Phillip Kirst

Supplier Switching Management

An empirical analysis of supplier switching activities in an industrial context

Cuvillier Verlag Göttingen

Phillip Kirst

Supplier Switching Management

An empirical analysis of supplier switching activities in an industrial context

Cuvillier Verlag Göttingen

Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.ddb.de abrufbar.
1. Aufl. - Göttingen : Cuvillier, 2008
Zugl.: St. Gallen, Univ., Diss., 2008

978-3-86727-653-5

Nonnenstieg 8, 37075 Göttingen
Telefon: 0551-54724-0
Telefax: 0551-54724-21
www.cuvillier.de

1. Auflage, 2008
Gedruckt auf säurefreiem Papier

978-3-86727-653-5

Preface

Current market dynamics have forced industrial companies to rethink their value creation processes and have led to a concentration on core competencies. As a consequence, non-core businesses, in which companies have no distinctive capabilities have been outsourced to suppliers. Due to the subsequently decreased net added value ratio of manufacturers the influence of suppliers on a buyer's performance is strongly increased. In order to deal with the new importance of suppliers, companies are recommended to integrate activities across transaction partners to effectively deliver products to the market and to exchange resources for mutual benefit. Thus, supplier integration has become a pivotal supplier management activity of growing importance. However, recent research appears to focus only on the positive aspects of supplier integration like the possibility to reduce time to market and costs as well as the opportunity of gaining a relational rent. "The more integration and mutual adjustments the better" seems to be the dominant logic in practice and science. Nevertheless, the concept of supplier integration is problematic. It involves various dimensions and can lead to high dependencies on suppliers, which in turn decreases flexibility and generates the risk of being trapped in a suboptimal supplier-buyer relationship.

Phillip Kirst has picked up this circumstance. He questions if there is a possibility to take advantage of the benefits of supplier integration without the sacrifice of a flexible supplier-structure that enables a purchasing company to switch to another supplier if the incumbent is not suitable anymore. He argues that the concept of switching as an opportunity of improving the supplier base performance has been neglected in the scientific and practical discussion in favour of supplier development measures. In his research he states that companies have to be able to switch to another supplier if an existing one is not satisfying the needs of the organization and satisfaction can not be achieved in a timely manner and with acceptable costs.

This research on supplier switching will support companies to structure vendor replacements and to anticipate possible challenges in the switching process. Accordingly, this work helps to reduce switching costs, which are combined with a change of a closely integrated supply partner and will assist to reduce the time needed to execute the vendor switch. The work on hand consequently enhances contemporary supply- and supplier- management research and − due to this − it should experience much attention in the practical and scientific community.

St. Gallen / Switzerland, July 2008 Prof. Dr. Wolfgang Stölzle

To my family

Acknowledgements

The idea for and the major part of this research on switching integrated suppliers has emerged during my stint as a research associate at the Chair of Logistics Management, University of St.Gallen (HSG) in Switzerland. Since May 2007, I have had the chance to finalize the thesis project at the Department of Operations Management at the Copenhagen Business School (CBS) in Denmark. The work addresses scientists as well as practitioners who are interested in a comparably comprehensive disquisition on supplier switches and a holistic theoretical-conceptual foundation of this phenomenon.

Working on this thesis has been simultaneously challenging and rewarding and I consider it very important to mention that the completion of this dissertation would not have been possible without the strong support given by a number of people, all of whom I would like to thank on this occasion. I feel greatly indebted to my thesis supervisor Prof. Dr. Wolfgang Stölzle. Through his demanding, yet supportive business ethics, he has challenged me to bring out the best of myself and thus enabled me to experience a steep learning curve. I also cordially thank Prof. Dr. Walter Brenner as my co-supervisor for his time investment and his support for my stay in Denmark. Additionally, I would like to thank all of my supporters at CBS in Denmark, and especially Prof. Dr. Herbert Kotzab, who has provided me with an ideal working environment which has made a rapid completion of the thesis possible. Furthermore, I would like to thank Prof. Tage Skjøtt-Larsen (PhD) for several inspiring discussions.

I am very grateful to all the interviewees of the case studies that agreed to participate in this research, donating time and sharing valuable information. Due to confidentiality considerations, they cannot be listed by name but they should know that it has been a great pleasure for me to learn from their experiences.

I would also like to thank all my colleagues of the Chair of Logistics Management for their support. In particular, I would like to thank Dr. Erik Hofmann for his personal effort and constructive feedback on my thesis. Additional thanks go to my friend and colleague Harald Bachmann, who provided me with various suggestions for improvement and strong support in every respect. Furthermore, my gratitude for countless discussions and an amicable working atmosphere goes to Dr. Joerg Hofstetter, Florian Hofer, Nils Peters, Kay Oppat, and Elias Halsband.

Finally, I would like to express my greatest gratitude to my parents Helga and Rudolf Kirst, my uncle Jürgen Kirst, and my sister Claudia Kirst. I could always be sure of their encouragement and their unconditional support of my academic path. They have provided me with the long-term environment that has made this doctoral thesis possible. Hence, this work is dedicated to them – my family.

Bremen / Germany March 2008 *Phillip Kirst*

Table of contents

Acknowledgements ..... **VII**

Table of contents ..... **VIII**

List of figures ..... **XI**

List of tables ..... **XIII**

List of abbreviations ..... **XIV**

1 Introduction and relevance of this research on supplier switching **1**

1.1 Background and the problem of the research on supplier switching 2

1.2 Objectives and questions of research on supplier switching 8

1.3 Positioning the research within scientific theory 12

1.4 Outline of the dissertation 22

2 Supplier switching from a theoretical point of view **24**

2.1 Origins and benefits of supplier integration and their effect on supplier switching 25

2.1.1 Supplier switching in the context of supply management 26

2.1.2 Supplier switching in the context of supplier management 31

2.1.3 Drivers and benefits of supplier integration and their impact on the switching environment 40

2.2 Disadvantages of supplier integration and their impact on supplier switching 50

2.2.1 Challenges of integrated supplier-buyer relationships as drivers for supplier switches 50

2.2.2 Supplier switching as one reaction strategy related to supplier weaknesses, its barriers and its impact 56

2.3 Structuring conceptual elements of supplier switching 71

2.3.1 The disengager, the old and new supplier, and further actors of supplier switching 71

2.3.2 Interrelation layers between actors in the supplier switch 74

2.3.3 The division of supplier switches into the switching decision, execution, and success evaluation phase 78

2.4 Theoretical aspects of supplier switching 83

2.4.1 Transaction cost economics and its contribution to supplier switching 83

2.4.2 The relational view and its contribution to supplier switching 89

2.4.3 Social exchange theory and its contribution to supplier switching 95

2.4.4 An eclectic explanation approach for the reasons, objectives and success of supplier switches 101

2.5 The phase-based theoretical-conceptual framework of supplier switching 110

3 Empirical research on supplier switching 113

3.1 Empirical research design for exploring supplier switching 113

3.2 Supplier switching case studies 119

3.2.1 Introduction to the empirical case study reports 119

3.2.2 Case company “A” 120

3.2.3 Case company “B” 129

3.2.4 Case company “C” 136

3.2.5 Case company “D” 143

3.2.6 Case company “E” 150

3.2.7 Case company “F” 159

3.3 Joint analysis of the supplier switching case studies 168

3.3.1 The disengager’s switching environment 168

3.3.2 Activities in the supplier-switching decision phase 170

3.3.3 Activities in the supplier-switching execution phase 177

3.3.4 Activities in the supplier switch success evaluation phase 188

4 Conclusions and managerial implications for successful supplier switching 194

4.1 Key findings of the research on supplier switching 194

4.2 Managerial implications for successful supplier switching 202

4.3 Recommendations for further research on supplier switching 207

References 209

Appendix A 231

List of figures

Figure 1-1: Practical and theoretical relevance of research on supplier switching 7

Figure 1-2: Research questions and the answering procedure 11

Figure 1-3: The subjectivist-objectivist dimension of research 13

Figure 1-4: The iterative process of the research on supplier switching 16

Figure 1-5: Outline of the research on supplier switching 23

Figure 2-1: Systemization of sourcing strategies 28

Figure 2-2: Scheme of supplier reduction 32

Figure 2-3: Portfolio of purchased goods and services 35

Figure 2-4: Structure of supplier development initiatives 38

Figure 2-5: Overview of supply risks 42

Figure 2-6: The emergence of competitive advantages through outsourcing and supplier integration 45

Figure 2-7: Exit, voice and loyalty framework 60

Figure 2-8: Exemplary evolution of a supplier weakness 62

Figure 2-9: Possible future development of the supplier-buyer relationship performance after EVL decisions 65

Figure 2-10: Actors involved in supplier switches 71

Figure 2-11: Change of relational linkages between the actors directly involved during supplier switches 75

Figure 2-12: The phases of supplier switching and further structuring elements 81

Figure 2-13: House of relational rents and competitive advantages 93

Figure 2-14: Components of relational rewards in the eclectic theoretical approach 103

Figure 2-15: Components of the relational effort in the eclectic theoretical approach 105

Figure 2-16: Evaluation of the disengager's satisfaction and resulting exit, voice and loyalty strategies 107

Figure 2-17: The phase-based theoretical-conceptual framework of supplier-switching 110

Figure 3-1: The multiple case study research process 115

Figure 3-2: Structure of the case studies with respect to the theoretical-conceptual framework 119

Figure 3-3: Selected condition of the disengagers' switching environments 169

Figure 3-4: Time invested in performance improvements relative to the anticipated improvement success 173

Figure 3-5: Ex ante invested resources for supplier development and their ex post perceived adequacy 175

Figure 3-6: Activities in the supplier switching decision evaluation phase 177

Figure 3-7: Dissolution strategies of the case companies 179

Figure 3-8: Integration strategies of the case companies 180

Figure 3-9: Operational problems in the supplier switching execution phase 184

Figure 3-10: Activities in the supplier-switching execution phase 188

Figure 3-11: Overall supplier switching success 192

Figure 3-12: Schematic evaluation of the supplier-switch success-evaluation activity 193

Figure 4-1: Overview of the consolidated supplier switching activities 197

Figure 4-2: Impact of relative and absolute supplier weaknesses on the competitiveness of the disengager 200

List of tables

Table 1-1: Overview of the research's position in scientific theory 21

Table 2-1: Understanding of the terms purchasing, materials management, and supply management 27

Table 2-2: Selected empirically-revealed benefits of supplier integration 48

Table 2-3: Selected disadvantages and risks of supplier integration 51

Table 2-4: Literature overview of supplier switching and related research topics 56

Table 2-5: Transaction cost economics and its contribution to research on supplier switching 89

Table 2-6: The relational view and its contribution to the research on supplier-switching 95

Table 2-7: Six satisfaction situations within the social exchange theory 98

Table 2-8: Social exchange theory and its contribution to research on supplier-switching 101

Table 2-9: Determination of outcomes and comparison-levels in the eclectic theory approach 106

Table 3-1: Built-in quality assurance tactics for the multiple case study research design 117

Table 3-2: Overview of case examples 120

Table 3-3: Core switching elements of case company "A" 129

Table 3-4: Core switching elements of case company "B" 136

Table 3-5: Core switching elements of case company "C" 143

Table 3-6: Core switching elements of case company "D" 150

Table 3-7: Core switching elements of case company "E" 158

Table 3-8: Core switching elements of case company "F" 166

Table 3-9: Overview of core elements of the case studies 167

Table 3-10: Selected changes of the relational reward and effort drivers, triggering supplier-switching decisions 171

List of abbreviations

CL = Comparison level

CL_{alt} = Comparison level of the alternative

e.g. = Exempli gratia

EMS = Electronic manufacturing services

et al. = et alia (and others)

EVL = Exit, voice, and loyalty

IT = Information technology

OEM = Original equipment manufacturer

p. = Page

pp. = Pages

RQ = Research question

1 Introduction and relevance of this research on supplier switching

Companies in the current business environment are affected by increasingly complex market dynamics that are caused by, among other things, global competition, new information and communication technologies, fastidious customers, and capital market pressures.[1] In order to compete in this challenging environment, companies have pursued strategies that either help to adapt more quickly to changes, or strategies that support stability and the reduction of complexity. For the latter, and specifically with reference to the supply side of a company, the concept of supplier integration has been strongly promoted recently. Supplier integration first requires the reduction of the number of suppliers, in order to intensify the relationship with some of the remaining ones. If the intensification of supplier-buyer relationships comprises mutual adjustments or specific investments, the supplier becomes integrated. The specificity of an investment refers to the degree to which a company can redeploy it to alternative uses without a sacrifice of productive value.[2] Thus, the more specific a certain investment becomes, the lower its value is when put to another use. Integrated supplier-buyer relationships promise benefits and increased competitiveness for both parties. On the other hand, they cause dependencies and hence an inflexibility to switch, which can be a threat for the purchasing organization if the performance of the incumbent supplier weakens unexpectedly. The practical relevance of research on supplier switching relates to the dilemma of the simultaneous need for stability through supplier integration and the flexibility of the supplier structure.[3] This work discusses the possibilities of increasing the flexibility of supplier-buyer relationships without sacrificing the benefits of supplier integration. In the perspective of the research on hand, this can be accomplished through a systematic approach to supplier switches.

As far as the scientific relevance of the research on supplier switches is concerned, it can be stated that approaches that combine supplier integration with increased flexibility of the supplier-buyer relationship structure are new. Furthermore, a gap in the scientific literature has been identified, since the research of the supplier-switching phenomenon in the context of integrated supplier-buyer relationships has been neglected in comparison to alternative reaction options – like supplier development – to supplier weakness. The following sections of this chapter explain the relevance of systematic supplier-switching approaches in further detail. Furthermore, the objective of this research with regard to supplier-switching activities will be set forth, along with the questions posed by the work. Additionally, the research will be positioned in relation to scientific theory and an outline of the work is presented at the end.

---

1 Hofmann (2004), p. 1.

2 Williamson (1991), p. 281.

3 A dilemma is a contest between conflicting imperatives, whereas an imperative is a pragmatic rule, which expresses the objective necessity for an action in such a way that the action would inevitably take place if the will were to be entirely determined by reason. van Gigch (1997), p. 383.

1.1 Background and the problem of the research on supplier switching

Generally, two distinct approaches to business research can be identified. Practical problems on the one hand reflect challenges of economic entities with certain phenomena. On the other hand, theoretical challenges exist when the literature does not offer descriptions and explanations that apply to the real world. Both approaches can be used to start the research process, which elucidates certain characteristics of the phenomena due to a synthesis of empirical knowledge and theoretical explanations. This procedure corresponds to the iterative research process of *Kubicek*.[4] The following section will provide an overview of the practical and theoretical challenges that cause the relevance of the topic.

Companies in today's business environment are subject to several trends that require an organization to adapt continuously.[5] Keeping pace with these external developments is one of the major challenges for the retention of a company's competitive position. A number of selected trends with relevance for research on supplier switches are discussed below.

First, **customer preferences** have become more volatile and diverse than ever.[6] This trend complicates the predictability of customer demands and hence increases the demand-side uncertainty of order quantities.[7] The wide range of customer requirements leads to a growing number of micro-segments that force companies to increase the number of product variations.[8] This boosts the complexity of the value-creation process and adds further challenges to those already faced by companies.[9] Organizations therefore try to reduce the diversity in certain parts and apply mass-customization strategies like modularization and postponement to limit inventory costs and obsolescence risks.[10] Furthermore, customer requirements change more rapidly and unexpectedly as the media stimulate knowledge about new products. New information technologies like the Internet substantially change the customer's demand behavior, since they increase market-transparency and comparability of product characteristics and prices. This trend forces companies to adapt quickly to customer demands. Firms need to be able to reduce prices or change the product characteristics when customer orders are dropping. Especially for complex products, companies need the technological capabilities and cost-cutting creativity of their suppliers. If the incumbent supplier is unable to keep pace with the requirements of the buyer, switching tendencies can arise.

---

4 Kubicek (1977), pp. 14.

5 For a definition of the term "environment" see Welge (1980), p. 260.

6 Giesa and Kopfer (2000), p. 43.

7 Christopher (2000), p. 37; Lee (2002), pp. 106; Hofmann (2006a), p. 75.

8 Lee (2002), p. 105.

9 Non-transparent procedures and processes, high product variety, long value creation chains, multiple hierarchical layers, a big number of non-standardized supplies and orders as well as interorganizational interfaces, all drive high complexity. Child and Diederichs (1991), pp. 53.

10 Christopher (2000), pp. 42; Lee (2002), p. 114. For a comprehensive overview of the concept of "mass customization" see Piller (2006).

A further trend that currently challenges companies relates to the **acceleration of technological advances** and **shortened product life cycles**. Both lead to clockspeed competition. The concept of clockspeed was introduced by *Fine* and describes the relationship between time and change within different industries: in high-clockspeed industries, products and processes are replaced by completely new ones in a period ranging from six months to five years. In low-clockspeed industries, the same change will take 15 to 30 years.[11] Shortened product life cycles are accompanied by increased development costs and time, which makes it even harder for a single company to accomplish cost and innovation objectives at the same time. In some industries, like the automotive business, this trend has led to the necessity to split up research and development tasks between buyers and suppliers. This has multiplied inter-organizational coordination complexity and has increased the importance of the supplier-base.[12] Switching tendencies may arise as soon as the currently used supplier is incapable of delivering innovative products at the required cost and time. Additionally, a need to switch to another supplier can arise when a product or process innovation enables the purchasing company to relinquish the purchased goods of the current supplier in favor of a completely new product from an alternative vendor.

Furthermore, **globalization** has a big impact on competition intensity and describes the ongoing process of worldwide work-division.[13] In view of the fact that international trade-barriers have been reduced, capital has become more and more mobile and employable worldwide. Since the 1990s, global sourcing in particular has gained much more attention in practice and business research.[14] Currently, the proportion of globally-sourced products relative to domestically-sourced supplies is still growing.[15] In general, the globalization and liberalization of trade intensifies the competition between companies all over the world. It enables production and sources of supply to shift to locations with the highest cost, quality, and technological advantages. This increases cost and price pressures, especially for companies in highly-developed and industrialized countries. Due to the vast number of possible suppliers all over the world, the supply market of a company becomes ever bigger. Thus, if the purchasing company performs effective supply market research, new potential suppliers, which can meet the buyer's requirements, can be discovered every day. This increases the probability that alternative suppliers can offer better prices, quality, or technology, which fosters the tendency to switch away from the incumbent supplier, if it cannot compete.

---

11 Fine (1998), p. 239.
12 Wangenheim (1998), p. 67.
13 Bundeszentrale für Politische Bildung (2007).
14 Arnold (1997), pp. 111; Koppelmann (2003), pp. 223.
15 Trent and Monczka (2002), p. 67.

In order to preserve their competitiveness in a global environment, companies have changed their way of doing business to a far-reaching extent. The **core-competence approach** in particular was implemented intensively at the end of the last millennium, and has had a big impact on today's supply structures. Core competencies can be defined *as company-specific capabilities that help companies to achieve strategic competitive advantages in a certain market.*[16] In this context, a competitive advantage can be described as follows: "*A firm experiences competitive advantages when its actions in an industry or market create economic value when few competing firms are engaging in similar actions.*"[17] However, the expression "core competence" is not defined homogeneously, but there is a common understanding of core-competence characteristics.[18] In order to define a competence as core, a company needs to have capabilities and resources that support the creation of a sustainable competitive advantage by being transferable to new products and markets, and hence deliver the basis for a broad bandwidth of new products. Furthermore, core competencies must not be easily imitable and substitutable, and need to provide a recognizable benefit that is appreciated by customers.[19] This pursuit of focusing on core competencies can lead to supplier-switching tendencies, if the core-competences of the buyer and the supplier are not compatible anymore or overlap. The first case might occur when the supplier decides to focus more on other business units than the one which is involved in the particular supplier-buyer relationship. The latter case might arise when a buyer decides to insource the production of a supply good that has previously been purchased from an external supplier, due to a redefinition of its own core-competencies.

The core-competence approach relates to **outsourcing tendencies**, which have shaped the economy for many years. Outsourcing has developed out of "make-or-buy" decisions that question whether a company should produce a certain product internally or if the latter should be sourced from an external supplier.[20] Coming from a more cost-oriented focus for the externalization of certain operations, outsourcing has become the subject of a broader understanding, including strategic motives for using external suppliers.[21] One result of outsourcing has been the extensive reduction of the net value added ratio due to outsourcing of areas in which companies have no distinctive capabilities. Up until now, the value of purchased

---

16 Prahalad and Hamel (1991), pp. 67. For a definition of competitive advantages, see Picot *et al.* (2001), pp. 523.

17 Barney (2002), p. 9.

18 Zahn (1996), pp. 885.

19 Simon (1988), p. 465; Prahalad and Hamel (1990), pp. 82; Prahalad and Hamel (1991), pp. 69; Friedrich (1995), p. 88; Bouncken (2000), p. 867; Osterloh and Frost (2000), p. 161.

20 Männel (1996), p. 148. The term "outsourcing" and "make-or-buy" are often used synonymously. Engelsleben (1999), p. 81. However, in contrast to "make-or-buy" decisions, outsourcing only comprises products and services, as well as operations, which have been produced internally before and are about to be fabricated by an external supplier. Zahn *et al.* (1999), pp. 91; Barth (2003), p. 84. This is reflected by the meaning of the term as well: Outsourcing = outside resource using. Bühner and Tuschke (1997), p. 21.

21 Bretzke (1998), p. 393.

materials, components, and systems accounts for 50 to 80% of the total cost of goods sold in many industries.[22] This situation leads to the fact that a substantial part of performance-critical activities are not under the control of buying companies anymore.[23] Thus, considering the **reduced net value added** of companies and the dynamic environment, companies have to make sure that they always have reliable and efficient access to superior resources from outside the firm boundaries.[24] In order to accomplish this goal, companies are advised to concentrate on fewer, yet integrated suppliers.[25] Some authors have emphasized that there is a chance to gain a competitive advantage through the establishment of those integrated supplier-buyer relationships.[26] It seems to be today's dominant logic in science and practice that integration of sequentially-linked organizations is a good thing and thus, the more integration, the higher the potential for gaining a competitive advantage.[27]

Some scientists have started to demand a more critical discussion of supplier integration, since the benefits of supplier integration used to come at the price of the inflexibility of the supplier structure and dependency.[28] These two aspects can cause challenges if the current supplier's performance has weakened or if the company has identified a more suitable vendor on the supply market.[29] Due to the close interrelation of the buyer and the integrated supplier, a buying firm cannot easily terminate an incumbent exchange relationship ahead of time in order to exploit the potentials of a better performing alternative supplier. Thus, the structure of these supplier-buyer relationships tends to be stiffer and hence less flexible than in arm's length relationships, which require no mutual adjustments or specific investments. Because of this inflexibility, buyers can face problems when adapting to fast-changing market conditions, and system- and relationship-specific investments between the supply partners can become obsolete as soon as they are created.[30] However, companies still need the stability and continuity of integrated supplier-buyer relationships in order to be able to focus on core competencies, decrease cost, and increase sales.[31] Nevertheless, at the same time, they need flexibility

---

22 Cammish and Keough (1991), p. 23; Arnolds et al. (1998), p. 15; Arnold (1997), p. 15; Tani and Wangenhein (1998), p. 25; Sydow and Möllering (2004), p. 23; Kaufmann and Carter (2006), p. 653; Nogatchewsky (2006), p. 89.

23 Rossetti and Choi (2005), p. 47; Stölzle and Kirst (2006), p. 240.

24 Dyer and Singh (1998); Smith (2002), p. 39.

25 Dwyer *et al.* (1987), pp. 11; Monczka and Morgan (1996), p. 110; Dyer and Singh (1998), p. 661; Frohlich and Westbrook (2001), p. 186; Wagner (2003), p. 4; Das *et al.* (2006), pp. 564; Paulraj *et al.* (2006), p. 107; Wagner and Hoegl (2006), p. 936.

26 E.g. Dyer and Singh (1998), pp. 675; Jap (1999), pp. 466; Lavie (2006), p. 638.

27 Lambert *et al.* (1998), p. 15; Bask and Juga (2001), p. 137; Bagchi and Skjøtt-Larsen (2005), p. 275.

28 E.g. Bretzke (2006), p. 12; Hofmann (2006b), pp. 11.

29 Performance in general is a multidimensional construct, which includes financial and non-financial metrics. It relates to the concepts of efficiency and effectiveness in combination with the way of achieving of multiple objectives. Performance has – besides a past- and present-oriented understanding – a future- and potential-orientated dimension. Karrer (2006), pp. 12.

30 Bask and Juga (2001), p. 149.

31 Becker *et al.* (2003), p. 19.

on the supply side in order to adapt quickly to the dynamic environment.[32] Thus, companies have to be able to integrate and operate close supplier relationships, but they simultaneously have to be capable of replacing suppliers if the latter do not satisfy the needs of the organization and satisfaction cannot be achieved at acceptable costs and within an acceptable time. This reflects the cornerstone of the practical relevance of research on supplier switching, which aims for the concurrent achievement of the benefits from supplier integration and supplier structure flexibility. It is assumed that the parallel achievement of both benefits can be accomplished through a structured approach towards supplier switching and the activities involved, which aims for a reduction of the time and cost needed to replace an integrated supplier. Furthermore, this approach can help buying firms to reduce the negative performance impacts of weak suppliers, since the switch to a better-performing vendor could be more easily achieved. However, a concept that supports companies in the switching decision, execution, and success evaluation does not exist, but can help companies to improve their ability to form, operate, and change supplier-buyer relationships. This is regarded as a key capability in today's turbulent business environments.[33]

As far as the scientific relevance of the research on supplier switches is concerned, it can be stated that approaches that combine supplier integration with increased flexibility of the supplier-buyer relationship structure are new. Despite the contribution of various scholars to the question of how to create flexible,[34] agile,[35] or semi-coupled supplier-buyer relationships,[36] research has not evoked concepts that allow the simultaneous achievement of the benefits of supplier integration and flexibility of supplier-buyer relationships.[37] Usually, the concepts emphasize the need for either one or the other. This leads to a trade-off between the benefits of flexibility and integration: each can be improved, but only at the expense of the other. This work introduces a possible way of maintaining integration benefits and accepting the disadvantage of dependency, while reducing the negative consequences of terminating the relationship with an integrated supplier and switching demands to an alternative one. This means that the roots of the negative aspects of supplier integration (dependency and inflexibility) will not be cured – only the symptoms (loss of performance, complex switching processes) are toned down.

---

[32] Christopher (2000), pp. 37.

[33] Fine (1998), p. 200.

[34] E.g. Vickery *et al.* (1999); Duclos *et al.* (2003); Martínez Sánchez and Pérez Pérez (2005).

[35] E.g. Christopher (2000); Mason-Jones *et al.* (2000); Prater *et al.* (2001).

[36] Bask (2001); Hofmann (2006a); Hofmann (2006b).

[37] Some of the literature examples cited deal with supply chains instead of dyadic supplier-buyer relationships. These two thematic focuses have to be distinguished from each other, since supply chains can comprise a broader perspective as single relationships. However, both research strings can contribute to interorganizational flexibility.

Furthermore, even though a scientific discussion about the causes of supplier switches[38] and success dimensions exists,[39] research that emphasizes the switching activities and their relationship to the switching objectives is particularly under-represented in a business-to-business context. Thus, this work aims to explore the structure of supplier-switching phenomena in an industrial environment, which enables future research to systemize and define further investigations according to a consistent research framework. In addition to that, research of the supplier switching phenomenon has in general been neglected in comparison to alternative reaction options towards a supplier weakness, such as supplier development.

A last argument, which further supports the relevance of research on supplier-switching, is that research explaining the impact of a successfully-executed supplier switch on the competitiveness of the purchasing organization is rudimentary. Thus, this research aims for an enhancement of the theoretical understanding of supplier-switching, supplier integration, supplier-buyer relationship flexibility, their interrelationships, and their relationship to competitive advantages.

Due to these unsolved challenges in practice and theory that describe the relevance of research on supplier switching, the work at hand attempts to gain empirical and theoretical insights into the reasons, activities, and success dimensions of supplier-switching in order to understand how a successful supplier switch can lead to a competitive advantage. The following figure summarizes the discussion of the relevance of this research (*Figure 1-1*).

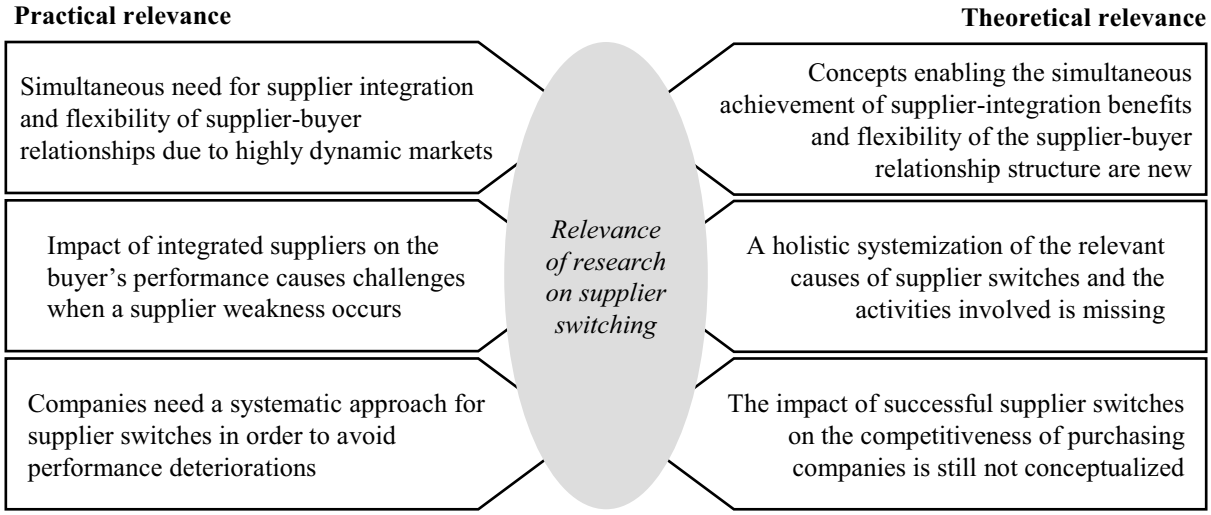


Figure 1-1: Practical and theoretical relevance of research on supplier switching

[38] E.g. Heide and Weiss (1995); Keaveney (1995).
[39] E.g. Alajoutsijärvi (2000); Arnold (2007).

1.2 Objectives and questions of research on supplier switching

Based on the discussion of the relevance of supplier-switching research, it can be stated that integrated supplier-buyer relationships seem to struggle with the highly dynamic environment due to a lack of flexibility of the relationship structure.[40] The practical and theoretical research gaps, addressed in the previous section, are taken into account in this work. This leads to a theoretical and a pragmatic research objective.

The **theoretical objective** is primarily concerned with the development of hypotheses, which explain past and present phenomena, and that can predict future phenomena.[41] Following this, the theoretic-scientific objective for the research at hand can be stated as follows:

To identify, describe, structure, and explain supplier switches with respect to the interrelationships of activities performed in the switching decision, execution, and success evaluation phases in order to explain how a successful supplier switch can help companies to gain a competitive advantage.

The theoretical research objective will be approached through the use and combination of different theories. A comprehensive understanding of the phenomenon will be developed through explanations of the reasons for switching, insights about the structure of necessary switching processes, and the discussion of the success dimensions of supplier switches. Furthermore, the theoretical objective aims for the development of a conceptual framework for supplier switches, which should assist the systematic and structured empirical analysis of real-world changes of the supplier structure.

The **pragmatic objective** is concerned with the solution of practical problems by using theoretical knowledge.[42] Those objectives aim for the acquisition of heuristic knowledge and contribute to the design and shaping of reality.[43] Hence the pragmatic objective of this research is:

To analyze different conformation models of supplier switches in real business, in order to identify improvement opportunities within the different phases of switching that can help a purchasing company to perform a successful change of its supplier-buyer relationship structure.

This objective is concerned with the exploration of supplier switches in order to identify elements that influence switching decisions, relevant management activities in the actual switching phase, and dimensions for success-evaluation purposes, and reflects the exploratory

---

[40] Verduijn (2004), p. 4; Bretzke (2006), p. 12; Hofmann (2006b), pp. 11.
[41] Lambert *et al.* (1998), p. 10; Handfield and Nichols (1999), p. 42; Vokurka *et al.* (2002), p. 19.
[42] Schanz (1977), p. 75.
[43] Abel (1979), p. 158.

nature of this research. Conformation models in general are used to shape a new reality for companies and thus represent guidelines for the improvement of a company's situation in its competitive environment. This second objective encompasses the identification of "good" practices for supplier switches with respect to the switching activities. This goal will be accomplished through a qualitative research approach, which will be described in the following chapter. Due to the qualitative and exploratory nature of this research, no causal relationship between certain practices and the switching success can be inferred, but the identified activities can be used to structure supplier switches and hence systemize future research. Thus, managerial implications are derived at the end of this research, which can be utilized in the formulation of hypotheses in future quantitative research.

In order to reduce the complex nature of supplier-switching, the research at hand incorporates three restrictions. Firstly, the research only considers **integrated and important supplier-buyer relationships**. The importance can be related to either the strategic, leverage, or bottleneck character of the supply object. Secondly, the research will hold the **perspective of the purchasing company as the disengager** since it has to secure its further supplies and can be seen as the driving power during the switch. Thirdly, only **business-to-business supplier-buyer relationships in an industrial context** are considered. This is because the net value added ratio has strongly declined within this sector over the last years, so the quality and importance of supplier-buyer relationships and the corresponding mutual adjustments have caused new challenges in supplier switches.

To achieve the stated objectives, the primary research question (RQ) is formulated as follows:

RQ_0: *How can a systematic structured switch of integrated suppliers lead to a competitive advantage for the disengager?*

The "how" signals the explorative character of the research. The unit of analysis[44] is the "supplier switch" itself. The expression "systematic structured" refers to the supplier switching activities, which shall enable the disengaging company to use an alternative supplier with a better performance than that of the incumbent vendor. The supplier's performance relates to the vendor's ability to attain desired goals and objectives.[45] This generic definition can be enhanced by using a vast range of measures of supplier performance, like transaction cost, delivery performance and supplier-buyer relationship satisfaction.[46] In the context of this work, the supplier's performance influences the purchasing company's **economic situation** (e.g. through the purchasing price and transaction costs), **technologic situation** (e.g. through the quality of the supply good or the innovativeness), and its **strategic situation** (e.g. through dependencies or a strategic match with the objectives of the purchasing company). The

---

[44] For a definition of the "unit of analysis" see Yin (2003), pp. 22.

[45] Maloni and Benton (2005), p. 56.

[46] Artz (1999), pp. 114.

improvement of at least one of these three dimensions is the assumed objective of a supplier switch. However, the improvements need to be attained in an efficient manner. Thus, the switching activities need to be systematically structured in order to consume less time and fewer resources in comparison to unprepared and sporadically-structured supplier-switching activities. This research therefore takes another **switching-related success dimension** into account, which is related to the efficiency with which the three previously mentioned success objectives have been accomplished. Furthermore, it analysis if the ex ante defined objectives of the supplier switch have been attained and thus, incorporates the strategic success dimension. This means that an achievement of economic, technological and strategic objectives is not necessarily sufficient to gain an improvement of the purchaser's competitiveness: the switch itself needs to be efficient, too. Thus, a company that is extraordinarily efficient in performing supplier switches can create economic value and has a competitive advantage.

Besides the primary research question, four more secondary research questions are developed to support an answer to the primary question. The first research question aims for descriptive testimonies. Before investigating the characteristics of supplier-switching activities, the relevance of supplier-switching in integrated supplier-buyer relationships will be discussed:

***RQ*$_1$**: *What is the challenge of switching integrated suppliers?*

The second research question targets descriptive testimonies as well. These will suggest which theories are more applicable to the exploration of supplier-switching, with a view to explaining why supplier switches happen and how these reasons are related to the different supplier-switching activities:

***RQ*$_2$**: *What are the theory-related drivers of integrated supplier-switching and how are they related to supplier-switching activities?*

The next research question will lead to explicative testimonies and aims for an exploration of the supplier-switching activity structure that help companies to achieve a better performance in practice, and hence achieve a competitive advantage. Real supplier switches will be analyzed in order to elucidate how companies currently perform supplier switches and what kind of practices they use:

***RQ*$_3$**: *How can the activities associated with switching integrated suppliers be systemized and performed in a target-oriented manner?*

Like the other questions, the last research question is exploratory in nature and aims for descriptive testimonies. It targets the definition of a "successful switch" and shall identify criteria that support the success evaluation of a supplier switch. Therefore, the research will utilize the previously derived success dimensions and integrate them into a supplier-switching context:

***RQ*$_4$**: *How can the "success" of switching integrated suppliers be defined and evaluated?*

The research questions will be answered on the basis of different theories and empirical investigations, whereas the secondary research questions will be answered first in order to support the answering of the primary research question. The following figure illustrates the research questions and their answering process (*Figure 1-2*).

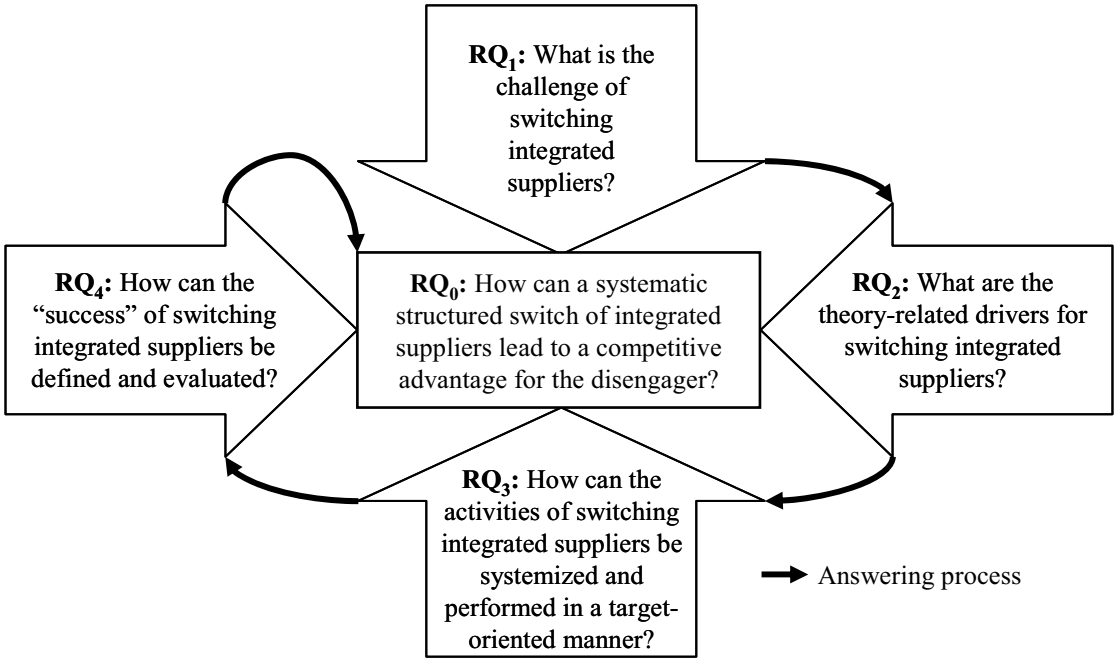


Figure 1-2: Research questions and the answering procedure

1.3 Positioning the research within scientific theory

In order to link the research questions to the outline of the research, it is appropriate to pay some attention to the scientific-theoretical position of the research in hand. The following section takes a stand regarding the position of this work within scientific theory. It will classify this work with respect to the three layers of scientific theory: the meta-methodological layer, the methodological layer and the theoretical layer. The scientific theoretical positioning can be used as an initial understanding of the research and thus determines the value of the research results.[47] Furthermore, it enables scientists and managers to frame this research in relation to other investigations in the field of supply management, supplier management, and supplier-buyer relationship management.

The theory of science or the "science of science" generally deals with the foundation and explication of scientific objectives, systems of declaration, and the development of scientific methods.[48] In other words, theory of science elaborates declarations about science, which in turn elaborates declarations about the business reality. Due to this structure of declarations, a three-layer arrangement of scientific research can be developed, in which each layer provides testimonies for the layer below it.[49]

Starting with the highest degree of abstraction, the **meta-methodological layer** provides declarations for the objectives, subject, and meta-methodology of the research. This layer primarily reflects the idea that the improvement of the understanding of the real world should be the objective of real science and, by extension, of business research.[50] Before a researcher starts investigating a certain phenomenon, which means asking "what to research" and which method to use (question: "how to research"), the meta-methodological layer will state the question of "why to research." This question is an important one to discuss, since it is interrelated with the answers to the other questions. The researcher's "why" perspective is based on the assumptions concerning the interrelated concepts of ontology, epistemology, and human nature (see *Figure 1-3*).[51] Whatever the standpoint of researchers within these concepts is, the view of ontology will affect the epistemological persuasion, which in turn affects the researcher's view of human nature, and consequently the choice of methodology. The general opposites of the assumptions can be seen as objectivism and subjectivism. In between these two extremes, varying philosophical positions are aligned:

---

47 Schanz (1990), p. 173.

48 Kuhn (1999), pp. 25.

49 Hofmann (2004), p. 11.

50 For a systematization of different kinds of science see Hill and Ulrich (1979), pp. 163 or Chmielewicz (1994), p. 33.

51 Holden and Lynch (2004), p. 407.

"*The objectivist approach to social research developed from the natural sciences - social science researchers decided to employ the highly successful methods of the natural sciences to investigate social science phenomena. However, subjectivism arose as critics argued, and continue to argue, that both sciences are disparate.*"[52]

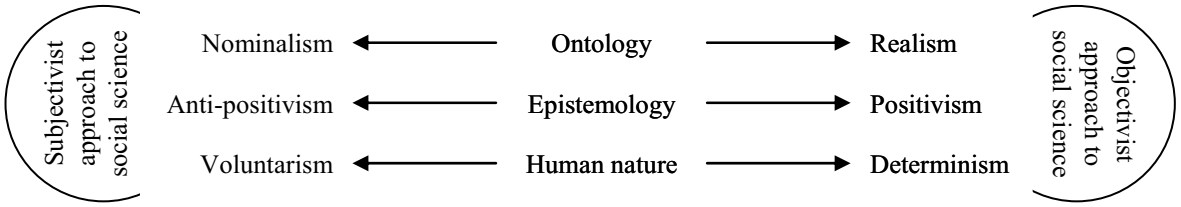


Figure 1-3: The subjectivist-objectivist dimension of research[53]

Ontology refers to the view of the nature of being and is a branch of metaphysics.[54] The knowledge-acquisition process is related to epistemology, which is concerned with how knowledge is understood and how this understanding is communicated to other people. The human nature aspect takes the role of man into account and discusses whether human beings are free in their decisions or if their actions are predetermined.

Within ontology, two opposing extremes of thought can be distinguished. "Realism" refers to the belief that reality is external to the individual and that it therefore has an objective nature. The social world is a real thing "out there," and it affects everyone in one way or another.[55] Conversely, "nominalism" refers to the doctrine that universals or general ideas are mere names without any corresponding reality. Thus, reality is seen as a product or a projection of the individual consciousness, which has been formed in an act of creative imagination and of dubious intersubjective status.[56] In general, this research into supplier switching is essentially based on the understanding of business research as an applied social science.[57] Business administration is regarded as a concept that deals with problems of the configuration, management, and development of social systems.[58] Companies are considered as complex social systems that are not fully controllable.[59] This point of view influences research on supplier-switching, since the reasons, the activities, and the success of supplier-switching are influenced by various complex interrelations between these elements and the environment. Ac-

---

52 Holden and Lynch (2004), pp. 398.
53 Related to Burrell and Morgan (1979), p. 14.
54 Morgan and Smircich (1980), pp. 492.
55 Morgan and Smircich (1980), pp. 495.
56 Morgan and Smircich (1980), pp. 494; Solem (2003), p. 138.
57 Schanz (1977), p. 75; Hill and Ulrich (1979), pp. 163.
58 Ulrich (1984), pp. 170.
59 Raffée (1989), p. 39.

cordingly, the research on the supplier switching activities[60] is related to nominalism and thus it is associated with the subjectivist perspective.

This research is concerned with the understanding of the elements of a supplier switch. Furthermore, it is assumed that researchers cannot distance themselves from the research object, the study's subject matter, the method, and chosen research design of the study. This means that the researcher is laden with inherent bias, which is determined by the researcher's background, status, interests, beliefs, skills, values, and resources.[61] Nominalism is connected to the phenomenological paradigm, which considers the world to be socially constructed and subjective, whereas realism is further connected to positivism. These are the extreme positions in the epistemological assumptions. Another popular pair of opposites within the epistemological discussion can be identified: critical rationalism[62] on the one hand and radical constructivism on the other.[63] The epistemological perspective of this research is more closely related to radical constructivism because of the formulated preperception of the supplier-switching reality. A certain switching reality has been constructed and different categories are identified during the research process. Furthermore, it is assumed that every element of supplier switching has a contextual importance.

Besides the views of ontology and epistemology, it is assumed that the nature of man influences the methodological layer and thus the research method, which will be adopted in the research on hand. The view on human nature pays attention on the question, "whether or not

---

60 In the following, "research on supplier-switching activities" and "research on supplier switching" will be used interchangeably, since it is assumed that switching suppliers always incorporates specific activities, which aim for the change of the supplier-buyer relationship structure.

