On the evolution of social scientific metaphors:
A cognitive-historical enquiry into the divergent trajectories of the idea that collective entities – states and societies, cities and corporations – are biological organisms.

12. Lars Andreas Knutsen
Mobile Data Services:
Shaping of user engagements

13. Nikolaos Theodoros Korfiatis
Information Exchange and Behavior
A Multi-method Inquiry on Online Communities

14. Jens Albæk
Forestillinger om kvalitet og tværfaglighed på sygehuse
– skabelse af forestillinger i læge- og plejegrupperne angående relevans af nye idéer om kvalitetsudvikling gennem tolkningsprocesser

15. Maja Lotz
The Business of Co-Creation – and the Co-Creation of Business

16. Gitte P. Jakobsen
Narrative Construction of Leader Identity in a Leader Development Program Context

17. Dorte Hermansen
"Living the brand" som en brandorienteret dialogisk praxis:
Om udvikling af medarbejdernes brandorienterede dømmekraft

18. Aseem Kinra
Supply Chain (logistics) Environmental Complexity

19. Michael Nørager
How to manage SMEs through the transformation from non innovative to innovative?

20. Kristin Wallevik
Corporate Governance in Family Firms
The Norwegian Maritime Sector

21. Bo Hansen Hansen
Beyond the Process
Enriching Software Process Improvement with Knowledge Management

22. Annemette Skot-Hansen
Franske adjektivisk afledte adverbier, der tager præpositionssyntagmer indledt med præpositionen à som argumenter
En valensgrammatisk undersøgelse

23. Line Gry Knudsen
Collaborative R&D Capabilities
In Search of Micro-Foundations

24. Christian Scheuer
Employers meet employees
Essays on sorting and globalization

25. Rasmus Johnsen
The Great Health of Melancholy
A Study of the Pathologies of Performativity

26. Ha Thi Van Pham
Internationalization, Competitiveness Enhancement and Export Performance of Emerging Market Firms:
Evidence from Vietnam

27. Henriette Balieu
Kontrolbegrebets betydning for kausativalternationen i spansk
En kognitiv-typologisk analyse

2010

1. Yen Tran
Organizing Innovationin Turbulent Fashion Market
Four papers on how fashion firms create and appropriate innovation value

2. Anders Raastrup Kristensen
Metaphysical Labour
Flexibility, Performance and Commitment in Work-Life Management

3. Margrét Sigrún Sigurdardottir
Dependently independent
Co-existence of institutional logics in the recorded music industry

4. Ásta Dis Óladóttir
Internationalization from a small domestic base:
An empirical analysis of Economics and Management

5. Christine Secher
E-deltagelse i praksis – politikernes og forvaltningens medkonstruktion og konsekvenserne heraf

6. Marianne Stang Våland
What we talk about when we talk about space:
End User Participation between Processes of Organizational and Architectural Design

7. Rex Degnegaard
Strategic Change Management
Change Management Challenges in the Danish Police Reform

8. Ulrik Schultz Brix
Værdi i rekruttering – den sikre beslutning
En pragmatisk analyse af perception og synliggørelse af værdi i rekrutterings- og udvælgelsesarbejdet

9. Jan Ole Similä
Kontraktsledelse
Relasjonen mellom virksomhetsledelse og kontraktshåndtering, belyst via fire norske virksomheter

10. Susanne Boch Waldorff
Emerging Organizations: In between local translation, institutional logics and discourse

11. Brian Kane
Performance Talk
Next Generation Management of Organizational Performance

12. Lars Ohnemus
Brand Thrust: Strategic Branding and Shareholder Value
An Empirical Reconciliation of two Critical Concepts

13. Jesper Schlamovitz
Håndtering af usikkerhed i film- og byggeprojekter

14. Tommy Moesby-Jensen
Det faktiske livs forbindtlighed
Førsokratisk informeret, ny-aristotelisk ἦθος-tænkning hos Martin Heidegger

15. Christian Fich
Two Nations Divided by Common Values
French National Habitus and the Rejection of American Power

16. Peter Beyer
Processer, sammenhængskraft og fleksibilitet
Et empirisk casestudie af omstillingsforløb i fire virksomheder

17. Adam Buchhorn
Markets of Good Intentions
Constructing and Organizing Biogas Markets Amid Fragility and Controversy

18. Cecilie K. Moesby-Jensen
Social læring og fælles praksis
Et mixed method studie, der belyser læringskonsekvenser af et lederkursus for et praksisfællesskab af offentlige mellemledere

19. Heidi Boye
Fødevarer og sundhed i senmodernismen
– En indsigt i hyggefænomenet og de relaterede fødevarepraksisser

20. Kristine Munkgård Pedersen
Flygtige forbindelser og midlertidige mobiliseringer
Om kulturel produktion på Roskilde Festival

21. Oliver Jacob Weber
Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective

22. Susanne Ekman
Authority and Autonomy
Paradoxes of Modern Knowledge Work

23. Anette Frey Larsen
Kvalitetsledelse på danske hospitaler
– Ledelsernes indflydelse på introduktion og vedligeholdelse af kvalitetsstrategier i det danske sundhedsvæsen