61 Hunt (1993), p. 78.

62 Critical rationalism formulates the basic assumption that an objective reality exists that can be discovered in principle. For a general overview see Popper (1965). However, this reality will never be accessible directly, but can be experienced through individual perceptions; thus it should be the goal of any research to come as close as possible to the objective reality. Radnitzky and Andersson (1980), pp. 3. Critical rationalism supports the idea that theories can and should be rationally criticized, and thus that they should be examined in order to evaluate if they are true in reality. Therefore, theories have to be tested with respect to internal contradictions, their empirical basis, contribution to science, and possible practical implications. Schildknecht (1998), p. 53.

63 Radical constructivism pleads for a normative business research and a pragmatic reasoning of scientific declarations. In general, it is a philosophical theory about cognition and knowledge. Janich (1992), pp. 28. This epistemological understanding argues that there is no such thing as a pure reality that is independent of the observer's interpretation. Glasersfeld (1992), p. 23. All knowledge can be attributed to the organization of our own experiences in our own world. According to this, it is impossible to describe an absolute reality, since reality is a cybernetic cognitive process of the human brain and as a result, no objective truth exists. Glasersfeld (1992), p. 27; Weber (2000), p. 106. In the opinion of radical constructivism, the process of constructing knowledge regulates itself. Knowledge is regarded as a construct rather than an arrangement of empirical data, and it is therefore impossible to know the extent to which knowledge reflects an objective reality. Raffée and Abel (1979), p. 6. Consequently, truth should not be discovered, but should be defined in the light of a qualified consensus. In other words it should be "constructed." This solves the problem of the arbitrariness of the definition of truth, which occurs because the correspondence between linguistic constructs of scientific declarations and reality always depends on the perception of the researcher. Kirsch (1990), pp. 432.

the researcher perceives man as the controller or as the controlled."[64] Two opposing extremes can be identified concerning the view of man: *voluntarism*, which looks at man as pure and conscious beings, and *determinism*, where the human being is the responder to the environment.[65] This research on supplier switching is more closely related to voluntarism, since it is assumed that human beings are free to choose their responses to external stimuli. In a supplier-switching perspective, it means that different organizations incorporate different human beings (employees), which are the agents taking a certain standpoint with regard to supplier switches. These distinguishable employees react differently to external stimuli and thus the organization's reaction is not exactly determinable.

The next layer of scientific research is the **methodological layer**. A methodology defines the analysis of the principles of methods, rules, and postulates employed by a discipline. Furthermore, it can be understood as the doctrine of rules or as "rules for the rules."[66] This layer distinguishes between a scientific research objective and a pragmatic research objective, which have been defined in the previous chapter.[67] Both objectives cannot be pursued independently, since pragmatic objectives cannot be realized without a minimum of theoretical foundation, and theoretical results that bear no relation to the real practical world are useless.[68]

The methodological layer discusses procedures and rules for theory development and improvement. Two major approaches can be distinguished: *deductive theory testing* and *inductive theory building*. The deductive approach represents the positivist paradigm,[69] which is based on the view that the world consists of objective cause-and-effect relationships, which can be wholly or partly elucidated through observation.[70] In deductive research, the observation phase comes after the formulation of the hypothesis and the path of theory building goes from the general to the particular.[71] Other researchers have suggested inductive research approaches as an alternative approach to theory-building.[72] The inductive approach represents the phenomological paradigm.[73] The path of knowledge acquisition goes from the particular to the general. After observations of a number of single phenomena have been made, the researcher attempts to find a fundamental regularity that enables the generation of a theory.[74] However, both approaches have their downsides and cannot be followed in a pure way, due to

---

64 Holden and Lynch (2004), p. 400.
65 Solem (2003), pp. 138; Holden and Lynch (2004), p. 400.
66 Weber (2000), p. 114.
67 Schanz (1977), p. 75; Chmielewicz (1994), p. 150.
68 Hofmann (2004), p. 14.
69 Easterby-Smith *et al.* (1991), p. 24.
70 Walsham (1993), pp. 36.
71 Parkhe (1993), p. 236.
72 Bonoma (1985), p. 199.
73 Easterby-Smith *et al.* (1991), p. 24.
74 Lingnau (1995), p. 126.

the impossibility that any researcher could genuinely separate the processes of induction and deduction.[75] It is believed that prior theory and theories emerging from the data are always concurrently involved. This makes it impossible to go theory-free into any study.[76] Thus, a pragmatic mixture of both approaches is suggested for business research and will be applied for research on supplier-switching as well (*Figure 1-4*).

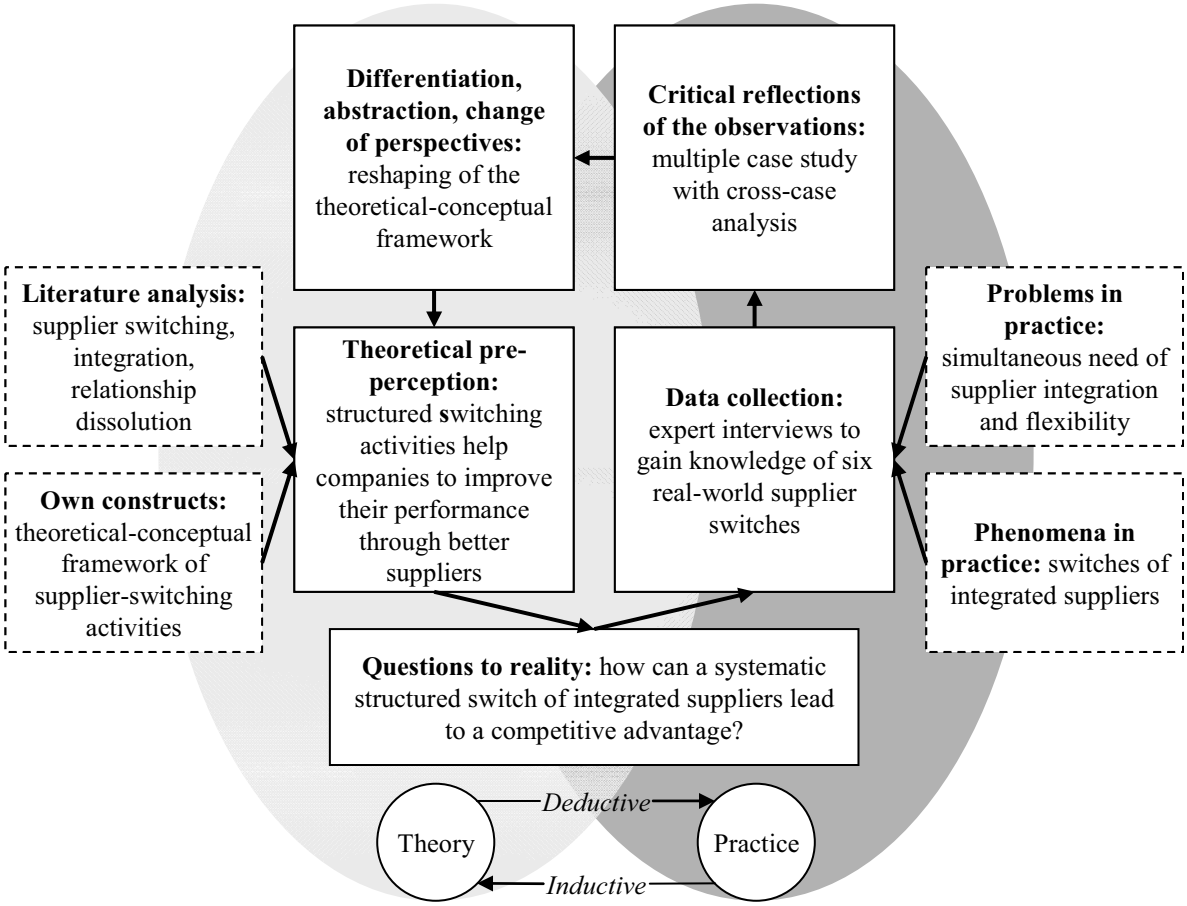


Figure 1-4: The iterative process of the research on supplier switching[77]

Unless the initial idea for research on supplier-switching has come from problems in practice, the research will start with an in-depth literature analysis that offers the opportunity to build an own theory- and literature-based framework of supplier switches. This construct leads to an own pre-perception of supplier switching and generates questions regarding reality. This part reflects deductive research. Through data-collection in six case examples of real-world supplier switches, the practical observations will be considered critically, in order to improve

---

[75] The primary downside of the deductive approach is the fact that the conclusion of the research cannot contain more information than the premises, since the validity of all findings depends solely on the quality of the logic previously employed. Bonoma (1985), p. 199. The primary downside of the inductive approach is that, whatever a researcher may find, it emerges from the observation and is not due to the imposition of a logical pattern on the data. Mitroff and Mason (1982), p. 365. Furthermore, it seems unfeasible to select the significant relationships of a phenomenon without judgment and intuition. Parkhe (1993), p. 237.

[76] Richards (1993), p. 40.

[77] Related to Kubicek (1977), pp. 14.

the theoretical preperception through a change of perspectives, abstraction, and differentiation. Through this knowledge acquisition process, the theoretical understanding of supplier-switching improves and, based on assumptions of cause and effect, recommendations can be formulated for supplier-switching in practice.

A further issue that needs to be discussed on the methodological layer is the selection of the right research method. Two streams can be distinguished and applied to empirical studies: quantitative and qualitative methods. Quantitative methods aim to test theories and models through *ex ante*-generated hypotheses,[78] whereas qualitative methods focus on the inner structure of empirically-investigated coherences.[79]

Quantitative methods are based on causal explanations following a deductive logic and critical rationalism.[80] The central ideas of quantitative methods are the isolation of cause and effect, the clear operationalization of the theoretical interrelations, and the measurability of phenomena, which all lead to models that provide general principles for the explanation of the real word.[81] The advantages of quantitative research are related to (among others) highly standardized and relatively neutral data-gathering methods (e.g. surveys), the narrow focus that allows in-depth analysis, and the exact quantified results.[82] The disadvantages of quantitative methods include the circumstance that the results are highly related to the knowledge of the researcher, and their inherent assumption that social phenomena are causal-relationship systems that can be represented and explained in the form of general principles.[83] Thus, for several areas of social science and business research, quantitative methods are not considered ideal.[84]

Qualitative methods deal with the understanding of social reality through the discovery of intentions, motives, objectives, and sense of human actions, without anticipating reality in fixed models.[85] The underlying research logic of qualitative methods is induction, which enables the researcher to extrapolate the insights gained regarding a certain phenomenon to general theories. The advantages of this method are related to the unstructuredness and openness of data-gathering methods (e.g. interviews) - since complex interrelationships in social phenomena are not easily elucidated with questionnaires - their chances of discovering

---

78 Schnell *et al.* (1995), pp. 109.

79 Becker (1993), p. 112.

80 Mayring (2002), p. 12 and pp. 36.

81 Flick (1995), pp. 280.

82 Tomczak (1992), p. 82; Schnell *et al.* (1995), pp. 83.

83 Konegen and Sondergeld (1985), pp. 66.

84 Flick (1995), pp. 16.

85 Lamnek (2005), pp. 242. For more information about the origin of qualitative methods, see Tschamler (1983), pp. 33; Mayring (2002), p. 12; Golafshani (2003), p. 600.

novel processes or facts, and their capability of interpreting individuals.[86] Their disadvantages mirror the advantages of quantitative methods and thus relate to their unstructuredness, their non-measurability, and the fact that the results are hard to reproduce by other researchers.

In order to decide which research methodology is most suited to the purposes of this work, it can be stated that the reasons, activities, and the success dimensions of supplier switches are influenced by various complex elements, and that the relationships between them are not well understood. Additionally, the number of variables and their interconnections are likely to exceed the capabilities of quantitative research. After all, supplier-switching is a new area of research and not all variables of interest may have been identified yet. For these reasons, and because of the exploratory nature of the research questions, a qualitative research method will be applied.[87] The research design, which is applied within the qualitative research method, will be the multiple case study design. A discussion of the pros and cons of these designs will take place as an introduction to the empirical research.[88]

As far as the **theoretical layer** is concerned, a choice between a single and multiple theory approach has to be made.[89] If a multiple theory approach is chosen, it has to be decided whether it should be pluralistic or eclectic.[90] A pluralistic approach uses different theoretical assumptions, with each theory being applied in its regular form. Due to the dissimilar character of the theories, knowledge acquisition can be achieved.[91] In contrast, the eclectic-theory approach combines different theories to coherent systems of declarations. The combination of different theories should happen with respect to the main elements of the unit of analysis. Furthermore, the chosen set of theories has to be devoid of any contradictions, so that no theory conflicts with another.[92]

---

[86] Lamnek (1989), pp. 7; Eisenhardt (1989), p. 542; Miles and Huberman (1994), p. 10; Bortz and Döring (2005), pp. 295.

[87] Some authors recommend that the discrepancies between the two methods should not be regarded as a dichotomy, but more as a bipolar dimension in which research can be situated in between the extremes of qualitative and quantitative methods. In this context, the triangulation of methods has been promoted for several years. However, due to time constraints in research projects, usually only one major method, which suits the research problem and associated uncovered gaps the most, will be applied. Flick (1995), p. 250; Mangan (2004), pp. 568. Triangulation can be defined as "the combination of methodologies in the study of the same phenomenon." Denzin (1978), p. 291. For further information, see Easterby-Smith *et al.* (1991); Hussey and Hussey (1997); Ticehurst and Veal (2000).

[88] See Chapter 3.1.

[89] The theoretical layer distinguishes between models, concepts and instruments, in which instruments contain the most empirical knowledge. For a comprehensive overview of the definition of models, concepts, and instruments, see Lofland (1974), pp. 102; Schneider (1981), p. 45; Stölzle (1999), p. 16 and p. 275. Generally, theories need to be closely related to reality and need to be exact with respect to their declarations. Furthermore, they have to be based on regularities and a logical structure, and they are not allowed to include any contradictions. Stölzle (1999), p. 16.

[90] Lechner and Müller-Stewens (1999), p. 22.

[91] Kirsch (1990), pp. 114.

[92] Singh and Kundu (2002), p. 684.

For the research on supplier-switching, various common theories related to the explanation of economic, organizational and social phenomena could be applied. Nevertheless, the research aims for the identification of opportunities for purchasing companies to gain a competitive advantage in the context of a supplier-buyer relationship. This leads to a focus on a relationship perspective between two independent companies (buyer and supplier); hence theories like the resource-based view,[93] the competence-based view,[94] or the dynamic capability view,[95] which are more concerned with the internal competitive characteristics of a company in "isolation," are not the first choice. Supplier switching is an event that affects interacting business organizations, so inter-organizational theories like the principal-agent theory,[96] transaction cost economics,[97] relational-based theories,[98] or the resource dependency theory,[99] seem to be especially applicable. Within this set of theories, *transaction cost economics* and the *relational view* are considered very appropriate candidates to support the answering of the defined research questions. This is mainly due to the following reasons:

- the two theories deal with legally independent organizations that exchange resources, which describes the basic context of each supplier switch;
- they both focus on relationships and the way of doing business, instead of the exchanged resources. This is important, because even if an exchanged resource is still valuable to a buyer, the need for supplier switching can be rooted in the relationship or in the way the exchange partners deal with each other;
- both theories explicitly include supplier integration as a possible government-structure for a certain set of exchange relationships. They explain when a buying firm should integrate a supplier, and they describe the necessary integration processes. Both the explanations and the necessary processes can be applied to supplier-switching by extrapolating their arguments.

Furthermore, due to the interaction of different organizations, theories of power and dependencies, like the *social exchange theory,*[100] can help to provide further insights. The social exchange theory is especially helpful, since it analyses different relationship settings that can

---

[93] For further information see Rumelt (1984), p. 556; Wernerfelt (1984), pp. 171; Barney (1991), pp. 99; Mahoney and Pandian (1992), p. 363, Peteraf (1993), pp. 179; Rasche and Wolfrum (1994), pp. 501; Conner and Prahalad, (1996), pp. 477.

[94] For further information see Prahalad and Hamel (1990), pp. 79; Knudsen (1994), pp. 135; Nooteboom (2004), pp. 505.

[95] For further information see Teece *et al.* (1997), pp. 509; Teece and Pisano (1998), pp. 17; Eisenhardt and Martin (2000), pp. 1105; Combe and Greenley (2004), pp. 1456.

[96] For further information see Grossman and Hart (1983), pp. 7; Wenger and Terberger (1988), pp. 506; Eisenhardt (1989), pp. 57; Spremann (1990), pp. 506; Elschen (1991), pp. 1002; Picot *et al.*(1998), pp. 78.

[97] For further information see Williamson (1975) and Chapter 2.2.2.

[98] For further information see Dyer and Singh (1998) and Chapter 2.2.3.

[99] For further information see Pfeffer and Salancik (1978); Aldrich (1979); Ulrich and Barney (1984), pp. 471; Eiriz and Wilson (2006), pp. 280.

[100] For further information see Thibaut and Kelley (1959) and Chapter 2.2.4.

lead to supplier switches. In addition, the theory is capable of explaining why sometimes even poorly-performing relationships cannot be terminated.

The research at hand will integrate transaction cost economics and the relational view into the social exchange theory in order to create a theoretical framework that is able to explain how a decision concerning supplier switches comes together, what kind of objectives are followed while executing the switch, and how the success of the supplier switch can be evaluated. This reflects the eclectical research approach. The use of this approach is meaningful, since the application of one of the common theories by itself cannot provide the necessary explanatory power for supplier switches. This is mainly due to the contradictory need for simultaneous close integration and high flexibility of interorganizational relationships. By applying just one of the cited theories, the dilemma cannot be resolved: the relational view supports close supplier-buyer integration but neglects originating inflexibilities due to a close connection. The transactions cost theory offers hybrid forms of governance, yet it cannot explain the frequently-observed external supply of highly specific goods and services in an uncertain and dynamic environment. The social exchange theory offers clarification for switching in unsatisfying relationships but explanations are limited to the availability of better-performing suppliers, and "better performance" is not clearly defined. Thus, all three theories can partially help to explain the need of close interconnectedness on the one hand, and switching tendencies on the other hand, but they are not sufficient when used alone.

Due to the position of this research in scientific theory and its objectives and research questions, an explorative alignment of the research has been chosen.[101] Explorative research is a strategy that is particularly applicable if knowledge of a complex phenomenon is rudimentary or of a general nature.[102] In order to make a valuable contribution to the understanding of the phenomenon, explorative research has to accomplish three goals.[103]

Firstly, the main contribution of an explorative study is the adequately precise description of the phenomenon. In the context of research on supplier switching, this descriptive function will be accomplished through a comprehensive account of the circumstances that lead to supplier switches and the challenges that purchasing companies face while replacing vendors. Furthermore, theoretically-derived activities of supplier switching are developed, which will be analyzed in the empirical work.

Secondly, explorative researchers suggest that after the empirical work in the research process, the relationships between the described elements should be formulated in a hypothesis. This leads to the fulfillment of the explanatory function. This goal will be attained through

---

[101] In principle, in consideration of theory-richness and the intention of the research, explorative, descriptive-, explicative-, and causal-studies can be distinguished. Friedrichs (1990), pp. 155.

[102] Becker (1993), p. 117.

[103] Kirsch (1977), p. 241.

the answer of the primary research question, which takes the explanations of the secondary research questions into account as well.

Thirdly, the research needs to attain a practical function. The accomplishment of this function requires that practical solutions be offered in order to deal with the described challenges. Managerial recommendations that support companies in their efforts to preserve the benefits of supplier integration, while increasing the flexibility of the supplier-buyer relationship-structure, are presented at the end of this work.

In order to carry out the explorative research in a systematic manner, and to combine the different theories and concepts, a research framework will be utilized. The theoretic-conceptual framework of the supplier-switching activities consolidates the different elements of supplier replacement within a comprehensive model and will be used to structure the empirical analysis of supplier switches. The development and the use of the research framework for the analysis of the supplier-switching phenomenon will go through three phases. Each phase contains a different set of tasks, which support the knowledge acquisition process:[104]

1. **Framework development and testing:** the primary task in this phase is to derive the elements of the framework from the literature and first expert interviews. It provides the researcher with an initial understanding and a certain preperception of the phenomenon.
2. **Framework utilization and data analysis:** this phase comprises the empirical research. Expert interviews, observations, and qualitative debriefings can be used as instruments. In this phase, the researcher has to select the research design, the number of cases, the sampling strategy, and data-gathering methods. Afterwards, the framework has to be utilized.
3. **Creation of the explanatory framework**: at the end of an explorative study an explanatory framework has to be developed. The main objectives of the explanatory framework are the description of the real problems, the formulation of an explanatory hypothesis, and the development of managerial recommendations.

The following table summarizes the findings of the chapter and shows the position of the research on supplier switching in relation to the three layers of scientific theory.

Layers of scientific theory	Position of the research on supplier switching
Meta-methodological layer	The work is related to nominalism, has a subjectivist perspective, and follows radical constructivism and voluntarism.
Methodological layer	The work follows a pragmatic mixture of deductive and inductive approaches and applies a qualitative research method.
Theoretical layer	Transaction cost economics, relational view and social exchange theories are applied to an eclectical multiple-theory approach.

Table 1-1: Overview of the research's position in scientific theory

[104] In relation to Becker (1993), pp. 121.

1.4 Outline of the dissertation

The research at hand is divided into four differently-weighted chapters, as shown in *Figure 1-5*. *Chapter One* has been the introduction and describes the relevance of this research to supplier-switching, the objective and the research questions, as well as the position of the research within scientific theory.

Chapter Two is concerned with the development of a comprehensive understanding of the phenomenon of supplier switches, and the related theories and concepts. This is necessary to form a theoretic-conceptual framework. It starts with a closer look at the origins and benefits of integrated supplier-buyer relationships and their effect on supplier switching (*Chapter 2.1*). The background of the current popularity of supplier integration will be discussed based on a literature review, and the way in which it has influenced the supplier-switching environment will be presented. *Chapter 2.2* continues with an introduction of the disadvantages of supplier integration. The chapter encompasses a literature-based debate about the downsides of integrated supplier-buyer relationships, and shows how a systematic supplier switch can preserve the benefits of integration and helps to avoid the pitfalls. *Chapter 2.3* will provide structural elements of supplier switching and introduces relevant actors, interrelationship layers of dyadic supplier-buyer relationships, and the phases of supplier switching. *Chapter 2.4* deals with theoretical aspects of supplier switches. It introduces different theories and explains their contribution to the research at hand. At the end of the chapter, the theories will be combined into an eclectical explanation approach for the reasons, objectives, and success of supplier switches. In *Chapter 2.5*, the theories will be combined into a theoretic-conceptual framework that supports the systematization of the different supplier-switching activities with respect to the supplier switching decision, execution, and the success evaluation phase. The framework will provide the structure for the empirical research, which will be introduced in *Chapter Three*.

Chapter Three contains the empirical part of this work. It starts with a description of the empirical research approach and methodology used, and provides an overview of the research approach and methodology in *Chapter 3.1*. *Chapter 3.2* introduces the case studies conducted. Every case study will be analyzed in the same manner by using the theoretic-conceptual framework as a structure grid. *Chapter 3.3* provides a joint analysis of the case studies and will discuss the revealed activities and conditions within the three phases of supplier switching.

Finally, *Chapter Four* will summarize the considerable results of the research and presents conclusions and managerial recommendations. The chapter first gives an overview of the key findings of research on supplier switching activities and answers the research questions in a consolidated manner. The second chapter will provide managerial implications, and the final section of *Chapter four* discusses recommendations for further research on supplier switching.

1. Introduction and relevance of this research on supplier switching

1.1 Background and the problem of the research on supplier switching

1.2 Objectives and questions of the research on supplier switching

1.3 Positioning of the research within scientific theory

1.4 Outline of the dissertation

2. Supplier switching from a theoretical point of view

2.1 Origins and benefits of supplier integration and their effect on supplier switching

2.2 Disadvantages of supplier integration and their impact on supplier switching

2.3 Structuring conceptual elements of supplier switching

2.4 Theoretical aspects of supplier switching

2.5 Phase-based theoretical-conceptual framework of supplier switching

3. Empirical research on supplier switching

3.1. Empirical research design for exploring supplier switching

3.2. Supplier switching case studies

3.3. Joint analysis of supplier-switching case studies

4. Conclusions and managerial implications for successful supplier switching

4.1. Key findings of research on supplier switching

4.2. Managerial implications for successful supplier switching

4.3. Recommendations for further research on supplier switching

Figure 1-5: Outline of the research on supplier switching

2 Supplier switching from a theoretical point of view

The following chapter will discuss the conceptual and theoretical aspects that influence and sharpen the pre-perception of the phenomenon of switching integrated suppliers in a business-to-business industrial context. Existing knowledge of integrated supplier-buyer relationships and inter-organizational theories will be discussed and combined into a theoretical-conceptual framework that structures relevant supplier-switching activities. With respect to the different phases of framework-based research, the following section is concerned with framework development and testing. After a discussion of supplier-switching-related research, the theoretical-conceptual research framework is developed. However, before the conceptual and theoretical foundations of supplier switches are presented, a definition of a "supplier switch" and "supplier switching activities" will be set forth.

Attempts to define the nature of supplier switches are rare. The existing proposed definitions are primarily related to the dissolution of relationships and do not take the simultaneous integration of a new relationship into account, which neglects the implementation of new ties with a new supplier. In order to build a practical definition, the two elements of the term "supplier switch" are further analyzed.

- A *"supplier"* is defined *as a source of supplies for a purchasing company that can be integrated in a company's value-creation process*.[105]
- The word *"switch"* can be used interchangeably with "change," which affects two dimensions: a content-related layer, which describes what will be changed, and a relational-related layer, which describes the forms of relationships and the interaction patterns.[106]

With respect to the content-related layer of change, supplier switches have an impact on the supplier structure. The term "*supplier structure*" in this research refers to *the design and configuration of the set of all active dyadic supplier-buyer relationships and the interrelationships that provide the purchaser with a variety of supply objects*. In anticipation of the explanations in the following chapter, it has to be mentioned that of these sets of suppliers, vendors[107] of strategic, bottleneck, or leverage supply objects are of the most interest for the development of an approach towards systematic supplier switches.[108] The relational-related layer of supplier switches refers to the way in which the purchasing company does business with its suppliers. The interaction patterns with the old and the new supplier will change during a supplier switch.

---

[105] Lasch and Friedrich (2004), p. 93.

[106] Rüegg-Stürm (2002), p. 81.

[107] The terms "vendor" and "supplier" will be used interchangeably in this work, even though literature differentiates between them with respect to their responsibilities within an exchange relationship, e.g. Wangenheim (1998).

[108] See Chapter 2.1.2.

After the elements of the term “supplier switch” have been explained, a definition can be developed, which has to take the focus on integrated supplier-buyer relationships into account:

A supplier switch is the change of a purchasing company’s supplier structure, in which an existing integrated supplier will be substituted completely or for the most part by a new supplier, which has yet to be integrated.

With respect to this supplier-switching definition, “*supplier switching activities”* can be defined as follows:

Supplier-switching activities are sets of actions that aim for the preparation, execution, and success evaluation of a supplier switch and are performed by the disengager – the purchasing company.

The definitions should support an initial understanding of the supplier switch as a unit of analysis. However, the elements of both definitions need to be further described and filled with content, due to their currently rudimentary character. Since supplier switches cause changes in the supplier structure and primarily affect the supply side of a company, concepts related to supply and supplier management are discussed in the next chapters. Firstly, the origins and benefits of supplier integration are analyzed in order to reveal why companies actually integrate suppliers, and to gain insights into the consequences of supplier integration. Secondly, the disadvantages of supplier integration are introduced and supplier switching is discussed as one reactive option for dealing with weak suppliers. Thirdly, supplier-switching is discussed in more detail and structuring elements will be elaborated that build the main elements of the supplier switching framework. Fourthly, theories will be introduced that provide further content for the developed structure and fifthly, all introduced concepts and theories will be consolidated into a theoretic-conceptual framework of supplier switching.

2.1 Origins and benefits of supplier integration and their effect on supplier switching

As stated in *Chapter 1.1*, suppliers have an ever-increasing influence on the performance and competitiveness of a buying firm. If this circumstance is systematically used, the right supplier base can help a company to achieve a competitive advantage.[109] Supplier-buyer relationships that are driven solely by price considerations seem to be unsuited to achieving competitive advantages. Hence the emphasis has shifted to strategically important suppliers that are selected in the light of several factors, such as quality, innovativeness and flexibility. With these suppliers, buyers have started to build close relationships, by linking and integrating them into their own value-creation process. The following chapter discusses supply- and supplier-management as the origins of the concept of supplier integration and shows the

[109] Sarkis and Talluri (2002), p. 18.

benefits that companies involved in integrated supplier-buyer relationships expect to enjoy. Furthermore, the chapter examines the requirements of integration in terms of supply-related conditions that foster the applicability of supplier integration as a supplier-management strategy. Additionally, it will be shown that integrating suppliers increases the complexity of supplier-buyer relationships and makes their management more difficult. Due to these difficulties, a change of the supplier structure is not easy to achieve.[110] Because of the challenging character of supplier switches, integrated supplier-buyer relationships build the focus of this research.

2.1.1 Supplier switching in the context of supply management

Supply management, and especially strategic supply management questions, remained broadly unconsidered until the beginning of the 1980s and "purchasing" has been understood as an operational task.[111] A large and rich body of literature on supply management has subsequently been developed.[112] However, some terminological confusion exists, since "supply management" or "strategic supply management" are often used interchangeably with the similar concepts of "purchasing" and "materials management."[113] However, because this work is related to the supply side of the company and supply management topics, it is important to clarify the terms. The literature overview in *Table 2-1* shows some existing understandings of each concept and of the different roles for the purchasing, materials-management and supply-management function of companies.

The overview shows a very heterogeneous understanding of the different terms. However, it seems that purchasing has a more operational character and is more concerned with the efficient execution of purchases. Materials management seems to have a broader perspective, since it additionally incorporates processes concerned with inbound and in-house logistics. However, it still focuses more on processes and costs than on a supplier-buyer relationship perspective, which is important with respect to supplier-switching. Supply management has the broadest scope of all concepts. It deals with the management of all supply processes necessary to provide a company with direct and indirect material from sources external to the purchasing company and aims for the achievement of competitive advantages, due to its strategic perspective.[114]

---

[110] Bretzke (2006), pp. 10.

[111] Eßig and Wagner (2003), p. 279; Brenner and Wenger (2007), pp. 5.

[112] E.g.: Kraljic (1983); Leenders *et al.* (1989); Boutellier and Locker (1998); Petersen *et al.* (2000); Boer *et al.* (2001); Boutellier *et al.* (2003); Arnold *et al.* (2005).

[113] Arnolds et al. (1998), p. 19.

[114] Kaufmann (1999), p. 12.

Author	Purchasing	Materials management	Supply management
Arnold (1997)	Related to the operative tasks of price, quantity, quality, and time policy as well as inbound logistical issues. The objective is to accomplish the defined materials demand at the defined cost.	Materials management comprises all processes within a company that aim on the availability of materials to an economic optimum.	Supply management comprises all company- and market related activities, which aim on availability of all externally sourced supply objects.
Arnolds *et al.* (1998)	Purchasing is related to the order process of supply objects, which comprises the order execution and the legal contracting.	The focus of materials management is materials and consumption goods instead of technical assets and property rights. It further comprises logistical processes of inbound logistics and in-house logistics.	Supply management takes care of the possession process of supply objects from the supply market and has a close relation to purchasing. But in contrast to purchasing, the strategic component of supply is emphasized.
Corsten (1994)	Purchasing is concerned about the gain of the right of usage for supply objects and is the execution organ of the supply function.	Materials management comprises all processes that are concerned about the provision of materials at the point of use within the company. It is further the object-specific manifestation of the supply function.	Supply management comprises all activities that aim on gaining availability of production factors. These factors are required in order to accomplish the goals of the company but are produced externally.
Koppelmann (1995) and (2000)	Purchasing can be described in analogy to sales in the marketing department, as a sub-function of the supply department. Its main task is the negotiation with suppliers and the fostering of supplier-buyer relationships.	Materials management is object-specific and has an operative perspective as well as an adaptive behavior. This means it is more focused on the execution of purchases and has to carry out orders from a superior function.	
Kraljic (1983)	Purchasing and procurement primarily deal with commodities and just some specified materials that have a non-complex character. It aims on functional efficiency.	Materials management deals with leverage items and specified parts. It has a strong cost and materials flow emphasis.	Supply management focuses strategic items and high-value components, whereas the key performance indicator is the long-term availability.
Monczka *et al.* (1998)	Purchasing (or procurement) refers to the functional activity of the day-to-day management of material flows and information.	Materials management requires managers that deal with purchasing, inbound transportation, inbound quality control, receiving and storage, materials control, production planning, and scheduling.	

Table 2-1: Understanding of the terms purchasing, materials management, and supply management

This strategic perspective of the supply management function goes along with responsibilities for defining the right sourcing strategies, which determine important characteristics of a

specific exchange of supply objects.[115] Additionally, the applied sourcing strategies offer a systematic approach to the description of specific supply situations of purchasing companies, which again have an influence on the switching environment. The different sourcing strategies can be summarized by a morphological box (see *Figure 2-1*).

Supplier	Sole	Single	Dual	Multiple
Supply object	Unit	Modular		System
Supply frequency	Stock	Demand Tailored		Just-in-time
Supply subject	Individual		Cooperative	
Technology	Manual		Electronic	
Supply marked	Local		Global	

Figure 2-1: Systemization of sourcing strategies[116]

The *supplier strategy* refers to the number of suppliers that provide the buying company with the specific supply object. Four strategies can be distinguished in this dimension. “Sole sourcing” describes the supply from a monopolist, whereas “single sourcing” refers to a situation in which only one supplier has been chosen out of bigger number of possible suppliers.[117] “Dual sourcing” is related to the provision of the same supply object by two suppliers whereas “multiple sourcing” refers to the usage of more than two suppliers.[118] The number of applied suppliers influences the ease of supplier switching, since if the purchasing company has applied more than one supplier, an alternative already exists and can be used as a temporary backup.

The *supply-object strategy* is concerned with the complexity of sourced goods, which influences the right design of the purchasing process.[119] Unit sourcing refers to a simple product design, which is not considered to be complex. However, even when the construction of the product might be simple, the specifications in terms of accuracy, for example, can be very challenging and thus difficult to accomplish. The unit can be integrated into a module or a system of the final good. If the supplier produces a complex product, which reflects an independent module of the buyer’s finished good, modular-sourcing will be applied. If a

---

[115] Some authors distinguish sourcing management from the other concepts of purchasing, materials management and supply management as well. However, the differences to supply management are insignificant, since it is regarded as an integrative management approach to the design of all supplier relations in the sense of a total relationship management. Kaufmann (1995), p. 277. Furthermore, it comprises a cross-functional process and thus involves members of the buying firm other than those who work in the purchasing department. Monczka *et al.* (1998), p. 4. These characteristics are valid for supply management as well.

[116] Arnold (2002), p. 208.

[117] Swift and Coe (1994), p. 173.

[118] Krampf (2000), pp. 186.

[119] Brenner and Hamm (1996), p. 214.

buyer performs system-sourcing, the supplier will have complete development responsibility for a whole system. This comprises the coordination and testing of pre-suppliers as well.[120] As far as supplier-switching is concerned, it can be stated that a complex product design and extensive development responsibilities of the supplier cause interorganizational complexity that requires intensive interaction and mutual adjustments between the buyer and the supplier.[121] Thus, the more complex the design of the supply object, the more difficult a supplier switch tends to be.

Strategic inventory considerations have an impact on the *supply-frequency*. If a company performs "stock sourcing," it will purchase certain goods in advance, even if no production demand has occurred yet. This will lead to a higher average inventory in comparison to other supply frequency strategies. Demand-tailored supply refers to an individualized demand behavior, which aims for inventory reductions. It will be applied if demand occurs sporadically and without a certain pattern (e.g. in the mechanical engineering industry). Just-in-time sourcing is the most advanced supply frequency strategy. Its objective is to achieve zero-inventory and reduces buffers to a minimum through a synchronization of supply and demand as well as a pull-oriented provision of materials.[122] The implementation of the just-in-time strategy requires special adjustments and an intensive information exchange between the two exchange partners in order to guarantee a smooth supply and delivery process. Due to the reduced buffers, the exchange relationship is more vulnerable to disruptions and problems on the supplier's side.[123] Thus, the more sophisticated the supply frequency becomes, the more challenging a supplier switch tends to be.

As far as the *supply-subject* is concerned, one can distinguish "individual sourcing" and "cooperative sourcing." If a company uses the first strategy, it will buy the required goods individually, without using possible economies of scale and scope, through the combination of demands from other external organizations. "Cooperative sourcing," on the other hand, refers to a sourcing strategy in which the buying company actively tries to achieve purchasing-price advantages through joint purchasing with other companies.[124] If a purchasing company is involved in cooperative sourcing and takes advantages from economies of scale, it seems to be more difficult to switch the supplier since other companies are involved as well. This, in turn, increases adjustment requirements with the purchasing partners and thus might add complexity to the supplier switching process.

The used *technology* refers to the automation and technological sophistication of the purchasing department. A company that uses advanced IT, like e-auctions or supplier web pages,

---

[120] Kamath and Liker (1994), pp. 158; Tani and Wangenheim (1998), pp. 27; Gadde and Jellbo (2002), pp. 186.
[121] Wangenheim (1998), p. 67.
[122] Pfohl (2000), pp. 185; Hopp and Spearman (2004), pp. 134.
[123] Bretzke (2006), pp. 8.
[124] Eßig (2002), pp. 263.

performs electronic sourcing.[125] If no or rare IT support takes place, the purchasing strategy is called "manual sourcing." The sourcing strategy, which is concerned with the IT use in purchasing processes, can have an impact on the complexity of the supplier-switching environment as well. Particularly if the exchange relationship with the supplier that is about to be replaced involves a specifically-developed IT environment (e.g. for the administration of specific transport containers), which enables the buyer and the supplier to keep track of the exchange. If this is the case, the purchasing company needs to make sure that a potentially new supplier is capable of providing comparable IT competencies. However, other forms of electronic sourcing, such as e-auctions, might decrease the complexity of supplier switching, since the purchasing company requires all suppliers to use this tool, which makes comparability between the offers easier and could even foster supplier switches. Thus, the sourcing technology can have an ambivalent impact on supplier switches.

The last sourcing strategy refers to the *supply market*. Companies can either source on global markets, which represents a "global sourcing" strategy, or they can source somewhere nearby, in their own country, which is called "local sourcing."[126] Due to the listed trend of globalization and global sourcing,[127] the use of global suppliers is becoming increasingly common. As a result of cultural differences and large geographic dissonances, which usually go along with global sourcing, switching to a global supplier might cause challenges in the integration process, [128] which can make the change of the supplier structure more difficult.

The supply-management function of a company needs to define which sourcing strategy is best suited to a particular exchange. The applied sourcing strategies for a specific supply object define an individual supply situation, which builds the environment of a particular supplier-buyer relationship. The empirical research will analyze the different sourcing strategies of companies in order to describe the switching environment. However, the presented roles of purchasing, materials management, and the supply management function in companies do not represent a development from bad to good. Rather, all stages exist in contemporary organizations at the same time, and perform different supply-related tasks. Furthermore, all can involve supplier switches while taking care of different responsibilities. However, since this work focuses on switching integrated suppliers, it is assumed that the supply-management function plays a major role in supplier replacement. This is because integrated suppliers have a more long-termed relationship perspective and a change of the long-term supplier structure is a strategic decision made by the supply-management function.

---

[125] For further information, see Brenner and Wenger (2007).

[126] Arnold and Eßig (2000), p. 124 differentiate between global, local, and domestic souring, whereas domestic sourcing refers to the nationwide sourcing in the buyers own country.

[127] See Chapter 1.1.

[128] Stölzle and Kirst (2007), pp. 82.

Besides the different roles of purchasing, materials management, and supply management function that co-exist in contemporary industrial companies, scientists have shown that the focus on the different functions has shifted. Companies with sophisticated purchasing organizations have emphasized the need for an elaborate approach to the management of the supply side of the company and have discovered the value-creation opportunities of their suppliers. Thus, modern supply management focuses more on a holistic view of the supply processes and important suppliers that are involved in the product-development process and integrated in the value creation of the company, than on the legal processes and bureaucracy associated with traditional purchasing, which has mainly performed low-value clerical work.[129] This development from a narrow understanding of purchasing to a broader scope of supply management has supported the realization of the value of suppliers for the performance of the purchasing company. This, in turn, has lead to a growing importance of the tasks of supplier management.

2.1.2 Supplier switching in the context of supplier management

The systematic planning, implementation, development, and control of current and potential external supply relationships are the responsibilities of supplier management.[130] The literature broadly groups supplier management activities into three different categories: (a) supplier-base management, (b) supplier development, and (c) supplier integration.[131] All activities aim for the improvement of the supply performance. The conformation of the different supplier management activities influences the possibility of switching supplier in an easy and uncritical manner. How this influence materializes and how it has emerged will be described below.

(a) Management of the supplier base

This supplier management category can be organized into different tasks, which comprise the *supplier reduction*, *segmentation of the supplier base*, *supplier selection*, and further activities that aim for the improvement of the supplier base performance.[132] In order to optimize the different supplier-buyer relationships, companies start with a *reduction* of the number of active *suppliers* via a reduction of purchased supply objects. This means that buying firms start to investigate for similar or identical parts that can be consolidated into one contract with

---

[129] Cammish and Keough (1991), p. 32; Appelfeller and Buchholz (2005), p. 2.

[130] Wagner (2001), p. 77. Goffin *et al.* (1997), p. 422, offer another definition: supplier management is in charge of "organizing the optimal flow of high-quality, value-for-money materials or components to manufacturing companies from a suitable set of innovative suppliers."

[131] Goffin *et al.* (1997), p. 423; Wagner (2003), p. 4. Alternative classifications can be found in Koppelmann (2000), pp. 238; Lasch and Friedrich (2004), p. 93.

[132] Koppelmann (2000), pp. 238; Lasch and Friedrich (2004), p. 93.

one supplier. This initial part and supplier reduction can reduce the ratio between suppliers and the number of purchased parts only to a specifically lower point. From this point, further reductions of the supplier base can no longer be achieved by cleaning up superfluous parts. Only continuous improvement and system integration can help a company to reach the anticipated "optimal" number of suppliers. Thus, buying firms have started to shift their supply-object strategy from a focus on unit sourcing towards a systems sourcing approach, where a first-tier supplier takes over the coordination of pre-suppliers. Both procedures will reduce the number of suppliers. The initial part reduction can cause supplier switches in the sense of this research, since the exchange relationship to an actively-used supplier will be terminated and the relationship to another – either new or already actively used – supplier will be started. However, because the identified superfluous items are substitutable by others, these supply objects are likely to be rather complex and thus an integration of the new supplier might not be necessary. In the other case, the consolidation of formerly-purchased parts into a system, which is being bought from a first-tier supplier, will not cause a supplier switch in the logic of this research. This is because an exchange relationship for the previously-ordered supply object does not exist anymore. Thus, the old supplier-buyer relationship will be rescinded, but no equivalent supplier-buyer relationship will start in its place. The purchase of the new system will cause a wholly new supplier-buyer relationship that is likely to apply entirely novel sourcing strategies. Thus, the old and the new supplier-buyer relationship are not comparable anymore. The process of supplier reduction can be illustrated as shown in *Figure 2-2*.

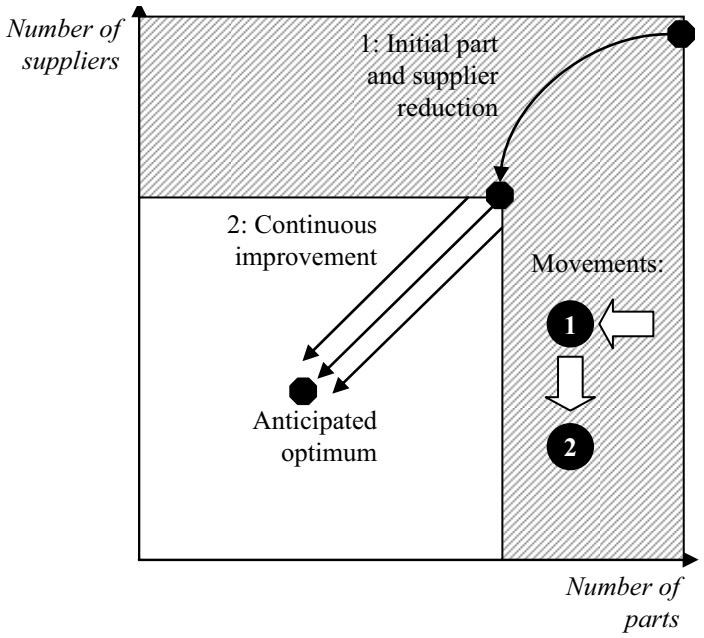


Figure 2-2: Scheme of supplier reduction[133]

[133] Related to Boutellier *et al.* (1995), p.31.