24. Toyoko Sato
Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire

25. Kenneth Brinch Jensen
Identifying the Last Planner System
Lean management in the construction industry

26. Javier Busquets
Orchestrating Network Behavior for Innovation

27. Luke Patey
The Power of Resistance: India's National Oil Company and International Activism in Sudan

28. Mette Vedel
Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position

29. Kristian Tørning
Knowledge Management Systems in Practice – A Work Place Study

30. Qingxin Shi
An Empirical Study of Thinking Aloud Usability Testing from a Cultural Perspective

31. Tanja Juul Christiansen
Corporate blogging: Medarbejderes kommunikative handlekraft

32. Malgorzata Ciesielska
Hybrid Organisations.
A study of the Open Source – business setting

33. Jens Dick-Nielsen
Three Essays on Corporate Bond Market Liquidity

34. Sabrina Speiermann
Modstandens Politik
Kampagnestyring i Velfærdsstaten.
En diskussion af trafikkampagners styringspotentiale

35. Julie Uldam
Fickle Commitment. Fostering political engagement in 'the flighty world of online activism'

36. Annegrete Juul Nielsen
Traveling technologies and transformations in health care

37. Athur Mühlen-Schulte
Organising Development
Power and Organisational Reform in the United Nations Development Programme

38. Louise Rygaard Jonas
Branding på butiksgulvet
Et case-studie af kultur- og identitetsarbejdet i Kvickly

2011

1. Stefan Fraenkel
Key Success Factors for Sales Force Readiness during New Product Launch
A Study of Product Launches in the Swedish Pharmaceutical Industry

2. Christian Plesner Rossing
International Transfer Pricing in Theory and Practice

3. Tobias Dam Hede
Samtalekunst og ledelsesdisciplin
– en analyse af coachingsdiskursens genealogi og governmentality

4. Kim Pettersson
Essays on Audit Quality, Auditor Choice, and Equity Valuation

5. Henrik Merkelsen
The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication

6. Simon S. Torp
Employee Stock Ownership:
Effect on Strategic Management and Performance

7. Mie Harder
Internal Antecedents of Management Innovation

8. Ole Helby Petersen
Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland

9. Morten Krogh Petersen
'Good' Outcomes. Handling Multiplicity in Government Communication

10. Kristian Tangsgaard Hvelplund
Allocation of cognitive resources in translation - an eye-tracking and key-logging study

11. Moshe Yonatany
The Internationalization Process of Digital Service Providers

12. Anne Vestergaard
Distance and Suffering
Humanitarian Discourse in the age of Mediatization

13. Thorsten Mikkelsen
Personligsheds indflydelse på forretningsrelationer

14. Jane Thostrup Jagd
Hvorfor fortsætter fusionsbølgen udover "the tipping point"?
– en empirisk analyse af information og kognitioner om fusioner

15. Gregory Gimpel
Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making

16. Thomas Stengade Sønderskov
Den nye mulighed
Social innovation i en forretningsmæssig kontekst

17. Jeppe Christoffersen
Donor supported strategic alliances in developing countries

18. Vibeke Vad Baunsgaard
Dominant Ideological Modes of Rationality: Cross functional

integration in the process of product innovation

19. Throstur Olaf Sigurjonsson
Governance Failure and Icelands's Financial Collapse

20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets

21. Heidi Tscherning
Mobile Devices in Social Contexts

22. Birgitte Gorm Hansen
Adapting in the Knowledge Economy Lateral Strategies for Scientists and Those Who Study Them

23. Kristina Vaarst Andersen
Optimal Levels of Embeddedness The Contingent Value of Networked Collaboration

24. Justine Grønbæk Pors
Noisy Management A History of Danish School Governing from 1970-2010

25. Stefan Linder
Micro-foundations of Strategic Entrepreneurship Essays on Autonomous Strategic Action

26. Xin Li
Toward an Integrative Framework of National Competitiveness An application to China

27. Rune Thorbjørn Clausen
Værdifuld arkitektur Et eksplorativt studie af bygningers rolle i virksomheders værdiskabelse

28. Monica Viken
Markedsundersøkelser som bevis i varemerke- og markedsføringsrett

29. Christian Wymann
Tattooing The Economic and Artistic Constitution of a Social Phenomenon

30. Sanne Frandsen
Productive Incoherence A Case Study of Branding and Identity Struggles in a Low-Prestige Organization

31. Mads Stenbo Nielsen
Essays on Correlation Modelling

32. Ivan Häuser
Følelse og sprog Etablering af en ekspressiv kategori, eksemplificeret på russisk

33. Sebastian Schwenen
Security of Supply in Electricity Markets

2012

1. Peter Holm Andreasen
The Dynamics of Procurement Management - A Complexity Approach

2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment

3. Line Kirkegaard
Konsulenten i den anden nat En undersøgelse af det intense arbejdsliv

4. Tonny Stenheim
Decision usefulness of goodwill under IFRS

5. Morten Lind Larsen
Produktivitet, vækst og velfærd Industrirådet og efterkrigstidens Danmark 1945 - 1958

6. Petter Berg
Cartel Damages and Cost Asymmetries

7. Lynn Kahle
Experiential Discourse in Marketing A methodical inquiry into practice and theory

8. Anne Roelsgaard Obling
Management of Emotions in Accelerated Medical Relationships

9. Thomas Frandsen
Managing Modularity of Service Processes Architecture

10. Carina Christine Skovmøller
CSR som noget særligt
Et casestudie om styring og meningsskabelse i relation til CSR ud fra en intern optik