The reduction of the supplier base enables the buying firm to accomplish different goals. Examples of these goals are more efficient configurations of supply processes, pooling of purchasing-volumes, and the possibility of gaining economies of scale. Furthermore, it enables the buyer to build integrated partnerships with selected suppliers.[134] The latter point is particularly important, since the strategy of supplier reduction is considered to be especially fruitful if tight linkages between the buyer and the remaining suppliers can be established.[135] By committing to this smaller number of suppliers, the buying firm expects a greater willingness by the suppliers to build relationship-specific investments or to grant quantity-related price reductions. Thus, the buyer tries to increase its bargaining power in the contract negotiations.[136] However, suppliers tend to secure their commitment through longer contract durations or other agreements, which reduce the probability that the buyer shifts its demand to a supplier that happens to be better in terms of price, quality, technology, or other performance measures on a short notice. Thus, after the purchasing organization has made the contract with a supplier, it might lose bargaining power, either due to contractual agreements or specific dependencies towards the vendor. This leads to a situation in which the short-term switch of suppliers becomes difficult.

After the supplier-base has been reduced, the buying firm has to determine the right strategy for the remaining supplier-buyer relationships. A popular *supplier base segmentation* method is the ABC-analysis, which classifies suppliers with respect to a single criterion (e.g. purchasing volume).[137] The ABC-analysis is considered an easy way to differentiate between important and unimportant suppliers.[138] However, in today's complex supply situations a single-criterion analysis seems to be an insufficient reflection of reality. Due to the shortcomings of an ABC-analysis and the need to describe supplier-buyer relationships from a multi-dimensional perspective, several portfolio approaches have been developed in the recent past.[139] The attractiveness of these approaches is basically due to their capacity to represent complex relationships graphically in an aggregated form and hence reduce decision complexity.[140] For the purpose of supplier-buyer relationship strategy development, a vast range of portfolio approaches has been discussed in the literature. These approaches can be organized – among other systematizations – along their unit of analysis; for instance, materials and components,[141] supplier relationships,[142] engineering and purchasing interaction,[143] or supply

---

[134] Boutellier *et al.* (1995), pp.30.
[135] Cannon and Perreault (1999), p. 439.
[136] Bakos and Brynjolfsson (1993), pp. 43.
[137] Brenner and Wenger (2007), pp. 2.
[138] Hartmann *et al.* (2004), p. 27.
[139] Sarkis and Talluri (2002), p. 20.
[140] Fröhling (2002), pp. 475.
[141] Kraljic (1983); Nellore and Sönderquist (2000); Croom (2000); Gelderman and van Weele (2002).
[142] Olsen and Ellram (1997); Bensaou (1999); Tang (1999); Wagner and Johnson (2004).
[143] Nellore and Taylor (2000).

contracts.[144] These portfolios aim for an *ex-ante* estimation of the potential supplier performance, the strategic importance, the risk, or the difficulty of managing the purchasing situation with suppliers,[145] and have a long-lasting tradition in supplier management.[146] Each portfolio-approach evaluates suppliers or supply situations along two independent criteria. The value of each criterion (e.g. supply risk) is determined under the consideration of different means, which amount to a supplier-specific value for the particular criterion. The value of each criterion helps a buyer to position suppliers or supply objects within the portfolio, and thus enables the company to derive supplier- and supply object- specific strategies, which determine, in general, how the buying organization should design the supplier-buyer relationship.

A common approach to deriving a suitable supplier-buyer relationship-strategy through the utilization of a portfolio has been developed by *Olsen* and *Ellram*.[147] They describe a three-step approach to determining which relational setting would best fit the analyzed supplier relationship. In the first step, the current supply situation of the organization will be analyzed and in a second, potential suppliers will be evaluated.[148] In the third step, the authors recommend action-plans for the improvement of all existing types of supplier-buyer relationships. For the first step of the analysis of the supply situation, *Olsen* and *Ellram* use two measures: (1) Difficulty of managing the purchase situation and (2) the strategic importance of the purchase. The difficulty of managing the purchase situation can be assessed by evaluating product characteristics, supply market characteristics, and environmental characteristics. The strategic importance of the purchasing situation is a multi-dimensional measure as well and is composed of competence, economic, and image factors.[149] The results can be illustrated by using a four-cell portfolio, which divides purchases into strategic, bottleneck, non-critical, and leverage groups (*Figure 2-3*).

---

[144] Martínez-de-Albéniz and Simchi-Levi (2005).

[145] For a complete overview see Stölzle and Kirst (2006), pp. 244.

[146] Stölzle and Kirst (2006), p. 243.

[147] Olsen and Ellram (1997).

[148] To evaluate suppliers, Olsen and Ellram use the "strength of the relationship" and the "relative supplier attractiveness" as measures. Each represents a multidimensional construct, which comprises many different factors. For the "strength of the relationship" the authors use economic factors, the character of the exchange relationship, the degree of cooperation between buyers and suppliers, and the geographic distance between the two exchange partners. Factors for the "relative supplier attractiveness" are financial and economic factors, performance factors, technological factors, organizational, cultural, and strategic factors. Olsen and Ellram (1997), pp. 106.

[149] Olsen and Ellram (1997), p. 104.

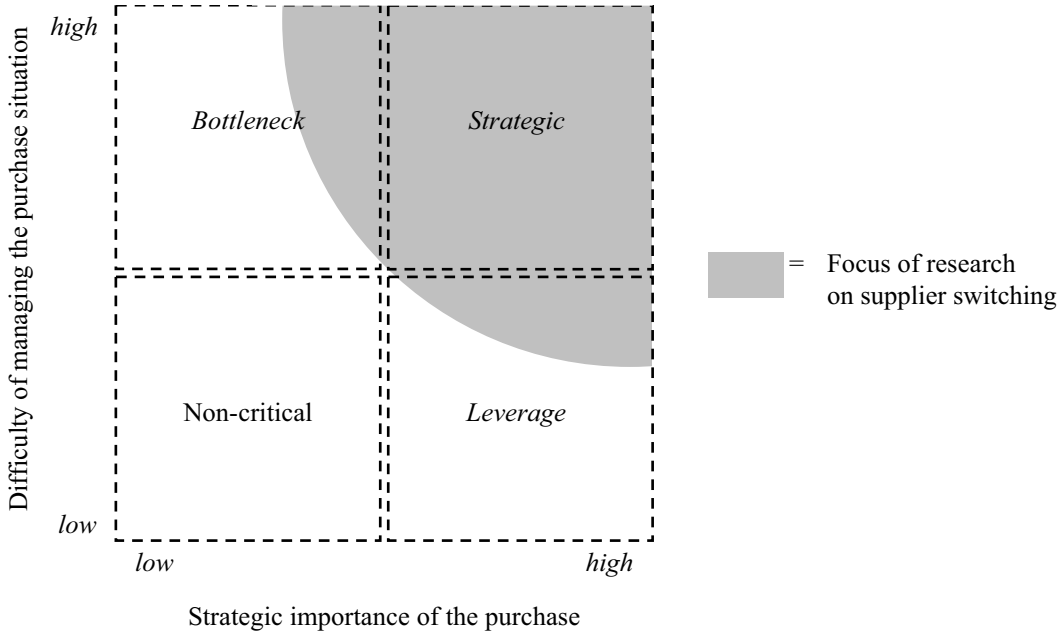


Figure 2-3: Portfolio of purchased goods and services[150]

Within the four categories, different supplier-buyer relationship and sourcing strategies are recommended. The non-critical cell includes purchases that are easy to manage and have low strategic importance. In this cell, efficiency is paramount and arm's-length relationships have to be installed.

The goal in the leverage category is to "*create mutual respect in the supplier relationship and communicate requirements further into the future*."[151] Suppliers of leverage supply goods, should be further involved in engineering and value analysis in order to get the biggest advantage of their leveraging capabilities. The two upper cells include purchases that are difficult to manage. Suppliers of supply objects in the bottleneck category should be tightly involved in demand forecasts and production planning. Suppliers of strategic goods are considered as the most important vendors that have the biggest impact on the performance of the buyer. Consequently, they should be integrated into important processes and decisions of the buying company that are related to the particular supply object. These strategic purchases in particular require a long-term perspective with suppliers that should be regarded as the natural extension of the firm.[152]

The area surrounding the upper right-hand corner of *Figure 2-3* builds the primary focus of this research on supplier switching, since the necessity for mutual adjustments and specific

---

[150] Olsen and Ellram (1997), p. 105; Brenner (1996), p. 6. This portfolio of purchases has also been used by Kraljic, who applied the "complexity of the supply market" and "importance of purchasing" as measures to set up a portfolio. Kraljic (1983), pp. 111.

[151] Olsen and Ellram (1997), p. 105.

[152] Olsen and Ellram (1997), p. 105.

investments for these relationships tend to increase the more difficult the supply situation becomes and the higher the strategic importance of the purchase is. This, in turn, will have an influence on the difficulty of a supplier switch and thus the utilization of systematically conformed supplier switch can have a greater impact in those kinds of supplier-buyer relationships than in non-critical relationships, with a low strategic importance and low difficulties of managing the purchasing situation. Thus, suppliers of strategic, bottleneck, and leverage supply objects are taken into account in the discussion of systematic supplier switching activities.

After the supply object has been systemized according to its strategic importance, a fitting supplier needs to be identified and selected. The process of *supplier selection* can be related to the funnel-model of supplier management, which comprises five process steps and different filter measures.[153] The first step is supplier identification and its object is to discover possible suppliers for the buyer's demand. To do so, the buyer will screen the supply market for suppliers that offer the particular supply object, that are in a specific industry, or that are experienced in the use of special technologies. These search characteristics will lead to a number of suppliers that are potentially capable of meeting the buyer's requirements. The second step is supplier delimitation and aims for a reduction of the number of possible suppliers through a more detailed analysis of the remaining supplier's competencies. This analysis can be carried out through self-disclosures of vendors, which provide a cost-efficient way to gather relevant information for supplier delimitation. After the number of potential suppliers has been reduced further, a more detailed supplier analysis, based on the concrete demands and requirements of the buying firm, will be performed. The analysis aims on a preselection of a small number of suppliers. With these remaining suppliers, the buyer will start negotiations about the potential exchange relationship. During this negotiation, the supplier's demands and requirements (e.g. price and detailed engineering drawings) will be considered and discussed. After the buyer has negotiated the details with the remaining potential suppliers, one supplier (or more, depending on the sourcing strategy) will be selected and a supply contract will be awarded. However, these steps of supplier selection are idealized and do not have to be strictly followed in the sequential way. Furthermore, it needs to be stated that an increasing strategic importance of the supply object requires more sophisticated supplier-selection measures. This is due to the circumstance that the more strategically important a supply object becomes, the more mutual adjustments and specific investments are required in order to install a reliable and efficient supplier-buyer relationship.[154] Non-critical supply objects tend to need a "regular" supplier, which is mainly chosen by price and will not be integrated into the buyer's value-creation process. This means that the buyer is able to switch

[153] Koppelmann (1995), pp. 235.
[154] Olsen and Ellram (1997), p. 105; Tang (1999), p. 46.

to a new supplier if a cheaper offer is available.[155] Leverage and bottleneck supply objects tend to be more complex, unique, and critical and therefore require more mutual adjustments and more intensive communication between the buyer and the supplier. In order to select the right vendor for this kind of supply objects, the purchasing company will use more elaborat selection criteria than price. This can result in a quality evaluation, or a supplier audit.[156] To ensure a flawless exchange of goods, the suppliers of bottleneck and leverage supply objects will be integrated in some of the buyer's value-creation processes. This tightens the links between the purchasing company and those suppliers and thus the ease of supplier switching is decreased.[157]

A strategic supply object is highly critical to the buyer's performance. It represents a highly complex part or service, either in terms of development, production, or logistical requirements, which is strongly customized for the buyer's purposes. Strategic supply objects demand a highly sophisticated supplier evaluation and selection approach, since contracts with potential suppliers are usually long-term in nature. In addition, due to the high complexity of the supply situation, formal contracts are likely to fail, since they cannot cover every possible contingency. Incomplete contracting is therefore strongly associated with this kind of supply object.[158] Due to extensive interaction and mutual adjustments and strong communication, the supplier will be integrated into several processes and decisions, some of which have a strategic scope. As a result of the intensive integration, suppliers of strategic goods are highly difficult to switch. Those integrated supplier-buyer relationships build the focus of the work on hand and will be described in further detail below.

(b) Supplier development

Supplier development is an activity that "*involves a long-term co-operative effort between the buying firm and its suppliers to upgrade a specific supplier's technical, quality, delivery, or cost capabilities and to foster ongoing improvements*."[159] Buying firms can use a vast variety of activities to advance specific supplier capabilities. In general, supplier development initiatives can aim for the improvement of existing suppliers and on the enhancement of potentially new ones. The latter route of supplier development pursues the expansion of the supplier base through qualification of new suppliers that have not been used for the specific supply object before. Although the object of a supplier development initiative can be an "old"

---

[155] Tang (1999), p. 45.

[156] For further information about supplier evaluation criteria see (e.g.) Swift (1995); Choi and Hartley (1996); Goffin *et al.* (1997); Boer *et al.* (2001); Sarkis and Talluri (2002); Koppelmann (2004); Humphreys *et al.* (2005).

[157] Verduijn (2004), pp. 141.

[158] Tang (1999), p. 45.

[159] Watts and Hahn (1993), p. 12.

or "new" supplier, the methods and instruments used will remain essentially the same.[160] A differentiation with regard to the direct interaction between a buyer and a specific supplier seems to be more helpful. *Figure 2-4* systemizes the basic forms of supplier development initiatives and integrates specific investment issues that have an influence on the ease of performing a supplier switch.[161]

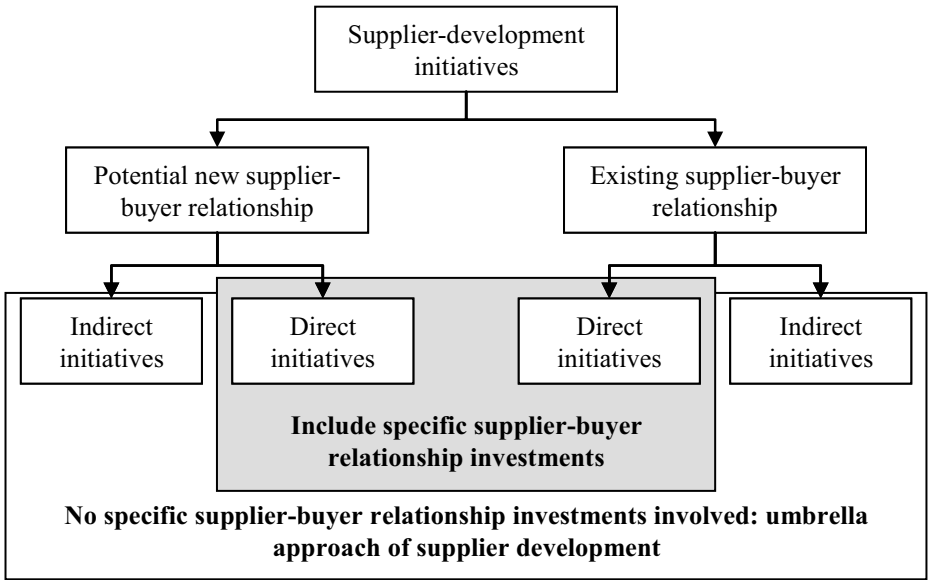


Figure 2-4: Structure of supplier development initiatives[162]

Indirect supplier development strategies include instigating competition among suppliers, whereby the buying company uses market pressures through the utilization of multiple suppliers.[163] Another indirect development opportunity is the implementation of supplier certification procedures in combination with comprehensive supplier-evaluation systems. If suppliers are analyzed frequently and the buying firm communicates expectations in the same manner, suppliers tend to invest more effort into performance improvements.[164] Furthermore, buying organizations can improve a supplier's performance by using incentive systems that aim for a supplier's motivation to improve performance independently. Incentives can include the sharing of achieved cost savings, consideration for future business, and recognizing supplier improvements through awards.[165] These indirect supplier development activities reflect a more passive approach to supplier development and require little involvement and investments of the buying organization. "*In essence, the buying firm is able to motivate suppliers to improve by providing positive market incentives (in the form of increased purchase volumes) or negative market incentives (in the form of decreased business or the threat*

[160] Wagner (2001), p. 211.
[161] Verduijn (2004), p. 140.
[162] With adoptions from Wagner (2001), p. 211.
[163] Krause *et al.* (2000), p. 36.
[164] Modi and Mabert (2007), p. 43.
[165] Gunipero (1990), p. 21; Modi and Mabert (2007), p. 44.

of competition).”[166] Indirect supplier development initiatives follow an “umbrella approach” to supporting supplier performance improvements and thus represent a non-supplier-buyer relationship-specific investment.

On the other hand, direct supplier development approaches comprise activities of the buying firm that directly aim for the improvement of a specific supplier-buyer relationship. The buyer is directly involved through the assignment of own resources that are dedicated to the supplier. Examples are the training of supplier’s personnel, dedicating buying firm’s personnel temporarily to the supplier, or the disposal of machinery. These actions cause relationship-specific investments in the supplier by the buying firm. Moreover, the buying firm internalizes the cost of developing the supplier’s performance, in the expectation that the investments will cause a valuable return in the future. “*However, these investments are non-transferable, and the benefits of the supplier development investment are unrecoverable for the buying firm if the relationship is prematurely dissolved.*”[167] Thus, investing in supplier-development activities can cause the risk of sunk costs when the improvement initiative fails and the vendor is switched. Nevertheless, the risk of generating costs that do not lead to an anticipated improvement effect can occur even when the disengager decides to invest nothing directly into the supplier’s performance enhancement. Those costs are related to opportunity costs, which arise when the purchasing company is aware of a better alternative supplier with a superior performance. Hence, opportunity costs are generated as long as the old vendor is subject to a performance weakness and a potentially superior alternative remains unused.

In general, it can be stated that for low-value-added, non-strategic commodities, the cost of changing to a new supplier tends to be low, and switching may be the preferred option, since the investment in a supplier development initiative might not be compensated by the performance improvements for the buying company.[168] However, switching suppliers of complex products that used to be a partner of the buying firm for a long time can cause substantial challenges and costs, especially if the buyer is dependent and the two transaction-partners are mutually integrated into the processes of the other.[169] Thus, if a supplier weakness occurs, supplier development seems to be the preferred option if the estimated effort of the certain initiative is smaller than the expected performance improvement.

(c) Supplier integration

Supplier integration can be defined as “*the combination of internal resources and capabilities of selected key suppliers through the meshing of inter-company business processes to achieve*

---

[166] Krause *et al.* (2000), p. 36.
[167] Krause *et al.* (2000), p. 37.
[168] Handfield *et al.* (2000), p. 37.
[169] Wagner (2001), p. 209.

a competitive advantage."[170] A competitive advantage through supplier integration can be achieved through the intensive use of the supplier's knowledge, especially in the product-development phase, which can lead to performance improvements like increased flexibility, decreased quality failures, and cost reductions, due to less inventory or economies of scale and scope. Besides the potential achievement of a competitive advantage through supplier integration, the reduction of supply-side uncertainties is another chief driver of supplier integration initiatives.

A prerequisite for supplier integration is a reduced and segmented supplier base. This is necessary, since not all suppliers can be integrated in all kinds of processes of the buying firm. Due to this, different supplier integration intensities can be identified. For example, *Jaspers* and *van den Ende* have developed a procedure to assess the degree of supplier integration by measuring the intensity of ownership integration, task integration, coordination integration, and knowledge integration. After the intensity of integration within these four dimensions has been determined, different configurations between arm's length and full integration can be derived.[171]

These systemizations can help companies to evaluate their extent of integration, and hence their potential performance improvements, since integration is regarded as an avenue to cost reductions, service enhancements, and uncertainty reductions.[172] These positive characteristics reflect the main drivers of supplier integration. However, besides these positive aspects some downsides of supplier integration have to be taken into account as well. These cause challenges for the purchasing company, especially if switching tendencies occur. Due to the high importance of the concept of supplier integration for the work on hand, the drivers, benefits, and challenges and their relation to supplier switching will be discussed in separate chapters.

2.1.3 Drivers and benefits of supplier integration and their impact on the switching environment

In the last decade supplier integration was strongly stimulated through the concentration on core competencies and the outsourcing of non-core competencies.[173] This trend has increased the interdependencies between buyers and suppliers and requires close linkages between purchasing companies and some important providers of supply objects.[174] Due to this trend, it can be stated that relationships between buyers and suppliers have changed substantially over

---

[170] Wagner (2003), p. 4.
[171] Jaspers and van den Ende (2006), p. 825.
[172] Bask and Juga (2001), p. 137.
[173] Fawcett and Magnan (2002), p. 339.
[174] Jaspers and van den Ende (2006), p. 820; Frohlich and Westbrook (2001), p. 185.

the last few decades, and formed a new supply environment.[175] These changes have fostered the implementation of supplier integration, for which two primary reasons can be identified: (a) environmental uncertainty and supply risks and (b) the potential of gaining competitive advantages.

(a) Environmental uncertainty and supply risk reduction through supplier integration

Uncertainty and risk receive increasing attention in various theoretical publications. Two prominent examples are the resource dependence literature[176] and the transaction cost approach literature.[177] *Noordewier, John,* and *Nevin* define uncertainty as "*unanticipated changes in circumstances surrounding an exchange*."[178] The processes constituting an exchange have to be adapted if the environment changes. This circumstance can be linked to dynamism. Dynamism includes a dimension of time in order to define the speed of change relative to a time unit.[179] Additionally, dynamism contains a dimension of scope of change, which can be revolutionary, piecemeal, focused, isolated, or incremental. Thus, the dynamism of a system can be described with respect to the pace and the frequency of change.[180] The more dynamic the environment of a company is, the less predictable the company's future, which in turn leads to increased uncertainty.

Risk can be described as "*the extent to which there is uncertainty about whether potentially significant and / or disappointing outcomes of decisions will be realized."*[181] Risk within a supply context can be defined in a similar way and is related to an exchange relationship between a supplier and a buyer:[182] *"supply risk is the transpiration of significant and / or disappointing failures with inbound goods and service."*[183]

Supply risks can be related to the supply market or the supplier-buyer relationship, whereas the supplier-buyer relationship category can be further divided into performance and behavioral risks (see *Figure 2-5*).[184] Risks related to the supply market have their roots in actions of governments and political circumstances in the country of the supply origin. Furthermore, legal, financial, and socio-cultural risks can be distinguished in the context of supply mar-

---

[175] Lin (2004), p. 943.
[176] E.g. Pfeffer and Salancik (1978).
[177] E.g. Williamson (1985); Rindfleisch and Heide (1997); Barney (1999).
[178] Noordewier *et al.* (1990), p. 82.
[179] Mintzberg and Westley (1992), pp. 42.
[180] E.g. Fine (1998).
[181] Sitkin and Pablo (1992), p. 10.
[182] Stölzle and Kirst (2007), p. 74.
[183] Zsidisin *et al.* (1999), p. 187.
[184] Zsidisin (2003), pp. 220.

kets.[185] Companies have very little, if any, opportunities to actively influence those kind of risks. However, supplier integration can help buyers to share the risks with their suppliers and hence reduce potentially negative effects.

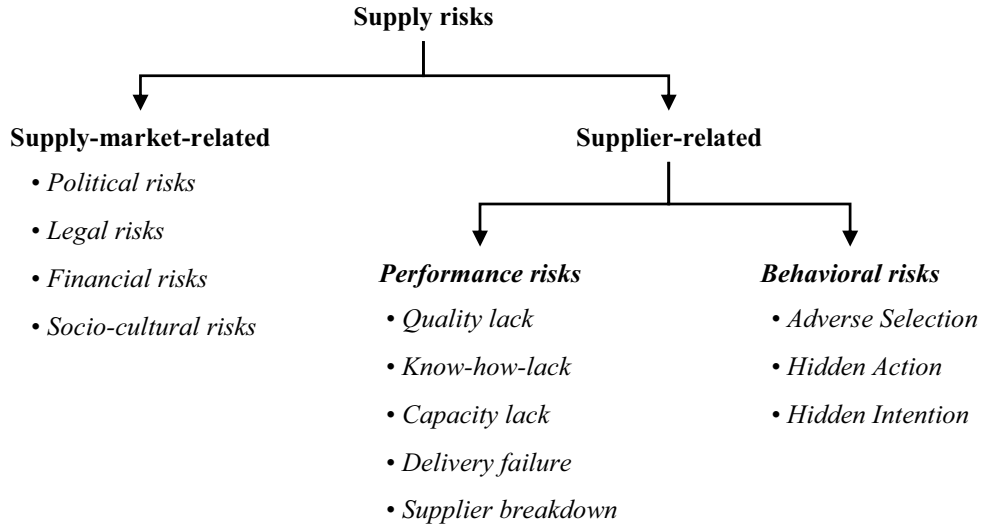


Figure 2-5: Overview of supply risks[186]

Risks related to the performance of a supplier can have different causes. Quality issues and capacity shortcomings are the most common risks that often lead to temporary or long-lasting crisis with the supplier. A lack in know-how, which leads to the incapability of the supplier to meet quantitative and qualitative requirements, as well as delivery failures with respect to quantity and the right product, are another source of supply risks associated to the supplier-buyer relationships. An extreme case of supplier-performance risks is represented by supplier breakdown. This risk comprises a total-supply breakdown, with the consequence that no goods and services can be obtained from the supplier anymore and the buyer's production comes to a halt.[187]

If both parties do not have the same degree of information about the transaction, information asymmetry exists. Information asymmetry is the main risk-driver in the supplier-buyer relationship behavior risk category and stems from a situation in which "*two parties possess unequal tacit knowledge and information about quality and compatibility.*"[188] This situation can lead to opportunistic behavior, which can be described as "*self-interest-seeking with guile*."[189] Depending on the time – in relation to the signing of the contract between the

[185] Trent and Monczka (2002), pp. 74.
[186] Stölzle and Kirst (2007), p. 63.
[187] Zsidisin (2003), p. 221. For other examples, see Cooper *et al.* (1997), p. 75.
[188] Lin (2006), p. 550.
[189] Williamson (1985), p. 47; Andersen and Buvik (2001), p. 207.

exchange partners – three forms of information asymmetry can be distinguished: "adverse selection," "hidden action," and "hidden intention."[190]

Adverse selection describes the risk of selecting the wrong supplier due to incomplete information before the contract (*ex ante*). Hidden action problems arise *ex post* as soon as the buyer cannot fully control the actions of the supplier and the supplier is taking advantage of this situation ("moral hazard"). The agency problem of hidden intentions refers to a situation where the agent has goals and interests not known *ex ante* by the principal, but will come to the surface after a contract has been made (*ex post*). These goals are, however, contrary to the objectives of the buyer. *Ex post* information asymmetries in particular bear a risk if the buyer has implemented specific and irreversible investments into the relationship, which cause a strong dependency on the supplier.[191] In order to reduce these kinds of risks, supplier integration can help the buyer to establish closer ties with the supplier by means of proactive joint-action efforts or to establish relational norms that reduce the hazards of opportunism.[192]

To avoid supply uncertainties, buyers implement securing mechanisms like contracts or monitoring instruments that help to identify upcoming problems as soon as possible. However, the implementation of those safeguards increases transaction costs, which include costs associated with negotiating, implementing, coordinating, monitoring, adjusting, enforcing, and terminating exchange agreements.[193] If these transaction costs become too high, switching tendencies may arise within a supplier-buyer relationship, if another vendor promises a lower need of supervision.

(b) Achievement of competitive advantages through supplier integration

The achievement of competitive advantages is an important objective of companies and has attracted extensive attention from practitioners and scientists.[194] However, over the last few decades of research the competitive advantage has mostly been sought inside the organiza-

---

[190] This risks are broadly discussed in the agency-theory literature and can be denoted as "agency problems" (for more information see Wenger and Terberger (1988), p. 507; Spremann (1990), pp. 568; Picot and Neuburger (1995), p. 16; Barth (2003), p. 98. The agency theory focuses agency relationships that occur whenever one partner in a transaction (the principal) delegates authority to another (the agent) and the wellbeing of the principal is affected by the choices of the agent. Wenger and Terberger (1988), p. 506; Picot and Neuburger (1995), p. 15; Barth (2003), p. 98. The theory assumes that information is distributed asymmetrically between the two transaction partners, whereby the agent obtains more information. Barth (2003), p. 98. Due to this, monitoring the agent is important to avoid unsatisfactory performance from the principal's point of view. Ross (1973), p. 136.

[191] Spremann (1990), p. 569; Dietl (1993), p. 121; Schade and Schott (1993), p. 21; Picot *et al.* (2002), p. 91; Barth (2003), p. 99.

[192] Heide and John (1990), p. 26.

[193] Williamson (1985), pp. 22; Milgrom and Roberts (1990), p. 65.

[194] E.g. Simon (1988); Barney (1991); Prahalad and Hamel (1991); Porter (1998); Picot *et al.* (2001); Vokurka, *et al.* (2001).

tion.[195] In particular, the resource-based view has become one of the most influential explanatory approaches in the strategic management literature. It adopts an inward-looking view and conceptualizes firms as heterogeneous entities consisting of bundles of idiosyncratic resources.[196] Resources are defined as "*all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by the firm that enable the firm to conceive and implement strategies that improve its efficiency and effectiveness.*"[197]

Firms that control valuable, rare, inimitable, and non-substitutable resources have the potential to achieve a competitive advantage in comparison to competitors.[198] These reasons have to be utilized in combination with value-creating strategies that cannot easily be duplicated by competing firms in order to unfold the whole value-generating potential.[199] By combining the understanding of resources and competitive advantage, the resource-based view suggests that resources enable the generation of *Ricardian* rents and *Quasi*-rents, which can be seen as a performance measure.[200] Due to the assumption that resources controlled by a company lead to a competitive advantage, the search for competitive advantages focuses on resources that are housed within the firm.[201] In the perspective of the resource-based view, competing companies only purchase standardized (non-unique) inputs that are available to all competitors or the costs of acquiring those goods equal the economic value they create. Consequently, inputs from outside the firm boundaries cannot be a source of competitive advantages.[202]

More recently, attention has shifted to supplier-buyer relationships as the unit of analysis. The reason for the increasing emphasis on competitive advantages gained from supplier-buyer relationships primarily stems from the trend of focusing on core competencies and outsourcing, which reduces the net-value added ratio. By focusing on core-competencies, a company concentrates only on resources that can lead to a competitive advantage and needs to purchase other necessary – non-core – goods from external suppliers to competitive conditions. Thus, the dyadic relationship has been seen as the true origin of competitive advantage instead of

---

[195] Hines and Rich (1998), p. 524.

[196] Lavie (2006), p. 640.

[197] Barney (1991), p. 101. Wernerfelt (1984), p. 172, provides an alternative definition.

[198] Dierickx and Cool (1989), pp. 1509.

[199] Conner and Prahalad (1996), pp. 479; Picot *et al.* (2001), pp. 523.

[200] Lavie (2006), p. 640. Companies earn rents for many reasons. Different ways can be identified that lead to the achievement of rents. "Rents can result from collusive relationships with competitors, from disequilibrium effects (luck), and from unique factors." Montgomery and Wernerfelt (1988), p. 624. The last class represents Ricardian rents. They result from scarcity of resources, which limits their supply in the short run. Quasi rents describe the added value that a firm can extract from its specialized resources relative to the value that other firms can extract from similar resources. Lavie (2006), p. 644. Examples can be particularly effective machines or especially talented workers. Quasi-rents will only exist as long as supply is smaller than demand. Thus, if supply is artificially restricted by a monopoly, the quasi-rent may continue indefinitely.

[201] Dyer and Singh (1998), p. 660.

[202] Dyer and Singh (1998), p. 660.

the individual organization.[203] This is especially the case if a company's resources and their related activity systems have complementarities in the external environment, e.g. suppliers that improve their potential to create competitive advantages.[204] Furthermore, special supplier-buyer relationships that have been optimized through mutual adjustments seem to be a source of competitive advantage itself because of their valuable, rare, inimitable, and non-substitutable character. *Figure 2-6* summarizes the development of competitive advantages through supplier-integration with respect to the three stages.

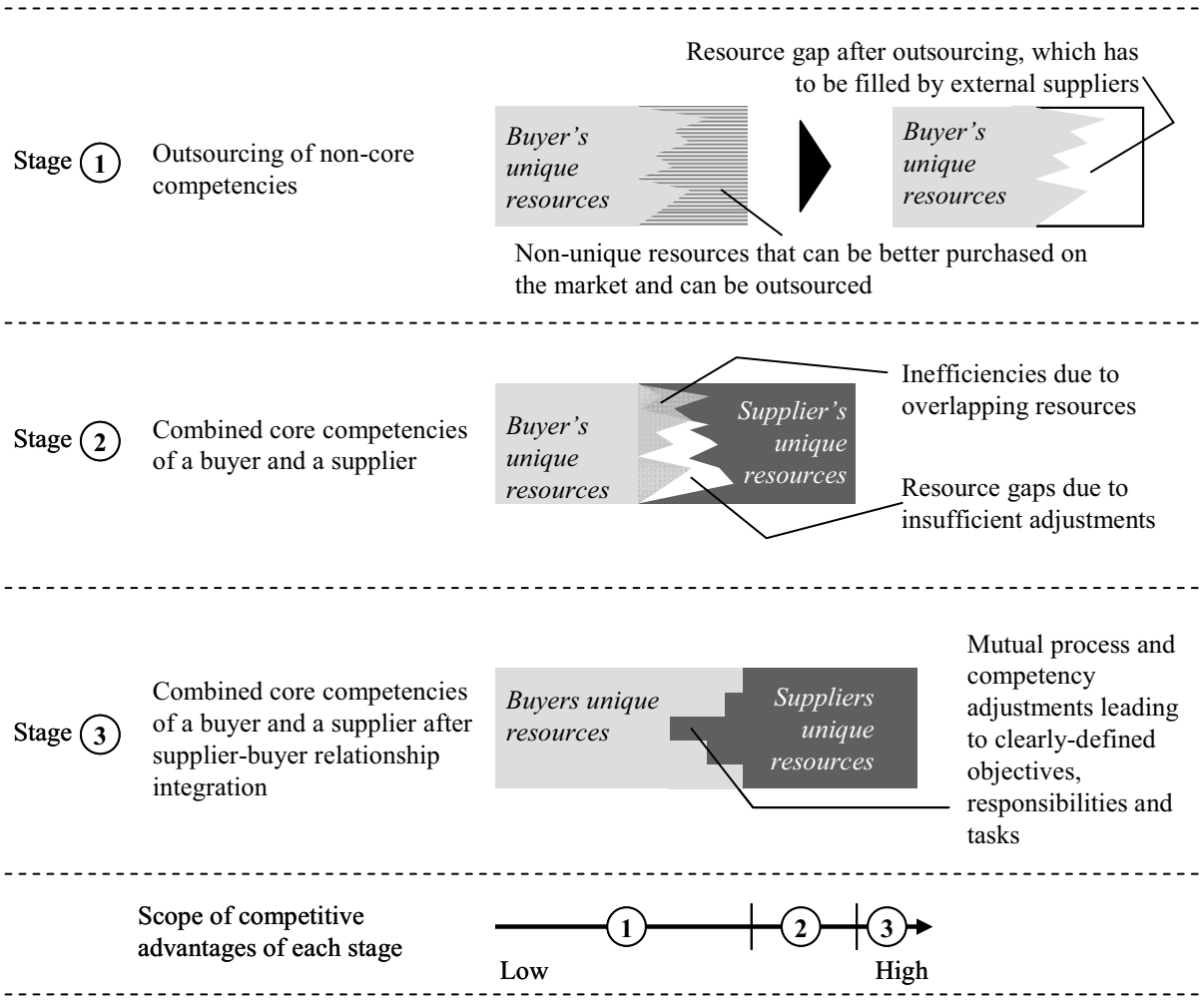


Figure 2-6: The emergence of competitive advantages through outsourcing and supplier integration

Put simply, the combination of internal and external competitive advantages emerges through three stages. In the *first stage,* the buying company gets rid of superfluous resources that are not core competencies. This leads to a leaner company, since inefficiencies and useless ballast

[203] E.g.: Dyer and Singh (1998), Monczka and Morgan (1996); Cannon and Perreault (1999); Lavie and Rosenkopf (2006).

[204] Collis and Montgomery (1998), p. 64.

has been cut off.[205] However, in order to supply the customer with valuable goods, additional resources will be needed. These resources can comprise goods (e.g. units, modules, and systems) and services (e.g. inbound and outbound logistics) that are necessary for the completion of the final product or service. These additional resources have to be purchased from the outside the company and consequently external organizations become vital for the buying firm. In the *second stage*, after a thorough analysis of the supply needs, potential suppliers will be analyzed and the best-fitting supplier will finally be selected.[206] The consequence of the combination of core competencies and competitive advantages of the two companies is an increased competitive advantage potential. However, the whole potential of the supplier-buyer relationship might not be achieved since some resources are redundant and superfluous (e.g. redundant quality controls). Other resources might not be strong enough to close the gap to the actually required resource-level (e.g. engineering capabilities). Following the argumentation of supplier integration literature, these gaps and inefficiencies can be eliminated in the *third stage* through mutual adjustments in areas like problem-solving responsibilities, division of labor, systems, processes, and the implementation of specific investments.[207] Related activities in this stage of supplier integration can be, for example, top management group meetings, holding quality awards, technology development support, one-to-one assistance, quality audits, and improvement workshops.[208] In order to achieve this competitive advantage in a timely manner, the purchasing company can support the vendor in the integration process. This has the character of a direct supplier development initiative.[209] Specific investments and the granted support of the buying firm foster the attainment of the benefits of integration. Thus, depending on the intensity of these two means the *integration strategy* of the disengager can be characterized.[210] Following the definition of supplier switching, the new supplier will be integrated into the value-creation processes of the disengager, which requires decisions about the integration strategy. Depending on the intensity of the buyer's support and the extent of specific investments, four generic integration strategies can be distinguished. The purchasing company can, on the one hand, extensively support the new supplier while imple-

---

[205] In general, the term "lean" implies to do more with less. Lean is often used in connection with lean manufacturing, which describes a "zero inventory" and "just-in-time approach." Christopher (2000), p. 37; Mason-Jones (2000), p. 4064. For more information about "leanness" see Womack *et al.* (2003); Womack and Jones (2003).

[206] See Chapter 2.1.2.

[207] E.g. Takeishi (2001), p. 408.

[208] Hines and Rich (1998), p. 527.

[209] See Chapter 2.1.2 or Sánchez-Rodríguez *et al.* (2005), pp. 289.

[210] In general, the integration strategy refers to the way a disengager plans to implement and run the relationship with the new supplier and causes a variety of activities. Das *et al.* (2006), p. 565. The supplier integration strategy can be related to – besides others – the time in the product development process, the supplier will be integrated. Examples are Bidault *et al.* (1998); Dowlatshahi (1998); Dowlatshahi (1999); Monczka *et al.* (2000); Mikkola and Skjøtt-Larsen (2003); Wagner and Hoegl (2006). The strategy can be related to the position of the new supplier in the hierarchy of suppliers as well. E.g. Kamath and Liker (1994); Tani and Wangenheim (1998); Nellore and Soderquist (2000). A further strategy is related to the intensity of supplier integration. Frohlich and Westbrook (2001); Narasimhan and Kim (2002).

menting either limited ("focused supporter") or extensive specific investments ("extensive supporter"). On the other hand, the buyer might only grant limited support while implementing either limited ("limited supporter") or extensive specific investments ("long-term supporter"). Depending on the chosen switching strategy, different degrees of integration can be achieved.

All in all, it can be stated that supplier-integration can increase the buyer's potential to realize a competitive advantage. Through the combined and integrated forces of the transaction partners the companies can realize an improved use of technology, a shorter time to market, minimized required investments in resources, reduced costs, and decreased response or cycle time.[211] Furthermore, purchasing companies engaged in supplier integration gain the opportunity to reduce their supply-side risks through proactive joint planning, exchange of hostages or relational norms, which reduce the hazards of opportunism and supply shortages.[212] The two main drivers of supplier integration presented reflect the expectations companies have while implementing integrated relationships with their exchange partners. The subsequent literature overview in *Table 2-2* shows a summary of publications dealing with supplier and supply chain integration and discusses the benefits on an empirical basis. Although it must be distinguished between the broader concept of supply chain integration and the dyadic perspective of supplier integration, both streams of literature will be analyzed due to their relevance for an understanding of integrated relationships and their challenges for supplier switching.

Authors	**Research objective**	**Research method and design**	**Revealed benefits of supplier and supply-chain integration**
Sakakibara *et al.* (1997)	Reveal relation between JIT-manufacturing and manufacturing performance	Questionnaire based quantitative research. Valid responses: 822	Delivery reliability capability and JIT performance result from relationship-building practices, such as the sharing of technical and end-customer information with suppliers. If this information is communicated frequently between the exchange partners, manufacturing performance is enhanced.
Artz (1999)	Relationship between transaction specific assets and partnership performance	Questionnaire based quantitative research. Valid responses: 393	Integrated supplier-buyer relationships can lead to significant flexibility-improvements due to mutual adjustments and rapid information distribution. These flexibility gains can be achieved through relationship specific investments.
Carr and Pearson (1999)	Relation between supplier-buyer relationships and buyer's performance	Questionnaire based quantitative research. Valid responses: 739	High levels of supplier-buyer collaboration and integration e.g. in form of frequent face-to-face planning and communication with key suppliers, lead to a better financial performance of the purchasing company

[211] Monczka and Morgan (1996), p. 110.
[212] Skjøtt-Larsen (2007). p. 88.

Frohlich and Westbrook (2001)	Identifying forms of supplier and customer integration	Questionnaire based quantitative research. Valid responses: 322	The forms of integration are defined by the direction (towards suppliers and/or customers) and degree of integration (inward-, periphery-, supplier-, customer- and outward-facing). They have revealed that a high degree of supply chain integration is positively correlated with higher levels of performance.
Takeishi (2001)	Division of labor between a suppliers and buyers in new product development	Qualitative interviews and questionnaire based quantitative research. Valid responses: 45	Supplier integration in form of divided labor can reduce fixed costs and increase specialist's expertise. Yet, in order to outperform competitors, buyers should not solely rely on the capabilities and resources of the supplier but have to develop, maintain, and improve their own as well.
Rosenzweig *et al.* (2003)	Reveal relation between integration intensity and buyers performance	Questionnaire based quantitative research. Valid responses: 238	Results show that consumer products manufacturers with high supply chain integration intensity achieve superior product quality, delivery reliability, process flexibility, and cost leadership.
Bagchi and Skjøtt-Larsen (2005)	Identifying driving factors for supply chain integration	Questionnaire based quantitative research. Valid responses: 149	Supply chain integration is positively affecting operational performance, reduces costs, and increases process efficiency and flexibility.
Das *et al.* (2006)	Finding supplier integration practices and their impact on performance	Questionnaire based quantitative research. Valid responses: 322	An optimal set of six supplier integration practices, comprising a mixture of internal and external integration initiatives emerged as significant influences on five manufacturing performance dimensions. Deviations from the optimal profile are associated with performance deterioration.

Table 2-2: Selected empirically-revealed benefits of supplier integration[213]

The positive mode of supplier integration is linked to the improvement of some bottom-line measures like quality, delivery, flexibility, or cost and thus can finally support a company to gain a competitive advantage. The improvements will be achieved through the meshing of core competencies of a buyer with the ones of the supplier, which requires mutual adjustments and relationship specific investments. In this regard, supplier integration has led to a supply environment in which the purchasing company works closely and collaboratively with its important supplies, which deliver strategic, leverage, or bottleneck goods.

This closeness of collaboration has led to a certain degree of stability on the supply side, but in the context of supplier switching tendencies, this positive stability can turn into negative rigidity and sluggishness as soon as a change of the supplier structure is required. Due to this, it can be stated that the concept of supplier integration is problematic, since it involves various dimensions and varying intensities and can lead to high dependencies on suppliers.[214]

---

[213] Same results in terms of quality improvements through supplier integration have been revealed in researches from Garvin (1987); Anderson *et al.* (1994). For delivery and reliability improvements same results have been identified by Yen Chun Wu (2003); Heusler *et al.* (2006). Process flexibility increase have been through supplier integration has been revealed by Sanchez (1995) as well. Cost reductions have been detected by Roth (1996) as well.

[214] Bask and Juga (2001), p. 149.

These negative aspects can turn into challenges for the buying firm, as soon as changes in the supplier structure are required. Thus, integrated supplier-buyer relationships lead to a challenging switching environment.

Section summary and key insights into supplier switching

Today's business environment has significantly changed through trends like globalization, liberalization, and modern information technologies. In their quest for opportunities to retain competitiveness, companies have identified improvement potentials on the supply side of the firm, which have led to a growing importance of supply and supplier management. Purchasing companies have reduced their supplier base in order to decrease complexity and take advantage of economies of scale. Furthermore, the reduction has enabled buying firms to engage in closer and integrated relationships with some of their suppliers, which promises a better supply performance than arm's length relationships for certain important supply objects. These integrated supplier relationships are broadly implemented in contemporary industrial firms, have enabled companies to gain competitive advantages. They have formed the picture of today's supply environment and build the background of this research. The characteristics of the supply environment become the starting position for supplier switching. Thus, the supply environment emerges to the switching environment as soon as serious problems occur with integrated suppliers.

2.2 Disadvantages of supplier integration and their impact on supplier switching

Comparatively little has been researched on the possible negative effects of supplier integration. More recently, this topic has gained some attention in science and practice, which can be related to the awareness that integrated supplier-buyer relationships tend to be more rigid, which decreases their flexibility to adapt to the fast-changing dynamic environment.[215] This static character, which integrated supplier-buyer relationships might experience, can cause challenges in the perspective of the purchasing company, especially if the incumbent supplier's performance is weakening. This leads to the question of how buying firms can react if a supplier weakness occurs. This chapter will provide an overview of selected publications related to the downsides of supplier integration and will present possible reaction options. Furthermore, a literature summary of the research on supplier-switching and related topics will be provided.