11. Michael Tell
Fradragsbeskæring af selskabers finansieringsudgifter
En skatteretlig analyse af SEL §§ 11, 11B og 11C

12. Morten Holm
Customer Profitability Measurement Models
Their Merits and Sophistication across Contexts

13. Katja Joo Dyppel
Beskatning af derivater
En analyse af dansk skatteret

14. Esben Anton Schultz
Essays in Labor Economics
Evidence from Danish Micro Data

15. Carina Risvig Hansen
"Contracts not covered, or not fully covered, by the Public Sector Directive"

16. Anja Svejgaard Pors
Iværksættelse af kommunikation
- patientfigurer i hospitalets strategiske kommunikation

17. Frans Bévort
Making sense of management with logics
An ethnographic study of accountants who become managers

18. René Kallestrup
The Dynamics of Bank and Sovereign Credit Risk

19. Brett Crawford
Revisiting the Phenomenon of Interests in Organizational Institutionalism
The Case of U.S. Chambers of Commerce

20. Mario Daniele Amore
Essays on Empirical Corporate Finance

21. Arne Stjernholm Madsen
The evolution of innovation strategy
Studied in the context of medical device activities at the pharmaceutical company Novo Nordisk A/S in the period 1980-2008

22. Jacob Holm Hansen
Is Social Integration Necessary for Corporate Branding?
A study of corporate branding strategies at Novo Nordisk

23. Stuart Webber
Corporate Profit Shifting and the Multinational Enterprise

24. Helene Ratner
Promises of Reflexivity
Managing and Researching Inclusive Schools

25. Therese Strand
The Owners and the Power: Insights from Annual General Meetings

26. Robert Gavin Strand
In Praise of Corporate Social Responsibility Bureaucracy

27. Nina Sormunen
Auditor's going-concern reporting
Reporting decision and content of the report

28. John Bang Mathiasen
Learning within a product development working practice:
- an understanding anchored in pragmatism

29. Philip Holst Riis
Understanding Role-Oriented Enterprise Systems: From Vendors to Customers

30. Marie Lisa Dacanay
Social Enterprises and the Poor
Enhancing Social Entrepreneurship and Stakeholder Theory

31. Fumiko Kano Glückstad
Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge

32. Henrik Barslund Fosse
Empirical Essays in International Trade

33. Peter Alexander Albrecht
Foundational hybridity and its reproduction
Security sector reform in Sierra Leone

34. Maja Rosenstock
CSR - hvor svært kan det være? Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi

35. Jeanette Rasmussen
Tweens, medier og forbrug
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug

36. Ib Tunby Gulbrandsen
'This page is not intended for a US Audience'
A five-act spectacle on online communication, collaboration & organization.

37. Kasper Aalling Teilmann
Interactive Approaches to Rural Development

38. Mette Mogensen
The Organization(s) of Well-being and Productivity
(Re)assembling work in the Danish Post

39. Søren Friis Møller
From Disinterestedness to Engagement
Towards Relational Leadership In the Cultural Sector

40. Nico Peter Berhausen
Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks

41. Balder Onarheim
Creativity under Constraints
Creativity as Balancing 'Constrainedness'

42. Haoyong Zhou
Essays on Family Firms

43. Elisabeth Naima Mikkelsen
Making sense of organisational conflict
An empirical study of enacted sensemaking in everyday conflict at work

2013

1. Jacob Lyngsie
Entrepreneurship in an Organizational Context

2. Signe Groth-Brodersen
Fra ledelse til selvet
En socialpsykologisk analyse af forholdet imellem selvledelse, ledelse og stress i det moderne arbejdsliv

3. Nis Høyrup Christensen
Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China

4. Christian Edelvold Berg
As a matter of size
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS

5. Christine D. Isakson
Coworker Influence and Labor Mobility
Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry

6. Niels Joseph Jerne Lennon
Accounting Qualities in Practice
Rhizomatic stories of representational faithfulness, decision making and control

7. Shannon O'Donnell
Making Ensemble Possible
How special groups organize for collaborative creativity in conditions of spatial variability and distance

8. Robert W. D. Veitch
Access Decisions in a Partly-Digital World
Comparing Digital Piracy and Legal Modes for Film and Music

9. Marie Mathiesen
Making Strategy Work
An Organizational Ethnography

10. Arisa Shollo
The role of business intelligence in organizational decision-making

11. Mia Kaspersen
The construction of social and environmental reporting

12. Marcus Møller Larsen
The organizational design of offshoring

13. Mette Ohm Rørdam
EU Law on Food Naming
The prohibition against misleading names in an internal market context

14. Hans Peter Rasmussen
GIV EN GED!
Kan giver-idealtyper forklare støtte til velgørenhed og understøtte relationsopbygning?

15. Ruben Schachtenhaufen
Fonetisk reduktion i dansk

16. Peter Koerver Schmidt
Dansk CFC-beskatning
I et internationalt og komparativt perspektiv

17. Morten Froholdt
Strategi i den offentlige sektor
En kortlægning af styringsmæssig kontekst, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser

18. Annette Camilla Sjørup
Cognitive effort in metaphor translation
An eye-tracking and key-logging study

19. Tamara Stucchi
The Internationalization of Emerging Market Firms:
A Context-Specific Study

20. Thomas Lopdrup-Hjorth
"Let's Go Outside":
The Value of Co-Creation

21. Ana Alačovska
Genre and Autonomy in Cultural Production
The case of travel guidebook production

22. Marius Gudmand-Høyer
Stemningssindssygdommenes historie i det 19. århundrede
Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelseslivs relative autonomi.
En problematiserings- og erfarings-analytisk undersøgelse

23. Lichen Alex Yu
Fabricating an S&OP Process
Circulating References and Matters of Concern

24. Esben Alfort
The Expression of a Need
Understanding search

25. Trine Pallesen
Assembling Markets for Wind Power
An Inquiry into the Making of Market Devices

26. Anders Koed Madsen
Web-Visions
Repurposing digital traces to organize social attention

27. Lærke Højgaard Christiansen
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS

28. Tommy Kjær Lassen
EGENTLIG SELVLEDELSE
En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement

29. Morten Rossing
Local Adaption and Meaning Creation in Performance Appraisal

30. Søren Obed Madsen
Lederen som oversætter
Et oversættelsesteoretisk perspektiv på strategisk arbejde

31. Thomas Høgenhaven
Open Government Communities
Does Design Affect Participation?

32. Kirstine Zinck Pedersen
Failsafe Organizing?
A Pragmatic Stance on Patient Safety

33. Anne Petersen
Hverdagslogikker i psykiatrisk arbejde
En institutionsetnografisk undersøgelse af hverdagen i psykiatriske organisationer

34. Didde Maria Humle
Fortællinger om arbejde

35. Mark Holst-Mikkelsen
Strategieksekvering i praksis
– barrierer og muligheder!

36. Malek Maalouf
Sustaining lean
Strategies for dealing with organizational paradoxes

37. Nicolaj Tofte Brenneche
Systemic Innovation In The Making
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEEIT

38. Morten Gylling
The Structure of Discourse
A Corpus-Based Cross-Linguistic Study

39. Binzhang YANG
Urban Green Spaces for Quality Life
- Case Study: the landscape architecture for people in Copenhagen

40. Michael Friis Pedersen
Finance and Organization:
The Implications for Whole Farm Risk Management

41. Even Fallan
Issues on supply and demand for environmental accounting information

42. Ather Nawaz
Website user experience
A cross-cultural study of the relation between users´ cognitive style, context of use, and information architecture of local websites

43. Karin Beukel
The Determinants for Creating Valuable Inventions

44. Arjan Markus
External Knowledge Sourcing and Firm Innovation
Essays on the Micro-Foundations of Firms' Search for Innovation

2014

1. Solon Moreira
Four Essays on Technology Licensing and Firm Innovation

2. Karin Strzeletz Ivertsen
Partnership Drift in Innovation Processes
A study of the Think City electric car development

3. Kathrine Hoffmann Pii
Responsibility Flows in Patient-centred Prevention

4. Jane Bjørn Vedel
Managing Strategic Research
An empirical analysis of science-industry collaboration in a pharmaceutical company

5. Martin Gylling
Processuel strategi i organisationer
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation

6. Linne Marie Lauesen
Corporate Social Responsibility in the Water Sector: How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic

7. Maggie Qiuzhu Mei
LEARNING TO INNOVATE: The role of ambidexterity, standard, and decision process

8. Inger Høedt-Rasmussen
Developing Identity for Lawyers Towards Sustainable Lawyering

9. Sebastian Fux
Essays on Return Predictability and Term Structure Modelling

10. Thorbjørn N. M. Lund-Poulsen
Essays on Value Based Management

11. Oana Brindusa Albu
Transparency in Organizing: A Performative Approach

12. Lena Olaison
Entrepreneurship at the limits

13. Hanne Sørum
DRESSED FOR WEB SUCCESS? An Empirical Study of Website Quality in the Public Sector

14. Lasse Folke Henriksen
Knowing networks How experts shape transnational governance

15. Maria Halbinger
Entrepreneurial Individuals Empirical Investigations into Entrepreneurial Activities of Hackers and Makers

16. Robert Spliid
Kapitalfondenes metoder og kompetencer

17. Christiane Stelling
Public-private partnerships & the need, development and management of trusting A processual and embedded exploration

18. Marta Gasparin
Management of design as a translation process

19. Kåre Moberg
Assessing the Impact of Entrepreneurship Education From ABC to PhD

20. Alexander Cole
Distant neighbors Collective learning beyond the cluster

21. Martin Møller Boje Rasmussen
Is Competitiveness a Question of Being Alike? How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007

22. Anders Ravn Sørensen
Studies in central bank legitimacy, currency and national identity Four cases from Danish monetary history

23. Nina Bellak
Can Language be Managed in International Business? Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)

24. Rikke Kristine Nielsen
Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC The Case of 'Group Mindset' in Solar A/S.