2.2.1 Challenges of integrated supplier-buyer relationships as drivers for supplier switches

Only a few publications mention the disadvantages of integration or deal with disintegration. The following literature overview in *Table 2-3* will show what kinds of challenges have been discussed in the scientific community.[216] As with the benefits of supplier integration, the literature analysis about the disadvantages of this concept incorporates publications about challenges in supply-chain integration and general integration of external companies as well, since they face comparable difficulties.

Authors	Research objective	Revealed disadvantages and risks of supplier and supply-chain integration
Harrigan (1985)	Analyzing the effect of vertical integration on exit barriers	When products must be modified frequently, or technology changes rapidly, high degrees of integration can hamstring buyers at the precise time when they need to change inputs and processes quickly. Thus, the negative effects of integration on strategic flexibility need to be taken into account.
Larson (1994)	Reveal influence of buyer-supplier cooperation on product quality and cost	Product quality and cost improvements can be subject to deteriorations if unilateral dependencies of the buyer exist and integration has been pushed too far. Buyers can become trapped into a relationship due to high specific investments or a lack of alternative suppliers. This, in turn, leads to an unequal distribution of power, which the supplier can abuse.

[215] Verduijn (2004), p. 4.

[216] In contrast to the previous literature overview about the benefits of supplier integration, the column "Research method and design" has been discarded, since the overwhelming majority of the analyzed publications have a conceptual character. This can be interpreted as an indicator of the need for empirically-based research on the disadvantages of supplier integration.

Singh and Mitchell (1996)	Demonstrating that integration can oppose the buyer's performance	Integration can place firms in a precarious position, with respect to unilateral dependencies on the will of another. Additionally, integration can compromise the process for acquiring resources from outside the supplier-buyer relationship.
Bask and Juga (2001)	Describing management trends that challenges integrated supply chains	Today's supply chains seem to need more disintegration, divergence and differentiation. In their opinion, growing competition, technological advancements, and shortened product life cycles increase the risk that integrated systems and processes across supply partners are obsolete as soon as they have been created.
Park and Ungson (2001)	Showing the influence of integration on management complexity	Integration of business partners can lead to serious competitive risks and managerial complexity. Furthermore, conflicting strategic interests of the cooperating companies can lead to rivalry, which damages the willingness to make an effort to support the other party's objectives.
Bretzke (2005)	Challenging the scientific discussion about the benefits of integrated supply chains	The price of supplier integration is the renunciation of the market mechanism and competition between different vendors. Integrated supplier-buyer relationships tend increase management complexity and lead to inflexibility and slow decision-making. Cybernetic networks that can add and dissolve suppliers as soon as needed are seen as advantageous in the future.
Rossetti and Choi (2005)	Explaining how supplier integration can lead to unintended consequences	Purchasing companies can grow monopoly suppliers if supply base rationalization and integration are pushed to an extreme degree. Thus, integration can lead to increased dependency, through which some suppliers take opportunistic advantage. Furthermore, close integration of suppliers has fostered the elimination of competition between suppliers. Additionally, diminished competitive advantage due to decreased quality and flexibility can be downsides of supplier integration.
Hofmann (2006b)	Analyzing the need of flexible supplier-buyer relationships	Supplier integration can lead to increasing management complexity, decreasing flexibility, financial risks, shrinking need for innovation, dependencies, partial loss of decision-power, lost performance through a bad cultural fit between buyer and supplier, and the risk of unwanted know-how transfer.

Table 2-3: Selected disadvantages and risks of supplier integration[217]

In summary, it can be postulated that the disadvantages and risks of supplier integration refer to increased management complexity, decreased flexibility of the supplier-buyer relationship structure, worsening of financial performance indicators, the neglected development of own capabilities in respect to the supply object, unilateral dependencies that increase behavioral risks, constrained freedom of decision making, frictions due to different cultures, unwanted know-how transfer, and the growing of monopoly suppliers. These challenges become even more obvious in a fast-changing dynamic environment with high uncertainty, which requires the ability to adapt quickly to changing circumstances. Issues like inertia within a long-lasting

[217] Borys and Jemison (1989) have revealed same results in terms of management complexity and interface problems. Park and Russo (1996) and Kogut (1989) have identified further financial risks of integration. Miles and Snow (1992) have revealed the risk of neglecting the development of own capabilities in integrated supplier-buyer relationships. Costly frictions due to different cultures have been revealed as disadvantage of integrating suppliers by Park and Ungson (1997). Furthermore, Gulati (1995) and Hamel (1991) discuss the risk of unwanted know-how transfer to the transaction partner.

supplier-buyer relationship can additionally reduce the adaptability.[218] Relation-specific investments can lead to dependencies that cause inflexibilities of the supplier-buyer relationship-structure and hence can cause difficulties if a transaction partner wants to exit the relationship for any reason. The reverse relationship between supplier-buyer relationship integration and flexibility of the supplier-buyer relationship structure can be regarded as especially challenging, for supplier integration and fosters the relevance of research on supplier switching. Thus, the concept of flexibility in the context of this work will be further analyzed.

Flexibility in general and in the context of supplier-buyer relationship has attracted increasing attention in practice and science.[219] This is based on the assumption that flexibility is of major importance to the survival and prosperity of firms in turbulent, dynamic, and unpredictable environments. Consequently, the availability of flexibility is regarded as a competitive advantage.[220] Flexibility can be described as a "*firm's capacity to adjust to change and / or exploit opportunities resulting from environmental changes […]*."[221] As previously mentioned, some researches have found empirical evidence that supplier-buyer relationship integration can increase flexibility over time.[222] In contrast to this, research has also found that specific parameters of flexibility, like the flexibility of choosing optional partners, may decrease in integrated supplier-buyer relationships.[223] This clarifies the necessity to distinguish between the flexibility *within* and the flexibility *of* supplier-buyer relationships. This is because how the flexibility *within* supplier-buyer relationships – both strategic and operational – can be combined with the external integration necessity in such a way that the entire set of supplier-buyer relationships is flexible remains an unsolved problem.[224] Thus, flexibility *of* supplier-buyer relationships corresponds to the ability to switch suppliers.

For this work, supplier-buyer relationship flexibility is defined relative to the presented definition of flexibility as the *capability of a firm to make adjustments within given supplier-buyer relationships (flexibility within supplier-buyer relationships) and adjustments of the structure of supplier-buyer relationships (flexibility of supplier-buyer relationships), in order to catch up with change and / or exploit opportunities resulting from environmental changes.*

Flexibility has different dimensions that have to be considered in this discussion.[225] The degree of flexibility within each dimension amounts to the overall flexibility of a company.

---

[218] Wagner and Friedl (2007), p. 701.

[219] E.g. Vickery *et al.* (1999); Duclos *et al.* (2003); Graves and Tomlin (2003); Dreyer and Gronhaug (2004); Pagell and Krause (2004); Lummus *et al.* (2005); Swafford *et al.* (2006); Voigt *et al.* (2006).

[220] Dreyer and Gronhaug (2004), p. 492.

[221] Dreyer and Gronhaug (2004), p. 484.

[222] Artz (1999), pp. 117; Bagchi and Skjøtt-Larsen (2005), p. 286.

[223] Bretzke (2006), p. 7; Hofmann (2006b), pp. 79.

[224] Duclos *et al.* (2003), p. 454.

[225] Vickery *et al.* (1999), pp. 16; Duclos *et al.* (2003), p. 450.

Supplier-buyer relationship flexibility can be linked to these dimensions as well and aims for the flexibility within an existing supplier-buyer relationship and the flexibility to change the supplier-buyer relationship structure:[226]

1. *Product flexibility* refers to the ability to customize products in order to meet specific customer demands. This includes the capability to develop new products either within an existing or a new / additional supplier-buyer relationship.
2. *Production flexibility* is the ability to adjust capacity either upwards or downwards in order to meet the demanded customer quantities either within an existing or a new / additional supplier-buyer relationship.
3. *Distribution flexibility* is the ability to provide widespread access to products in combination with the ability to respond to special customer expectations either within an existing or a new / additional supplier-buyer relationship.
4. *Supply flexibility* relates to the possibility of getting quick access to new resources and the ability to identify and avoid potential supply shortages either within an existing or a new / additional supplier-buyer relationship.
5. *Logistics flexibility* is the ability to effectively transform goods and services in respect to time and location in order to meet changing customer requirements either within an existing or a new / additional supplier-buyer relationship.
6. *Organizational flexibility* reflects the ability to allocate labor force, skills, and technological capacities to the needs of the company to meet customer's service and demand requirements either within an existing or a new / additional supplier-buyer relationship.
7. *Information systems flexibility* is the ability to align information system architectures and systems with the changing information needs of the organization as it responds to changing customer demands either within an existing or a new / additional supplier-buyer relationship.

The listed dimensions refer to the flexibility *within* and flexibility *of* supplier-buyer relationships. They have to be evaluated in order to gain insights about the overall supplier-buyer relationship flexibility.

Flexibility *within* supplier-buyer relationships can be increased through specific investments e.g. in IT, production machines, logistical assets, or exchange procedures. In general, those investments increase the adaptability of specific supplier-buyer relationships and are discussed in concepts like "agility."[227] Flexibility *of* supplier-buyer relationships refers to the structure *of* relationships and includes concepts like modularization and loose coupling of

---

[226] Vickery *et al.* (1999), pp. 16; Duclos *et al.* (2003), pp. 450; Hofmann (2006a), p. 79.
[227] Christopher (2000), pp. 37.

supplier-buyer relationships and supplier switching.[228] The flexibility of supplier-buyer relationships can be increased through industry-wide standard implementation, complexity decreases, lessening supplier-buyer relationship specific investments, and supplier dependency reductions. The flexibility *of* and the flexibility *within* supplier-buyer relationships amount to the supplier-buyer relationship flexibility.[229] However, the simultaneous achievement of both kinds of supply flexibility causes a dilemma.

In order to increase the flexibility *within* supplier relationships and gain relational rents,[230] the relationship has to be moved towards integration and away from arm's-length relationships through the deployment of specific investments.[231] However, the more specific an investment in a certain supplier-buyer relationship is, the more dependent the investing actor is on the other, since redeploying the investment into another use would cause high sunk costs.[232] Besides the sunk cost of the specific investments, switching costs will also occur,[233] which in combination can make a change of the supplier structure unattractive or even impossible. In other words, companies try to promote supplier-buyer relationship integration through the deployment of specific investments. These investments aim for a decrease of uncertainty and opportunistic behavior, improving the ability to meet changing customer requirements, and an increase of flexibility *within* supplier-buyer relationships. On the other hand, specific supplier-buyer relationship investments increase a buying firm's dependencies and hence lead to a reinforcement of the supplier-buyer relationship structure. Thus, by increasing flexibility *within* supplier-buyer relationships, companies decrease the flexibility *of* supplier-buyer relationships. Consequently, the ability of a buying firm to switch to an alternative supplier in order to exploit opportunities on both the supply market shrinks.

The challenge in integrated supplier-buyer relationships is that companies have to be able to increase both kinds of flexibility at the same time. The effects of decreased flexibility *of* supplier-buyer relationships will be even more important, as soon as problems and weaknesses occur with an existing supplier-buyer relationship. In general, companies have to be able to switch a supplier if an existing one cannot satisfy the needs of the organization anymore. Generally, in highly turbulent environments the concept of switching is regarded as an

---

[228] Fine (2000), pp. 213.

[229] The term "supplier-buyer relationship flexibility" and "supply flexibility" will be used interchangeably in the following.

[230] Relational rents are defined as supernormal profits that are jointly generated in an exchange relationship and cannot be generated by either firm in isolation. Dyer and Singh (1998), p. 662.

[231] Cox *et al.* (2003), p. 143.

[232] By definition, sunk costs cannot be recovered in the event the transaction is terminated. Specialized equipment or skills are examples of assets and investments that have no alternative use, and will be "sunk" after termination. Demski *et al.* (1987), p. 79.

[233] Basically, switching costs correspond the one-time costs upon switching from one supplier to another. Porter (1980), p. 10; Jackson (1985), pp. 66; Burnham *et al.* (2003), pp. 111.

important mechanism to stay tuned with the latest changes in both demand and supply.[234] The concept of switching and especially supplier switches are neglected in comparison to other research on supplier-buyer relationships, for example in the field of supplier development initiatives. Before the understanding of the concept of switching is further described in the next chapter, the results of a literature analysis to the topic of supplier switching will be presented in *Table 2-4*. However, due to the limited number of publications concerning supplier switches, the literature analysis has covered related publications in areas like relationship termination, dissolution, and exit as well.

Authors	**Objective**	**Focus - Concept**	**Key findings**
Coulter and Ligas (2000)	Development of a framework for service dissolution.	Process - dissolution	The process of supplier-buyer relationship exit passes the dissolution stage, exit stage, and post-dissolution stage. Different factors have an influence on the duration of an exit and are service-, market-, self-, and other-related.
Giller and Matear (2001)	Combination of the dissolution reasons with the right dissolution process.	Process - dissolution	Different termination strategies with different outcomes can be distinguished. Other-oriented strategies are perceived favorably while self-oriented strategies are less likely to produce a satisfactory outcome for the actors.
Halinen and Tahtinen (2002)	Development of a process model to understand how dissolution advances.	Process - dissolution	Relationship dissolutions are likely to differ according to three dimensions. (1) Complexity of the ending process (2) amount of social and economic costs incurred, and (3) speed and practical easiness of the process. Factors that influence the process of dissolution can be systemizedin predisposing, attenuating, and precipitating factors.
Peng and Shenkar (2002)	Increase knowledge of relationship dissolution by using interpersonal divorce as metaphor.	Process - dissolution	Description of a four-phase dissolution process covering the initiation, going public, uncoupling, and aftermath face. Managers should watch for warning signals revealing a weakening relationship. Decision-makers need to pay attention to the asymmetry between the divorce initiator and partner, the repercussions of going public, and the impact of the aftermath on future strategic relationships.
Michalski (2004)	Explaining different types of customer relationship ending.	Process - ending	Six types of relationship ending exist: forced, sudden, creeping, optional, involuntary, and planned ending. The typologies are derived under the consideration of a strong / weak reaction on failure and short / long process of relationship ending.
Alajoutsijärv*et al.* (1998)	Explanation of how "beautiful" exits can be realized.	Process - exit	The quality of exit is mostly affected by the disengager's choice of the exit strategy. Four strategies can be distinguished: "disguised exit," "silent exit," "communicated exit," "revocable exit," and "voice."
Hocutt (1998)	Creation of model that depicts key antecedents of relationship commitment and dissolution.	Reasons - dissolution	Relationship specific investments in the old supplier have positive influences on the commitment to the existing vendor and hence negative impact on the likelihood of relationship dissolution. However, the likelihood of relationship dissolution is positively influenced by the quality of alternatives.

[234] Verduijn (2004), p. 6.

Smith (2002)	Revealing how environmental changes can de-stabilize business relationships.	Reasons - dissolution	Normative emphasis is first increased to stabilize a relationship as environmental conditions worsen and then retracted to initiate the de-stabilization of the relationship in order to start the process of dissolution.
Verduijn (2004)	Development of a framework that identifies contingencies leading to need and ease of switching.	Reasons - switch	Ease and need for switch are both multidimensional constructs, which have to be balanced. Four main components constitute a need for switching: the motive, triggers, frequency, and urgency for switching. Factors that influence the easiness of switching are: the way actors are chosen, the relationship governance, exchange processes, and the settings of coordination.
Heide and Weiss (1995)	Explaining how the decision to switch a supplier comes together.	Reasons - switching	Division of the decision-making process into the consideration phase and the choice stage. They further distinguish between switching to a vendor who is already selling products to the buyer and vendor who is new to the purchasing organization. Interestingly, they found that an organization with centralized decision processes is more likely to switch to a new supplier, than a decentralized organization.
Keaveney (1995)	Identification of critical behaviors of service firms that causes customers to switch services.	Reasons - switching	Classification of reasons why customers are switching services into eight general categories: 1) pricing, 2) inconvenience, 3) core service failure, 4) failed service encounters, 5) response to failed services, 6) competition, 7) ethical problems, 8) involuntary switch.

Table 2-4: Literature overview of supplier switching and related research topics

By and large two main focuses of research can be distinguished. One deals with the reasons for switching or relationship termination, and the other with the process of switching and dissolution. A third subcategory of publications is covering both areas of literature. The review reveals that a holistic view of supplier-switching, which systemizes the relevant switching activities is missing – especially in a business to business context. Furthermore, no known research relates supplier switching theories that explain how a successfully performed switch of a supplier can lead to a competitive advantage for the purchasing organization. In addition, no research has comprehensively discussed the dilemma between flexibility *within* and flexibility *of* supplier-buyer relationships, in the context of supplier switches. Thus, based on this literature analysis, these research gaps reflect theoretical challenges, which will be addressed along with its practical counterparts in the work at hand.

2.2.2 Supplier switching as one reaction strategy related to supplier weaknesses, its barriers and its impact

As stated before, one major challenge for integrated supplier-buyer relationships is the achievement of the benefits of integration while preserving the flexibility of supplier-buyer relationship structure. In the perspective of the buying firm, the problems that are related to the flexibility-dilemma will stay under the surface as long as the existing supplier performs

well. However, the hitches of the dilemma will become apparent as soon as the buyer is not satisfied with the performance of the supplier anymore. Dissatisfaction emerges as soon as a negative difference between required and available performance of the supplier is recognized, and if this performance-gap cannot be closed in a timely manner and at competitive costs.[235] This situation implies a supplier weakness, which will be discussed next.

Supplier weaknesses as the initiator of supplier switching

A supplier weakness can occur in an absolute and a relative form. The absolute supplier weakness refers to a situation in which the performance of the existing supplier has declined in comparison to the past. Examples are decreased quality, increased costs, worsened service, or a decrease in the strategic match with the buyer's and the supplier's objectives. In the case of a relative supplier weakness, another (alternative) supplier, which can offer better prices, quality, innovativeness, service, or is superior in terms of other performance measures in comparison to the old supplier, has been identified.

According to *Hirschman,* buyers that experience a supplier weakness can choose between three generic strategies to react. These are labeled as the *"exit*," *"voice*," and "*loyalty strategy*."[236] The concept of exit, voice, and loyalty (EVL) has been primarily utilized in social psychology to explain interpersonal relationship divorces or stability and has been used to categorize the responses of adults to dissatisfaction in "romantic" relationships.[237] Furthermore, the EVL framework has contributed to consumer marketing and supplier management literature.[238] The different strategies will be introduced in an order that is related to the scope of the consequences for the supplier.

The *loyalty strategy* is the weakest possible form of a reaction to a supplier weakness, since no action will be started. The buying firm will keep its poorly-performing supplier and will just accept the current output level. In other words, the buyer keeps being loyal, no matter what has happened and does not even try to improve the situation. This reflects a completely passive behavior of the purchasing company.

The *voice strategy* refers to a situation where the buyer has the intention to continue the relationship. However, certain changes have to be made. The supplier will be confronted about its weakness and both parties jointly discuss possible solutions. In general, the current supplier-buyer relationship can be continued with or without an additional supplier. The voice strategy without an additional supplier can be divided into two options as well. The buyer can either try to adjust the supplier's performance or the buyer adjusts the requirements of the

---

[235] Simatupang and Sridharan (2005), pp. 349; Verduijn (2004), p. 133.
[236] Hirschman (1970).
[237] Giller and Matear (2001), p. 96.
[238] E.g. Helper (1990); Helper (1991); Michalski (2004).

exchange relationship according to a negotiation process. The first alternative is frequently combined with instruments and methods of supplier development. The advantage of the voice option is the absence of supplier switching costs. On the other hand supplier development initiatives are always resource-consuming, either in terms of *(a)* directly invested resources of the buying firm, or *(b)* the acceptance of opportunity costs, for the time, the used supplier's performance is inferior to a potential alternative.[239]

(a) In direct-supplier development the risk of exaggerated resource investments has to be contained. Thus, it seems to be useful to determine a specific amount *ex ante* to the performance improvement project, and define certain goals.[240] The adequacy, which means if the company has invested the right amount or spend too much or too little to accomplish the defined objectives, can be determined *ex post* to the development initiative. This can lead to four generic situations, in which a company has either adequately invested comprehensive (satisfied comprehensive resource investor) or limited resources (satisfied limited resource investor), or the buying firm's comprehensive (unsatisfied comprehensive resource investor) or limited (unsatisfied limited resource investor) resource investments have been inadequate.

(b) As soon as the disengager identifies a supplier weakness, the buying firm experiences opportunity costs in comparison to the old performance of the incumbent supplier or in comparison to an alternative supplier. Thus, the time the purchasing company grants its old supplier to improve can be regarded as a risky investment since the disengager temporarily takes a weaker performance of the old supplier in the confident expectation of future improvements. These two dimensions can be utilized in order to determine the adequacy of the *ex ante* invested time in an *ex post* perspective. Basically the two dimensions can describe four general situations in which the disengager has either confidently invested more (confident comprehensive time investor) or less time (confident short time investor), or the purchasing firm has unconfidently invested more (unconfident comprehensive time investor) or less (unconfident short time investor) time.

The second alternative within the voice strategy – the adjustment of requirements – is basically an accepted decrease of the supplier's performance and an *ex post* correction of the terms and conditions of the transaction relationship. The agreed corrections are a result of an active negotiation process between the exchange partners.

The voice strategy with an additional supplier refers to a situation in which the extent of the exchange will be split up between the existing and a new supplier. It can be stated that if the new supplier gets a substantial share of the business, this form of the voice option can be regarded as the initial form of supplier switching. The advantage of this alternative is the utilization of the capacity and knowledge of more than one supplier. On the other hand, this

---

[239] See Chapter 2.1.3.
[240] Handfield *et al.* (2000), p. 47.

alternative is combined with increased coordination effort and hence transaction costs, and might cause additional fixed costs. This is especially likely to be the case if the product or service cannot be produced without intensive specific investments or mutual adjustments on the supplier's or the buyer's side.

The use of the *exit strategy* causes a complete supplier switch, since the particular exchange relationship with the old supplier will be terminated and a relationship with a new supplier will be started. Within this strategy, we have to distinguish between an internal and an external new source of supply. The first case is often described as insourcing, which can be defined as the internalization of former externally-performed tasks into the own organization. In the other case, the old supplier will be substituted by a new one. If a purchasing company decides to reallocate its demand from an incumbent integrated supplier to an alternative supplier, which needs to get integrated, a switching strategy should be defined. The switching strategy can be split up into a *(a)* dissolution strategy and an *(b)* integration strategy.

(a) The dissolution strategy is linked to the disengager's (the purchasing company) behavior towards the old supplier in the dissolution process. The behavior can be defined through the two dimensions of the disengager's degree of egoism and frankness.[241] The degree of egoism can be located between the two extremes of other-orientation (altruistic) and self-orientation (egoistic). The other-orientation strategy facilitates the goal of protecting the old supplier from additional harm. The negative aspect of the other-oriented switch may be that the disengager has to sacrifice self-interest through the renunciation of some short-term benefits. If the disengager follows a self-oriented strategy, the company is more concerned with its own interests and well-being and may hurt the old supplier.[242] The self-orientation strategy may seem to be attractive in the short run, but the "disengager has to assess how much trouble the ex-partner may cause through actions in the connected business network,"[243] which can have a negative impact in the end. The degree of frankness is related to the disengager's communication behavior towards the old supplier. It can be situated between the two extremes of indirect and direct communication. Indirect strategies are used when the disengager does not state the desire to exit explicitly, but tries to achieve the dissolution of the old supplier-buyer relationships by different actions. Direct communication on the other hand, does not leave the old supplier in doubt and the aspiration to terminate the exchange relationship is addressed explicitly and frankly.

The dissolution strategy of a disengager can thus be described by applying the degree of frankness and egoism. Four generic types of disengagers can thus be identified. The disengager can be other-oriented and concerned with the well-being of the old supplier without explicitly addressing the wish to exit. This disengager can be labeled as "warm but reticent."

---

[241] Alajoutsijärvi *et al.* (2000), pp. 1274.
[242] Alajoutsijärvi *et al.* (2000), p. 1284.
[243] Alajoutsijärvi *et al.* (2000), p. 1285.

Other-orientation and direct communication refers to a "warm and frank disengager". If the purchasing company is more self-oriented and secretive in its communication behavior, the disengager could be described as "cold and reticent." If self-orientation and open communication is the case, the disengager has applied a "cold but frank" dissolution strategy.

(b) Besides the dissolution strategy, which is more related to the activities from the disengager towards the old supplier, the integration strategy deals more with activities affecting the new supplier. The integration strategy has been already described in *Chapter 2.1.3* (b) and refers to the way a disengager plans to implement and run the relationship with the new supplier. The dissolution and the integration strategies are the two elements of the switching strategy that need to be defined by the disengager, after a supplier weakness has occurred and the decision to switch has been made. All possible reaction options to a supplier weakness are summarized and illustrated in *Figure 2-7*.

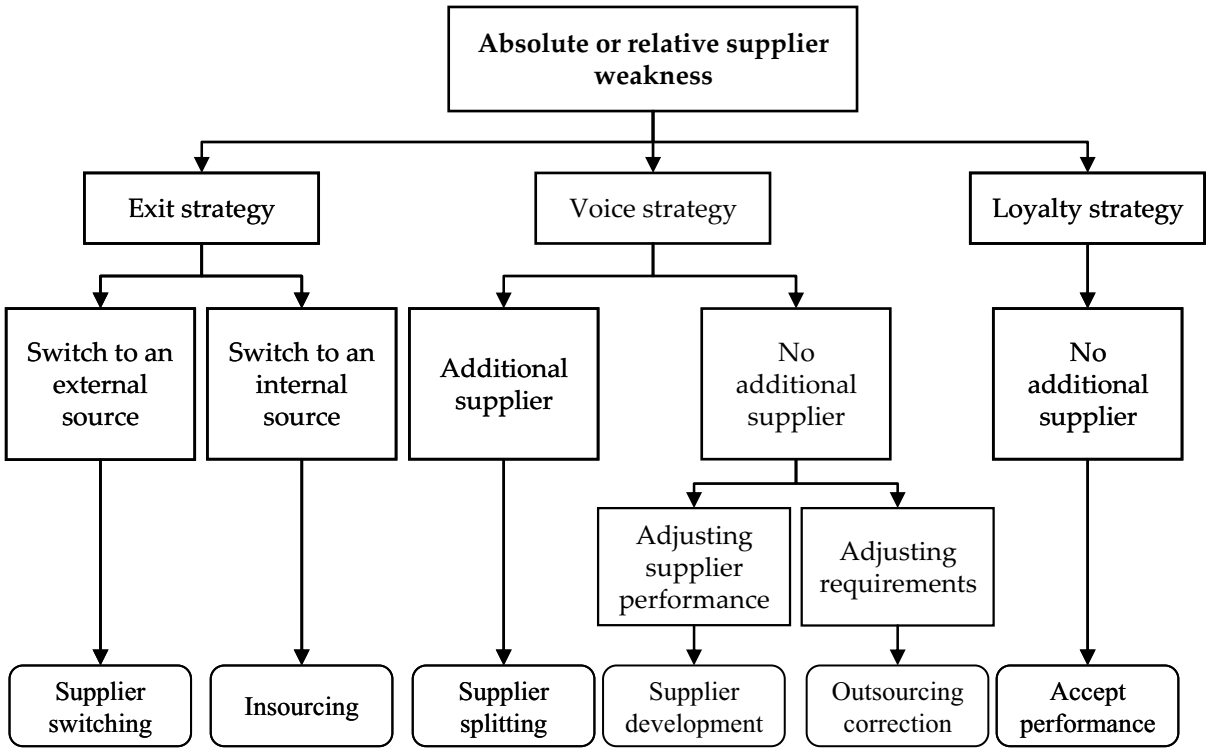


Figure 2-7: Exit, voice and loyalty framework[244]

The research will focus on the exit strategy option and switches to a new external supplier. "New" in this context means that the particular supplier, which replaces the former supplier, has not been used for the specific supply object recently. However, it is possible that the new supplier and the purchasing firm are or have been involved in other exchange relationships and therefore know each other fairly well. In order to explain the reasons for applying the exit strategy, which leads to a supplier replacement, in further detail, the next section will take a closer look on the causes of supplier weaknesses.

---

[244] Kirst and Hofmann (2007), p. 416.

Reasons for supplier weaknesses

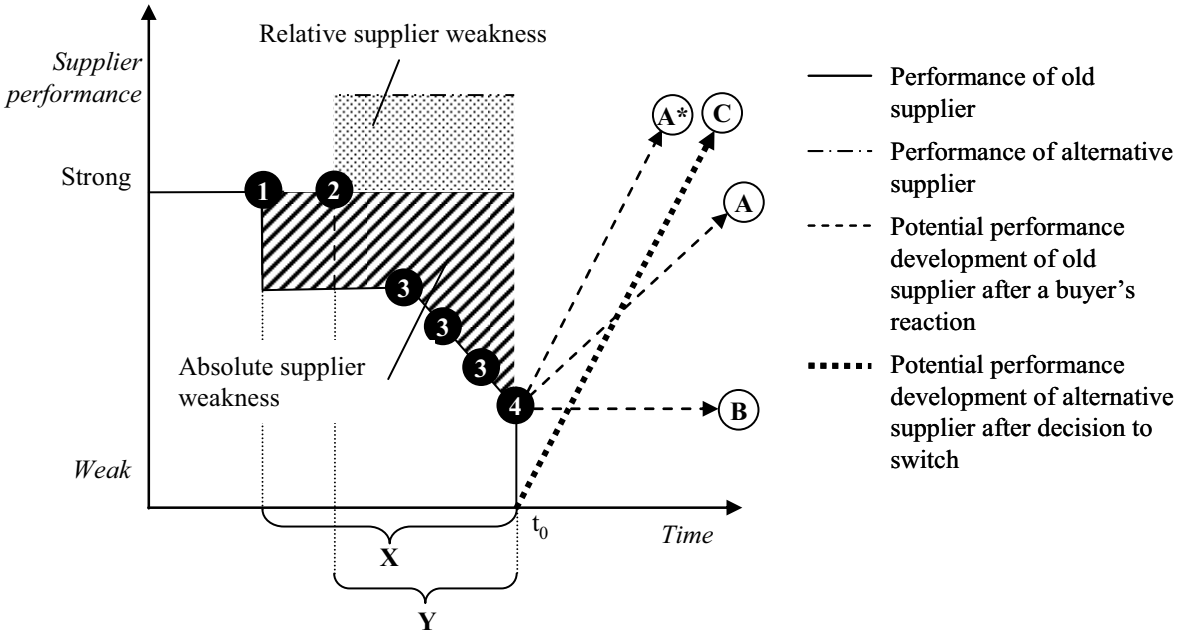
There can be several reasons for the weakness of the actively used supplier. Weakness can be a result of one or several negative triggers that eventually lead to a situation, where the buyer has to choose between the exit, voice, or loyalty strategy. The triggers have to be distinguished from the final motivation to switch, since the motivation refers to the more general category of supplier weakness, whereas the triggers represent events that finally initiate actions towards voice or exit.[245] In general, six motivation categories to exit a specific supplier-buyer relationship can be distinguished:[246]

- Insufficient sharing of new technologies due to a lack of the current supplier's innovative capabilities.
- Unsuitable or impossible access to alternative components and services, due to complex specifications.
- Supplier's capacity bottlenecks that are caused by strong variation in demand.
- Price increases initiated by the current supplier or the identification of a new supplier with lower prices or a better cost / benefit ratio.
- Poor quality delivered by the current supplier or the identification of a new supplier with a better quality / cost ratio.
- Decrease of the strategic fit between the objectives of the buyer and the ones of the supplier.

Thus, a motivation to switch a supplier will arise after certain triggers have stimulated a specific motivation category strongly enough (e.g. multiple price increases by the supplier affect the price-increased motivation to switch). The literature basically distinguishes seven triggers that influence the motivation to switch: quality decline, availability and attractiveness of alternatives, decreased exit barriers, likelihood of success of voice, perceived value of product and services, buyer's loyalty, and strategic fit.[247] Accordingly, *a trigger is a change of parameters that negatively affects the supplier's performance.*[248] However, the triggers usually do not lead to a supplier switch instantaneously. There is a rather wide agreement that particularly important suppliers deserve ample warning or even assistance (voice) over a certain period of time.[249] A big challenge of supplier switching is to determine the duration of the considerate treatment of the supplier. The phase of supplier development and support

[245] Hofmann (2006a), p. 83.
[246] Related to Verduijn (2004), pp. 134.
[247] Lee (2002); Steward (1998); Hirschman (1970).
[248] Kirst and Hoffmann (2007), p. 417.
[249] Ahmadjian and Lincoln (2001), p. 695.

cannot last forever, and neither can the patience of the buyer. The hypothetical process leading to a decision to switch the supplier is schematically illustrated in *Figure 2-8*.



1 Trigger with a big absolute impact

2 Trigger with a big relative impact

3 Multiple small triggers with absolute impact

4 Buyer's decision regarding exit, voice or loyalty

X Time of decreased performance through the absolute supplier weakness (until buyer's decision)

Y Time of relatively decreased performance in comparison to an alternative supplier (until buyer's decision)

A Voice: Development of the old supplier up to the former level

A* Voice: Development of the old supplier to the level of the alternative supplier

B Loyalty / Voice: Correction of the requirements or doing nothing

C Exit: Terminating the old relationship and integrating into the alternative supplier-buyer relationship

Figure 2-8: Exemplary evolution of a supplier weakness

The figure schematically shows one possible pre-switching (*ex-ante*) decision phase and has to be regarded as one example of how a situation in which the purchasing company needs to decide between exit, voice or loyalty can come together. The figure shows a specific supplier-buyer relationship and the development of the supplier's performance over time.[250] Initially the supplier has a satisfying performance from the perspective of the buying firm. A first trigger (no. *1*) occurs, which has an immediate, absolute, and perceivable impact on the supplier's performance (e.g. an unannounced price-increase). The trigger leads to an absolute supplier weakness, since the supplier's performance has been decreased in comparison to its old performance. Even though the performance of the supplier has decreased in the displayed

[250] The performance of the supplier is related to the supplier's ability to positively influence the buyer's economic, technological, and strategic situation (please refer to Chapter 1.2).

situation, the buyer does not question the whole relationship yet, and stays loyal. The second trigger has a relative impact on the supplier's performance. A potentially alternative supplier for the supply object has been identified that is potentially able to generate a better performance as the old supplier and could therefore be more valuable for the buying firm. Consequently, a relative supplier weakness emerges. Even if the old supplier does not have an absolute weakness caused by trigger one and its actual performance is the same, the old supplier would be worse than the alternative supplier and therefore weak.

Due to this relative supplier weakness, the buying firm faces opportunity costs, since the next best alternative supplier is better than the one in use. After the second trigger has occurred, the old supplier shows an absolute and a relative weakness, which amount to the perceived supplier weakness. However, in the situation being considered, the buyer still keeps being loyal, since no corrective action is initiated. The triggers labeled with number three indicate a bunch of weak triggers that eventually lead to a slow decline of the supplier's performance (e.g. creeping quality deterioration). One of these triggers alone would not have a measurable impact, but since lots of weak triggers occur in a relatively short period of time, they finally lead to an unacceptable performance level. If the supplier falls below this buyer-specific level of minimum-satisfying performance, the buying firm has to decide about the future of the relationship. The point in time at which the supplier makes the decision is labeled as t_0. The buyer can continue the relationship and use a "voice" strategy with the old supplier. Instruments of supplier development can be used to push the supplier back to its old performance level (*A*) or to improve the old supplier's performance so much that it meets the potential performance of the alternative supplier (*A**). Besides the voice strategy, the buyer can decide to do nothing and simply accept the underperformance of the old supplier (*B*). This loyalty-strategy is of little practical relevance and will not be focused on in this research. However, it can happen if the supplier-buyer relationship faces a planned end so that any effort put into the relationship would be a sunk cost anyway. Finally, the supplier might decide to take advantage of the potentially higher performance of the alternative supplier and switch (*C*). The evaluation of the different strategies is related on a calculation of cost and benefits. Furthermore, the level to which a supplier's performance is regarded as too low in the view of the buying company can vary. How long a buying firm will actually wait before it initiates countermeasures or switching activities is influenced by factors that are related to the barriers of supplier switching. These barriers can extend the time of decreased absolute (*X*) or in a relative (*Y*) supplier performance.

Barriers to supplier switching

The following barriers to supplier switching have an influence during the time period in which a lower supplier performance is accepted by the purchasing company. A general barrier of supplier switching refers to the deciding managers in the buying company. From the

manager's perspective, making the wrong decision by switching to an uncertain new source of supply, which might not be better than the old supplier, and might even be worse in the end, can be a "career-killer."[251] Hence, decision makers could be better off if they change nothing and try to improve the situation with the current supplier, which would represent the voice strategy. These circumstances can cause a situation in which the buyer experiences a long phase of reduced supplier performance, which in turn has impacts on the buyer's performance. This performance gap can become even bigger in the interim phase between the old and the new supplier, if disruptions occur in the switching phase. However, the extent of the performance-gap is almost unpredictable and thus it causes even more uncertainties for the manager who is in charge of the switching decision. As a result of this, the uncertainty about the new supplier's performance is one major barrier of supplier switching. Other barriers can be identified that prevent a buying company from terminating an integrated supplier-buyer relationship.[252]

- A bias towards existing suppliers can appear when employees or certain functions within the buying organization want to stay with the old supplier due to positive experience in past businesses or social relationships.
- Internal power structures can be a difficult barrier to supplier-switching if conflicting interests of different departments exist.
- Habit and an aversion to change can cause strong inertia, since employees are used to the way of doing business with the old supplier and do not want to modify their processes.
- Personal relationships between employees from the buyer and supplier can make supplier-switching difficult, since conflicting social interests might occur.
- Lack of information and communication (e.g. through language and IT-systems barriers)[253] can make the real performance of a potential new supplier hard to predict or the switching process hard to control, which then in turn requires more time.
- Opportunistic behavior of the old supplier as soon as the termination of the exchange relationship will be announced may cause further troubles that can make the performance gap even bigger.
- Other important barriers for supplier switching are specific investments of the buyer, which will turn into sunk costs if the relationship will be terminated. Thus, as asset specificity decreases, switching becomes easier and vice versa.

---

[251] Ahmadjian and Lincoln (2001), pp. 695.

[252] Related to Alajoutsijärvi *et al.* (2000), pp. 1277; Vaaland (2004), pp. 41; Michalski (2004), pp. 985; Mikkola and Skjøtt-Larsen (2004), p. 38; Verduijn (2004), pp. 134; Wagner and Friedl (2007), pp. 701.

[253] Stölzle and Kirst (2007), p. 93.

The listed barriers will lead to delays in the process of deciding upon the exit- or voice-strategy. As long as nothing is done to improve the supplier performance or switch to another vendor, the loyalty strategy will be followed. With respect to the stated barriers, the uncertainty, and the cost involved in supplier switching, it can be stated that switching integrated suppliers is a difficult, complex, and costly venture.[254] Consequently, systematic supplier switching activities that aim for a decline of uncertainty and additional costs as well as a reduction of time needed for a supplier replacement can lower the barriers for supplier switching. Hence, they can help to make supplier-switching a realistic option as soon as a supplier weakness occurs. How the advantageousness of the exit, voice, or loyalty strategy can be evaluated, and how the future performance of a specific supplier-buyer relationship can develop after the decision (*ex-post*) is schematically illustrated in *Figure 2-9*.

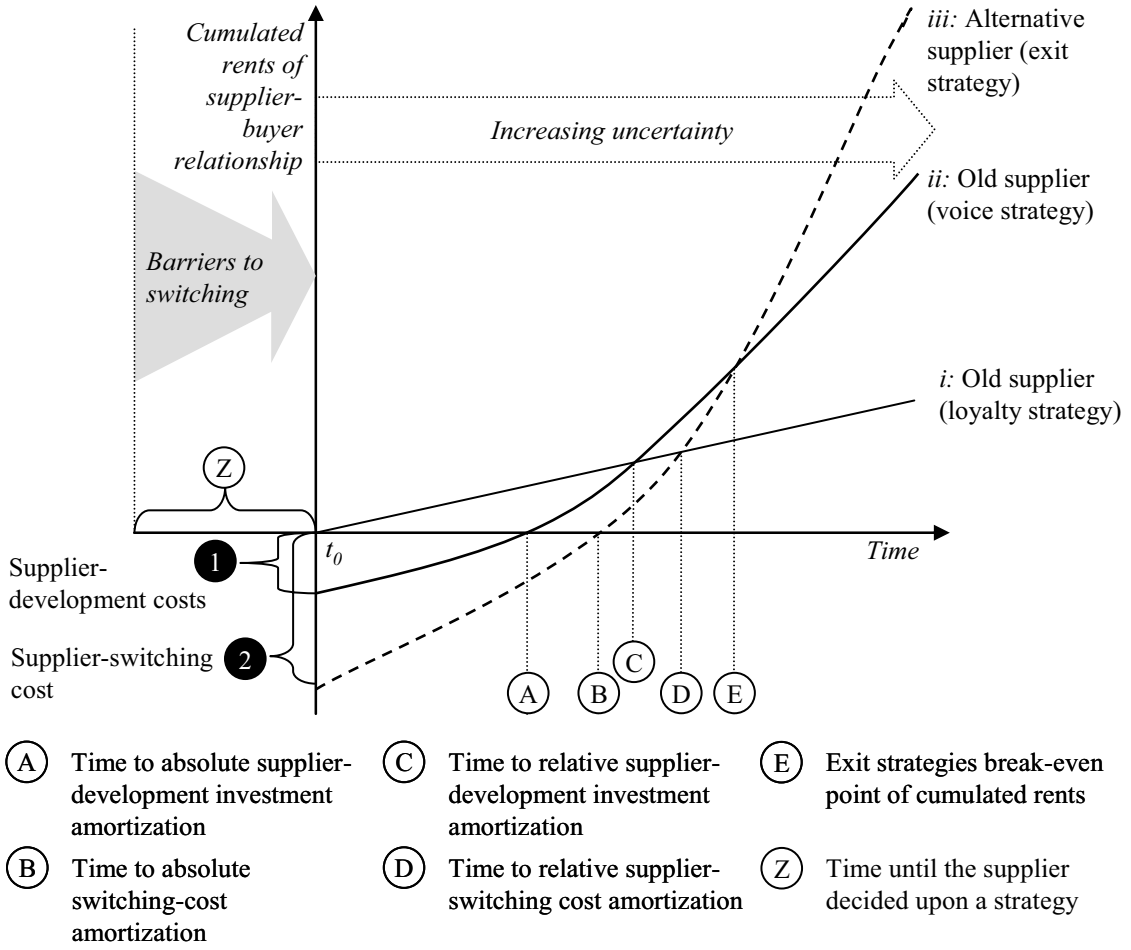


Figure 2-9: Possible future development of the supplier-buyer relationship performance after EVL decisions

The figure shows one possible future development of the performance of the buyer's relationships with either the incumbent or an alternative supplier after the loyalty, voice, or exit strategy has been implemented. The basis for the evaluation is the anticipated performance of

[254] Arnold *et al.* (2005), p. 120.

the supplier – either the incumbent or the new one, which is described in terms of rents. These rents (Ricardian, Quasi, and Relational rents) are generated through better prices, quality, technology, or other performance measures of the respective supplier in comparison to other providers of the supply good. In order to illustrate the rent-generating capacity of a specific supplier-buyer relationship in the course of time, the ordinate shows the "cumulated rents of the supplier-buyer relationship," whereas the abscissa presents the dimension "time." In general, the more rents a specific supplier-buyer relationship generates per time unit, the more attractive the utilized supplier is. The figure illustrates a possible basis for decision-making at the time t_0, which corresponds with t_0 in *Figure 2-8*. Depending on the intensity of the barriers of supplier switching, t_0 can be pushed into the future, which would extend the phases of weak supplier performance (*X* and *Y* in *Figure 2-8*) and hence the time, where the disengager experiences opportunity costs. At t_0 all former rents generated by the old supplier-buyer relationship will not be considered anymore. The figure shows three curves, *i*, *ii*, and *iii*, with different curve progressions, which reflect only one possible development. The gradients of the curves result from the pace of rent generation. The better the performance of the particular supplier is, the steeper the slope.[255] The origin on the y-axis, which is determined by the initial costs the implementation of a certain strategy causes, further influences the position of the curves.

Curve *i* represents the cumulated rents of the old supplier without any adoptions. This curve would be experienced by the buying firm, if it follows the loyalty-strategy and the supplier is unable to overcome its weakness alone. The positive linear gradient reflects that, in this case, even without adoptions, the old supplier would generate rents.

Curve *ii* describes the rent-gaining development of the old supplier in combination with a supplier development initiative, which would reflect the voice-strategy. The costs of a supplier development (number *2*) lead to an initial negative cumulated rent for the old supplier-buyer relationship in this example, since cost-causing actions occur massively at the beginning of the initiative and hence have a lump sum character.[256] The supplier-development initiative aims for an improvement of the old supplier's rent-generating potential. This objective will be reached eventually. The improvement process is represented by the increas-

---

[255] Figure 2-9 shows the switching situation after the supplier weakness has been identified, which therefore cannot be seen directly but only in comparison to former gradient angel of the old supplier. However, if the weakness should be displayed, an absolute supplier weakness would result in a shrinking gradient angel. In opposite to that, a relative supplier weakness can just be identified, if the gradient angel of the old supplier is compared to the gradient angel of an alternative supplier.

[256] Instead of a massive initial effort to develop the old supplier, other procedures could be imaginable. Continually occurring costs over a longer period could lead to initially decreasing cumulated rent curve. This would be the case if the costs of the supplier development initiative would be bigger than the rents that are generated by the supplier-buyer relationship. Eventually, after the development actions have been successfully implemented, the slope of the curve will become positive and increasing again. Another possibility would be a temporary flattening of the cumulative rents curve, which means that the rents generated by the supplier-buyer relationship are still bigger than the expenditures for the development initiative. However, the lump-sum character of the supplier-development costs has been chosen due to its proximity to reality.

ing gradient in the beginning of curve *ii*. A time-gap can be identified between the start of the actions of supplier development and their full impact on the supplier's performance and hence on its rent-generating potential. The gradient angel in the last sector of curve *ii* mirrors the old supplier's rent-generation potential after the development initiative has taken place. This potential has increased in comparison to the starting gradient angel of the curve, which is the same as the old gradient angel of curve *i.* If curve *ii* is compared with curve *i,* the supplier development initiative can be considered successful, since the cost of the initiative can be overcompensated by the increase in rent generation. After a certain period of time *A*, the absolute expended amount has been amortized and the cumulated amount of rents generated becomes positive again. The costs to develop the old supplier are amortized relatively in comparison to the situation without supplier development (curve *i*) after period *C* has passed by. From this moment on, the cumulative rents of the old supplier, which has experienced supplier development actions, are bigger than the cumulative rents of the old supplier without supplier development. Thus, it can be stated that the voice-strategy is superior to the loyalty strategy if the supplier-buyer relationship should last longer than *C*.

Curve *iii* represents the cumulated rents of an alternative supplier and thus, stands for the exit-strategy. The origin of curve *iii* lies in the negative area of the cumulated rent dimension, since the use of the new supplier goes along with supplier switching costs, represented by number *2*.[257] In general, switching costs become higher when more specific investments have been involved in the transaction between the buyer and the old supplier.[258] Switching costs act as an exit barrier in poorly-performing relationships[259] and have attracted some attention in management research.[260] Switching costs are primarily related to prior commitment to a technology or a particular supplier and reflect the one-time costs upon switching from one supplier to another.[261]

It can be stated that even if the buyer's satisfaction with a particular supplier-buyer relationship may be less than satisfactory, the buyer may stay in the relationship because the psychological and economic costs of switching are considered too high.[262] The psychological switching costs are related to, for example, psychic pain, caused when leaving suppliers with whom the buyer had an extended relationship and sometimes social bonds, and the worry of making the wrong decision.[263] Those switching costs are difficult to measure but have an important

---

[257] As the cost for a supplier development initiative, the supplier switching costs are assumed to have a lump sum character, since they will occur as soon as the decision to switch has been made. This assumption has been made in order to make the exit and the voice strategies more comparable.

[258] Kogut (1988), p. 320.

[259] Demski *et al.* (1987), pp. 95; Heide and Weiss (1995), p. 33; Mol (2001), p. 51.

[260] E.g. Monteverde and Teece (1982); Nielson (1996); Sharma and Patterson (2000); Lewis and Yildirim (2005); Li *et al.* (2006).

[261] Porter (1980), p. 10; Jackson (1995), pp. 66; Burnham *et al.* (2003), pp. 112.

[262] Coulter and Ligas (2000), p. 686; Sharma and Patterson (2000), pp. 471.

[263] Coulter and Ligas (2000), p. 690.

impact on the switching decision. The switching costs are also related to sunk costs for relationship-specific investments, which need to be reinvested in the new relationship, and the costs for the initiation of the new relationship.[264] Switching costs can be described as transaction costs, since they occur through the use of the market mechanism and are related to the initiation of a new transaction relationship. Switching costs lead to a negative value of the cumulated rents, which will be countervailed by upcoming rents. On account of the integration phase, the new supplier cannot generate rents at its full potential at the very beginning of the new supplier-buyer-relationship. However, the pace of rent-generation increases eventually through, for example, learning effects, closer interaction of the exchange partners, and supportive activities of the purchasing company.

In comparison to the voice and the loyalty strategy, costs combined with the switch to the alternative supplier will be amortized after time *B* has elapsed. From this time on, the cumulated rents generated by the new supplier-buyer relationship will become positive. After a period *D*, the cumulated rents of the new supplier-buyer relationship will be bigger than the rents that would have been generated in the old transaction relationship without adoptions (loyalty strategy). When curve *iii* crosses the cumulated rents curve *i* of the old supplier after the loyalty strategy has been implemented, the switching cost are relatively amortized. Since the pace of the alternative supplier's rent generation is bigger than the old supplier's gradient angel after the supplier development initiative, the cumulated rents of the new supplier-buyer relationship will surpass the rents generated in the old relationship eventually (after period *E* passed by). This moment in time can be regarded as the break-even point of the exit strategy. After the break-even point, the exit strategy is superior to both the loyalty and the voice strategy, in terms of rent generation potential and absolute cumulated rents. In order to be superior, it is a prerequisite that the supplier-buyer relationship lasts longer than *E*.

In general, it has to be considered that all curves represent the transaction of the same supply object with differently-formed supplier-buyer relationships. If this particular exchange should only last, or is only needed, until the end of period *C* at maximum, the loyalty strategy would be superior, since the value of cumulated rents would be bigger in comparison to all other strategies. If the existence of a supplier for the particular supply-object is required longer than period *C* but for less than period *E*, than the voice-strategy and supplier development would be the superior solution. For all other cases that require a perspective that goes beyond the period E, the exit strategy and the switch of the supplier represents the superior strategy.[265]

The curve progressions in *Figure 2-9* represent only one possible situation and one possible future development of the different supplier-buyer relationship settings, and other progres-

---

[264] Michalski (2004), p. 979.

[265] If the supplier-buyer relationship should last exactly as long as period C or period D, the loyalty- and voice-strategy (C) and the voice- and exit-strategy (D) would be equally matched. However, this seems to be more of theoretical interest and particularly unlikely in practice, and will not be discussed further.

sions and crossing-points are imaginable. This is mainly due to the surrounding uncertainty of the exchange, which increases with its distance from t_0. The more the buying firm moves its rents-estimations in the future, the bigger the variance of the potential rents and hence the bigger the risk of misevaluations and wrong decisions about the choice concerning the exit, voice, or loyalty strategy. However, in consideration of *Figure 2-9*, it can be stated that two factors in particular have an influence on the advantageousness of the exit, voice, and loyalty strategies:

- The initial costs that are combined with a supplier development or supplier-switching initiative. It can be postulated that, *ceteris paribus*, the higher the initial costs of a chosen strategy are and the longer the required phase of amortization is the bigger the uncertainty becomes.
- The pace of rent-generation in the different supplier-buyer relationship settings. The higher the pace of rent generation becomes through the implementation of the exit, voice, or loyalty strategy (*ceteris paribus*), the better the performance of the supplier-buyer relationship, and the longer one of the strategies stays superior, or the earlier it becomes one of the superior strategies.

Taking this into account, a systematical approach towards supplier-switching has two main starting points to improve the outcome of a supplier-buyer relationship exit strategy and hence to perform a successful switch. Firstly, the supplier switching costs, which have to be reduced in order to make exit strategies economically more meaningful. Secondly, the time needed until the alternative supplier's cumulated rents become superior, which has to be decreased in order to get better results faster and limit uncertainty. If these two levers of a successful supplier switching initiative can be used to gain a better supplier-buyer relationship performance, a proficient and systematic approach towards supplier-switching can help a buying company to increase its performance, improve its rent-generating capabilities and, finally, it can help the disengager to achieve a competitive advantage.

The relationship between systematic supplier switching and competitive advantage can be described as follows: reduced switching costs and time needed until the alternative supplier can be considered as superior cause, decrease of uncertainty, and a lower switching barrier and thus increase the number of possible useable suppliers. The increased number of potential suppliers equals a raise of possible management options. This, in turn, broadens the flexibility *of* supplier-buyer relationships, without the reduction of the flexibility *within* supplier-buyer relationships at the same time. Accordingly, systematic supplier switching activities increase the overall flexibility of the purchasing company, which can lead to a competitive advantage.

The important difference between the concept of supplier switching and other supplier management activities is that it can increase the flexibility *of* supplier-buyer relationships without reducing flexibility *within* supplier-buyer relationships. This works only through an acceptance of the disadvantages of supplier integration. These mechanisms of mutual adjust-

ments, specific investments, and increased dependencies reflect the drivers and sources of relational rents. The concept of supplier-switching does not affect these sources, so relational rents and flexibility can be achieved simultaneously. In other words, this research on supplier switching activities is neither opposing the usefulness and benefits of supplier integration nor adjusting the necessary adoptions for supplier integration. In this way, the research helps to enhance integrated supplier-buyer relationships. It answers the question of how to increase relationship flexibility without sacrificing relational rents.

Section summary and key insights into supplier switching

Integrated supplier-buyer relationships have shown positive effects on purchasing companies performance and thus have shaped the supply environment particularly in the last two decades. However, the risks and challenges of integration have been under-emphasized in scientific research and business practice. High dependencies, increased management complexity, and especially the decreased flexibility *of* supplier-buyer relationships challenge integrated supplier-buyer relationships in a dynamic business environment. However, purchasing companies can deal with these aspects as long as their utilized suppliers perform at the expected level. But as soon as a supplier weakness occurs, the downsides of supplier integration become a threat for the buyers. After a supplier weakness has been identified, companies can either stay with the vendor and do nothing (loyalty), they can try to improve the incumbent supplier with the means of supplier development (voice), or they can switch to another source of supply (exit). All three reaction options come at a certain cost. The loyalty strategy leads to opportunity costs, the voice strategy causes development costs, and the exit strategy has switching costs. Additionally, the switching strategy is subject to further challenges like resistance to change, inertia, or uncertainty about the new supplier's future performance. These challenges are related to the barriers of supplier switching that can lead to extra time and costs of supplier switches, which in turn make the exit option unattractive. If these impacts of the barriers could be reduced and the time and costs could be saved while executing the switch, a company would become more flexible, since more management options would exist in the case of a supplier weakness. Thus, a systematic approach to supplier switching activities could support companies by achieving a competitive advantage through an increase in flexibility.

2.3 Structuring conceptual elements of supplier switching

This chapter examines conceptual approaches to the phenomenon of supplier switching and provides structuring elements for the research framework that will be used in the empirical research. The structuring elements come from the definition of a "supplier switch" and "supplier switching activities" introduced at the beginning of *Chapter 2*. It has been stated that a supplier switch involves different actors: the disengager, the old supplier and the new supplier. They pursue different objectives and play specific roles in the switching process. These and further actors will be presented in the first section. The second section is concerned with the interrelations of the actors and presents the dyadic relational layers between the involved companies. These relational layers are regarded as areas of managerial activity in the course of supplier switches. Besides the involved actors and the activities that they perform on the dyadic relational layers, the phases of a supplier switch will be described in the third section.

2.3.1 The disengager, the old and new supplier, and further actors of supplier switching

Following the definition of supplier switching activities, three actors can be identified: the disengager, the old supplier, and the new supplier. Besides these actors that are directly involved in the switching process, other actors, like customers or service providers, might be affected by a supplier switch or even play an important role in the switching process. These other actors will be consolidated and labeled as "further affected actors." Thus, four different actors can be distinguished that are relevant to the description of a supplier switch (*Figure 2-10*).

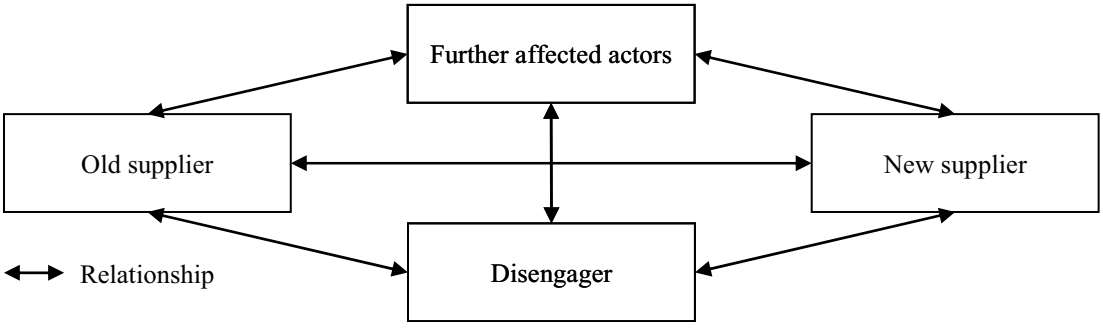


Figure 2-10: Actors involved in supplier switches

The actors might have different kinds of relationships among themselves, which can comprise, for example, further exchange relationships or personal relationships. They all have different interests and objectives that have to be considered in order to perform a successful switch. The different actors will be introduced by the description of their roles, how they are affected by the supplier switch, and how they can influence the success of the switch in

general. This research holds the perspective of the **disengager**, which is the initiator of the supplier switch. The work at hand only considers situations in which the buying firm is the disengager. This does not exclude situations where the initial intention to leave the relationship has been stated by the old supplier. However, the main emphasis is on the switching reasons, activities, and processes of the purchasing company. The disengager is the driving power in the switching process since it decides the implementation of the exit strategy and therefore has an active role in the whole switching process. This actor is embedded into a specific supply situation, which becomes the switching situation after the decision to exit the current supplier-buyer relationship has been made. The switching situation can be described by the sourcing strategies summarized in *Figure 2-1*, which have been applied to the purchase of the particular supply object. The disengager is subject to one of the introduced supplier weaknesses,[266] which is deteriorating its competitive position. Before the disengager finally decides to exit the old supplier-buyer relationship, it might consider the loyalty and voice strategy as well, and can start activities aiming for an improvement of the old supplier's performance.[267] However, if the purchasing company finally decided to replace the incumbent supplier, it has to decide upon the switching strategy, which comprises the dissolution and integration strategy.[268] Depending on the chosen strategy, the disengager influences the effects of switching on all other involved actors, which manifest themselves on the relational layers in the switching execution phase.

A further important actor of supplier switching is the **old supplier**. The performance of the old supplier can be regarded as the main cause for the switch. Either it has weakened in comparison to its past performance, which relates to an absolute supplier weakness, or the performance is worse than the one of the old supplier's competitors, which relates to a relative supplier weakness.[269] The old supplier is integrated into a relationship with the disengager that is about to be terminated and therefore this actor is usually negatively affected by the supplier switch, due to the loss of business. As stated before, the scope of negative consequences experienced by the old supplier depends largely on the chosen disengaging strategy of the purchasing company.[270] If the disengager implements a more self-oriented strategy, the old supplier may face even stronger negative consequences through the termination of the supplier-buyer relationship (e.g. due to some customer-specified inventory for which the disengager is not willing to pay compensation). However, if the disengager decides to follow a more self-related disengaging strategy, the old supplier might utilize the dependency for an increase of the disengager's switching costs. Thus, after the old supplier knows that the incumbent exchange relationship will be terminated, the supplier can choose between an

[266] See Chapter 2.2.2.
[267] See Chapter 2.1.2 and 2.2.2.
[268] See Chapter 2.2.2.
[269] See Chapter 2.2.2.
[270] Michalski (2004), pp. 979.

opposition strategy and a cooperation strategy.[271] If an opposition strategy is applied by the old supplier, the disengager's switching costs can increase e.g. through a decrease of customer service. As long as the old supplier meets the contractually agreed arrangements, the supplier can discontinue all the extra effort that helped to run the exchange relationship smoothly in the past – for example, the employees of the supplier can make themselves less available for appointments. Such behavior can increase the switching costs of the disengager to a level that makes the planned switch unattractive again. If the old supplier follows a more cooperative strategy, additional costs for the disengager can be avoided and the supplier tries to close the supplier-buyer relationship without further trouble. In particular, this strategy might be useful if additional exchange relationships exist between the disengager and the old supplier or if the old supplier wants to do more business with the disengager in the future. In addition to the impact that the old supplier's behavior can have on the switching costs, this actor can further influence the disengager's reputation on the supply market by communicating either positively or negatively with its business partners. If the disengager follows a very self-oriented dissolution strategy, it might risk garnering a reputation as an opportunistic and unpredictable purchasing company. This can lead to challenges for future purchases, when suppliers are alarmed about the business ethics of the disengager and thus avoid specific investments, or may require extensive securities.[272]

The third directly involved actor in supplier-switching is the **new supplier**. The performance of this actor can be one of the main reasons to switch as well, if the disengager experiences a relative supplier weakness. This means that the new supplier promises a bigger potential for the purchasing company to improve its competitive position through a superior supplier performance. The new supplier takes over the business from the old supplier and needs to reach the expected performance level as quickly as possible. Therefore, it is expected that the new supplier plays an active role in the supplier switching process. Furthermore, the actor can be subject to supplier development initiatives of the disengager, if the purchasing company supports the new supplier in the integration phase.[273] This can be useful in accelerating the process until the new supplier reaches its expected pace of rent generation,[274] since it is only a limited amount of time available to connect all the processes between the buyer and the supplier.[275] The actual performance of the new supplier affects the overall success of the supplier switch to a significant extent. If the new supplier does not achieve the performance

---

[271] Since the behavior of the disengager influences the behavior of the old supplier and vice versa, the prisoner's dilemma might be suited to explaining the strategies of each actor. This dilemma is related to game theory, which will not be applied in this work, since it will not provide more insights than the three chosen theories. For more information about the prisoner's dilemma and game theory see Rapoport *et al.* (1965); Rapoport (1998); Fudenberg and Tirole (2000); Axelrod (2003).

[272] Arnold (2007), p. 225.

[273] See Chapter 2.1.3 (b).

[274] See figure 2-9.

[275] Verduijn (2004), p. 9.

expectations, the disengager can be worse off than before and hence the supplier could not be described as successful.

The last actor relevant to supplier switches is related to a whole group of actors and labeled as **further affected actors**. It can be stated that the dissolution of the old and integration of the new supplier-buyer relationship can have effects on or might be affected by other companies and institutions. These can be customers, further suppliers, banks, service providers, the public in general, or other organizations that might be involved in or affected by the supplier switch. For example, in some industries (e.g. the automotive industry) supply chains are organized in a very hierarchical way. Thus, if a first-tier supplier wants to change one of its own vendors, the first tier is likely to need the approval of the OEM. This case can also occur, if the regarded supply object is subject to governmental regulations (e.g. certain supplies in the defense or nuclear power industry). All in all, from the perspective of the disengager, breaking the relational norms, while switching an incumbent supplier, can damage the company's network image or cause rejection of the switching project.[276] Thus, the expectations and requirements of the related network have to be taken into account. Nevertheless, the influence of further actors, or the way in which other companies and institutions might be influenced through a supplier switch is barely researched. Hence, further affected actors serve as a "catch-up" category and the empirical research will analyze their role in supplier switches in more detail.

2.3.2 Interrelation layers between actors in the supplier switch

The actors of supplier-switching are interrelated through, for example, exchange processes, or assets. These interrelations can be systemized in relation to specific aspects of supplier-buyer relationships. The different systemization opportunities can be derived from relational network approaches, which are divided into structure,[277] layer,[278] and phase approaches.[279]

The relational network *structure* approach utilizes different structural aspects of relationship networks, like the number of partners within the network, the degree of internationalization (local companies vs. global companies), or the level of specialization of each actor, to describe specific relationships, since those structural aspects determine the way the network-actors perform their business.[280]

---

[276] Alajoutsijärvi *et al.* (2000), pp. 1283.
[277] E.g. Pfohl (2001), pp. 35.
[278] E.g. Fleisch (2000), pp. 208; Gomm and Trumpfheller (2004), pp. 51.
[279] E.g. Zajac and Olsen (1993), pp. 139; Röhrs (2003), pp. 41.
[280] Pfohl (2001), p. 37.

The relational network *phase* approach integrates dynamism of networks into the explanation of the network relationship. Some authors describe that a transaction relationship can go through three lifecycle phases, namely, the initializing, processing and reconfiguration phases.[281] According to this, each phase comprises specific relational tasks and actions between the actors, which can be used to describe a particular supplier-buyer relationship.

Finally, the relational network *layer* approach utilizes the interfaces between interrelated actors in a business environment to define different layers of interaction. Each layer comprises specific tasks, activities, and challenges that influence the exchange process between the regarded actors. If the relational layer approach is applied to dyadic exchange processes, it can describe the different activities and challenges *on* each layer and *between* the layers in a supplier-buyer relationship. In the context of supplier switching it can be stated that the linkages between the disengager and the other actors change during the switching process. Interactions with the old supplier will be terminated or reduced and the activities between the disengager and the new vendor will start. Due to its structuring ability for interorganizational activities, the relational network layer approach can be usefully applied to the systematization of supplier-switching activities as well. The relational layer approach distinguishes between five layers that focus on the organization and controlling of exchange relationships and are related to the areas of supplier and supply chain relationship management.[282] These layers, the institutional, financial, operational, informational, and social layers, can be seen as areas of managerial activity for the disengager during the course of supplier switches, since linkages have to be dissolved with the old and created with the new supplier. This causes a simultaneous effort for the disengager (*Figure 2-11*).

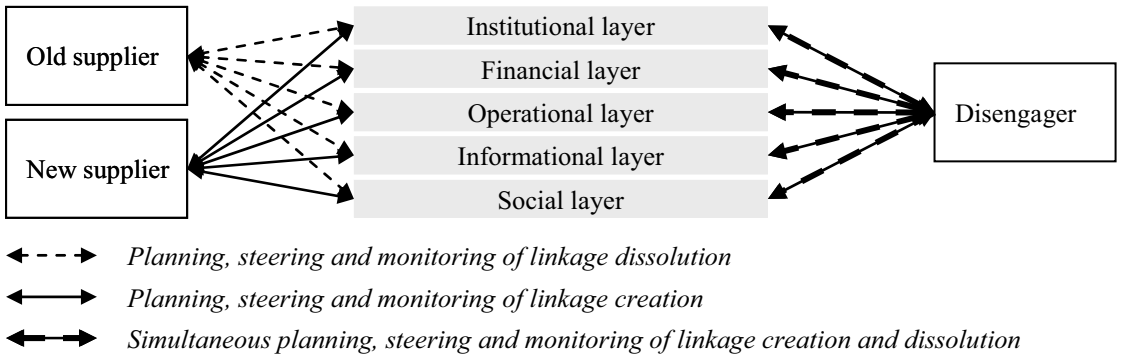


Figure 2-11: Change of relational linkages between the actors directly involved during supplier switches

The research will reveal those activities that need to be dissolved in the course of supplier-switching and those that have to be installed with the new supplier. Each layer will be presented in the context of supplier switches.

---

[281] E.g. Zajac and Olsen (1993), p. 139

[282] Trumpfheller and Hofmann (2004), pp. 71.

The institutional layer comprises all legal and formal linkages between the actors that specify the obligations and roles of parties in an exchange relationship.[283] The legal bonds can be regarded as detailed and binding contractual agreements between the involved actors.[284] Furthermore, they can provide guidelines for the case of dissolution in terms of exit clauses. Referring to supplier switching, questions about, for example, lawsuit actions and division of assets as well as contracting are of interest. Thus, the empirical research on supplier-switching will inquire relevant contractual issues and actions that are related the dissolution of the old and the building of new legal bonds. In order to disengage the old supplier, the terms of the contracts have to be examined and the new contract with the new supplier has to be negotiated.

The financial layer deals with the money flow between the transaction partners and comprises interactions with financial institutions as well.[285] For supplier switching processes, monetary aspects like compensation claims of the old supplier or the disengager and the difficulty of adjusting payment transactions are important. Since compensation claims of actors involved in supplier switches can cause legal actions, the financial layer is closely related to the legal layer of exchange relationships. The analysis of the financial layer will further aim for the determination of costs that are associated with a supplier switch. These costs do not only include switching costs but also take costs that have occurred through the supplier weakness (e.g. additional effort of the disengager due to bad-quality deliveries) into account. Moreover, whether or not a particular supplier switch influences the cash flow of the disengager negatively will be analyzed.

The operational layer captures the degree to which systems, procedures, and routines of the buying and selling organizations are linked to facilitate operations and support the flow of physical goods.[286] Operational linkages can be systemized by referring to company functions, like logistics, production, distribution, or development. Different authors use various terminologies to describe the same operative linkages between companies. For example, the IMP Group[287] uses “technical bonds” to describe connected technical or production processes. In integrated supplier-buyer relationships, actors install specific procedures and linkages, e.g. a just-in-time (JIT) concept to support the logistical operations or EDI applications to facilitate order processing. These procedures will guarantee a flawless flow of goods, information, and money. These linkages between the old supplier and the buyer have to be dissolved and rebuilt with the new vendor. The operational layer is regarded as one of the most important interrelational layers, since the “smooth” transition of supplies from the old to the alternative

---

[283] Cannon and Perreault JR. (1999), p. 443.
[284] Cannon and Perreault JR. (1999), p. 443.
[285] Pfohl *et al.* (2003), p. 1.
[286] Cannon and Perreault JR. (1999), p. 442.
[287] E.g. Håkansson and IMP Project Group (1982).

supplier is paramount in avoiding disruptions of the production system during the switch. Questions about an increased safety stock, required changes in product design, or possible logistical, production, or distribution problems, for example, have to be analyzed in order to identify the challenges of supplier switching and reveal countermeasures.

The informational layer between buyers and suppliers has a qualitative dimension, which describes what kind of information is transferred between the exchange-partners, and a technical dimension, which depicts how the transfer is achieved. As far as supplier switches are concerned, one of the most important aspects in terms of an informational exchange is the communication strategy adopted with regard to the switching intention. As stated in *Chapter 2.2.2*, the disengager can communicate its intention to switch either directly or indirectly, and can do so early or late in the process. Communication involves oral and written information, as well as certain acts (e.g. price increase) to which the other party assigns a relationship-specific meaning.[288] The communication strategy can affect the set of possible management actions, since it might be necessary to keep the switching decision secret from the old supplier for as long as possible. This can happen if the disengager expects consequences with a negative impact on the old supplier's performance, which in turn affects its own performance when the old supplier learns of the switching intention. Thus, the empirical research investigates which kind of communication strategy the disengager has implemented.

The **Social layer** is concerned with social relationships that have been established between the old supplier and the disengager, and that have to be established in the new exchange relationship.[289] Social links between buyers and suppliers describe "*the degree of mutual personal friendship and liking shared by the buyer and seller.*"[290] Research has revealed that buyers and sellers that have strong personal relationships are more committed to maintaining the relationship than less socially-bonded partners.[291] Thus, if strong personal relationships have been developed between the old supplier and the buyer before the switch, the implementation of an other-oriented dissolution strategy seems more likely, which opposes the self-oriented approach, which might harm the old supplier.[292] However, strong social linkages between the old supplier and the purchasing company can lead to inertia in the switching process. This might increase the time before countermeasures against the weak performance of the old supplier are implemented, or extend the time for which the new supplier's performance is superior in comparison to the old supplier.[293] Finally, it can be stated that the social bonds existing between the disengager and the supplier affect the existent trusting relationship between the actors. Thus, the empirical research on supplier switching will analyze the

---

[288] Alajoutsijärvi *et al.* (2000), p. 1273.
[289] Håkansson und Snehota (1989), pp. 190.
[290] Wilson (1995), p. 339.
[291] Wilson and Mummalaneni (1986), pp. 46.
[292] Alajoutsijärvi *et al.* (2000), pp. 1274 and Chapter 2.2.2.
[293] See Chapter 2.2.2.

development of the trusting relationship between the disengager, the old, and the new supplier as well as the implemented dissolution strategy.

Besides the involved actors and the relational layers between suppliers and buyers, one more structuring element will be added to the analysis of supplier-switching activities: the process of switching will be split up in different phases in order to reduce complexity. Because of the complex character of supplier switches, the simultaneous termination and integration of supplier-buyer relationships might call for more than one phase, as the switching phase.

2.3.3 The division of supplier switches into the switching decision, execution, and success evaluation phase

In order to structure the process of supplier switching into smaller and hence better-analyzable sub-processes, it can be initially resolved into the (a) dissolution and the (b) integration processes. Social psychology and business marketing literature can be applied to gain more insights into the dissolution phase. Supplier-management literature can provide descriptions for the supplier integration phase. Since neither phase can start without any up-front preparations, a decision phase can be identified as well, which will start before the other phases.

(a) The phases of supplier-buyer relationship dissolution

First of all, social psychology and business marketing theory literature will be considered. These streams of literature provide descriptions for the different stages of supplier-buyer relationship termination processes. These descriptions are primarily based on interpersonal- and business-relationship dissolution processes and can be utilized for the termination of supplier-buyer relationships. *Duck* has proposed that "romantic" interpersonal relationship dissolution goes through four phases:[294] it starts with the intra-psychic phase in which an individual considers his or her situation in a cognitive process and perceives dissatisfaction in the relationship (phase 1). This stage merges into a dyadic phase, in which the individual addresses the displeasure to the partner (phase 2). As the dissolution process continues, the social stage emerges, where the public will be informed of the dissolution of the relationship (phase 3). In phase 4 – the grave-dressing – the partners clear up the picture and choose whom to blame for the end of the relationship.[295] However, due to the differences in business and personal relationships with respect to their nature and the number of involved actors, this model is not directly applicable to supplier-buyer relationship dissolution.[296]

---

[294] Duck (1982), pp. 10.
[295] Halinen and Tähtinen (2002), p. 172.
[296] Tähtinen (2001), p. 58.

Ping and Dwyer have developed another relationship dissolution model.[297] They argue that companies progress through a seven-staged process when terminating a business relationship. The stages are labeled as positive, negative, intra-personal, intra-company, inter-company, public, and aftermath. The special feature of this dissolution model is the distinction of evaluation and communication processes that will take place only within the disengaging company (positive, negative, intra-personal, and intra-company stages) and processes that involve external institutions, the old supplier, the new supplier, and the network (inter-company, public, and aftermath stages). In the positive stage (phase 1), the disengaging company is in a satisfying relationship with its supplier and has positive thoughts about its future. This mindset changes in the negative phase (phase 2) where early triggers lead to discomfort. These negative impressions will come more and more to the consciousness of certain key employees in the disengaging company (phase 3). These employees will start to discuss the issue on an intra-company level (phase 4). If no improvement of the supplier can be identified, the intra-company level evolves to the inter-company level (phase 5), where the concerns are communicated to the supplier. If no solution still cannot be found, the disengagement will start and eventually other external organizations will get involved in the public phase (phase 6). In the aftermath stage (phase 7), the relationship has been terminated and an evaluation of the former relationship and the switching process will start.

A further model of business-relationship dissolution between buyers and suppliers has been developed by *Halinen* and *Tähtinen*.[298] They divide the dissolution process into five stages, in which each stage has feedback-linkages with the related network. At the assessment stage (phase 1) individuals of the disengager start to evaluate the current relationship and its possible future. Although those individuals might have the authority to demand a termination of the relationship, the decision concerning exit, voice, or loyalty will only be made after consultation with other individuals at the department or company level. This is referred to as the intra-personal and intra-company stage of *Ping* and *Dwyer*. At the decision-making stage (phase 2) the responsible individuals of the company will decide which of the exit, voice, or loyalty strategies should be followed. Reports and other decision-supporting documents will be generated in order to get a more objective point of view for decision-making. Afterwards, the decision will be communicated to the exchange partner in the dyadic communication stage (phase 3). If the buyer has decided to follow the voice-strategy, the supplier will have the opportunity to take steps to restore and maintain the exchange relationship. If these steps are successful, the dissolution process may stop at this stage. If the supplier-buyer relationship does not improve after the announcement of the potential dissolution, the disengagement-stage (phase 4) will be initiated. This phase can be started in parallel to restorative actions. The disengagement stage is followed by the aftermath stage (phase 5). In this stage, the actors

[297] Ping and Dwyer (1992).
[298] Halinen and Tähtinen (2002), pp. 173.

mentally go through the ending process in order to make sense of what has happened and to evaluate what has been achieved during the relationship.[299] However, the phase-model of supplier dissolution from *Halinen* and *Tähtinen* can be simplified for supplier-switching purposes. The seven stages will be consolidated into the "supplier-switching decision phase," the "supplier-switching execution phase," and the "supplier-switching success evaluation phase."

The switching decision phase includes the actions of the assessment- and decision-making stage. The dyadic communication stage can be a part of the switching decision phase and the switching execution phase, depending on the chosen communication strategy of the disengager. However, the switching decision stage can be seen as the *ex ante* switching phase. The switching execution phase itself begins as soon as the disengager initiates actions that lead to a disengagement of the old supplier. It is completed when the new supplier has reached its anticipated performance level and activities with the old supplier have been stopped or reduced to the anticipated level. The third stage − the aftermath stage − has been re-labeled and is called "supplier-switch success evaluation phase" and comprises the evaluation of the former supplier-buyer relationship and the switching process itself. The phase model shown has been related to relationship-dissolution processes. However, this is only one relational change during the supplier-switching process, so the phase-model has to be enhanced with the processes of supplier integration as well. This will consider the simultaneous character of supplier switching (the end of an old and the beginning of a new supplier-buyer relationship).

(b) The phases of supplier-buyer relationship integration

In order to build a new integrated supplier-buyer relationship, an appropriate exchange partner has to be found first. This procedure is related to supplier management, which describes a five-staged supplier selection model.[300] After a supplier that is about to substitute the incumbent supplier has finally been selected, integration activities start.[301] However, there might be some lead time needed until the new supplier can deliver its products. This lead time can include time for necessary adoptions on the supplier's and / or the buyer's side, time for set-ups, or time needed until the necessary capacity (e.g. machinery) is available. The period of time after the contract has been assigned and while the new supplier works on its anticipated performance-level can be labeled as the integration-phase. It is than followed by a phase of continuous supplier-management activities in which the new relationship is controlled by the buyer and, if necessary, actions for improvement are applied.[302] The phases of supplier

[299] Halinen and Tähtinen (2002), p. 175.
[300] See Chapter 2.1.2.
[301] See Chapter 2.1.2.
[302] See Chapter 2.1.2.

integration have to be considered in the supplier-switching process as well. The supplier selection process will be rolled out in the switching decision analysis phase of supplier-switching. However, it is possible that the relationship with the old supplier will be terminated first and the buying firm starts to look for a new supplier after the dissolution is completely finished. The supplier integration phase is likely to occur in the switching execution phase and thus will be performed at the same time as the disintegration process. This does not necessarily mean that these two processes will start and end at the same time, but the processes are expected to overlap to a certain degree. The integration process aims to gain closer linkages on all or a part of the dyadic relational layers of the disengager and the new supplier. The continuous supplier management phase starts as soon as the expected level of supplier-buyer integration is reached. In this phase the new supplier-buyer relationship is subject to the general control and management mechanisms of supplier management and has lost its special status as a "new" relationship. In the light of the previous explanations, structuring elements of supplier switching can be illustrated as show in *Figure 2-12*.

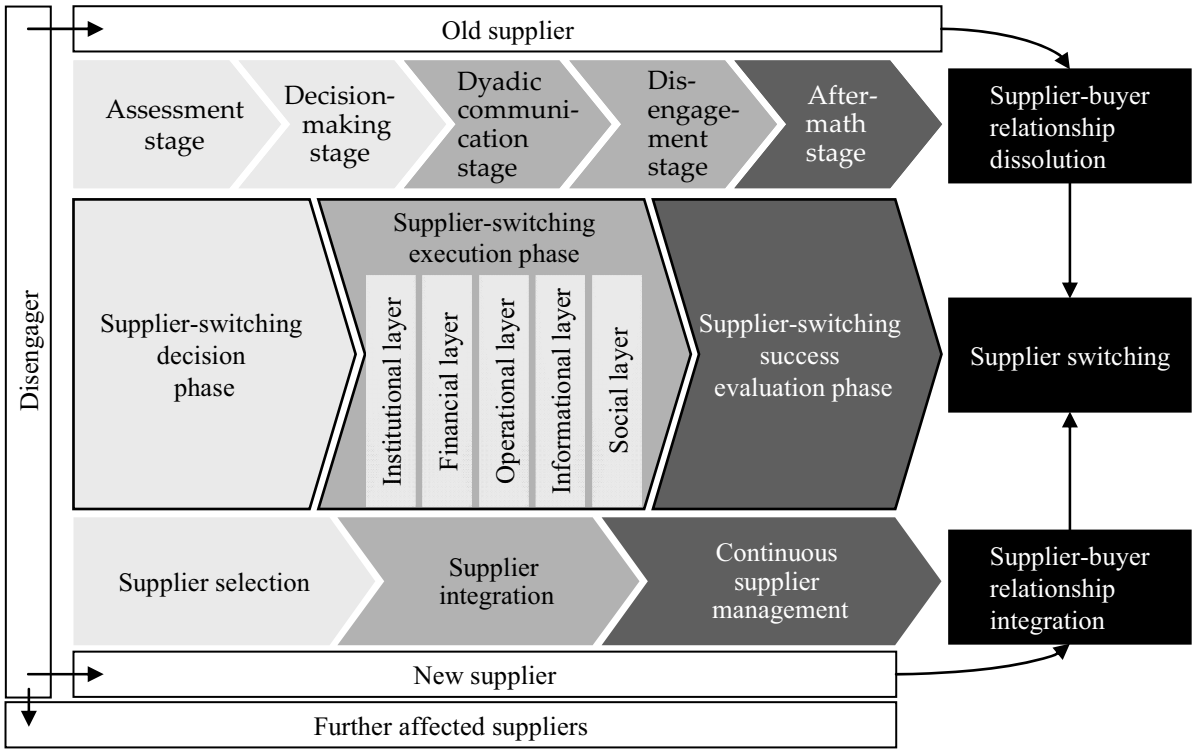


Figure 2-12: The phases of supplier switching and further structuring elements

The phases of supplier switching are related to the stages of supplier-buyer relationship dissolution and supplier-buyer relationship integration. The relationship dissolution processes, which are performed within the different stages of dissolution, primarily affect the old supplier, whereas the relationship integration processes focus on the new supplier. These two usually-separated processes are parallelized in the supplier-switching process, which is initiated by the disengager. The switching process can be resolved into three generic phases of supplier-switching: first, the supplier switching decision phase; second, the supplier switching

execution phase; and third, the supplier switch evaluation phase. However, the described sequential phases of supplier dissolution, integration, and switching are idealized and can differ from observations in business practice. Nevertheless, they structure the supplier-switching process in smaller pieces and hence help to reduce complexity.

Section summary and key insights into supplier switching

The chapter has analyzed the different actors that are involved in supplier switches. Four actor categories have been identified. The disengager (1) decides whether to switch or not and is the driving force in the switching process; the old supplier (2) is going to be substituted due to disadvantages in comparison to a new supplier (3); and further affected actors (4), which can influence the switching decision and the switching process. It has been stated that the supplier replacement changes the disengager's relationships with the other actors. These changes take place on five dyadic relational layers that are related to institutional, financial, operative, informational, and social interrelationships between the actors. The layers can be regarded as the areas of switching activities, which follow different objectives and tasks. In order to reduce the complexity of a supplier switch, three phases have been derived from the stages of supplier-buyer relationship dissolution and supplier-integration. The supplier switching decision phase relates to the time before the actual decision to switch has been made. The supplier switching execution phase primarily focuses on the simultaneous dissolution of the old and integration of the new supplier. The Supplier switch success evaluation phase comes last and is concerned with an *ex post* analysis of the supplier replacement.

All the discussed elements of supplier switching – the actors, the relational layers, and the phases – provide a framework for the analysis of supplier-switching activities. However, they cannot be used to explain why supplier switches occur at all, and they do not assist in the evaluation of the success of supplier switches. In order to analyze and answer those kinds of questions, a robust theoretical foundation is required.

2.4 Theoretical aspects of supplier switching

The following chapters discuss the theoretical approaches to the phenomenon of supplier switches. As explained in *Chapter 1.3,* the work on hand follows an eclectic research approach, and three theories will be presented. Transaction cost economics (*Chapter 2.4.1*), the relational view (*Chapter 2.4.2*) and the social exchange theory (*Chapter 2.4.3*) are introduced with their general elements, functions, and their explanations for supplier switching. The introduction of the different theories follows a unified scheme that will answer the following questions:

- What is the research object of the theory?
- What are the constituent elements of the theory?
- What is the objective of the theory?
- What are the recommendations of the theory?
- How is the theory related to supplier-switching?

Transaction cost economics and the relational view will be integrated into the social exchange theory in *Chapter 2.4.4* in order to establish an eclectic theoretical framework that is able to make comprehensive testimonies about the phenomenon of supplier-switching. This will happen with respect to the three phases of supplier switches. Thus, the interrelationships of the three theories will support an explanation of why suppliers are switched in the supplier-switching decision phase, what kind of objectives are followed by the disengager in the supplier-switching execution phase, and how the success of switching can be assessed in the supplier-switch evaluation phase.

2.4.1 Transaction cost economics and its contribution to supplier switching

In general, transaction cost economics theorizes on the optimal coordination of economic transactions, whereas the research object is the single transaction between the buyers and suppliers.[303] These transaction costs have to be minimized. *Williamson* was the first to discuss the importance of transaction costs and their role in buyer-supplier exchange relationships. However, he was inspired by *Coase's* article *"The nature of the firm,"*[304] in which transaction costs have been introduced as costs for using the market mechanism. Transaction costs comprise all sacrifices and disadvantages that are related to the exchange of resources. The following categories can be distinguished:[305]

---

[303] Rindfleisch and Heide (1997), p. 31; Picot *et al.* (2002), p. 67; Skjøtt-Larsen (2007), p. 88.
[304] Coase (1937).
[305] Robins (1987), p. 69; Picot (1991), p. 344.

- *Initiation of transaction* (e.g. costs for traveling, communication, specific overhead expenses of the purchasing, marketing, development, and production department)
- *Contract negotiation* (e.g. time for negotiation, legal consultants, costs of internal coordination and discussion of the contract)
- *Coordination of the transaction* (e.g. coordination of the physical flow, cost of management)
- *Monitoring of the transaction* (e.g. quality and schedule control, control of special negotiated processes and rules like special social regulations)
- *Adjusting the transaction* (e.g. cost of subsequent qualitative, quantitative, or contractual adjustments, costs of exiting the relationship)

With respect to *Williamson's* organizational failure framework, transaction costs are primarily driven through certain (a) behavioral assumptions, (b) specific environmental factors, and the (c) transaction's atmosphere. These factors represent the constituent elements of transaction cost economics. Based on the drivers of transaction costs, the theory derives recommendations for transaction–cost-minimizing designs for inter-organizational exchanges, known as governance structures.

(a) Behavioral assumptions include bounded rationality and opportunism, which influence the optimal government structure. Bounded rationality is ascribed to a lack of intellectual capacity of individuals, and to incomplete information regarding the consequences of a given action.[306] The reasons for bounded rationality can be related to the limited information-processing capacity of the human mind, and to the difficulty of communicating tacit knowledge.[307] The problem of non-communicated information leads to the problems of information asymmetries.[308] These information asymmetries can lead to opportunistic behavior, namely, a lack of candor or honesty in transactions that includes self-interest seeking with guile.[309] Safeguards preventing the supplier-buyer relationship against opportunism, information asymmetry and bounded rationality cause transaction costs, which in turn can be influenced by the choice of a certain governance structure.

(b) Environmental factors are related to environmental uncertainty, asset specificity, and the cost to measure the outcome of the transaction.[310] The primary consequence of environmental uncertainty is an adaptation problem, which is concerned with difficulties with modifying

---

[306] Skjøtt-Larsen (2007), p. 88.
[307] Picot *et al.* (2002), p. 70.
[308] For more details see Wenger and Terberger (1988), p. 507; Spremann (1990), pp. 568; Picot and Neuburger (1995), Sp.16; Barth (2003), p. 98.
[309] Williamson (1985), p. 47.
[310] Picot *et al.* (2002), p. 70.

agreements in response to changing circumstances.[311] Specificity refers to investments that have been made for the particular supplier-buyer relationship and have only limited alternative applications in other relationships.[312] Specificity refers to a "small-numbers situation," which means that there are few, if any, alternatives for a buyer or for a seller to replace each other in a transaction.[313] However, the specificity of a supplier-buyer relationship is not a constant. Eventually, a standard exchange relationship can change into a specific one due to increasing system and know-how dependencies. This process is called *fundamental transformation* and increases the difficulties of switching suppliers due to increased dependencies.[314] Furthermore, the fundamental transformation process is a consequence of the efforts of the supplier's marketing,[315] which can work on an enhancement of the supplier-buyer relationship from, for example, a stock-based delivery to a just-in-time delivery. Six categories of specificity that influence the appropriate governance structure can be distinguished.[316]

- *Site specificity* originates from investments in immobile facilities that are dedicated to the particular supplier-buyer relationship, like warehouses or factories.
- *Physical asset specificity* occurs from investments in specific machines or technologies, which can only be used for the purpose of the transaction concerned.
- *Human asset specificity* is generated through investments in special qualifications of employees, which can only be utilized in a specific supplier-buyer relationship.
- *Brand name capital specificity,* which is attached to the supplier-buyer relationship. A common example is the "Intel inside" slogan for personal computers.
- *Dedicated assets specificity* represents investments in unspecific assets that are only needed in the particular exchange and turn into overcapacities should the supplier-buyer relationship be terminated.
- *Temporal specificity* is akin to technological non-separability and can be thought of as a kind of site specificity in which timely responsiveness by on-site employees is paramount.