25. Rasmus Koss Hartmann
User Innovation inside government Towards a critically performative foundation for inquiry

26. Kristian Gylling Olesen
Flertydig og emergerende ledelse i folkeskolen
Et aktør-netværksteoretisk ledelses-studie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole

27. Troels Riis Larsen
Kampen om Danmarks omdømme 1945-2010
Omdømmearbejde og omdømmepolitik

28. Klaus Majgaard
Jagten på autenticitet i offentlig styring

29. Ming Hua Li
Institutional Transition and Organizational Diversity:
Differentiated internationalization strategies of emerging market state-owned enterprises

30. Sofie Blinkenberg Federspiel
IT, organisation og digitalisering:
Institutionelt arbejde i den kommunale digitaliseringsproces

31. Elvi Weinreich
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig – er Diplomuddannelsens lederprofil svaret?

32. Ellen Mølgaard Korsager
Self-conception and image of context in the growth of the firm – A Penrosian History of Fiberline Composites

33. Else Skjold
The Daily Selection

34. Marie Louise Conradsen
The Cancer Centre That Never Was
The Organisation of Danish Cancer Research 1949-1992

35. Virgilio Failla
Three Essays on the Dynamics of Entrepreneurs in the Labor Market

36. Nicky Nedergaard
Brand-Based Innovation
Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation

37. Mads Gjedsted Nielsen
Essays in Real Estate Finance

38. Kristin Martina Brandl
Process Perspectives on Service Offshoring

39. Mia Rosa Koss Hartmann
In the gray zone
With police in making space for creativity

40. Karen Ingerslev
Healthcare Innovation under The Microscope
Framing Boundaries of Wicked Problems

41. Tim Neerup Themsen
Risk Management in large Danish public capital investment programmes

2015

1. Jakob Ion Wille
Film som design
Design af levende billeder i film og tv-serier

2. Christiane Mossin
Interzones of Law and Metaphysics
Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights

3. Thomas Tøth
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION
An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services

4. Steven Højlund
Evaluation Use in Evaluation Systems – The Case of the European Commission

5. Julia Kirch Kirkegaard
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER
A CONSTRUCTIVIST INQUIRY INTO CHINA'S PRAGMATICS OF GREEN MARKETISATION MAPPING CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER

6. Michelle Carol Antero
A Multi-case Analysis of the Development of Enterprise Resource Planning Systems (ERP) Business Practices

Morten Friis-Olivarius
The Associative Nature of Creativity

7. Mathew Abraham
New Cooperativism:
A study of emerging producer organisations in India

8. Stine Hedegaard
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or ganizational identity in a sustainability context

9. Cecilie Glerup
Organizing Science in Society – the conduct and justification of resposible research

10. Allan Salling Pedersen
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.

11. Nihat Misir
A Real Options Approach to Determining Power Prices

12. Mamdouh Medhat
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES

13. Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing

14. Eva Pallesen
In the rhythm of welfare creation
A relational processual investigation moving beyond the conceptual horizon of welfare management

15. Gouya Harirchi
In Search of Opportunities: Three Essays on Global Linkages for Innovation

16. Lotte Holck
Embedded Diversity: A critical ethnographic study of the structural tensions of organizing diversity

17. Jose Daniel Balarezo
Learning through Scenario Planning

18. Louise Pram Nielsen
Knowledge dissemination based on terminological ontologies. Using eye tracking to further user interface design.

19. Sofie Dam
PUBLIC-PRIVATE PARTNERSHIPS FOR INNOVATION AND SUSTAINABILITY TRANSFORMATION
An embedded, comparative case study of municipal waste management in England and Denmark

20. Ulrik Hartmyer Christiansen
Follwoing the Content of Reported Risk Across the Organization

21. Guro Refsum Sanden
Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies.

22. Linn Gevoll
Designing performance management for operational level
- A closer look on the role of design choices in framing coordination and motivation

23. Frederik Larsen
Objects and Social Actions – on Second-hand Valuation Practices

24. Thorhildur Hansdottir Jetzek
The Sustainable Value of Open Government Data
Uncovering the Generative Mechanisms of Open Data through a Mixed Methods Approach

25. Gustav Toppenberg
Innovation-based M&A – Technological-Integration Challenges – The Case of Digital-Technology Companies

26. Mie Plotnikof
Challenges of Collaborative Governance
An Organizational Discourse Study of Public Managers' Struggles with Collaboration across the Daycare Area

27. Christian Garmann Johnsen
Who Are the Post-Bureaucrats? A Philosophical Examination of the Creative Manager, the Authentic Leader and the Entrepreneur

28. Jacob Brogaard-Kay
Constituting Performance Management A field study of a pharmaceutical company

29. Rasmus Ploug Jenle
Engineering Markets for Control: Integrating Wind Power into the Danish Electricity System

30. Morten Lindholst
Complex Business Negotiation: Understanding Preparation and Planning

31. Morten Grynings
TRUST AND TRANSPARENCY FROM AN ALIGNMENT PERSPECTIVE

32. Peter Andreas Norn
Byregimer og styringsevne: Politisk lederskab af store byudviklingsprojekter

33. Milan Miric
Essays on Competition, Innovation and Firm Strategy in Digital Markets

34. Sanne K. Hjordrup
The Value of Talent Management Rethinking practice, problems and possibilities

35. Johanna Sax
Strategic Risk Management – Analyzing Antecedents and Contingencies for Value Creation

36. Pernille Rydén
Strategic Cognition of Social Media

37. Mimmi Sjöklint
The Measurable Me - The Influence of Self-tracking on the User Experience

38. Juan Ignacio Staricco
Towards a Fair Global Economic Regime? A critical assessment of Fair Trade through the examination of the Argentinean wine industry

39. Marie Henriette Madsen
Emerging and temporary connections in Quality work

40. Yangfeng CAO
Toward a Process Framework of Business Model Innovation in the Global Context
Entrepreneurship-Enabled Dynamic Capability of Medium-Sized Multinational Enterprises

41. Carsten Scheibye
Enactment of the Organizational Cost Structure in Value Chain Configuration A Contribution to Strategic Cost Management

2016

1. Signe Sofie Dyrby
Enterprise Social Media at Work

2. Dorte Boesby Dahl
The making of the public parking attendant
Dirt, aesthetics and inclusion in public service work

3. Verena Girschik
Realizing Corporate Responsibility Positioning and Framing in Nascent Institutional Change

4. Anders Ørding Olsen
IN SEARCH OF SOLUTIONS
Inertia, Knowledge Sources and Diversity in Collaborative Problem-solving

5. Pernille Steen Pedersen
Udkast til et nyt copingbegreb
En kvalifikation af ledelsesmuligheder for at forebygge sygefravær ved psykiske problemer.

6. Kerli Kant Hvass
Weaving a Path from Waste to Value: Exploring fashion industry business models and the circular economy

7. Kasper Lindskow
Exploring Digital News Publishing Business Models – a production network approach

8. Mikkel Mouritz Marfelt
The chameleon workforce: Assembling and negotiating the content of a workforce

9. Marianne Bertelsen
Aesthetic encounters
Rethinking autonomy, space & time in today's world of art

10. Louise Hauberg Wilhelmsen
EU PERSPECTIVES ON INTERNATIONAL COMMERCIAL ARBITRATION

11. Abid Hussain
On the Design, Development and Use of the Social Data Analytics Tool (SODATO): Design Propositions, Patterns, and Principles for Big Social Data Analytics

12. Mark Bruun
Essays on Earnings Predictability

13. Tor Bøe-Lillegraven
BUSINESS PARADOXES, BLACK BOXES, AND BIG DATA: BEYOND ORGANIZATIONAL AMBIDEXTERITY

14. Hadis Khonsary-Atighi
ECONOMIC DETERMINANTS OF DOMESTIC INVESTMENT IN AN OIL-BASED ECONOMY: THE CASE OF IRAN (1965-2010)

15. Maj Lervad Grasten
Rule of Law or Rule by Lawyers?
On the Politics of Translation in Global Governance

16. Lene Granzau Juel-Jacobsen
SUPERMARKEDETS MODUS OPERANDI – en hverdagssociologisk undersøgelse af forholdet mellem rum og handlen og understøtte relationsopbygning?

17. Christine Thalsgård Henriques
In search of entrepreneurial learning – Towards a relational perspective on incubating practices?

18. Patrick Bennett
Essays in Education, Crime, and Job Displacement

19. Søren Korsgaard
Payments and Central Bank Policy

20. Marie Kruse Skibsted
Empirical Essays in Economics of Education and Labor

21. Elizabeth Benedict Christensen
The Constantly Contingent Sense of Belonging of the 1.5 Generation Undocumented Youth
An Everyday Perspective

22. Lasse J. Jessen
Essays on Discounting Behavior and Gambling Behavior

23. Kalle Johannes Rose
Når stifterviljen dør…
Et retsøkonomisk bidrag til 200 års juridisk konflikt om ejendomsretten

24. Andreas Søeborg Kirkedal
Danish Stød and Automatic Speech Recognition

25. Ida Lunde Jørgensen
Institutions and Legitimations in Finance for the Arts

26. Olga Rykov Ibsen
An empirical cross-linguistic study of directives: A semiotic approach to the sentence forms chosen by British, Danish and Russian speakers in native and ELF contexts

27. Desi Volker
Understanding Interest Rate Volatility

28. Angeli Elizabeth Weller
Practice at the Boundaries of Business Ethics & Corporate Social Responsibility

29. Ida Danneskiold-Samsøe
Levende læring i kunstneriske organisationer
En undersøgelse af læringsprocesser mellem projekt og organisation på Aarhus Teater

30. Leif Christensen
Quality of information – The role of internal controls and materiality

31. Olga Zarzecka
Tie Content in Professional Networks

32. Henrik Mahncke
De store gaver
- Filantropiens gensidighedsrelationer i teori og praksis

33. Carsten Lund Pedersen
Using the Collective Wisdom of Frontline Employees in Strategic Issue Management

34. Yun Liu
Essays on Market Design

35. Denitsa Hazarbassanova Blagoeva
The Internationalisation of Service Firms

36. Manya Jaura Lind
Capability development in an off-shoring context: How, why and by whom

37. Luis R. Boscán F.
Essays on the Design of Contracts and Markets for Power System Flexibility

38. Andreas Philipp Distel
Capabilities for Strategic Adaptation: Micro-Foundations, Organizational Conditions, and Performance Implications