---

311 Rindfleisch and Heide (1997), p. 31. For more information to environmental uncertainty, please refer to Chapter 2.1.3.

312 Skjøtt-Larsen (2007), p. 88. An example for a supplier's specific investment is a customer-dedicated machine that is only needed for one buyer. From the buyer's perspective, an example is a specific resource-consuming supplier-development initiative.

313 Johanson and Mattsson (1987), pp. 41; Kogut (1988), p. 320; Osegowitsch and Madhok (2003), p. 27.

314 Williamson (1990), pp. 70. According to Ebers and Gotsch (2002), p. 228, dependencies occur because the employed assets are primarily valuable for the use in the specific relationship. A change of partners would cause a loss in value of the assets and hence partners cannot be switched easily, and the organizations may stay in an underperforming relationship.

315 Dietl (1993), p. 111.

316 Williamson (1991), pp. 281.

In addition to that, another environmental factor has to be taken into account, which is related to the measurability of the outcome of a certain transaction.[317] If the outcome of the particular supplier-buyer relationship or the performance of a specific task cannot be evaluated, if it cannot be stated whether the performance is good or bad, further information asymmetries, and thus behavioral risks, occur. These, in turn, provoke stronger monitoring efforts that increase transaction costs.

(c) The **transaction atmosphere** primarily refers to the frequency with which the transaction is repeated. The frequency has an impact on transaction costs, since it is assumed that the more often a transaction is repeated (the more often the supply object is ordered), the bigger the economies of scale are in relation to transaction cost.[318] Further elements that influence transaction costs in the transaction atmosphere are all socio-cultural and technological factors that have an impact on the coordination and motivation instruments in a particular relationship. Those factors cause "interaction effects" that lead to effects that cannot be explained through transaction cost economics. Examples are "friendship," which would lead to lower transaction cost due to fewer necessary monitoring costs or special technologies, like the internet, which can reduce information asymmetries.[319]

Depending on the extend of these drivers, the amount of transaction costs varies and leads to different recommended governance structures. In general, transaction cost economies postulate that if a company faces high uncertainties, high specificity, and a high frequency of transactions, the firm should coordinate the value-creation process internally and thus implement a hierarchical governance structure. If the purchasing situation is characterized by low uncertainties, little specificity and a low frequency of transactions, low transaction costs are assumed and the buying firm should coordinate the value-creation process through market coordination.[320] Market governance relies on prices, competition and contracts to coordinate the transaction. Hierarchical governance refers to a situation in which transaction partners operate under a joint control. Thus, hierarchical governance structures rely on direct instructions from the transaction partners concerned.[321] Besides these extreme forms of governance structures, hybrid forms have to be distinguished. Those forms will be implemented if a medium specificity, high uncertainties and a medium frequency of exchange pertain to the transaction.[322] In this respect, integrated supplier-buyer relationships represent a hybrid form

---

[317] Barzel (1982), pp. 31.

[318] Picot *et al.* (2002), p. 72.

[319] Picot *et al.* (2002), pp. 73.

[320] Bössmann (1983), pp. 105; Stölzle (1999), pp. 34. The issue of measurability is not explicitly listed, but implicitly incorporated in uncertainty, since low measurability of the supplier-buyer relationship performance leads to high uncertainties.

[321] Barney (1999), pp. 138.

[322] Corsten and Gössinger (2001), p. 4.

of governance[323] and build the focus of this research. Supplier integration supports the decrease of uncertainty through mutual adjustments, intense communication, the "exchange of hostages" and contractual safeguards.[324] Thus, through decreased information asymmetries and uncertainties, supplier integration can reduce the behavioral risks of moral hazard, hidden action and hidden intention in supplier-buyer relationships.[325]

Transferring these theoretical implications to supplier-switching issues, different reasons for supplier-switching can be derived. First of all, it can be stated that the buying company has certain perceptions concerning the maximum amount of transaction cost it is willing to accept for a certain exchange relationship. Therefore, the purchasing firm will evaluate the presented transaction cost drivers *ex ante,* before it will sign a contract with a supplier. To determine the transaction cost, the company evaluates the uncertainty, specificity, and frequency of the transaction for each dyadic relational layer. The behavioral assumptions will be implicitly taken into account and impact the uncertainty category. The estimated transaction costs have an influence on the advantageousness of the supplier-buyer relationship from a cost point of view. Pure transaction cost economics assumes that other cost categories, like production costs, are independent from the chosen governance structure and hence equal in relation to different coordination mechanisms. Thus, the theory postulates that those costs do not have to be taken into account. In order to map the real word more realistically, this assumption will be dropped for the purpose of this research and it is assumed that production costs do matter in the choice of a certain governance structure. Thus, direct costs like production costs will be included for cost evaluations. If the total cost of an anticipated supplier-buyer relationship is regarded as beneficial, the supplier-buyer relationship will be started and integrated if necessary. However, after the exchange-relationship is up and running, some of the evaluated cost drivers can change, so that the actual costs can be higher than expected and the particular exchange relationship becomes less competitive. This might be a result of, for instance, insufficient trust, which increases the need for transaction-cost-monitoring activities or contractual safeguards, increased environmental risk, which raises uncertainty, or it can be related to the fundamental transformation of the relationship. Thus, based on transaction cost economics, it can be postulated that switching tendencies will occur as soon as the real cost of the supplier-buyer relationship increases and becomes higher than expected. If the costs increase, the chosen governance structure might need to be adapted, or the chosen governance structure is the right one, but the current supplier-buyer relationship is not competitive in terms of costs, and needs to be developed or switched.

The governance structure of a certain supplier-buyer relationship manifests itself on the dyadic relationship layers. Depending on the degree of hierarchical coordination, different

---

[323] Kirst and Hofmann (2007), p. 412.
[324] Skjøtt-Larsen (2007), p. 88.
[325] Spremann (1990), pp. 568; Picot and Neuburger (1995), p. 16; Barth (2003), p. 98.

procedures can be installed on each layer, Thus, different governance structures cause a certain degree of uncertainty and idiosyncrasy or specificity, which will influence actor behavior and the ease with which the supplier switch can be implemented.[326] For example, an integrated supplier-buyer relationship with specific investments on the supplier's and the buyer's side, such as a jointly-used warehouse, experiences more challenges concerning the dyadic relational layers during the switching process than a more market-based exchange relationship with no specific investments. Thus, the transaction cost drivers uncertainty and specificity in particular can be evaluated on each of the dyadic relational layers of the transaction relationship, whereas the transaction frequency is a more general measure that influences the magnitude of transaction costs. Depending on the specific configuration of uncertainty and the specific investments on each dyadic relationship layer, and on the transaction frequency, the difficulties of a supplier switch in a certain relational setting can be explained. Additionally, transaction cost economics can be utilized to explain the objectives that the disengager pursues on each relational layer. The explanations are related to the fact that the switching cost itself represents transaction costs that have to be minimized in the switching process. Thus, every switching activity on a dyadic relational layer needs to be evaluated with respect to its anticipated benefit and (transaction) cost generation. For example, if the disengager wants to sue the old supplier because of poor-quality deliveries, it will evaluate the possible outcome of this action relative to the transaction cost, such as attorney fees, that such an activity would cause. If the potential outcome of a specific activity is bigger than the transaction costs involved, the implementation of such an activity might become an objective. Furthermore, these drivers of transaction costs can be utilized in the evaluation of the switching success. This is possible through an *ex ante / ex post* comparison of the different (transaction) cost drivers. Generally, from a transaction cost economy perspective, it can be postulated that the supplier switch has been a success as soon as the new transaction costs are lower than the old ones.

Besides the explanatory strength of transaction cost economics for the phenomenon of supplier switching, some weaknesses can be identified in this context as well. For example, increasing transaction costs within a supplier-buyer relationship does not automatically lead to dissatisfaction if the rewards are increasing to at least the same level. By the same token, if transaction costs are decreasing, it is not necessarily beneficial for a relationship if the performance is declining too. This means that shrinking transaction costs do not always indicate a healthy and efficient supplier-buyer relationship that is stable, just as increasing transaction costs are not always related to inefficiencies and switching tendencies. Thus, transaction costs have to be assessed relative to the rewards of a supplier-buyer relationship. The simultaneous consideration of rewards and efforts tackles the critics of transaction cost economics, who argue that neither the relative nor the absolute amount of transaction costs is by itself relevant

[326] Verduijn (2004), pp. 138.

in the evaluation of the advantageousness of a certain supplier-buyer relationship setting; instead, it is the total outcome that matters.[327] Thus, some authors have demanded an integration of rewards into transaction cost economics.[328] The contributions and critics of transaction cost economics in the context of supplier switching are summarized in *Table 2-5*.

Transaction cost theory	
Research object	Governance structures of interorganizational exchanges that generate different levels of transaction cost
Contribution to the supplier-switching decision phase	Switching tendencies arise, if the drivers of transaction cost (uncertainty, asset specificity, or the frequency) change and cause an increase of transaction costs, which than become higher than expected. Furthermore, it explains the ease of supplier switches with respect to the chosen governance structure.
Contribution to the supplier switching execution phase	Explanation of the objectives that the disengager pursues on each relational layer. Each activity in the execution phase targets a certain objective and its outcome needs to be bigger than the transaction / switching costs it causes. Thus, activities in the switching execution phase need to be switching-cost-minimizing.
Contribution to the supplier-switch success evaluation phase	*Ex post* comparison of the transaction cost in the old supplier-buyer relationship in comparison to the transaction costs in the new one.
Weakness of the theory with respect to supplier-switching	Transaction cost economics focuses more on contractual rather than relational aspects and is primarily concerned with the cost-effectiveness of the recent and the alternative supplier-buyer relationship. Relational issues and the reward side of a certain exchange relationship are underemphasized, which can lead to an incorrect interpretation of switching tendencies.

Table 2-5: Transaction cost economics and its contribution to research on supplier switching

2.4.2 The relational view and its contribution to supplier switching

The relational view has developed out of strategic management research and theorizes on why some companies are more successful, profitable and competitive than others. To answer this question, the literature has mostly focused on the single company and researched how the market of the firm influences competitiveness[329] or how internal resources and competencies impact the success of a company.[330] However, the image of isolated actors competing for profits with each other in an impersonal marketplace is increasingly inadequate in a world in which firms are embedded in networks with other organizational actors, be they suppliers, customers, competitors, or other entities.[331] Due to this, research has recognized the increasing importance of inter-company linkages and resource-exchange as a source of competitive

[327] Ballwieser (1987), p. 87; Richter and Furubotn (1999), p. 61.
[328] Windsperger (1987), p. 65.
[329] E.g. Porter (1980).
[330] E.g. Wernerfelt (1984); Barney (1991).
[331] Gulati *et al.* (2000), p. 203.

advantage. Therefore, the primary research object has shifted from an intra-company perspective to an inter-company perspective.[332] This research object has been intensively discussed in the relational view of *Dyer* and *Singh*.[333] The relational view advances the resource-based view by arguing that critical resources may span firm boundaries.[334] Due to this, firms that combine these resources in unique ways and create idiosyncratic inter-firm linkages may realize a competitive advantage and gain relational rents.[335] Thus, companies do not only earn Ricardian- and Quasi-rents but also relational rents that are jointly generated with alliance and exchange partners.[336] Relational rents are defined as supernormal profits that are jointly generated in an exchange relationship and cannot be generated by either firm in isolation.[337] It is the objective of the relational view to explain how these relational rents can be achieved.

Dyer and *Singh* argue that organizations can achieve the advantages only as they move exchange relationships away from the attributes of market governance. Exchange partners have to generate cooperative value-creating potentials through a synergistic pooling of resources. These potentials can be achieved through emphasis on the drivers of relational rents:[338]

- *Relationship-specific assets:* an extraordinary working relationship can be achieved through investments in assets that are specifically dedicated to the assets of the exchange partner. These investments will be specific to the relationship, since their value would be significantly lower if implemented in alternative uses. Due to this idiosyncratic character of investments and the co-specialization of the supplier and the buyer, relational rents can be achieved.[339] The ability of the exchange partners to build up relational rents is further related to their ability to install safeguards as a barrier to opportunistic behavior.
- *Substantial knowledge exchange:* inter-organizational routines need to stimulate knowledge exchange as well as the generation of new knowledge. If these routines lead to product- and process innovations, relational rents can be achieved.[340] The development and improvement of these interfirm knowledge-sharing routines will be supported by the transparency in the supplier-buyer relationship and the actor's absorptive capacities.
- *Complementary resources and capabilities:* the exchange and combination of complementary resources in a synergistic way, is an important prerequisite for the generation of relational rents. These synergies lead to stronger competitive positions than those achievable

---

[332] Dyer and Singh (1998). p. 661.
[333] Dyer and Singh (1998).
[334] Dierickx and Cool (1989); Barney (1991).
[335] Dyer and Singh (1998), p. 661.
[336] Lavie (2006), p. 641. For an explanation of Ricardian- and Quasi-rents, please refer to Chapter 2.1.3.
[337] Dyer and Singh (1998), p. 662.
[338] Dyer and Singh (1998), p. 662.
[339] Dyer and Singh (1998), p. 662; Duschek (2002), p. 258.
[340] Duschek (2002), p. 259.

by the exchange partners when operating alone. In order to make the supplier-buyer relationship a specific one, it is necessary that neither firm be able purchase the resources provided by the exchange partner on a secondary market. Otherwise, extraordinary rents (relational rents) could not be achieved.

- *Effective governance:* besides formal governance securitization mechanisms (e.g. contracts), companies need to implement self-enforcing mechanisms, which help to avoid opportunistic behavior and support the safeguard of the relationship-specific investments. A powerful informal mechanism is trust, which can help to reduce coordination and monitoring efforts.[341] Trust reflects the voluntary implementation of a risky action in a relationship, while renouncing explicit safeguards against opportunistic behavior.[342]

An engagement within these different categories leads to an integration of the two transaction partners and causes extensive efforts in both financial and time resources. Thus, the integration strategy only makes sense when the expected value of the combined resources and knowledge of the partners exceeds the expected efforts.[343]

Besides the inter-company roots of relational rents, four more conditions, internal and external to the relationship, need to be fulfilled in order to preserve relational rents in the long run. By analogy, if one or more of these mechanisms weaken or disappear the relationship becomes unstable and one partner may ultimately decide to exit the liaison or − in the perspective of the buyer − might switch to another supplier. These preserving factors represent barriers to imitation since they hinder competitors from simply imitating the partnering behavior, and preserve uniqueness.[344] Four mechanisms in particular can be identified that preserve relational rents generated by exchange partners:[345]

- *Inter-organizational asset interconnectedness:* the mutual interconnectedness of resources in integrated supplier-buyer relationships leads to a cumulative increase of cross-company assets over time. This is related to the fundamental transformation described in transaction cost economics.[346] The reason for this is that in the course of time, co-specialization and relationship-specific investments allow the implementation of even more relationship-specific investments, which in turn make further co-specialization possible, which leads to a snowball effect.[347] This progress is path-dependent and cannot easily be copied by competitors. Thus, the rent-generating idiosyncrasy of the relationship is preserved.

---

[341] Ripperger (1998), pp. 43.

[342] Ripperger (1998), p. 45. For alternative definitions of "trust" see Luhmann (1973), pp. 23; Bachmann and Lane (1997), p. 82; Sjurts (1998), pp. 285; Krystek (2002), p. 367. Stölzle (1999), pp. 229, further provides a detailed overview of trust characteristics.

[343] Dyer and Singh (1998), p. 675.

[344] Duschek and Sydow (2002), p. 429.

[345] Dyer and Singh (1998), pp. 671.

[346] Williamson (1990), pp. 70.

[347] Dyer and Singh (1998), pp. 672.

- *Partner scarcity:* in order to generate relational rents from the perspective of the buying company, the purchaser needs to find suppliers with complementary strategic resources and relational capabilities. However, due to the required idiosyncrasy of rent-creating relationships, fitting suppliers are difficult to find or might be engaged in another specific partnership already. Thus, strong first-mover advantages can be realized by firms that quickly install integrated supplier-buyer relationships. Furthermore, it can be stated that if potential supply partners are very scarce, a supplier switch is not easy to achieve, due to the limited number of alternatives.
- *Resource indivisibility:* the idiosyncratic character of the supplier-buyer relationship can lead to conditions that make it impossible for the two companies to generate the particular output somewhere else. This is especially true if the necessary production assets cannot be separated from each other (e.g. a jointly-used research laboratory), or can only be separated with difficulty. Thus, a separation of the relationship-specific assets will make it impossible for the individual actors to generate relational rents. This development is additionally supported by the co-evolution of the capabilities of each partner, which leads to a restriction of each firm's ability to control and redeploy resources, and thus bears the potential for dependencies and inflexibilities.
- *Institutional environment:* some institutional basic conditions can be defined as a further barrier towards an easy imitation of partnering behavior. These conditions can be related to, for example, culture that fosters goodwill, trust and cooperation, which lead to lower monitoring transaction costs. Other conditions are related to regional-specific circumstances like competence clusters that have been developed over time. If new companies want to enter this cluster but face entry barriers, the generation and preservation of relational rents for the existing cluster members is supported.

These theoretical explanations for the achievement of relational rents have to be transferred to the supplier-switching context. It can be stated that the relational view − as transaction cost economics − provides explanatory power for the reasons of supplier switching. Furthermore, it helps to explain the processes of integration of the new supplier and can be used for a success evaluation of the supplier switch. In the explanation of how the different elements of the relational view are interrelated and influencing supplier-switching activities, the use of the "house metaphor" seems to be appropriate (*Figure 2-13*). The foundations of the house represent the context of the specific transaction and comprises the mechanisms that help to preserve the relational rents. Suppliers and buyers do not have complete control over these mechanisms, since they represent the very nature of the exchange, or affect matters that are external to the organizations. However, they are necessary prerequisites for the generation of relational rents and competitive advantages in a specific transaction relationship. By analogy, if one or more of these mechanisms weaken or disappear, the relationship becomes unstable and − holding the perspective of the disengager − switching tendencies may arise. If the assets

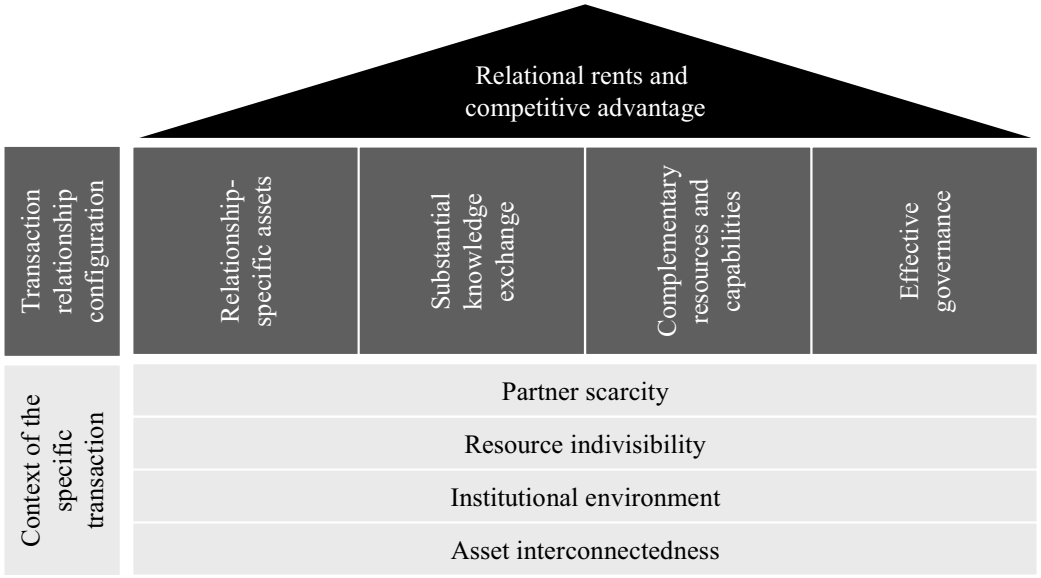


Figure 2-13: House of relational rents and competitive advantages

of the two companies are not interconnected, the companies cannot expect investments that aim for an increase of efficiency and effectiveness of the relationship. Thus, from the perspective of a potential disengager, if asset-interconnectedness declines, the buyer will become more independent and hence the opportunity to switch can be taken more easily. Furthermore, the institutional environment may encourage trust among the trading partners and lead to a solidification of the relationship. The opposite may be true if cultural differences or political turbulences are leading to distrust and suspicion. This would make further monitoring instruments necessary, which in turn increase transaction costs. This would lead to lower relational rents and thus may increase the need to switch to another supplier. In addition, resource indivisibilities may make it impossible for partners to leave the relationship and start on their own, thereby preventing dissolution tendencies. However, if resources become divisible due to, for example, new contracts or technologies, the buyer's dependency will decrease and hence switching tendencies may arise more easily. The creation of relational rents requires the creation of an idiosyncratic relationship with an exchange partner that has complementary strategic resources and relational capabilities. It is assumed that those kinds of suppliers are very rare, which leads to a higher dependency of the buyer on the supplier. However, if a new supplier with comparable qualities is identified, the existing supplier could be changed more easily.

Besides the context of the specific transaction, there are more elements actively configurable within a particular supplier-buyer relationship. These can be subject to changes and thus lead to the necessity or tendency to switch the supplier as well. If the specificity of relational assets decreases or the strategic importance of the assets declines, the buyer will become more independent. An example is the decrease in the strategic importance of a specific machine using a specific technology, which has been installed for the production of the supply object.

If technology advances over time, it might be possible to produce the same supply object on regular, less specific machines.

Substantial knowledge exchange is necessary for the generation of relational rents. However, it might be subject to change as well. In particular, communicative barriers, like different languages or IT-systems, may make an easy knowledge exchange more difficult and hence impede the generation of relational rents.[348] Furthermore, social animosities like distrust can also be a barrier to open communication. Thus, if the knowledge exchange declines, the supplier-buyer relationship cannot generate the same amount of relational rents as before. Consequently, the relationship might not be as valuable to the buyer anymore and switching tendencies can arise. Switching tendencies might also occur if the complementarities between the resources will decline. Applying the disengager perspective, complementarities can shrink due to the own absorptive capacity, which finally empowered the buyer to produce the specific supply object independently. Another reason is a change in the environment that made the particular complementary resources and capabilities less important. The last element, which can cause switching tendencies and may therefore explain why supplier switches happen, is related to the efficiency of governance. If transaction costs increase in a specific supplier-buyer relationship, switching tendencies may arise if the higher transaction costs do not lead to a better overall performance.[349]

Besides an explanation of the reasons for supplier switching, the relational view provides explanatory power for the chosen integration strategy for the new supplier. In order to generate relational rents, the context of the transaction must foster their creation. Furthermore, the buyer and the supplier need to be engaged in activities that help to implement relationship-specific investments, knowledge-sharing routines, and mutual adjustments in order to install complementary resources and capabilities, as well as effective governance procedures. Thus, the way the new supplier-buyer relationship is set up can be related to the relational view. In addition, the relational view can be utilized in the evaluation of the success of the supplier switches. This can be achieved through a comparison of the previously achieved relational rents with the relational rents in the new supplier-buyer relationship.

Despite the advantages of the relational view in the description of contemporary supplier-buyer relationships, the theory has been subjected to some criticism. One of the critics refers to the under-represented emphasis on the costs associated with the development and the acquisition of resources.[350] This criticism can lead to misinterpretations of supplier-switching decisions. For example, an increase of relational rents in a specific supplier-buyer relationship does not automatically indicate an improvement of the exchange relationship or an increase of the buyer's satisfaction, since costs and efforts could have been increased as well. Thus,

---

[348] Stölzle and Kirst (2007), p. 93.
[349] See Chapter 2.4.1.
[350] Lavie (2006), p. 651.

increasing rewards do not directly lead to an improved stability, just as declining relational rents do not necessarily cause switching tendencies. Thus, the improvement of the cost emphasis can help to overcome the critics on the relational view. The contributions and pitfalls of the relational view for research on supplier switching are summarized in *Table 2-6*.

Relational view	
Research object	Forms of inter-organizational interconnectedness that generate relational rents.
Contribution to the supplier-switching decision phase	Switching tendencies arise if changes in the context of a specific exchange relationship (asset interconnectedness, resource indivisibility, partner scarcity, institutional environment) and changes in the transaction relationship configuration (specific investments, knowledge exchange, complementary assets, effective governance) have a weakening impact on the drivers of relational rents.
Contribution to the supplier-switching execution phase	The disengager and the new supplier need to aim for activities that create relationship-specific investments, knowledge-sharing routines, and mutual adjustments in order to install complementary resources and effective governance.
Contribution to the supplier-switch success evaluation phase	*Ex post* comparison of the relational rents in the old supplier-buyer relationship in comparison to the relational rents in the new one.
Weakness of the theory with respect to supplier-switching	The relational view underemphasizes the costs associated with the development and the acquisition of resources. This is problematic, since an improvement of relational does not automatically refer to an improvement of the supplier-buyer relationship, if the costs have increased as well.

Table 2-6: The relational view and its contribution to the research on supplier-switching

2.4.3 Social exchange theory and its contribution to supplier switching

As already stated, it is a basic tenet in supplier management that on-going relationships among suppliers and buyers increase efficiency and effectiveness.[351] However, supplier-buyer relationships do not only comprise economic elements, but will also incorporate elements of social exchange.[352] These social elements can be the origin of switching tendencies as well, and thus will be considered in the following section.

The social exchange theory has been created at the intersection of social psychological[353] and sociological[354] perspectives and explains social change and stability as a process of negotiated exchanges between parties. The core explanatory mechanism of the social exchange theory is the relational interdependence that ultimately develops through the interactions of exchange

[351] E.g. Choi and Hartley (1996), pp. 333; Sahin and Robinson (2002), pp. 551; Johnston *et al.* (2004), p. 25.
[352] Johnston *et al.* (2004); Griffith *et al.* (2006), p. 85.
[353] E.g. Skinner (1950); Thibaut and Kelley (1959); Thibaut and Walker (1978).
[354] E.g. Homans (1958); Gouldner (1960); Emerson (1976).

partners.[355] Thus, the research object of the social exchange theory is the relationship between the actors, not the resource exchanged. Furthermore, the social exchange theory provides an understanding about the "clear conception of the material and resource basis of social action"[356] and hence it is "well-suited for grasping material / extrinsic exchange."[357] It posits that all relationships are established, lived and terminated by the use of a subjective cost-benefit analysis and the comparison of available alternatives.[358] This means that institutions enter into new associations and maintain old ones because they expect it to be rewarding. Although economic rewards such as money play a major role in supplier-buyer relationships, social rewards like emotional satisfaction and sharing same values do have a big impact on how exchange partners evaluate their relationship.[359] Exchange interactions with a long-term orientation like integrated supplier-buyer relationships develop over time and comprise the history of the exchange as well. This historical background is utilized by companies to anticipate the future costs and benefits of developing and continuing the relationship.[360] Long-term orientation in this perspective will occur "*when an exchange partner believes that the on-going relationship with another is so important as to warrant maximum effort in maintaining the relationship.*"[361] Within this understanding of a long-term relationship, the social exchange theory suggests that actors will remain in relationships as long as satisfactory rewards continue. Satisfaction has been used in inter-company relationships as a means of success.[362] A vast variety of definitions exists, but it can be stated that, in general, it reflects a level of performance in which a transaction meets the expectations of the partners, including product and non-product attributes.[363]

In order to preserve a satisfactory level of performance, the interacting parties can expect to experience the necessity to make concessions to the needs of the counterpart. These concessions correspond closely to the concept of idiosyncratic investments and asset specificity in transaction cost economics and the relational view.[364] The interaction between buyers and suppliers results in various ways in which the exchange partners can modify their own and the other party's resources. Basically, two mechanisms can be used to explain these concessions: trust and power. In long-term-oriented exchange processes, the supplier and the buyer can mutually and sequentially demonstrate their trustworthiness by committing themselves to the

---

[355] Dwyer *et al.* (1987), pp. 12.
[356] Cook (2000), p. 688.
[357] Stolte *et al.* (2001), p. 411.
[358] Thibaut and Kelley (1959), pp. 10.
[359] Lambe *et al.* (2001), p. 6.
[360] Thibaut and Kelley (1959).
[361] Griffith *et al.* (2005), p. 88.
[362] Lambe *et al.* (2001), p. 25.
[363] Wilson (1995), pp. 338.
[364] Hallén and Seyed-Mohamed (1991), p. 30.

relationship through adjustments and relationship-specific investments.[365] Thus, inter-firm concessions are elements in a trust-forming social exchange process and in turn, if no concessions are made anymore, the level of trust may start to decline.

Power in exchange relationships can be seen as a means to influence the other party to adapt in order to meet their own expectations. Thus, power is defined as the opportunity to influence the outcome of a related party.[366] In the social exchange theory, power is the property of a relationship and not of an actor, because it resides implicitly in the other's dependence.[367] The dependence of the buyer directly increases with the value of the resources received from the supplier and varies inversely with a comparison level for alternative exchange relations.[368] Power can be primarily derived from resource dependency of the exchange partner and, considering a network of potential transaction partners, it also results from the structure of available alternative suppliers.

Thibaut and *Kelley* are often cited as significant contributors to the social exchange theory due to their development of the concept of different comparison levels. The authors argue that actors in an exchange evaluate the *outcome* of the relationship along two dimensions. The first dimension is the expected *comparison level* (CL_{exp}). It represents the benefit (both economic and social) standard that one feels is deserved for a specific exchange and that can therefore be regarded as an expected minimum outcome of a specific supplier-buyer relationship. This will be compared to the real outcome of the particular relationship.[369] Thus, it is the threshold above an outcome, which seems to be attractive.[370] An example for the comparison level CL_{exp} would be a buying firm that compares the supplier's price for a certain supply object with what the company thinks is warranted. If the price of the supplier is higher, the buying company would experience some degree of dissatisfaction and if the price is lower than the anticipated price, some degree of additional satisfaction would be experienced. Thus, in general one can postulate that one dimension of satisfaction depends on expectations that are *ex ante* to a particular contract.

The second dimension is called the comparison level of alternatives (CL_{alt}) and is related to the best payoffs (economic and social) available outside the current relationship. Therefore, it is used to determine whether one continues or terminates the relationship. Transferred to supplier-buyer relationships it is suggested that as long as the buyer's outcome exceeds CL_{alt} for a specific exchange, the buyer faces some dependencies on its current supplier, since it affords greater rewards than can be achieved with any alternative supplier. Thus, the buyer

---

[365] Hallén and Seyed-Mohamed (1991), p. 31.
[366] Thibaut and Kelley (1959), p. 101.
[367] Emerson (1962), pp. 32.
[368] Cook and Emerson (1978), pp. 723.
[369] Lambe *et al.* (2001), p. 9. In the following, outcome and performance of the relationship will be used interchangeably.
[370] Thibaut and Kelley (1959), pp. 81.

wants to maintain the relationship with the supplier and no need to switch to another supplier might exist. However, if an alternative supplier has been identified who can provide a better outcome, instability and switching tendencies may arise due to upcoming dissatisfaction.

These comparison levels can be used to assess the realized outcome of a given supplier-buyer relationship. The result of this evaluation process determines the degree of satisfaction of the actors and the degree of stability within the particular supplier-buyer relationship. Due to the chosen perspective of this research, the degree of satisfaction of the buyer – the disengager – is particularly relevant. Following this, six possible satisfaction situations or states of exchange relationships can be distinguished (see *Table 2-6*).

Relative value of outcome; CL, CL_{alt}	**State of the relationship**
1) Outcome > CL_{exp} > CL_{alt}	satisfying, stable, dependent
2) Outcome > CL_{alt} > CL_{exp}	satisfying, stable, non-dependent
3) CL_{alt} > CL_{exp} > Outcome	not satisfying, break relationship, happy elsewhere
4) CL_{alt} > Outcome > CL_{exp}	satisfying, unstable, happier elsewhere
5) CL_{exp} > CL_{alt} > Outcome	not satisfying, break relationship, continue unhappy
6) CL_{exp} > Outcome > CL_{alt}	highly unsatisfying, cannot break away, dependent and unhappy

Table 2-7: Six satisfaction situations within the social exchange theory[371]

These six states will be applied to the analysis of dissatisfaction in supplier-buyer relationships and how the exchange-partners can react to it. From the perspective of the buyer, the company might quit the relationship as soon as the outcome ceases to be satisfying and a superior alternative is available. However, it has to be taken into account that the meaningfulness of the exit option depends on the magnitude of the switching costs that occur if the disengager wants to utilize the better performance of the new supplier in comparison to the cost of a supplier development initiative as well. A better supplier might be available, but if the switching costs are excessively high, the buyer will be trapped in the incumbent relationship. Furthermore, if the old supplier's outcome could be improved by means of supplier development to a level that at least matches the one of the alternative supplier and the related cost for such an attempt are lower than the switching costs, the voice strategy would be the better choice. Having this in mind and referring to *Table 2-6*, the different relational typologies can be described as follows:

1. In this situation, the realized outcome in the actual supplier-buyer relationship is bigger than expected *ex ante* (Outcome > CL_{exp}). Furthermore, the *ex ante* expectations have been so high that no other supplier could match them (CL_{exp} > CL_{alt}). This leads to a satisfying and stable situation and thus, the purchasing company will stay loyal since no improvement is needed.

[371] Related to Roloff (1987), p. 87.

2. In the second situation the outcome of the current relationship is still better than anticipated *ex ante* (Outcome > CL_{exp}). Alternative suppliers could perform to a level that is still satisfying (CL_{alt} > CL_{exp}). However, since the current relationship's outcome is even better than the anticipated outcome of the alternative (Outcome > CL_{alt}) the buyer is satisfied in the transaction relationship and will stay loyal. Thus, this supplier-buyer relationship is stable and no switching tendencies will arise.
3. In this situation the outcome is worse than expected (CL_{exp} > Outcome) and thus, the relationship is not satisfying. Nevertheless, an alternative supplier (or more) exists, which can offer a better performance as in the current relationship (CL_{alt} > Outcome) and can reach the expected degree of performance as well (CL_{alt} > CL_{exp}). Due to the availability of better suppliers, the buyer can terminate the current relationship (exit) and switch to another vendor if the switching costs are lower than the cost of developing the old supplier (voice) to the required performance level.
4. This relationship is satisfying since the anticipated outcome has been surpassed by the realized performance (Outcome > CL_{exp}). However, another supplier exists that could offer an even better outcome to the buying firm (CL_{alt} > Outcome). Due to this, the current supplier-buyer relationship is unstable and switching tendencies exist. Thus, the buyer will exit the present relationship and replaces the incumbent supplier with the alternative one if the switching costs are lower than the cost of developing the old supplier.
5. This status of the current supplier-buyer relationship refers to a very unsatisfying supply situation. The realized outcome is smaller than expected (CL_{exp} > Outcome). The buying firm can improve its situation through switching to an alternative supplier, which would have a better performance as the current one (CL_{alt} > Outcome) if the switching costs are lower than the cost of voicing concerns. However, even after the switch to a new supplier the buyer would remain unsatisfied since its initial expectation cannot be fulfilled in the new relationship either (CL_{exp} > CL_{alt}).
6. This last status of a supplier-buyer relationship refers to a situation that is highly unsatisfactory. The outcome of the current relationship is lower than expected *ex ante* (CL_{exp} > Outcome). Additionally, the supplier does not have any chance to improve it, since the alternative supplier would perform even worse (Outcome > CL_{alt}). Thus, the buying firm is dependent on its poorly-performing supplier, cannot break away and will remain unsatisfied, or follows the voice strategy and tries to improve the old supplier.

These different situations can be utilized to systemize the different levels of satisfaction of the buyer within supplier-buyer relationships. Switching tendencies will arise as soon as the disengager's satisfaction level has been lowered and an alternative supplier-buyer relationship, which promises a higher satisfaction, is available, independently of the switching and supplier-development costs. These costs would be taken into account only after dissatisfaction has arisen.

In addition to the explanatory power of the social exchange theory for the reasons for vendor replacements in the supplier-switching decision phase, it can further explain activities for supplier development in the *ex ante* switching phase. If the incumbent supplier is performing worse than expected and no alternative source of the supply object is available, the disengager might only have the opportunity to improve the current supplier through a supplier-development initiative. Additionally, the social exchange theory can provide explanations for the objectives pursued by the disengager in the supplier-switching execution phase. The activities in general aim for an improvement of relevant product- and non-product-related performance attributes. In particular, the pursuit of non-product-related switching objectives, like decreasing dependencies or improving other strategic performance measures of the supplier-buyer relationship, can be clarified when their attainment increases the satisfaction of the disengager. This supports a thorough explanation of the switching activities (and their reasons), especially when the switch is not performed as a result of an excessively high transaction cost or excessively low relational rents, but because of strategic decisions. Furthermore, the social exchange theory offers opportunities for the success evaluation of supplier switches. The success of a supplier switch can be evaluated through an *ex ante / ex post* comparison of the disengager's satisfaction level, which is expected to be higher after the replacement of the old vendor.

However, the social exchange theory has been criticized too. Critics argue that the social exchange theory does not offer a holistic explanation of supplier-buyer relationships. It is suggested that other theories should be used in conjunction with the social exchange theory and that this would lead to a more comprehensive understanding of inter-organizational exchanges.[372] One important criticism is that relationships in a business environment, such as supplier-buyer relationships, cannot be coordinated exclusively by relational government through the use of power and trust. Thus, relational governance will not be able to replace formal governance mechanisms like contracts.[373] Nevertheless, it has been stated that norms and relational governance can serve as a moderator in conjunction with formal governance.[374] Another limitation of the social exchange theory is the lack of consideration of opportunism.[375] In particular, occasional differences between the exchange partners, even in long-lasting und trustful relationships, can experience inconsistencies that can eventually lead to a relationship breakdown. Thus, as suggested by transaction cost economics, relationship-specific investments and control mechanisms might be needed that function as a barrier to spontaneous switches. Hence, the use of social exchange theory in conjunction with transac-

[372] Lambe *et al.* (2001), pp. 28.
[373] Macaulay (1963); Hill (1990).
[374] Rindfleisch and Heide (1997), p. 50.
[375] Lambe *et al.* (2001), p. 26.

tion cost economics is recommended to fully explain business relationships.[376] If the two views − relational governance in the social exchange theory and formal governance of transaction cost economics − could be combined, a more comprehensive picture of exchange relationships can be drawn. The contributions of the social exchange theory for research on supplier-switching are summarized in *Table 2-8*, which additionally displays the weaknesses of the theory with respect to a holistic explanation of the supplier-switching phenomenon.

Social exchange theory	
Research object	Stability and instability in exchange relationships
Contribution to the supplier-switching decision phase	Switching tendencies arise if the purchasing company experiences dissatisfaction with respect to the output of a supplier-buyer relationship. This is the case when the current output is lower than an expected minimum output level (CL_{exp}) or lower than a potential output in an alternative supplier-buyer relationship (CL_{alt}). Furthermore, it can be explained why a supplier follows either the exit, voice or loyalty strategy.
Contribution to the supplier-switching execution phase	The disengager pursues product- and non-product-related switching objectives that shall increase its satisfaction level after the switch. The non-product-related objectives can have a strategic character, might even increase transaction cost or lower relational rents in the new supplier-buyer relationship, and would not be explainable by transaction cost economics or the relational view. However, if they positively influence the disengager's satisfaction, they can be explained through the social exchange theory.
Contribution to the supplier-switch success evaluation phase	*Ex post* comparison of the disengager's satisfaction level with the one in the old supplier-buyer relationship.
Weakness of the theory with respect to supplier-switching	The social exchange theory is over-emphasizing the importance of dependencies and power and neglects the aspects of formal governance mechanisms like contracts.

Table 2-8: Social exchange theory and its contribution to research on supplier-switching

2.4.4 An eclectic explanation approach for the reasons, objectives and success of supplier switches

Due to the specific weaknesses of the theories presented with respect to their explanatory power for the phenomenon of supplier switches and their interrelated character, transaction cost economics, the relational view, and the social exchange theory will be jointly utilized within an eclectic research approach. Therefore, the social exchange theory will be taken as a basis and transaction cost economics and the relational view will be integrated into it separately. Afterwards, the combined theories are integrated into the theoretical-conceptual framework, which will be utilized as a structure for the empirical research.

[376] Lambe *et al.* (2001), p. 29.

In order to incorporate the other theories into the social exchange theory, the constituent elements of transaction cost economics and of the relational view will be related to the different comparison levels of the social exchange theory. As discussed in *Chapter 2.4.3*, the level of satisfaction in a supplier-buyer relationship can be derived by evaluating the real outcome of the relationship (Outcome), the *ex ante* expected level of performance (CL_{exp}), and the possible performance of an alternative supplier-buyer relationship (CL_{alt}). All elements are multi-dimensional measures that come together through a calculation of rewards and the subtraction of efforts in a supplier-buyer relationship. These two sub-elements can be related to transaction cost economics and the relational view.

Integration of the relational view into the social exchange theory

The relational view explains how corporations can gain supernormal profits due to integrated relationships with external firms. It can be postulated that a buying company expects some extraordinary rewards through the integration of a supplier, in order to get compensated for risks like dependencies and increased management complexity.[377] These extraordinary rewards represent a surplus value and are thus related to the reward side of the comparison levels (CL_{exp}, CL_{alt}) and the outcome (Outcome). However, since rents reflect surpluses, it indicates that the cost or effort that is necessary to achieve those rents has already been subtracted.[378] Thus, in order to avoid redundancies and double-counting of transaction costs, these costs will be separated, and the definition of rents will be modified in a way that they refer to a reward measure that excludes the subtraction of efforts and costs (this would be comparable with the gross revenue of a company in a profit and loss calculation). These rents are labeled as "*modified relational rents*" in the following section. In this context, it is important to mention that the research does not claim to provide comprehensive operative measures of relational rewards or relational rents. Rather, it is concerned with an integration of the explanatory approaches of the three theories into a testimony system in order to explain the reasons for supplier-switching, how these influence the switching objectives in the execution phase, and how they can be used for an evaluation of the switching success.[379] However, the modified relational rents have the same drivers as the "regular" ones, as described in *Chapter 2.4.2*. Thus, modified relational rents can be generated by specific investments, like special machines that have been purchased by the supplier, are customized to the needs of the buyer and can therefore produce more efficiently than standard technology. Complementary assets like adjusted quality-checking equipment further foster the achievement of modified relational

---

[377] See Chapter 2.1.3 and 2.4.2.

[378] The fact that costs are inherent to the relational view becomes even more obvious through the discussion of effective governance. Some authors argue that the relational view has roots in transaction cost economics but is not incorporating these costs completely. Lavie (2006), pp. 642.

[379] One attempt to define operational measures that determine the actual amount of rents and relational rewards within a supplier-buyer relationship can be related to the supplier lifetime approach of Eßig (2003) or Stölzle and Kirst (2006).

rents as well as knowledge exchange concerning, for example, technical problems or demand forecasts. Modified relational rents can further be generated through effective governance; for example, by developing a trusting relationship.

By relating relational rents only to the benefits of a specific supplier-buyer relationship, they can fully represent the reward sub-element of the outcome (Outcome), the comparison level (CL_{exp}) and the comparison level of the alternative (CL_{alt}) in the social exchange theory. However, further distinctions related to the time at which the reward is calculated have to be made. It can be distinguished between an anticipated reward, which occurs *ex ante* to a relationship and reflects the general expectation that the buyer has with regard to a specific exchange, and an ex post reward, which occurs after a specific relationship has been integrated. The *ex ante* reward will be labeled as "*expected relational reward*" and is related to the expected comparison level (CL_{exp}). Furthermore, if a buying firm predicts the potential reward of a new supplier-buyer relationship, the reward is related to the comparison level of the alternative (CL_{alt}) in the social exchange theory and is labeled "*estimated relational reward alternative.*" In addition, a reward can be calculated after an integrated supplier-buyer relationship has been installed and is currently running. These rewards represent the real rewards of the current relationship and are therefore not subject to uncertainties. These rewards will be labeled as "*real relational rewards*" and are related to the outcome-level of the active supplier-buyer relationship (Outcome). However, all kinds of rewards comprise the same drivers and hence are determined in the same way (*Figure 2-14*).