39. Lavinia Bleoca
The Usefulness of Innovation and Intellectual Capital in Business Performance: The Financial Effects of Knowledge Management vs. Disclosure

40. Henrik Jensen
Economic Organization and Imperfect Managerial Knowledge: A Study of the Role of Managerial Meta-Knowledge in the Management of Distributed Knowledge

41. Stine Mosekjær
The Understanding of English Emotion Words by Chinese and Japanese Speakers of English as a Lingua Franca An Empirical Study

42. Hallur Tor Sigurdarson
The Ministry of Desire - Anxiety and entrepreneurship in a bureaucracy

43. Kätlin Pulk
Making Time While Being in Time
A study of the temporality of organizational processes

44. Valeria Giacomin
Contextualizing the cluster Palm oil in Southeast Asia in global perspective (1880s–1970s)

45. Jeanette Willert
Managers' use of multiple Management Control Systems: The role and interplay of management control systems and company performance

46. Mads Vestergaard Jensen
Financial Frictions: Implications for Early Option Exercise and Realized Volatility

47. Mikael Reimer Jensen
Interbank Markets and Frictions

48. Benjamin Faigen
Essays on Employee Ownership

49. Adela Michea
Enacting Business Models
An Ethnographic Study of an Emerging Business Model Innovation within the Frame of a Manufacturing Company.

50. Iben Sandal Stjerne
Transcending organization in temporary systems
Aesthetics' organizing work and employment in Creative Industries

51. Simon Krogh
Anticipating Organizational Change

52. Sarah Netter
Exploring the Sharing Economy

53. Lene Tolstrup Christensen
State-owned enterprises as institutional market actors in the marketization of public service provision:
A comparative case study of Danish and Swedish passenger rail 1990–2015

54. Kyoung(Kay) Sun Park
Three Essays on Financial Economics

2017

1. Mari Bjerck
Apparel at work. Work uniforms and women in male-dominated manual occupations.

2. Christoph H. Flöthmann
Who Manages Our Supply Chains? Backgrounds, Competencies and Contributions of Human Resources in Supply Chain Management

3. Aleksandra Anna Rzeźnik
Essays in Empirical Asset Pricing

4. Claes Bäckman
Essays on Housing Markets

5. Kirsti Reitan Andersen
Stabilizing Sustainability in the Textile and Fashion Industry

6. Kira Hoffmann
Cost Behavior: An Empirical Analysis of Determinants and Consequences of Asymmetries

7. Tobin Hanspal
Essays in Household Finance

8. Nina Lange
Correlation in Energy Markets

9. Anjum Fayyaz
Donor Interventions and SME Networking in Industrial Clusters in Punjab Province, Pakistan

10. Magnus Paulsen Hansen
Trying the unemployed. Justification and critique, emancipation and coercion towards the 'active society'. A study of contemporary reforms in France and Denmark

11. Sameer Azizi
Corporate Social Responsibility in Afghanistan
– a critical case study of the mobile telecommunications industry

12. Malene Myhre
The internationalization of small and medium-sized enterprises: A qualitative study

13. Thomas Presskorn-Thygesen
The Significance of Normativity – Studies in Post-Kantian Philosophy and Social Theory

14. Federico Clementi
Essays on multinational production and international trade

15. Lara Anne Hale
Experimental Standards in Sustainability Transitions: Insights from the Building Sector

16. Richard Pucci
Accounting for Financial Instruments in an Uncertain World Controversies in IFRS in the Aftermath of the 2008 Financial Crisis

17. Sarah Maria Denta
Kommunale offentlige private partnerskaber Regulering I skyggen af Farumsagen

18. Christian Östlund
Design for e-training

19. Amalie Martinus Hauge
Organizing Valuations – a pragmatic inquiry

20. Tim Holst Celik
Tension-filled Governance? Exploring the Emergence, Consolidation and Reconfiguration of Legitimatory and Fiscal State-crafting

21. Christian Bason
Leading Public Design: How managers engage with design to transform public governance

22. Davide Tomio
Essays on Arbitrage and Market Liquidity

23. Simone Stæhr
Financial Analysts' Forecasts Behavioral Aspects and the Impact of Personal Characteristics

24. Mikkel Godt Gregersen
Management Control, Intrinsic Motivation and Creativity – How Can They Coexist

25. Kristjan Johannes Suse Jespersen
Advancing the Payments for Ecosystem Service Discourse Through Institutional Theory

26. Kristian Bondo Hansen
Crowds and Speculation: A study of crowd phenomena in the U.S. financial markets 1890 to 1940

27. Lars Balslev
Actors and practices – An institutional study on management accounting change in Air Greenland

28. Sven Klingler
Essays on Asset Pricing with Financial Frictions

29. Klement Ahrensbach Rasmussen
Business Model Innovation The Role of Organizational Design

30. Giulio Zichella
Entrepreneurial Cognition. Three essays on entrepreneurial behavior and cognition under risk and uncertainty

31. Richard Ledborg Hansen
En forkærlighed til det eksisterende – mellemlederens oplevelse af forandringsmodstand i organisatoriske forandringer

32. Vilhelm Stefan Holsting
Militært chefvirke: Kritik og retfærdiggørelse mellem politik og profession

33. Thomas Jensen
Shipping Information Pipeline: An information infrastructure to improve international containerized shipping

34. Dzmitry Bartalevich
Do economic theories inform policy? Analysis of the influence of the Chicago School on European Union competition policy

35. Kristian Roed Nielsen
Crowdfunding for Sustainability: A study on the potential of reward-based crowdfunding in supporting sustainable entrepreneurship

36. Emil Husted
There is always an alternative: A study of control and commitment in political organization

37. Anders Ludvig Sevelsted
Interpreting Bonds and Boundaries of Obligation. A genealogy of the emergence and development of Protestant voluntary social work in Denmark as shown through the cases of the Copenhagen Home Mission and the Blue Cross (1850 – 1950)

38. Niklas Kohl
Essays on Stock Issuance

39. Maya Christiane Flensborg Jensen
BOUNDARIES OF PROFESSIONALIZATION AT WORK An ethnography-inspired study of care workers' dilemmas at the margin

40. Andreas Kamstrup
Crowdsourcing and the Architectural Competition as Organisational Technologies

41. Louise Lyngfeldt Gorm Hansen
Triggering Earthquakes in Science, Politics and Chinese Hydropower - A Controversy Study

2018

1. Vishv Priya Kohli
Combatting Falsifi cation and Counterfeiting of Medicinal Products in the E uropean Union – A Legal Analysis

2. Helle Haurum
Customer Engagement Behavior in the context of Continuous Service Relationships

3. Nis Grünberg
The Party -state order: Essays on China's political organization and political economic institutions

4. Jesper Christensen
A Behavioral Theory of Human Capital Integration

5. Poula Marie Helth
Learning in practice

6. Rasmus Vendler Toft-Kehler
Entrepreneurship as a career? An investigation of the relationship between entrepreneurial experience and entrepreneurial outcome

7. Szymon Furtak
Sensing the Future: Designing sensor-based predictive information systems for forecasting spare part demand for diesel engines

8. Mette Brehm Johansen *Organizing patient involvement. An ethnographic study*

9. Iwona Sulinska
Complexities of Social Capital in Boards of Directors

10. Cecilie Fanøe Petersen
Award of public contracts as a means to conferring State aid: A legal analysis of the interface between public procurement law and State aid law

11. Ahmad Ahmad Barirani
Three Experimental Studies on Entrepreneurship

12. Carsten Allerslev Olsen *Financial Reporting Enforcement: Impact and Consequences*

13. Irene Christensen *New product fumbles – Organizing for the Ramp-up process*

14. Jacob Taarup-Esbensen *Managing communities – Mining MNEs' community risk management practices*

15. Lester Allan Lasrado *Set-Theoretic approach to maturity models*

16. Mia B. Münster *Intention vs. Perception of Designed Atmospheres in Fashion Stores*

17. Anne Sluhan *Non-Financial Dimensions of Family Firm Ownership: How Socioemotional Wealth and Familiness Influence Internationalization*

18. Henrik Yde Andersen *Essays on Debt and Pensions*

19. Fabian Heinrich Müller *Valuation Reversed – When Valuators are Valuated. An Analysis of the Perception of and Reaction to Reviewers in Fine-Dining*

20. Martin Jarmatz *Organizing for Pricing*

TITLER I ATV PH.D.-SERIEN

1992

1. Niels Kornum
Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995

2. Verner Worm
Nordiske virksomheder i Kina
Kulturspecifikke interaktionsrelationer ved nordiske virksomhedsetableringer i Kina

1999

3. Mogens Bjerre
Key Account Management of Complex Strategic Relationships
An Empirical Study of the Fast Moving Consumer Goods Industry

2000

4. Lotte Darsø
Innovation in the Making
Interaction Research with heterogeneous Groups of Knowledge Workers creating new Knowledge and new Leads

2001

5. Peter Hobolt Jensen
Managing Strategic Design Identities
The case of the Lego Developer Network

2002

6. Peter Lohmann
The Deleuzian Other of Organizational Change – Moving Perspectives of the Human

7. Anne Marie Jess Hansen
To lead from a distance: The dynamic interplay between strategy and strategizing – A case study of the strategic management process

2003

8. Lotte Henriksen
Videndeling
– om organisatoriske og ledelsesmæssige udfordringer ved videndeling i praksis

9. Niels Christian Nickelsen
Arrangements of Knowing: Coordinating Procedures Tools and Bodies in Industrial Production – a case study of the collective making of new products

2005

10. Carsten Ørts Hansen
Konstruktion af ledelsesteknologier og effektivitet

TITLER I DBA PH.D.-SERIEN

2007

1. Peter Kastrup-Misir
Endeavoring to Understand Market Orientation – and the concomitant co-mutation of the researched, the re searcher, the research itself and the truth

2009

1. Torkild Leo Thellefsen
Fundamental Signs and Significance effects
A Semeiotic outline of Fundamental Signs, Significance-effects, Knowledge Profiling and their use in Knowledge Organization and Branding

2. Daniel Ronzani
When Bits Learn to Walk Don't Make Them Trip. Technological Innovation and the Role of Regulation by Law in Information Systems Research: the Case of Radio Frequency Identification (RFID)

2010

1. Alexander Carnera
Magten over livet og livet som magt
Studier i den biopolitiske ambivalens