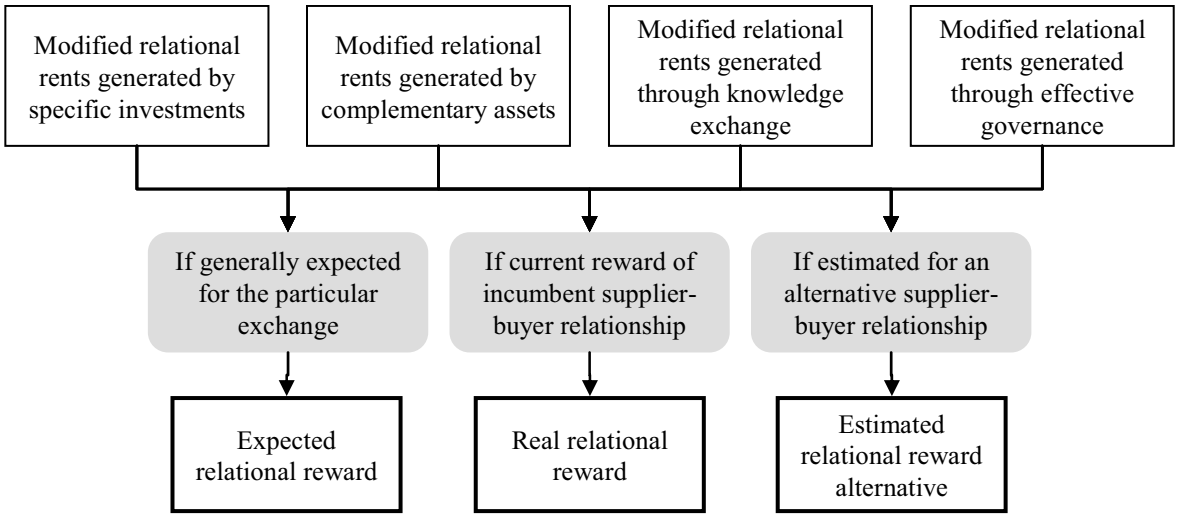


Figure 2-14: Components of relational rewards in the eclectic theoretical approach

If the drivers of relational rewards change in a way that negatively influences the real relational reward, switching tendencies may arise if the estimated rewards of an alternative supplier-buyer relationship are expected to be higher. This would refer to an absolute supplier weakness. However, if changes cause an increase of the estimated relational rewards of the alternative and the real reward remains the same, switching tendencies might occur as well. This would refer to a relative supplier weakness. Changes that provoke variation of the

expected relational reward (e.g. an increase of the market price for the purchased good) will have an influence on the satisfaction level of the buying firm. These changes can eventually cause switching tendencies if they increase the expected relational reward and the incumbent supplier-buyer relationship is not able to improve its performance adequately. Thus, the disengager will become dissatisfied and start to search for alternative suppliers. However, the change of the reward side of a particular supplier-buyer relationship does not automatically lead to switching tendencies if the given examples occur. The variations of the reward side need to be compared with changes on the effort side.

Integration of transaction cost economics into the social exchange theory

For the determination of a cost-effective government for a given transaction, the drivers of transaction costs, namely 1) asset specificity, 2) uncertainty, and 3) frequency of exchange, are taken into account.[380] The intensity of these drivers influences the height of the transaction cost and hence the choice of the governance structure. More precisely, the objective of transaction cost economics is to find the cost-minimizing governance structure, which means that "*the criterion for organizing commercial transactions is assumed to be the strictly instrumental one of cost-economizing.*"[381] This efficiency criterion causes problems as soon as only transaction costs are taken into account. The determination of the right governance structure based on minimal transaction costs only makes sense if the production costs are independent of changes in the governance structure. However, if transaction costs vary with a change in the coordination mechanism, it seems to be more appropriate to choose a governance structure that minimizes the sum of production and transaction costs,[382] in which the production costs from the perspective of the buying firm are represented by the *purchase price* of the supply object. This research will take both kinds of cost into account in order to describe the costs that are related to a specific supplier-buyer relationship more comprehensively. The sum of the two cost elements can be regarded as the total effort that has to be taken into account to run a specific supplier-buyer relationship and utilize the supply-object. This effort can represent the sub-element of the outcome, the expected comparison level and the comparison level of the alternative in the social exchange theory. Likewise, with the relational reward, the relational effort can be assessed before a relationship comes together. This expected effort is based on assumptions and experience and thus represents an estimate that is subject to uncertainties. Changes in the environment can lead to variations of the anticipated costs; additionally, at the time a particular supplier-buyer relationship is planned,

---

[380] Corsten and Gössinger (2001), p. 4; Skjøtt-Larsen (2007) p. 88. The criterion of measurability, which is stated as relevant from some authors, will not be taken into account explicitly. E.g. Milgrom and Roberts (1992). However, it will be considered implicitly in the uncertainty criterion.

[381] Williamson (1979), p. 245.

[382] Williamson (1979), p. 245.

not all information about the future is available.[383] This means that even though a supplier-buyer relationship might have been advantageous in the beginning, its positive aspects might turn into negative ones eventually. Following the applied logic of relational rewards, the expected relational effort is labeled "*expected relational effort*" and relates to the comparison level (CL_{exp}) in the social exchange theory. If a buying firm evaluates the potential effort with a new supplier, the effort refers to the "*estimated effort of alternative*" (CL_{alt}). If the effort in a currently running supplier-buyer relationship is evaluated, the buyer can fall back on real empirical data and this effort is therefore labeled as "*real relational effort*" and refers to the outcome-level (Outcome) in the social exchange theory. The evaluation of the anticipated and the real effort of a supplier-buyer relationship are based on a calculation of transaction costs and production costs, which are both difficult to operationalize. This obstacle has been addressed by *Williamson*, who demonstrated that "testable hypotheses could be developed by associating the relative efficiency of alternative governance structures with observable dimensions of transactions, namely, asset specificity, uncertainty, and transaction frequency."[384] Uncertainty drives transaction costs due to the need for securing mechanisms such as monitoring activities. Transaction cost can further be influenced through asset specificity, which needs to be covered through, for example, complex contracts that require comprehensive legal assistance. The frequency of exchange increases transaction cost if it experiences a strong variance that, for instance, makes the order-processing procedures sub-optimal in many cases. Production cost or the purchasing price respectively can also vary through circumstances like variation in the market supply and demand. Transaction and production cost drivers influence the height of the relational effort and are assessed in the same way, regardless of whether they have an expected, real, or estimated character (*Figure 2-15*).

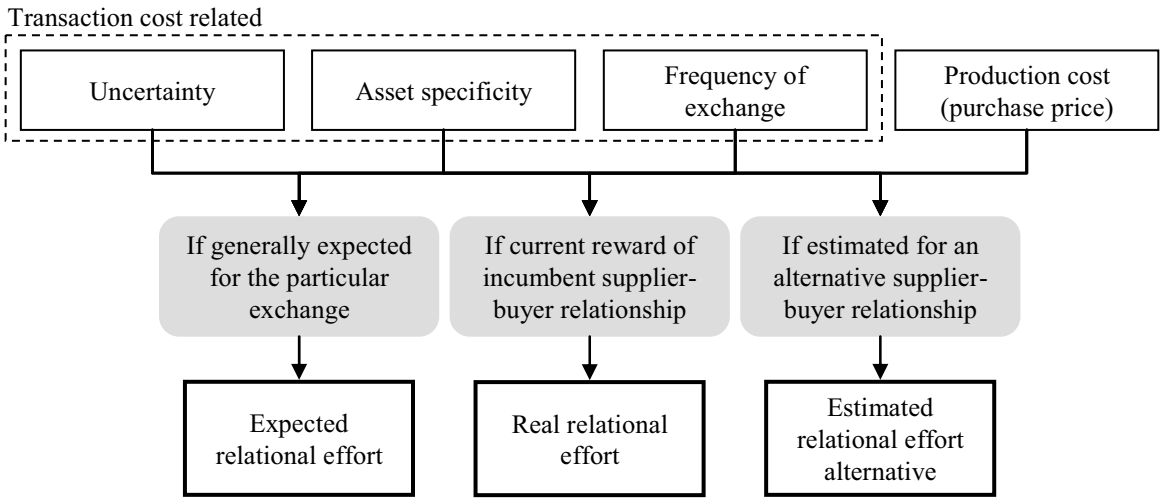


Figure 2-15: Components of the relational effort in the eclectic theoretical approach

[383] Even if all information were available for the future development of a certain supplier-buyer relationship, the purchasing company would not have the mental capability to take all information into account, due to the assumption of bounded rationality. Picot *et al.* (2002), p. 70.

[384] Geyskens *et al.* (2006), p. 519.

Changes affecting the drivers of the relational effort can cause supplier-switching tendencies, if they increase the real relational effort through, for example, political uncertainties in the country of the incumbent supplier's origin, to a level that is higher than the estimated relational efforts of a potential alternative supplier-buyer relationship. Switching can also become an option if the estimated efforts in an alternative supplier-buyer relationship decrease (e.g. through the development of leaner processes) and become smaller than the real effort. Changes affecting the expected relational effort can cause the dissatisfaction of the purchasing company if they increase the expectation in terms of efforts to a level that cannot be matched by the incumbent supplier. However, in order to make valid testimonies about the status and satisfaction in a supplier-buyer relationship, the development of the effort side needs to be compared to the development of the relational rewards.

The eclectic explanation approach for supplier-switching

After the relational rewards have been related to the relational view and the relational efforts have been linked to transaction cost economics, the theories are fully-integrated components of the social exchange theory. In order to determine the expected comparison level (CL_{exp}), the real outcome (Outcome), and the comparison level of the alternative (CL_{alt}), the efforts have to be subtracted from the rewards, which leads to the following definitions:

Measure	Determination
Real outcome (Outcome)	= real relational rewards - real relational efforts
Expected comparison level (CL_{exp})	= expected relational reward - expected relational efforts
Comparison level alternative (CL_{alt})	= estimated relational reward alternative - estimated relational efforts alternative

Table 2-9: Determination of outcomes and comparison-levels in the eclectic theory approach

The process of comparing efforts and rewards in a particular supplier-buyer relationship leads to a certain degree of satisfaction. Furthermore, this degree of satisfaction can be qualified by comparing the current supplier-buyer relationship with an alternative one. It can therefore be stated that satisfaction in the context of supplier-buyer relationships is influenced by the general expectations about the outcome (in terms of economic and social outcomes) of a certain exchange, the real outcome within an incumbent supplier-buyer relationship, and possible alternative outcomes in relationships with alternative suppliers (*Figure 2-16*). The figure shows how the satisfaction of the disengager comes together and how the degree of satisfaction can be improved through the implementation of exit, voice or loyalty strategies. The general expected outcome for a relationship with an arbitrary supplier (CL_{exp}) will be determined through a subtraction of all expected relational efforts from all expected relational rewards. After a specific supplier-buyer relationship has been established, the buyer compares its expectations with the real outcome (Outcome) of the relationship. If the purchasing company compares these two measures, dissatisfaction and hence switching tendencies can arise if the real outcome of the supplier-buyer relationship is lower than expected, which

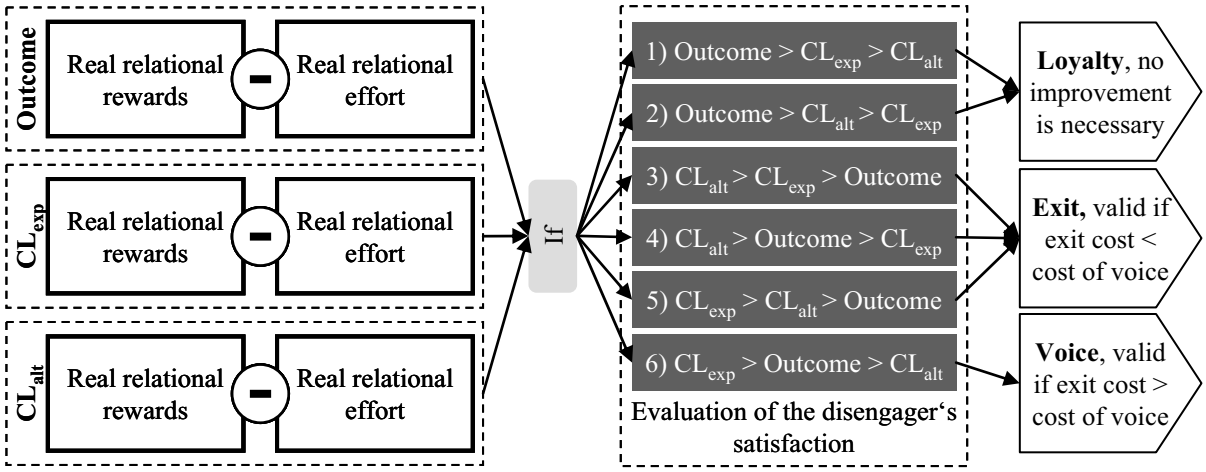


Figure 2-16: Evaluation of the disengager's satisfaction and resulting exit, voice and loyalty strategies

refers to an absolute supplier weakness. However, in order to consider the possibility of terminating the current relationship, the buyer needs to have an alternative. The analysis of the alternative supplier's outcome is based on the subtraction of the estimated relational efforts from the estimated relational rewards of the alternative. If the alternative supplier offers a better outcome than the incumbent, a relative supplier weakness has occurred, which leads to switching tendencies. As displayed in *Figure 2-16*, the decision regarding whether the purchasing company follows the exit or the voice strategy depends on the exit cost (switching costs) and on the cost of "voice" (supplier development cost). Thus, in situations where both strategies could be implemented in order to improve the purchasing company's satisfaction level – labeled "3", "4" and "5" – switching and developing costs need to be considered in order to make a meaningful decision concerning exit or voice. Finally, after the three theories have been combined, it can be assumed that all switching tendencies can be related to the buyer's dissatisfaction, whereas the switching decision needs to take the costs of switching and supplier development into account as well. The purchasing company's dissatisfaction is related to the two kinds of supplier weaknesses:

1. The real outcome of the current supplier-buyer relationship is lower than expected and an alternative supplier promises better outcomes. In this case it does not matter if the alternative supplier meets the original expectations of the buyer. The only important thing is that the alternative supplier's estimated performance is superior to the one of the incumbent supplier. The smaller-than-expected outcome of the incumbent vendor can be rooted back to either smaller rewards and the same expected amount of effort, through higher efforts and the same level of rewards, or a combination of the two developments in such a way that a shortfall occurs. This development is related to the absolute supplier weakness described earlier.

2. The alternative outcome of another supplier is higher than the real outcome of the current supplier-buyer relationship, even though the current supplier is meeting expectations. The higher potential outcome of the alternative supplier can be related to higher rewards and

the same effort as in the old exchange relationship, through lower efforts and the same level of rewards, or a combination the two developments in a way that the surplus occurs. This development is related to the relative supplier weakness described earlier.

The integration of the transaction cost theory and the relational view into the social exchange theory has helped to explain the reasons and motivations to switch suppliers from the buyer's perspective. Furthermore, the eclectic approach can be applied to the evaluation of the success of a particular supplier switch. To evaluate the success, the estimated comparison level of the alternative (CL_{alt}) becomes the new expected comparison level (CL_{exp}) in the new relationship, which includes the anticipated switching costs. From here, the described procedures of comparing the expected outcome with the real outcome and potentially alternative outcomes can start again and thus can account for the success evaluation of the supplier switch. However, in order to make the success evaluation more tangible, the success-dimensions of integrations research can be applied, which make a more differentiated and disaggregated success evaluation of the supplier switch possible. Thus, the success of switching can be divided in three subcategories.

The first subcategory is *economic success*. Economic reasons are one of the most important reasons for switching to another supplier and hence it is of principal interest if the switch from the old supplier to the new one has saved money, has helped the disengager to make more money, or has increased its market share.[385] Thus, the means of economic success (lower cost, higher revenues) influence the relational reward and the relational effort of the Outcome, CL_{exp}, and CL_{alt}.

The second success dimension of supplier switching is the *technological success*. A more innovative dynamic, an increased number of patent registrations, or better quality can be measures that help to determine this success dimension.[386] These means can be related to the relational reward side. Relational efforts in regards to technological issues essentially reflect a deterioration of certain characteristics of the supply object or the process in comparison to the old supplier-buyer relationship. However, the worsening of certain elements might be counterbalanced by improvements of economic factors.

The third success dimension is the *switching-related success* and contains measures like the duration of the switch (from the decision to switch to the end of the supplier-switching execution phase), costs of switching, the attainment of strategic goals, and soft factors like coordination problems and atmosphere between the involved parties. This success dimension can relate to both relational reward and relational effort. After all three success dimensions have been evaluated, the new relational rewards and the new relational efforts can be determined. *If the outcome of the alternative supplier-buyer relationship (CL_{alt}) is as big as*

---

[385] Chakrabarti (1990), pp. 260.
[386] Hagedoorn and Duysters (2002), pp. 71.

expected, bigger, or at least bigger than the outcome of the old supplier-buyer relationship, then the supplier switch can be regarded as successful.[387]

Besides the explanatory strength that the eclectic research approach offers to the supplier-switching decision phase and the switch-success evaluation phase, its ability to explain the activities within the execution phase is limited to the objectives of the activities. Since the disengager pursues an improvement of its relational outcome in the new supplier-buyer relationship, the activities aim for an increase of relational rewards, whereas the relational efforts should be limited. Thus, on the one hand the disengager will focus on activities that foster complementary assets, knowledge exchange, and effective governance. On the other hand, it will try to reduce uncertainty and the purchasing price. As far as specific investments, asset specificity and the frequency of exchange are concerned, it is assumed that the disengager estimates the right level of these cost- and rent-drivers, and establishes its governance structure accordingly. Thus, the objectives of the activities can be described, but they cannot be ordered according to priorities or need of resources.

Section summary and key insights into supplier switching

This chapter has described different theoretical approaches to the research on supplier switching. Transaction cost economics, the relational view, and the social exchange theory have been identified as especially appealing for this research, since they all focus on exchange relationships, with specific outcomes and dependencies that can be influenced by factors internal or external to the relationship. All of them can explain switching tendencies to a certain degree, but provide even more explanation when used in an eclectic approach. The basis of the approach builds the social exchange theory, which theorizes on stability and change in relationships by comparing outputs of a current relationship with the expectations one had before entering the liaison, and potential alternative outcomes with other partners. These outcomes are assessed by a subtraction of relational efforts (related to transaction economics) from relational rewards (related to the relational view). Depending on the realized outcomes, the disengager might experience dissatisfaction, which leads to switching tendencies, whereas the final switching decision needs to consider the costs of switching and supplier development as well.

[387] An alternative construct of how a “beautiful exit” can be measured is described by Alajoutsijärvi *et al.* (2000), p. 1282.

2.5 The phase-based theoretical-conceptual framework of supplier switching

The theoretical and conceptual aspects that have been discussed in the chapters above will be consolidated into a theoretical-conceptual research framework, which has emerged through several stages of improvements and testing. After a pre-perception of supplier-switching activities has been developed, a first framework has been tested by three preliminary expert interviews.[388] However, only the final research framework has been utilized for empirical data gathering. It is primarily systemized along the different phases of supplier switches, namely, *a) the supplier-switching decision phase, b) the supplier-switching execution phase*, and *c) the supplier-switch success evaluation phase*, which have been introduced in *Chapter 2.3.3*. The exploratory character of this research leads to a focus on gaining a comprehensive picture of the supplier-switching phenomenon through an analysis of these different phases, their managerial areas and activities, descriptions of certain events within the phases, and the interrelation of their elements. Taking this into account, the theoretical-conceptual framework can be illustrated as follows (*Figure 2-17*).

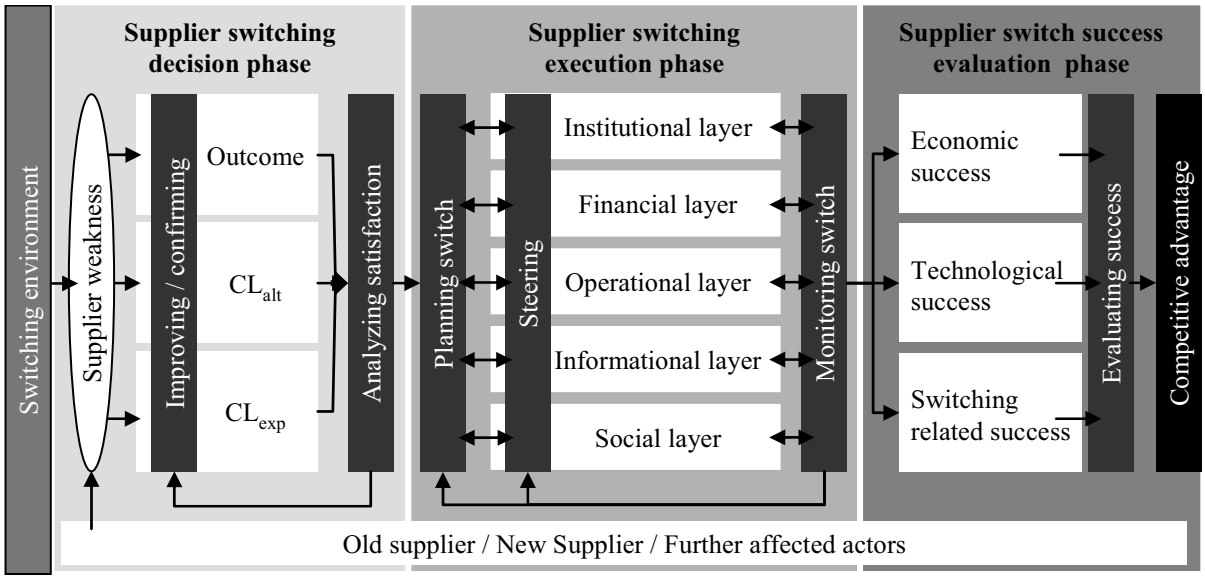


Figure 2-17: The phase-based theoretical-conceptual framework of supplier-switching

A prior condition for supplier switches is the existence of a supplier-buyer relationship. As stated in chapters 1.2 and 2.1.3, the research on hand is mainly concerned with integrated supplier-buyer relationships within an industrial context. This refers to a specific supply background, which includes strategic, bottleneck and leverage supply objects that are provided by an integrated supplier. The characteristics of this supply environment become the starting point for supplier-switching and emerge to the *switching environment* as soon as serious problems occur with integrated suppliers.

[388] See appendix A.

The identification of a supplier weakness initiates the first phase of supplier-switching, the *supplier-switching decision phase*. Within this phase, the disengager evaluates its satisfaction within the incumbent supplier-buyer relationship through a comparison of the outcome in the current relationship (Outcome), its initial outcome expectations (CL_{exp}), and estimated outcomes in a potential alternative supplier-buyer relationship (CL_{alt}) as shown in *Figure 2-16*. After the analysis of satisfaction, the purchasing company decides whether to follow the exit, voice or loyalty strategy. If the voice strategy will be followed, the buying firm can be engaged in supplier-development activities aimed at improving the old supplier-buyer relationship (*Chapter 2.1.2*). Furthermore, the disengager can remain loyal temporarily and prepare a possible future switch by searching potentially new suppliers and confirming the estimated outcome of the alternative supplier through performing the first steps of the supplier selection process (*Chapter 2.1.2*). However, the analysis of satisfaction will be performed on a continuous basis in order to identify the impact of the improvement activities. If the disengager finally decides that the exit strategy, and thus the replacement of the current supplier by a new one, is the right answer to the identified supplier weakness, the next phase of supplier switching will start. Hence, the supplier-switching decision phase ends with the decision to switch.

The next stage, which will be analyzed in the empirical research, is the *supplier-switching execution phase*, which starts with the planning of the supplier switch with respect to the different activities on the dyadic relational layers, introduced in *Chapter 2.3.2*. Furthermore, the planning comprises the choice of the switching strategy introduced in *Chapter 2.2.2* and thus defines how the disengager terminates the old supplier-buyer relationship and integrates the new vendor. Thus, the planning anticipates the switching activities, which will affect the five dyadic relational layers and are steered by the purchasing company. It is further assumed that the disengager monitors the implementation of the switching strategy and the planned activities. This allows the initiation of corrective steering actions or plan adaptations as soon as deviations between the planned outcome and the real outcome of a certain activity occur.

A focus for the empirical research in respect to the switching-execution phase is on the actors of supplier-switching. The actors of each supplier switch will be identified and questions about the relative size of the old and the new supplier in relation to the disengager shall foster the development of a better understanding of the power-and-dependency distribution. The supplier-switching execution phase is deemed complete as soon as the new supplier has reached its anticipated performance level and the exchange relationship to the old supplier has been terminated or reduced to the anticipated level.[389]

[389] As stated in Chapter 2.3.3, the definition of the starting and ending points of the switching phase is idealized and is only used as a broad indication. Considering a specific switch, the phases can start and end later or earlier.

The third phase of supplier-switching – the *supplier-switch success evaluation phase* – represents the completion of the vendor replacement. By evaluating the economic, technological and switching-related success of the change of suppliers *ex post*, as introduced in *Chapter 2.4.4*, the disengager can assess whether the *ex ante* estimated comparison level of the alternative (CL_{alt}) has been realized. As described in *Chapter 2.4.4*, each success dimension comprises elements of relational rewards and efforts that can have an estimated, expected or realized character and that can therefore be related to the different comparison levels. If a successful supplier switch has been implemented,[390] the disengager has improved its supply situation in comparison to the old one and thus has improved its competitive position.

The phase-based theoretical conceptual framework presented consolidates the theoretical preconception and addresses various aspects of the supplier-switching phenomenon. This should enable the researcher to gain a holistic perspective on supplier-switching through the explorative research. However, the framework might be criticized for its generic character, which does not focus on certain detailed elements of supplier-switching (e.g. just the reasons, or just the activities in the switching execution phase). Furthermore, the framework can be challenged because of its idealized sequential character of the switching phases, which have been chosen in order to reduce complexity. Nevertheless, the framework provides a sound structure for the empirical research, which will provide a better understanding of the reasons for supplier-switching, the processes and actions the actors go through during the switch, and whether the expectations of the switch were fulfilled.

[390] For the definition of successful supplier switches, refer to Chapter 2.4.4.

3 Empirical research on supplier switching

The previous chapters represent the framework-development and testing phases of framework-based research.[391] The next chapter deals with the utilization of the phased-based theoretical-conceptual framework of supplier switching. The objective of the empirical research is to enhance the theoretical preperception with practical insights. Thus, the following chapter pursues the fulfillment of the pragmatic-scientific objective, whereas the second chapter was more concerned with the achievements of the theoretical-scientific objective. *Chapter 3.1* introduces the multiple case study approach and the chosen research design in the context of supplier-switching. The case studies are then introduced. They will first be analyzed individually in *Chapter 3.2. Chapter 3.3* performs a joint analysis of all cases in order to identify certain patterns and similarities.

3.1 Empirical research design for exploring supplier switching

The following chapter deals with the applied research design, which is linked to the researcher's standpoint in scientific theory. This has been discussed in *Chapter 1.3* and it has been postulated that the work is related to nominalism, radical constructivism and voluntarism. The explorative character of the research has further led to the application of a qualitative research method that enables the utilization of different research designs. This can be experiments, surveys, archival analysis, history studies, or case studies. In order to decide which research design is the most appropriate, three conditions have to be considered in the context of research on supplier-switching.[392]

3. The first condition is the type of research questions. If the research questions include interrogative words like "how" and "why," there is likely a favor for case studies, experiments, or history studies. The primary research question of this work on supplier-switching is a clear "how" question, which will be discussed through the answering of four secondary research questions, which consist of "how" and "what" questions. "What" questions lead to the applicability of the case study design as well, when they have an explanatory character. The first and the second research questions are "what" questions of the exploratory kind.
4. The second condition is the extent of control an investigator has over actual behavioral events. This distinction helps to determine which of the three research designs - "histories," "experiments" or "case-studies" - is the most appropriate. In the case of research on supplier-switching, it can be stated that experiments would provide a high degree of control but fail to cover the whole complexity of a supplier-switching situation. Furthermore,

---

[391] See Chapter 1.3.
[392] Yin (1994), pp. 5.

the high contemporary relevance of supplier-switching makes it possible to move beyond an exclusively historic study. The case study design is preferred if contemporary events will be analyzed and the relevant behaviors cannot be manipulated, which is the case for research on supplier replacements. Thus, the second condition supports the usage of case studies as well.

5. The third condition is the degree of focus on contemporary versus historical events. Although supplier-switching has always happened in business relationships, its complexity and possible impact on the buyer's performance have increased in integrated supplier-buyer relationships, which leads to a more contemporary relevance of the phenomenon. Thus, the researcher has the opportunity to directly observe and discuss present switching behaviors or analyze recent switches.

All three conditions have been equally weighted and support the selection of a case study design in favor of historical studies and experiments. A "case" in this context can be different entities like individuals, groups, institutions, organizations, cultures or events, whereby each of these entities could be analyzed in isolation.[393] In this research, a "case" is a single instance of a supplier switch, performed by the buying firm. Within the case study design, the researcher has the option of selecting only one or several cases for analysis. In general, the reason for increasing the number of cases is to make the research more robust and compelling as well as to maximize the knowledge acquisition.[394] However, the amount of cases considered in a specific study influences the research method and design. By and large, it can be stated that the more cases a study comprises, the more applicable a quantitative method with a survey design becomes, since a detailed cross-analysis of each case would become increasingly complex.

However, if multiple cases should be applied, *Yin* postulates that it is important to select each case carefully in such a way that the case either predicts similar (literal replication) or contrasting (theoretical replication) results.[395] However, in this research, this logic will not be followed, since up to now neither full theory nor a comprehensive understanding of supplier switches exists that could help to select cases in the manner suggested. A further enlargement of the sample size leads to field studies, which involves "*limited-depth studies conducted in a non-random selection of filed sites, thus lying somewhere between in-depth cases and broad-based surveys.*"[396] Another increase of the statistical sample seize would lead to further difficulties in preparing in-depth case analyses. Thus, the bigger the sample size, the more appropriate statistical studies (like surveys) seem to be.

---

[393] Lamnek (1995), p. 7.
[394] Herriot and Firestone (1983), pp. 15; Yin (1994), p. 46; Stake (1995), p. 5.
[395] Yin (1994), pp. 47.
[396] Lillis and Mundy (2005), p. 120.

The research on supplier-switching will utilize a multiple case study design in order to catch up with the various reasons, activities and competitive impacts of supplier switches. It is assumed that the application of this design enriches the developed theoretical-conceptual the most, since single cases cannot lead to a broad understanding of the phenomenon, and surveys would be not able to elucidate specific nuances of supplier switches, due to a lack of knowledge about the phenomenon. The multiple case study research design requires a specific research procedure, which is illustrated in *Figure 3-1*.

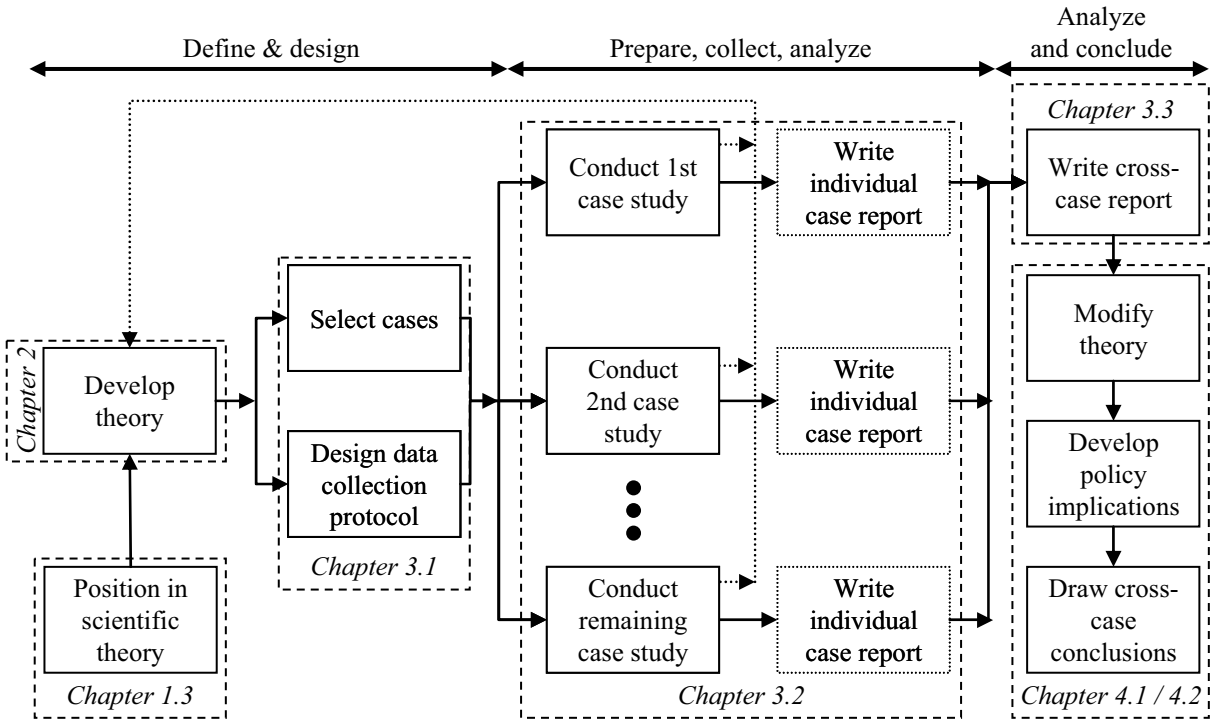


Figure 3-1: The multiple case study research process[397]

After the research has been positioned within scientific theory and the theoretical preconception has been developed, a case-sampling strategy, a case study grid, and appropriate data-gathering methods have to be selected.[398] The selection of cases can be performed by using two sampling strategies.[399] In probability sampling, each member of a population has a non-zero chance of being chosen and no pre-selection of companies within the population will be conducted. However, in purposeful sampling, researchers may have *a priori* statistical reasons to define some cases as more important than others. However, with respect to supplier–switching, it seems to be too early to identify extreme cases to validate a new theory in purposeful sampling. Thus, another sampling strategy has been applied, which can be described as theoretical sampling, in which cases are selected for theoretical rather than statisti-

[397] Related to Yin (1994), p. 50.
[398] Eisenhardt (1989), pp.533; Yin (1994), p. 49; Heusler (2004), pp. 342.
[399] Maxwell (1996), pp. 112.

cal reasons.[400] In theoretical sampling, the researcher searches for examples of a theoretical construct and hence elaborates and examines it.[401] The developed theoretical-conceptual research framework is utilized as the theoretical foundation for case-selection and is further used as a case-study grid. Thus, the researcher has looked for cases in which the disengager is an industrial buyer and the switched supplier has been integrated in the value-creation processes of the purchasing company to a certain degree.

After possible companies with their respective representative have been pre-selected, contact persons in the purchasing departments have been called for an initial contact. The purpose of the initial contact is related to two primary concerns: firstly, to make sure that the contacted company has experience in switching integrated suppliers, and secondly, to find out if the company wants to talk about its experiences in this area. If the company has had experiences and was willing to talk about a particular supplier switch, the structured interview-guideline, which has a questionnaire character, supplemental information about the topic and a confidentiality agreement has been sent to the contact person. The representative of the participating company has been asked to answer the questions in the guideline and return it up front to the following interview. After the interviewee returned the guideline, the researcher analyzed the answers and prepared further individual questions about the particular case. The ensuing interview (telephone or on-site) lasted, on average, between 60 and 90 minutes, and interviewees commented on the new questions. After the interviews were conducted, the researcher wrote the individual case study reports, which again were peer-reviewed by the interviewees. The outcome of the next step in multiple case study research processes, "write cross-case report," is presented in *Chapter 3.3*. The modified theory and the cross-case conclusions are presented in *Chapter 4.1*, which answers all research questions with respect to the knowledge gained from the supplier-switching case studies, and lists key elements of a systematic approach to supplier-switching. "Managerial implications" are developed in *Chapter 4.2*, where practical implications for companies will be derived from the empirical results and in conjunction with the modified theory.

However, the selection of the right research approach and method represents only one important part of a scientific research project. Another important task is to ensure the research quality throughout the different steps in the multiple case-study process. *Yin* proposes four different tests to judge the quality of the applied research design: construct validity, internal validity, external validity, and reliability.[402] Construct validity refers to the quality and appropriateness of the measurement of the relationship between theory and empiricism.[403] Internal

---

[400] Eisenhardt (1989), p. 537.

[401] Verduijn (2004), p.158.

[402] Yin (2003), pp. 33. Validity in general determines whether the research truly measures what it has been intended to measure, or how truthful the research results are. Golafshani (2003), p. 598. However, validity is inescapably grounded in the processes and intentions of particular research methodologies.

[403] Kirk and Miller (1986), pp. 26.

validity applies to the analytical phase of case research, in which causal relationships will be established, which tends to be less important in explanatory research.[404] External validity concerns the establishment of a domain to which the research findings can be generalized. The reliability test deals with the need to demonstrate that the operations of the study can be repeated and that other researchers can obtain the same results.[405] Although the term "reliability" has been primarily used to evaluate quantitative research, the idea can be applied in qualitative research as well. However, some researches argue that the discussion of reliability and hence repeatability might even be misleading, since a case study is not repeatable in the exact same manner.[406] The following table shows the different quality-assurance tactics applied in the research on supplier-switching (*Table 3-1*).

Test	Case study tactic	Applied in this research on supplier switching
Construct validity	Multiple sources of evidence	Multiple sources of evidence have been used in all cases (interview, public information, project plans).
	Establish chain of evidence	A chain of evidence has been created by ensuring the traceability from raw case study material to the conclusions by preparing a case study report, and record-keeping.
	Key informants review	The interview partners of each case have been asked to peer-review the case study report to check for correctness and consistency.
Internal validity	Pattern-matching	The theoretical considerations that have been included in the theoretical-conceptual framework have been compared with the empirical data.
	Explanation-building	Explanation-building is presented in *Chapter 4.1* through answering the research questions, which leads to an explanation of how a systematic approach to supplier-switching can foster competitive advantages of the disengager.
	Application of logic models	The application of logic models, e.g. the derivation of a direct 1:1 relationship, has not been taken into account, since this research follows an exploratory, rather than explanatory, character.
External validity	Replicate the logic in multiple-cases	The multiple case study research design does not lead to an empirical sample, which is a sufficient partial quantity of a larger population. Thus, it is not feasible to make general assumptions for this larger population. However, the findings of multiple case studies can be tested in terms of repeatability. Thus, within the boundaries of the theoretical-conceptual research framework of supplier-switching, the results are generalizable.
Reliability	Documentation of all steps	By providing the detailed interview guideline and the description of the case study procedure, as well as a description of the specific companies and the formulation of individual case study reports, the cases on supplier-switching can be repeated by any study in the future.

Table 3-1: Built-in quality assurance tactics for the multiple case study research design[407]

In summary, it can be stated that a good qualitative study should support the understanding of "a situation that would otherwise be enigmatic or confusing."[408] The phenomenon of supplier-

[404] Yin (2003), p. 36.
[405] Yin (2003), p. 34.
[406] Stenbacka (2001), p. 552.
[407] Related to Yin (2003), pp. 34.

switching has increased in importance recently, and not all variables that influence supplier switches are known, and those that were known have tended to be confusing up to now. Hence a qualitative explorative research method has been chosen instead of a quantitative explorative method. Furthermore, the case-study design has been selected due to its appropriateness for exploring contemporary phenomena that the researcher cannot influence. The sampling of the cases has been performed to accomplish the goal of taking different circumstances and forms of supplier switches into account. All six cases exhibit different challenges, circumstances and successes of supplier-switching activities, and will be presented in the following chapter.

[408] Eisner (1991), p. 58.

3.2 Supplier switching case studies

The following chapter will introduce the case studies in detail. The cases will first be presented collectively in a brief summary; every case will then be discussed individually in a separate chapter.

3.2.1 Introduction to the empirical case study reports

Six case study companies have been selected for the research on supplier switching. The three initial case interviews have not be considered further, since they have been exclusively used to improve the researcher's preperception and to adapt the initial research framework. Each case study will be described by using the same case study template. The template itself follows the structure of the theoretical-conceptual research framework and consists of five parts (*Figure 3-2*).

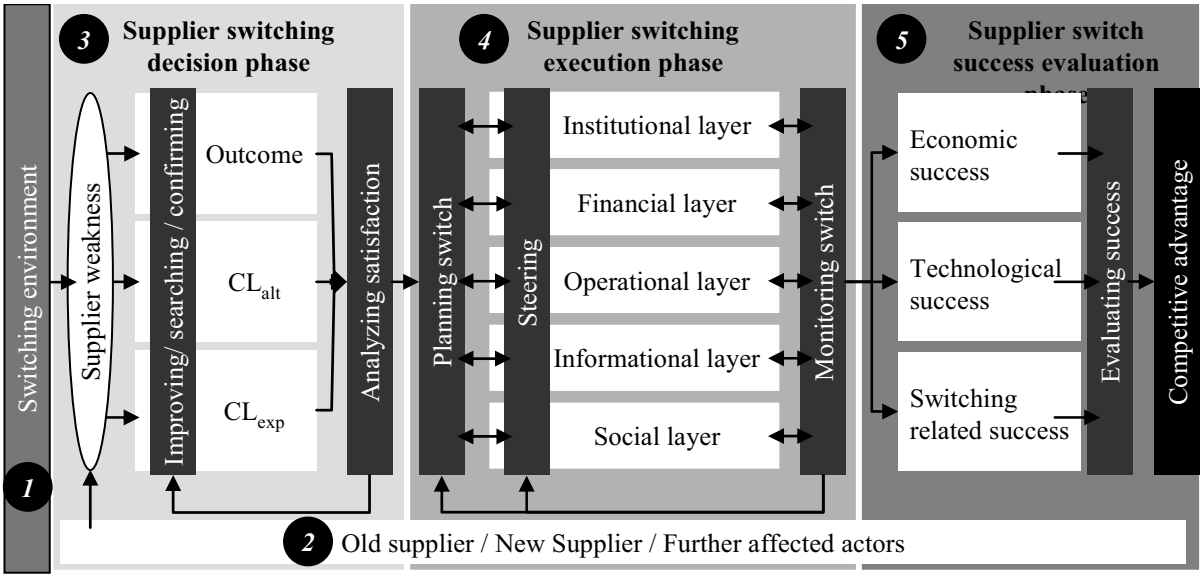


Figure 3-2: Structure of the case studies with respect to the theoretical-conceptual framework

After a brief introduction of the company, its industry, and organizational structure, the supplier switch will be described in detail. *Firstly*, the disengager's switching environment is introduced. This section provides information about the relevant supply object, the sourcing strategy, the supply market, and the specific dependency situation of the disengager. The *second* part considers the old and the new supplier, as well as further actors, and sheds light on some general aspects, like size, industry, and the quality of their relationship with the disengager. The *third* part deals with the supplier-switching decision phase and analyses the kind of supplier weakness, the initial reactions of the disengager towards this weakness and the switching strategy. The *fourth* section describes how the activities on the dyadic relationship layers have been planned, steered, and monitored in the supplier-switching execution phase. Finally, the *fifth* subchapter discusses the supplier-switching success-evaluation phase

and analyses the different success dimensions. The following table shows the six selected cases in summary and indicates the business of the companies as well as the nature of the supply object, the source of which was switched (*Table 3-2*).

Disengager	Business	Supply object	Reason to switch
A	Automotive supplier	Aluminum die casting part	Bad price
B	Appliance producer	Door look system for washing machine	Bad price, quality, technology, innovativeness, and logistic
C	Engineering company	Printed circuit board	Bad price
D	Car producer	Brake disk	Bad price effectiveness
E	Electricity provider	Nuclear fuel assemblies	Strategic decision for dual sourcing
F	Electricity provider	Turbine precision pin	Adherence to delivery dates

Table 3-2: Overview of case examples

3.2.2 Case company "A"

1) The disengager's switching environment

Case company "A" is a European automotive supplier with construction facilities all over the world. "A" provides the automotive industry with a wide range of products and considers itself an innovation leader. Its various business units are not limited to automotive supplies, but those products build the clear core of its activities. This particular business unit was staffed by more than 60,000 employees and its products are primarily related to engine components. The company's purchasing incorporates a centralized group department, which has limited responsibilities for all business units, like the overall supply strategy and supplier development. However, each business unit has a centralized purchasing department by itself, which is responsible for the majority of the business unit's purchases. Furthermore, each production facility had its own purchasing staff, which deals mainly with consumption objects. In the case of the particular supplier switch, the business units central purchasing has been in charge. The interviewee is the Vice President of the central purchasing department. The interviewee supervised the whole switching process, which took place in 2006. The supply object, the source of which has been switched, is an aluminum die casting part, which requires specific production capabilities and technologies. Extensive production knowledge is of paramount importance, since the production process aggressively wears out expensive tools. However, even though the technological requirements have been high, the number of potential suppliers has only been limited to a moderate extent. The supply strategy for the supply object mirrors a single sourcing approach at the supplier level and a unit-sourcing environment at the object level. The supply frequency has been demand-tailored and the supply subject is the individual business unit. As far as the supply technology is concerned,

case company "A" has used a manual sourcing approach. The company has further performed local sourcing. Moreover, it can be stated that the disengager's switching environment has shown intense dependency upon the old supplier, which can be tracked down to extensive specific investments within the supply relationship. First and foremost, expensive investments in die-casting tools have to be mentioned, which account for 20 - 30% of the revenue with the supplier. Further investments are related to a very costly and detailed release process for the supply object, which was required by the case company's customer. Additionally, the two exchange partners shared some specific values and behaviors, which have been developed over the time. These were seen as a big benefit of the supplier-buyer relationship.

2) The old and the new supplier, and further actors

The *old supplier* is a Germany-based company, which is significantly smaller in terms of revenues and employees than the disengager.[409] The old supplier's main business is related to all kinds of aluminum die-casting and its customers are not limited to the automotive industry. Case company "A" had worked with the old supplier for a long time and the exchange partners maintained a very trusting relationship before the switch. The new supplier is based in Turkey and it too is smaller than company "A." The case company and the *new supplier* maintain several exchange relationships, but the supply object in question has been the first purchase of the automotive segment of "A." The disengager identified the new supplier as a potential new source for the supply object through systematic supply market research. The knowledge of the new supplier's capabilities was comprehensive due to personal contacts on-site in Turkey, which were initiated through the case company's local purchasing office. The switch to the new supplier had an impact on different levels of the supply strategy, which changed to the following: the supplier strategy changed from single to dual sourcing, but the object strategy was kept to unit sourcing. The supply frequency was left to a demand-tailored approach. The supply subject was still individual and no sophisticated electronic technology was used to effect the purchases. Due to the foreign location of the supplier, the supply market was global after the switch. As far as *other relevant actors* are concerned, only the customers of the disengager were involved in the switching process. The involvement of customers has been necessary due to the need for their approval of the supply object's design. However, from a process perspective, the customers did not influence the supplier-switching procedure. Additionally, no other institutions – including the customers and other suppliers – influenced the selection of the new supplier.

[409] In the following cases "smaller" and "bigger" in this context will always refer to revenues and employees.

3) Supplier-switching decision phase

The reasons for the switch can be summarized as a relative weakness of the old supplier, since the new supplier's performance has been better than that of the old supplier, which remained the same. In other words, the comparison level of the alternative (CL_{alt}) has been considered as better than the current outcome (Outcome) of the incumbent supplier-buyer relationship. However, the old supplier initially met the expected performance level, so that the comparison level (CL_{exp}) has been fulfilled. This refers to the satisfaction situation number four in *Figure 2-16* and thus, exit was the recommended strategy, since CL_{alt} > Outcome > CL_{exp}.

The need to switch the supplier grew continuously and can be primarily related to cost issues, since the price of the alternative supplier was significantly lower than the one of the old supplier. Thus, the comparison level of the alternative (CL_{alt}) has been more attractive due to a lower relational effort, caused by smaller production costs. This in turn led to a more advantageous anticipated outcome with the alternative supplier, which was the chief motivation for the switch.

Ex ante to the switching process, the switching costs were evaluated. The disengager estimated the cost of switching as relatively high, since the new supplier needed to go through the whole release process of the OEMs. This process was regarded as costly, since it comprises several on-site audits and long-drawn-out quality tests. Due to this obstacle, the change of the supplier was drawn out over along period of time. The urgency to switch the supplier was very low, since the old supplier's performance was not so poor that company "A" lost money, and the old supplier was not in a rush to terminate the exchange relationship. Since the old supplier was not switched immediately after the opportunity to do so arose, company "A" granted the old supplier enough time to improve its performance. However, "A" communicated its dissatisfaction with performance clearly before the actual decision to switch was made. The disengager intended to show clear commitment through this behavior towards the old supplier in order to prevent any future switching decision from looking arbitrary. In addition to that, the case company spent its own resources on supporting the old supplier to achieve performance improvements. The interviewee declared that, with hindsight, giving the old supplier the opportunity to improve was the right decision to make, and that the resources spent on developing the supplier were not exaggerated. However, the interviewee stated that after switching to the alternative supplier was first considered, it became obvious that the old supplier-buyer relationship should be terminated. In the perspective of the interviewee, this feeling is mainly due to intuition and experience, which is helpful for the early assessment of a weak supply situation. However, such decisions have to be considered very carefully, which takes time.

In general, case company "A" has stated that the kind of supplier-buyer relationship – the chosen degree of integration – has had a strong negative impact on the flexibility of the supplier-buyer relationship. Thus, it has decreased its opportunity to switch to another source

of supply easily. Furthermore, the management complexity in the old supplier-buyer relationship was high. The high complexity in the old relationship was especially related to internal goal conflicts in the disengager, which needed to be balanced. The main opponents in this case have been the purchasing department, which was mainly concerned with the price, and the production department, which focused on quality. However, case company "A" tries to avoid those goal conflicts to the utmost extent through the definition of common goals for the two departments. Nevertheless, in this particular case, the consensus concerning the supplier's performance in terms of price and quality has been quite high. Besides the management complexity in the old supplier-buyer relationship, the interviewee mentioned that the company thinks that it neglected the development of its own capabilities, which are necessary to produce the supply object. This has had an impact on the dependency on the old supplier and decreased the case company's freedom of choice in terms of assigning a new supplier.

4) Supplier-switching execution phase

The transition process from the old to the new supplier, which materializes on the dyadic relationship layers, was planned in great detail in advance. In general, the case company always proceeds in the same manner if a supplier needs to be switched. After the decision to switch to an alternative supplier has been made internally, the processes, capabilities, and capacity of the new supplier will be established. This usually happens without the knowledge of the old supplier. After 2/3 of the planned duration of the new supplier's ramp-up, the disengager communicates its decision to switch to the old supplier and discusses further proceedings. The company uses an internal proceedings directive, which predetermines relevant tasks and steps for supplier switches. This document was not reviewed by the researcher since it is classified as confidential by case company "A," but it has been stated that it defines which departments need to be involved and what kind of safety level of good old parts have to be in stock before switching. Furthermore, it regulates the appointment of an employee who is responsible for the steering of the whole switching process and defines development release procedures in the case that the company has to adjust its own parts, systems or modules. Additionally, the directive determines at which time the quality management has to be involved to assess the new supplier's quality and finally, it describes at which time the company's customers – OEMs – should be informed. Nevertheless, in order to follow this detailed directive, it has not been necessary to build a project team. The whole process has been performed out of the regular line activities. The responsibility for the supplier switch has been taken over by the purchasing and logistics department and its progress has been precisely monitored.

As far as the dissolution-strategy component of the switching strategy is concerned, it can be stated that the disengager did not immediately inform the old supplier of its switching decision, but spent some time to build up the new supplier first. Thus, the communication behav-

ior of "A" can be described as reticent and indirect. However, relevant further actors (the OEMs) were informed immediately. This means that the disengager's customers had the switching information earlier than the old supplier. By performing in this way, company "A" wanted to ensure the commitment of the OEM, which is regarded as very critical for the automotive industry in general. The choice to switch was a final and irreversible decision, since the case company could expect a loss in its credibility from other suppliers if it had changed its mind. In terms of egoism in the switching behavior of the disengager, it can be stated that "A" was strongly committed to the idea of not harming the old supplier any further. There were multiple reasons for this attitude. Firstly, besides the terminated exchange relationship, the case company received more supply objects from the old supplier, so the supplier was still needed. Additionally, the interviewee stated that the interest in the well-being of its suppliers is a cultural attribute of the company, which helps it to maintain a trustworthy and fair reputation within the supply market. Moreover, by showing generosity to its old supplier, the case company is convinced that the old supplier will try even harder to make a good impression in its other relationships. With respect to the dissolution strategy of case company "A," a strong other-oriented behavior in combination with an indirect communication can be identified.

For the integration strategy, as the second part of the switching strategy, it can be stated that "A" has soundly supported the new supplier's ramp-up process with – among others – employees from the quality assurance and logistics department. Furthermore, the disengager has extensively invested specifically into the new supplier-buyer relationship, especially due to resource-consuming supplier development activities. Thus, the integration strategy of company "A" implies a behavior that can be described as "comprehensive supporter."

The activities in the switching execution phase materialize on the dyadic relationship layers that exist between the disengager, and the old and new supplier. The description of these layers will be organized along the order shown in the theoretical-conceptual framework.[410] As far as the *institutional layer* is concerned, company "A" refrained from suing the old supplier for compensation. This is mainly due to the fact that "A" only experienced a relative supplier weakness, so no real loss or harm was suffered by the disengager. However, the case company experienced an opportunity cost, since the alternative supplier was better than the old one and the performance level of the alternative supplier could not be attained by the incumbent vendor in adequate time. Thus, the old supplier failed to match the performance of the external comparison level of the disengager – the new supplier. In this particular case, the old supplier and case company "A" have come to a gentleman's agreement, such that "A" did not sue the old supplier, and the old supplier did not demand compensation for lost revenues. This agreement was facilitated through an explicit exit-clause in the supply contract between the

[410] See figure 2-17.

disengager and the old supplier, which is an essential part of every purchasing contract. This section in the contract is related to a competitive agreement, which addresses the right of the buyer to renounce the contract if a more reasonably-priced supplier has been identified. However, the current supplier always has the possibility of improving its initial offer first. Furthermore, in order to reduce dependencies within a supplier-buyer relationship, company "A" in general tries to retain ownership of specific machines or tools, which critical for the particular exchange. This has been the case in the discussed example as well. Company "A" was the owner of the die-casting machines and the tools, which have been placed at the old supplier's site. This legal construct has been used for the new supplier as well. Due to the non-critical time-line of the supplier switch, the negotiations with the new supplier have not been more difficult (e.g. due to time pressure) than usual.

The *financial layer* of the supplier-buyer relationship between the disengager, the old and the new supplier has not been unusually affected through the supplier switch. The interviewee stated that the change of suppliers did not cause a financial loss for the company. However, this does not mean that the supplier switch did not cost anything, but the costs did not exceeded the anticipated level. In order to ensure the correct execution of payments and other financial transactions, company "A" did not involve external financial institutions. A further important impact on the financial layer is the fact that the supplier switch has had a clear negative impact on the case company's cash flow. This is primarily related to a higher transaction cost for the disengager to orchestrate the supplier switch. Furthermore, quality issues occurred during the switch. This again increased the costs of each part, even though the old supplier was billed for the bad quality, the process of quality assurance and negotiating compensation added further transaction costs. However, these negative impacts were temporary.

One of the primary concerns on the *operative layer* was to guarantee continuous deliveries of the supply object. In order to ensure that enough supplies are available both during and after the switching phase, company "A" has increased its safety stock significantly in comparison to the normal level. This was done in order to avoid a loss of production, secure the company from overreactions of the old supplier after announcing the intention to switch, and to build a buffer against bad quality from the new supplier. The increase of the safety stock was not discussed with the old supplier and the additional orders were disguised in the regular demands. This is because the decision to switch the supplier was not communicated to the old supplier immediately, which made it possible for company "A" to prepare the switch without the knowledge and possible retribution of the old supplier. However, after the decision to switch was finally communicated to the old supplier, the two companies negotiated the switching conditions, particularly the manner of terminating deliveries. It was negotiated that the old supplier would not stop its deliveries on a particular target date, but a more smooth transition was fixed instead, which enabled the old supplier to consume all of its stocked raw material.

Even though the switching process was planned in detail in advance, the disengager experienced a number of problems in its own production facilities, which can be traced back to the supplier replacement. These production problems were related to minimal tolerance deviations in the dimensions of the supply object of the new supplier in comparison to the part from the old supplier. These deviations caused problems if the part was clamped into certain machines. The interviewee stated that even though the tolerances differed between the two suppliers, both stayed within the allowed deviations. The production problems occurred more through a different distribution of the tolerances on the surface of the supply object.

During the switch from the old to the new supplier, some logistical problems occurred as well. These are related to certain logistical risks that arise if one changes the source of supply. Firstly, company "A" considers risks of mixing old and new parts with each other. This is risky, since even though both parts are technically similar, they are not completely identical, and minor adjustments had to be made. Company "A" considers an excessively abundant inventory, in combination with an increased safety stock, a risk for its financial performance. On the other hand, if it keeps the stock to low, the risks for halts in production increases, since no empirical knowledge existed about the quality of the new supplier with regard to the particular supply object. Another challenge was the change-management and the tracking of changed and obsolete parts. The interviewee stated that they handled those issues by a detailed phase-in and phase-out plan for the supply object. A further problem company "A" experienced was the communication strategy towards its customer. This is because if they identified critical issues, they did not know whether they were critical enough to warrant the OEM being informed. However, the case company did not face any noteworthy distribution problems towards its customer during the supplier switch. This means that they were able to deliver their end product to the OEM always on time, and in the right quantity and quality.

As far as the *informational layer* is concerned, it can be stated that after the decision to terminate the relationship was communicated to the old supplier, the communication remained predominantly friendly and professional. However, the interviewee stated that meetings became somewhat unpleasant, since the old supplier constantly tried to convince the disengager that the decision to switch was misguided. Furthermore, the case company is aware of certain complaints and moderately negative comments that the old supplier spread in its supplier and customer network about the behavior of company "A." An important issue on the informational layer has been the fact that the old supplier needed to transfer a substantial part of its knowledge concerning the supply object to the disengager. This was specified in the contract upfront and was therefore not purely up to the goodwill of the old supplier. However, no relevant communication occurred between the old and the new supplier that could have helped the new supplier to facilitate a fast ramp-up process.

In order to avoid further negative influences by the old supplier on the *social layer*, the case company reduced its order quantity completely in agreement with the old supplier. Neverthe-

less, even though the case company was strongly committed to the well-being of the old supplier, "A" has not been able to preserve the trusting relationship between the two old exchange partners completely. One reason for this was the significant quality problems with the old supplier's parts during the switching process. These led to a clear increase of coordination and control costs at the end of the supplier switch and caused the disengager's strong dissatisfaction. On the other hand, the case company was able to establish a trusting relationship with the new supplier relatively fast. However, some cultural differences and initial quality concerns slowed the process to a certain extent. On the other hand, company "A" did not put much effort into cultural or team-building sessions, which could have facilitated mutual understanding between the companies. Furthermore, company "A" did not follow a personal meeting approach with the parties that were involved in the supplier switch. In particular, the discussions with the old supplier were limited to telephone or video-conferences. Another important issue from the perspective of the case company was the addressing of the switching reasons to the managing director of the supplier from a senior representative of company "A." This top-management involvement helped to reduce mutual reproaches and supported the maintenance of a professional relationship between the two companies.

5) Supplier-switching success evaluation phase

The success of the supplier switch was evaluated along the theoretically-derived concepts of economic, technological and switching success. In general, the case company knows that its *economic situation* was strongly improved by the supplier switch. The main cause for this is firstly related to a decrease of the unit price of the supply object, which was lowered significantly. Secondly, even if total costs of ownership are taken into account, the new supplier is clearly less costly than the old one. Due to this, company "A" improved its cash flow situation with regard to the particular supply object. The payment transaction effort remained the same, and was not of great importance in the previous relationship either. The disengager's costs of the supplier switch did not exceed the anticipated cost.

As far as the *technological success* of the new supplier-buyer relationship is concerned, company "A" stated that no significant improvement or deterioration was identified. Thus, the technological situation remained the same after the switch, but it has to be stated that an improvement of this success dimension was not the goal of the supplier switch. However, the disengager experienced a clear improvement in the quality of the supply object and a palpable decline of the rejection rate. In terms of the innovativeness of the new supplier, no changes were realized by the supplier switch, so the disengager considers the new supplier as innovative as the old one.

All in all, company "A" considers the *switching-related success* as clearly successful, since the goal of cutting the price of the supply object was accomplished. The disengager kept to its

anticipated timeline and managed to complete the supplier switch within six months. However, the switching process had a detrimental effect on relations between the employees of the old supplier and the ones of the disengager. This effect was not big, but big enough to damage the trusting relationship. Nevertheless, the reputation of company "A" in its professional network did not suffer as a result of the supplier switch, and the disengager believes that the old supplier retrospectively regards the buyer's behavior as fair. Similarly, company "A" stated that it considers the old supplier's behavior to be fair as well. Indeed, company "A" could more or less imagine starting a new supplier-buyer relationship with this company again, provided that some quality and cost issues can be resolved.

At the end, company "A" identified opportunities for improvement for future supplier switches. The concern of the case company is mainly about the reasons for supplier switching, and they ask if this might be a weakness of the company's own system: on the one hand there are concrete and unforeseeable supplier mistakes and weaknesses, but on the other hand it might have been a strategic mistake to select the outgoing supplier in the first place. Thus the company might improve its supplier-evaluation techniques in order to avoid supplier switches in the future. *Table 3-3* will provide the reader with a consolidated overview of the core elements of the supplier switch.

Core switching dimensions	**Relevant elements**	**Valuation**
Switching environment	Dependence of the disengager on the supplier	Buyer-dependent
	Number of alternative suppliers	Many suppliers
	Level of specific investments in the old relationship	High
Supplier switching decision phase	Reason(s) to switch	Price
	Kind of supplier weakness	Relative
	Progress of supplier weakness	Very continuous
	Resources for developing the old supplier	Decent effort
	Time granted for the old supplier to improve	Considerable time
	Satisfaction situation	4) CL_{alt} > Outcome > CL_{exp}
Supplier-switching execution phase	Dissolution strategy – degree of egoism	Strongly other-oriented
	Dissolution strategy – directness of communication	Indirect / disguised
	Integration strategy - support of ramp-up	Sound
	Integration strategy - scope of specific investments	Extensive
	Old contract contained an exit clause	Yes
	Financial damage through old supplier's weakness	No
	Production problems during the switch	Some distinctive
	Logistical problems during the switch	Moderate
	Distribution problems during the switch	Very few
	Prompt communication of switching decision	No

	Trust with the old supplier after switch	Moderate trust
Supplier switch success evaluation phase	Economic situation	Improved
	Technological situation	Same
	Switching-related success	Successful

Table 3-3: Core switching elements of case company "A"

3.2.3 Case company "B"

1) The disengager's switching environment

Case company "B" is a German high-quality appliance producer. The company employs more than 16,000 employees and its production facilities are mostly based in Germany. The company produces all kinds of appliance products and considers itself an innovation leader. The company's purchasing is virtually centralized; that is, lead buyers are managing company-wide commodity groups.

The interviewee is the Chief Purchasing Officer (CPO) of the company – effectively the head of the corporate purchasing department. The interviewee accompanied the whole switching process, which took place in 2005 and 2006. The supply object in this case is a door lock system for a washing machine. This module is a rather complex purchasing object, since on the one hand it requires a close collaboration between the engineers of the two companies in the development phase, and on the other hand it is an intensively-used part and hence requires a superior quality. Due to this complexity and demanding requirements, the number of potential suppliers has been relatively limited. Nevertheless, enough suppliers existed to generate competition among them. The supply strategy for the supply object mirrors a single-sourcing approach on the supplier level and a modular sourcing strategy on the object level. A just-in-time supply frequency was part of the contract and the supply subject was the individual company. As far as the supply technology was concerned, case company "B" used an electronic sourcing approach and the supplier was based in a global market. In comparison to other supplier-buyer relationships of company "B," it can be stated that the switching environment exhibited only limited dependencies of the disengager towards the supplier. This circumstance is mainly due to moderate specific investments in tools and consumption parts. However, the case company was more dependent on the supplier than the supplier was on the case company.

2) The old and the new supplier and further actors

The *old supplier* is smaller than company "B" and provides a broad range of business solutions. For confidentiality reasons, the other businesses of the old supplier cannot be disclosed

here. Case company "B" does not maintain further exchange relationships with the old supplier but the two companies had a long-lasting and stabile trusting relationship before the switch. The *new supplier* is smaller than company "B." The disengager and the new supplier maintain exchange relationships in addition to the one that has been recently established. The disengager learned about the potential of the new supplier via intensive supply market research. The disengager had a broad knowledge of the new supplier's capabilities resulting from comprehensive supply market research, on-site audits, and several prototype tests. The case company did not change its sourcing strategy in relation to the new supplier, which therefore remained the same: the supplier strategy follows a single-sourcing approach and the sourcing object is still a module. The supply frequency was left to a just-in-time approach and no economies of scale with external companies were utilized, so the supply subject is still individual. Company 'B' applied electronic sourcing and the utilized supply market is still global. As far as *further affected actors* are concerned, the disengager did not involve further institutions in the switching process. On the other hand, no other institutions influenced the switching process. Due to the business nature of case company "B," customers did not have an influence on the switching decision, since supply chain matters are not influenceable by them and hence are out of their scope and interest. Other suppliers did not play a role in the particular supplier switch, since the supply object did not need any complex matching with other purchased systems or modules of the end-product.

3) Supplier-switching decision phase

In this case, the motivation to switch the old supplier can be related to its poor performance, as well as a significantly better performance of the new supplier. Thus, relative and absolute supplier weaknesses occurred at the same time. It can be stated that the comparison level of the alternative (CL_{alt}) was considered to be far better than the current outcome (Outcome) of the incumbent supplier-buyer relationship. The existing supplier did not meet the expected performance level, so the comparison level (CL_{exp}) was not fulfilled. This refers the outcome of the disengager's satisfaction evaluation number three in *Figure 2-16*, since $CL_{alt} > CL_{exp} >$ Outcome, so exit was the recommended strategy.

In addition to that, the old supplier itself decided to shut down the whole door-closing systems business due to corporate strategy considerations. This means that the impulse to switch the supplier was not solely initiated by the disengager but also, to a certain degree, by the old supplier. In this particular case, the intention to switch the supplier grew absolutely continuously and can be related to several reasons. The disengager found out that the alternative supplier was more competitive in various relevant performance fields. One factor was a better price in combination with a better quality, which has caused a clearly better cost effectiveness. Furthermore, it was discovered that the new supplier uses a better technology. Moreover, the new supplier had better logistical capabilities and was seen as more innovative than the old

one. These reasons motivated the disengager to terminate the old supplier-buyer relationship and switch to the new supplier. Thus, the comparison of the real outcome (Outcome) and the expected performance (CL_{exp}) caused dissatisfaction due to a decrease of the relational reward and an increase of the relational effort. The reward declined through a decrease of strategic fit between the two companies, which lowered the complementary assets and the willingness to make specific investments of the old supplier. The relational effort within the old supplier-buyer relationship was increased through a rise of production costs. Furthermore, uncertainty also increased, due to the old vendor's wish to get out of the whole business. The comparison level of the alternative (CL_{alt}) has improved through a better relational reward, caused by a more efficient government, a higher willingness to apply specific technologies into the relationship, and a better knowledge exchange, which leads to a higher innovativeness. Simultaneously with the improvement of the relational reward in the alternative supplier-buyer relationship, relational effort with the new supplier was smaller. This was due to lower production costs and lower uncertainties, though better quality.

The costs of switching were estimated up front and the analysis indicated that these costs would be in a relatively moderate realm. Although the switching cost was estimated as moderate, the disengager did not start switching actions immediately after the supplier weakness occurred, but wanted to improve the supplier-buyer relationship. In order to do so, the disengager clearly addressed its concerns regarding the old supplier's quality and price of the supply good. The case company communicated its dissatisfaction in a very direct way, so the supplier was left in no doubt as to the seriousness of the problem. Additionally, the disengager granted the old supplier considerable time to improve its performance and heavily invested its own resources to support the old supplier in this process. In an *ex post* perspective, the disengager considers that the effort and the resources that were invested to improve the old supplier by means of supplier development were excessive, since they did not have any beneficial effects on quality or cost. Furthermore, the disengager stated that the need to switch became clear right after the first signs of weakness manifested themselves. In particular, after the old supplier's management made the strategic decision to abandon this market, they no longer had any incentive to improve their performance. The case company therefore had very little confidence that their supplier-development activity would have a beneficial effect on the supplier. When the decision to switch was made, it was final and irreversible. However, this was primarily due to the fact that the supplier wanted to move out of this area of production, so switching back was impossible anyway.

Company "B" stated that the chosen degree of integration only had a moderately negative impact on the flexibility of the supplier-buyer relationship, and therefore did not strongly influence the decision of whether to switch or not. Company "B" further stated that the chosen degree of integration with the old supplier had almost no effect on its management complexity. Furthermore, the disengager does not believe that the degree of integration has consequently led to a neglect of its own capabilities and development activities for the

particular supply object. This is mainly due to the fact that company “B” does not regard the door-locking system as one of its core modules, so a vast development of knowledge is not necessary. All in all, the design of the old supplier-buyer relationship did not decrease the disengager’s freedom to select new suppliers. The interviewee finally stated that, in particular, the old supplier’s decision to abandon the door-closing business caused internal structural changes that made the switch inevitable.

4) Supplier-switching execution phase

Company “B” intensively planned the necessary switching activities and responsibilities in advance. In order to steer the whole switching process, the disengager implemented regular project-management, which assigned required resources and followed certain milestones. Furthermore, the case company installed a project team that incorporated employees from the purchasing, the quality assurance, research and development, and production departments. The team members were mirrored by the new and to some extent by the old supplier in order to facilitate rapid communication and decision processes. The whole supplier-switching process was strongly monitored by the purchasing department of the disengager to ensure short reaction times in the case of plan deviations. Additionally, the old and the new supplier established a corresponding monitoring authority as well. The monitoring responsibility was assigned to the sales departments of both suppliers. If a divergence was identified, the disengager or the suppliers performed a variance analysis, which was then used to select corrective actions. The success of those actions was monitored again to see if the desired effect had occurred.

As far as the dissolution strategy is concerned, it can be stated that the case company strongly emphasized avoiding further negative consequences for the old supplier and can therefore be characterized as strongly other-oriented. However, the final decision to switch was not communicated immediately to the new supplier, since the disengager was afraid that further quality deteriorations could occur as a result. However, it was assumed that the vendor would accept it without resistance, since the supplier wanted to exit from this business anyway. Due to this special situation the disengager regarded the decision-making process as very complex, and it lasted six months before the final decision to switch was made. However, as soon as the company reached the increased level of safety stock, the decision to switch was communicated in a direct manner to the old supplier. As far as other relevant actors are concerned, the disengager informed them of the switch immediately after the decision to replace the old supplier was made. This was seen as necessary in order to achieve a smooth switching process.

With regard to the integration strategy as the second part of the switching strategy, it can be stated that the case company supported the new supplier’s ramp-up process extensively by means of supplier development, and implemented extensive specific investments in the new

supplier-buyer relationship. The disengager regarded this action as necessary in order to be able to make full use of the new supplier's potential. They assembled a project team that was in charge of the coordination of the switch and the support of the new supplier in order to secure a safe and smooth transition. Thus, in summary, the disengager's integration strategy reflects a comprehensive supporter.

Following the dyadic relationship layers in the theoretic-conceptual framework, the *institutional layer* is discussed first. Company "B" did not need to sue the old supplier for compensation, since the costs caused by mistakes of the old supplier were compensated without complications. The old supplier did not demand remuneration for lost revenues, so the disengager was not sued either. From the perspective of the old supplier, there was no reason to sue the disengager, due to its own wish to end the exchange relationship. In addition to that, the contract between the disengager and the old supplier incorporated an explicit exit clause, which regulated the matter of compensation and financial responsibilities of each party in the case of relationship termination. The interviewee stated that exit clauses are standard in every contract of the disengager and facilitate a frictionless supplier-buyer relationship dissolution process. Clearly-defined ownership of patents, tools, and means of production have further supported a relatively easy disbanding of the supplier-buyer relationship on the contractual level. As far as the new supplier is concerned, the interviewee stated that the negotiation of the new contract was not more difficult than usual. To a certain degree, reaching an agreement proved easier than usual, since the new supplier was very interested and cooperative, and very keen on getting the contract.

Regarding the *financial layer* of the supplier-buyer relationship between actors, the interviewee stated than the weakness of the old supplier and the switching process did not cause any financial damage to the disengager. This is mainly because the new supplier is clearly better in several relevant performance-drivers. Company "B" did not use external financial service providers in order to facilitate a smooth supplier-switching process, since the company considered its own financial power to be sufficient to compensate for any possible financial turbulences caused by the switch. Since no major disruptions occurred during the supplier switch, the disengager has stated that the vendor replacement has not had a negative impact on the company's cash flow. In general, company "B" regards the new supplier as financially stable and well-prepared for the future. Furthermore, the new supplier provides a big total cost of ownership advantage, which is expected to stay for a longer time.

As far as the *operational layer* is concerned, the disengager significantly increased its safety stock of the supply object in comparison to the normal level, in order to have a buffer against unexpected problems in the switching process. This was more a measure against certain production and quality uncertainties than a buffer against an incalculable behavior of the old supplier as a reaction of the switching decision. After the decision was communicated and the switching process was thoroughly planned, company "B" and the old supplier agreed that

deliveries would be terminated twelve months later. Due to previously increased safety stock, the disengager experienced almost no problems in its production process during the switching phase. This is also true of the distribution and logistical processes.

During the switching phase, the communication between the disengager and the old supplier on the *informational layer* remained on a very friendly and professional level. To the best of the case company's knowledge, the old supplier did not talk badly about the disengager and hence no reputation damage was identified on the supply market. In order to avoid a loss of knowledge about the door-locking system, the old supplier was encouraged to transfer its knowledge to company "B," which was also a contractual requirement. However, the old supplier and the new supplier did not communicate in the switching process with each other and the old supplier did not transfer any knowledge to the new one. Ultimately, the communication about the supplier switch was mainly influenced by the strategic decision of the old supplier to end its engagement in this production area. Thus, no secrets towards the old supplier were necessary in the perspective of the disengager.

In order to avoid additional negative influences on the *social layer* for the old supplier in the switching process, the disengager decreased the order quantity in agreement with the old supplier. During the whole switching process and even afterwards, the trusting relationship between the disengager and the old supplier remained stable and on a high level. However, even though trust continued to be a constituent element of this particular supplier-buyer relationship, the effort for coordination and control increased significantly in the switching phase. This is mainly related to additional quality controls, since the disengager was afraid of declining attention by the old supplier.

As far as the new supplier is concerned, the disengager was able to create a trusting relationship quickly. The communication to the new supplier was very frank and constructive. In order to establish this trusting relationship, company "B" intensively trained relevant employees in intercultural, logistics and technical themes. Furthermore, in order to perform a smooth and successful supplier switch, the employees of the old and the new supplier met frequently with the case company's representatives separately. The purchasing department of the disengager and the sales department of the old and the new supplier met on a six-weekly basis. In addition, the management directors met on a quarterly basis. The disengager further stated that an additional issue in the social layer was the employment situation on the old supplier's side. Since the old supplier decided to terminate the particular business, dismissals would have been necessary if the disengager had terminated the exchange relationship immediately. This was avoided.

5) Supplier-switching success evaluation phase

The case company evaluated the economic situation before and after the supplier switch and came to the conclusion that it achieved very positive *economic success*. On the one hand, this improvement is related to a strong decrease of the single supply unit's price. On the other hand, considering a total cost of ownership examination, the sum of all costs involved to make use of the supply object also strongly decreased. Consequently, the cash flow situation in the particular exchange relationship significantly improved in comparison to the old supplier-buyer relationship. The payment transaction effort remained the same and the disengager did not exceed the anticipated costs of the supplier switch, since the switch went according to plan.

As far as the *technological success* of the supplier switch is concerned, company "B" stated that its technological situation clearly improved after the supplier switch. The new supplier is regarded as plainly more innovative and offers a much better quality than the old supplier. Furthermore, the rejection rate was reduced significantly so that the case company considers the new supplier to be much better in terms of its economic and technological performance.

The disengager considers the switching-related success to be very successful, since the company reached all defined goals. All critical success factors like price, quality, innovativeness and technology were improved by the switch. The change from the old to the new supplier took the anticipated amount of time – twelve months – and thus did not exceed the time budget. Company "B" also stated that the social relationships between the old and the new supplier were almost intact after the switching process and the trusting relationship remained on a high level. Furthermore, the reputation of company "B" in the market was not damaged. The disengager regards the behavior of the old supplier during the switching process as fair. Additionally, company "B" believes that the old supplier cannot complain about its own fairness. However, even though the switch is considered as very successful and the old and the new supplier have maintained a trustful and open relationship with each other, the disengager cannot imagine entering a new exchange relationship with the old supplier again. This is due to the fact that the old supplier does not offer the particular supply object anymore and has no other relevant supplies for company "B."

All in all, company "B" regards the switch from the old to the new supplier as very successful and thus would not make any changes in the process for a future supplier switch. *Table 3-4* provides a summary of the core elements of the supplier switch:

Core switching dimensions	Relevant elements	Valuation
Switching environment	Dependence of the disengager on the supplier	More dependent than the supplier
	Number of alternative suppliers	Moderate
	Level of specific investments in the old relationship	Low
Supplier switching decision phase	Reason(s) to switch	Price, quality, technology, and strategic decision of the old supplier
	Kind of supplier weakness	Absolute and relative
	Progress of supplier weakness	Very continuous
	Resources for developing the old supplier	Very strong effort
	Time granted for the old supplier to improve	Very much
	Satisfaction situation	3) $CL_{alt} > CL_{exp} >$ Outcome
Supplier switching execution phase	Dissolution strategy – degree of egoism	Strongly other-oriented
	Dissolution strategy – directness of communication	Frank but not immediate
	Integration strategy - support of ramp-up	Extensive
	Integration strategy - scope of specific investments	Very extensive
	Old contract contained an exit clause	Yes
	Financial damage through old supplier's weakness	No
	Production problems during the switch	Very few
	Logistical problems during the switch	Very few
	Distribution problems during the switch	Very few
	Prompt communication of switching decision	No
	Trust with the old supplier after switch	Trustful
Supplier switch success evaluation phase	Economic situation	Strongly improved
	Technological situation	Strongly improved
	Switching-related success	Very successful

Table 3-4: Core switching elements of case company "B"

3.2.4 Case company "C"

1) The disengager's switching environment

Case company "C" is a provider of hardware and software IT solutions and services to retailers and retail banking and offers a wide range of related services. It is a mid-sized company with more than 5,000 employees. The company has a centralized strategic purchasing department, which coordinates the decentralized purchasing organizations in each country. Due to confidentiality considerations, no more information can be provided. The interviewee is a Supplier Development Engineer and assigned to the strategic purchasing department. The

interviewee accompanied the whole switching process, which took place in 2006. The supply object in this case is a printed circuit board for one of their ATM systems. The supply object was rather complex and required modern production technologies by the supplier. In general, those technologies were offered by a large number of companies that are engaged in the electronic manufacturing services (EMS) industry. Thus, the number of potentially alternative suppliers was comparatively high. The supply strategy for the supply object mirrors a single-sourcing approach at the supplier level and a unit-sourcing strategy at the object level. A demand-tailored supply frequency was chosen by the disengager, since it was regarded as superior in comparison to a just-in-time approach. The supply subject was the individual company. Case company "C" applied an electronic sourcing approach and the supplier was based in a global market. Furthermore, the disengager and the old supplier were dependent on each other, since both parties put approximately the same amount of resources into research and development, testing, prototyping, and the release process. However, the specific investments remained on a moderate level.

2) The old and the new supplier, and further actors

The *old supplier's* headquarters are in Asia but the supplying plant was near by the disengagers production facilities. The old supplier is bigger than company "C" and is an electronics manufacturing services provider. It focuses on delivering complete designs, engineering, and manufacturing services to various industries. The case company maintains further exchange relationships with the old supplier that are still up and running. The disengager has worked for a very long time with the old supplier but the relationship has always been strained by significant distrust. The *new supplier* is based in mainland China and is smaller than company "C." The disengager and the new supplier do not maintain further exchange relationships and the particular supply object is the first product the case company buys from this vendor. Company "C" discovered the potential of the new supplier through a comprehensive supply market research. Furthermore, the new supplier actively analyzed potential customers and approached the case company of its own accord. The disengager had comprehensive knowledge of the new supplier's capabilities. This knowledge came from an evaluation of commercial and qualitative aspects in the run-up of the supplier switching decision. The qualitative aspects were audited on the spot at the new supplier's production facilities in order to evaluate the supplier's basic ability to deliver the required quantity and quality. After a successful audit, the supplier was authorized for deliveries. Concurrently with the acknowledging process of the supplier, the disengager released the design of the supply object. The case company only applied minor changes to the sourcing strategy; it did not change its sourcing strategy in comparison to the old supplier-buyer relationship. The supplier strategy followed a single-sourcing approach and the sourcing object remained a unit. The supply frequency was left demand-tailored, but the supply subject changed to individual. Thus, company "C" does not

attempt to leverage its own purchasing power through an integration of demands of other external partners anymore. The disengager applied electronic sourcing, and the utilized supply market is still global. As far as *further affected actors* are concerned, the disengager did not involve further institutions in the switching process, since this was regarded as unnecessary. On the other hand, no other institutions influenced the switching process. Due to the business nature of case company "C," customers did not influence the switching decision, since they are not involved and mostly not interested in supply issues of the case company. Other suppliers did not play a role in the particular supplier switch either, since the functioning of certain interrelations with other systems and modules have been defined through the specifications.

3) Supplier-switching decision phase

In the case of this supplier switch, the motivation to switch the old supplier can be related to a bad performance of the old and a better performance of the new supplier. Thus a relative and an absolute supplier weakness occurred concurrently. This means that the comparison level of the alternative (CL_{alt}) was considered to be better than the current outcome (Outcome) of the incumbent supplier-buyer relationship. In addition to that, the old supplier was not able to meet the expected performance level, so the comparison level (CL_{exp}) was not fulfilled. This refers to satisfaction situation number three in *Figure 2-16*, since $CL_{alt} > CL_{exp} >$ Outcome. Thus, exiting the incumbent relationship and switching to the alternative supplier is the recommended strategy.

The dissatisfaction with the old supplier's absolute and relative performance grew absolutely continuously and can primarily be related to a better price of the new supplier, which could not be matched by the old one. However, price policy issues of the old supplier were not the only consideration in the decision to switch. In general, a number of single events, related to the old supplier's costs and quality, as well as the old supplier's behavior in some controversial issues, led to strained relations between the two actors. Due to this, the comparison level of the alternative (CL_{alt}) improved through a lower relational effort with the new supplier, which was attained primarily through lower production costs. However, the comparison level (CL_{exp}) was not reached anymore due to the absolute supplier weakness. This effect was basically initiated through a worsening of the reward side due to the complication of communication between the old supplier and the disengager, which made the governance less effective and the knowledge exchange less intense.

The disengager estimated the costs of the supplier switch in advance and they found out that these costs are comparatively low. The need to switch the old supplier as quickly as possible was low, since the old supplier still wanted to keep the relationship running. However, the disengager unmistakably addressed its concerns over the old supplier's price and quality performance of the supply object, and conveyed its displeasure in a direct manner to make

sure that the old supplier was aware of its perceived performance on the disengager's side. Ultimately, the disengager did not feel comfortable in the incumbent supplier-buyer relationship anymore and hence finally pushed the switch. Nevertheless, since company "C" did not lose money on a bigger scale, there was no need to rush to the cost of a profound planning. Due to this, the disengager was given the old supplier absolutely enough time to improve its performance; furthermore, it comprehensively supported the old supplier with its own resources in its efforts to improve performance. However, in an *ex post* consideration, the interviewee thinks that the resources spent on improving the old supplier were excessive However, given the information at that stage of the supplier-buyer relationship, the decision to invest in the old relationship was right. Company "C" further stated that when the switch was first considered, it was unclear whether they should switch immediately or stay with the old supplier, since the situation was ambiguous and the alternative supplier was not immediately convincing. Furthermore, the disengager was moderately confident that the supplier-development initiative was going to be fruitful. Additionally, the case company declared that the chosen degree of integration had a significantly negative impact on its flexibility to change to another supplier. In addition, in the perspective of the disengager, the degree of integration with the old supplier strongly affected its management complexity. However, the disengager does not think that the degree of integration consequently led to a reduced focus on the development of its own capabilities and knowledge for the printed circuit board. All in all, the design of the old supplier-buyer relationship decreased the disengager's freedom to contract new suppliers but did not affect its general freedom in decision-making.

4) Supplier-switching execution phase

Company "C" planned the necessary actions and processes in advance. The disengager further established a project team, which included employees from the logistics, purchasing, supplier engineering and the development departments. The whole switching process was monitored by the supplier engineering department, which was also responsible for the steering of the supplier replacement.

With respect to the dissolution strategy as part of the switching strategy, it can be stated that the disengager was not very concerned with the old supplier's well-being and the effort to prevent the old supplier from negative effects was only moderate in intensity. Furthermore, case company "C" did not inform the old supplier immediately after the decision to switch was made. One reason for this is that the decision was not absolutely final, since the case company still experienced some uncertainties with respect to the new supplier's performance. Due to this, the disengager wanted to keep its switching decision secret for as long as possible, in order to be able to evaluate the performance of the new supplier in further detail. Nevertheless, after the purchasing company was satisfied with the new vendor's performance, the disengager communicated its decision directly to the old supplier. Relevant network

partners were informed of the case company's decision to switch the old supplier with some delay. Immediate communication was not deemed necessary, since no one would have to take any consequences from the supplier switch. Overall, the switching strategy of case company "C" can be described as calculating in terms of egoism, and frank but not immediate with regard to the directness of communication.

With respect to the integration strategy, the disengager only implemented very few specific investments in the new supplier-buyer relationship; in the form of, for example, supplier-development initiatives. This is because the capabilities of the new supplier were found to be sufficient for the particular supply object. However, the disengager strongly and intensively supported the new supplier in its ramp-up process in order to reduce the time the new supplier needed to deliver flawless printed circuits boards. Thus, the case company organized the necessary test equipment, defined the test instruction, and provided the required testing adapters. In summary, the integration strategy of the disengager matches the behavior of a focused supporter.

A far as the *institutional layer* of the disengager's supplier-buyer relationships is concerned, the case company did not sue the old supplier for damages, since no extraordinary costs were sustained. Losses caused by the poor quality of the old supplier's deliveries were compensated by the supplier directly. The old supplier, on the other hand, tried to claim compensation for lost revenues from the disengager, but this was prevented by company "C." To some degree, this was facilitated by the absence of an explicit exit-clause in the contract between the disengager and the old supplier. Due to this, recompensation and certain property issues were not clarified up front, which led to some freedom of interpretation with the contract. As far as the new supplier is concerned, the interviewee stated that negotiating the new contract was much more difficult than usual, due to new logistical issues of global sourcing, which needed to be integrated in the new contract with the new supplier.

In regards to the *financial layer* of the supplier-buyer relationship between the involved actors, the old supplier's weakness did not cause financial damage to the disengager. Company "C" did not involve external financial service providers to support a smooth supplier-switching process, since this was not deemed necessary. Finally, the interviewee stated that the company did not experience a worsening of its cash flow as a consequence of the supplier switch.

In order to safeguard against unexpected problems on the *operational layer,* the case company heavily increased its safety stock for the particular supply object. This was done somewhat secretly, since the old supplier did not communicate the switching decision immediately. This was done to buy time to build up the new supplier. Furthermore, it was expected that the old supplier would behave counterproductively if it learned of the upcoming termination of the exchange relationship. Due to this, deliveries from the old supplier were not stopped on a particular target date. The disengager decided to get the new supplier ready first and then

communicate the switch to the old supplier in combination with a plan concerning how deliveries would be phased out. However, even though the safety stock was increased in advance, the disengager experienced a moderate number of logistical problems. These problems were based on problems and logistical barriers in the exchange process with the new supplier. The fact that the new supplier is located in a rural area of the sourcing country, which can be considered as a low-cost country, several infrastructure, customs, and cultural problems occurred that occasionally caused trouble in the ramp-up phase of the new supplier. Nevertheless, those problems did not lead to distribution problems. Only a few problems occurred during the supplier-switching phase, but these did not exceed the normal level. This is true for production problems too, since only minor problems occurred in the assembly process of the disengager's production facilities.

On the *informational layer*, the communication between the disengager and the old supplier weakened further during the switching phase, but remained on a functional level. However, discussions occasionally lacked professionalism and objectivity from the old supplier's side, but besides that the case company has not heard that the old supplier complained about the disengager's behavior in front of some relevant network partners. Nevertheless, the purchasing company believes that the old supplier perceived the disengager's switching behavior as rather unfair. The old supplier was not willing to transfer its knowledge of the printed circuit board to company "C." However, due to contractual agreements, basic data about certain functionalities were delivered to the disengager. Finally, the interviewee stated that the old supplier and the new supplier did not communicate at all in the switching process.

As far as the *social layer* is concerned, it can be stated that company "C" did not discuss the reduction of order quantities with the old supplier intensively in order to avoid further negative impacts. The date on which the orders ceased was fixed by the disengager alone. The old supplier had only limited possibilities to change the plan. The trusting relationship between the case company and the old supplier did not remain stable during and after the switch, but did not completely degenerate either. It has just found another stable level, which is significantly under the trusting level that preceded the switch. The decline in trust is – among others – one reason for the increased coordination and monitoring costs in the switching phase. On the one hand, the quality of the old supplier needed to be ensured, and on the other hand, the new supplier needed support for its ramp-up process.

As far as the new supplier is concerned, the disengager found it somewhat difficult to establish a trusting relationship with the new vendor quickly. One reason for this is related to the cultural distance between the two exchange partners. However, the disengager only put minor effort into intercultural training for its employees, which could have fostered mutual understanding. The interviewee stated that they did not meet frequently with relevant employees of the old or the new supplier on a personal basis in order to clarify critical topics face to face. Instead, those issues were primarily discussed via email or telephone- and video-conferences.

6) Supplier-switching success evaluation phase

In general, the case company considers its economic situation to have improved through the supplier switch, so an *economic success* was achieved. This can be related to a decrease of the unit price of the supply object, which is clearly lower in comparison to the old price. Furthermore, in consideration of a total costs of ownership level, cost strongly decreased as well, so that company "C" strongly improved its cash flow situation in this particular exchange relationship. However, the payment transaction effort remained the same. The anticipated costs of the supplier switch were not exceeded by the disengager and came out as expected. As far as the *technological success* dimension is concerned, it can be stated that the technological situation of the new supplier-buyer relationship did not change in comparison to the old supplier-buyer relationship. Neither improvement nor decline were achieved as far as the quality of the supply object is concerned. However, an improvement of this performance category was not the objective of the supplier switch. Furthermore, the rejection rate did not change either, and the new supplier is considered as to be as innovative as the old supplier. Ultimately, company "C" considers the switching-related success to have been successful, since they reached the objective of lowering the price for the supply object. However, the case company does not perceive the switch as a complete success, due to the loss of some of their good supply market reputation. The time required to switch to the new supplier was slightly shorter than the expected nine months. However, the switching process had a detrimental effect on the social relationships between the employees of the old supplier and the ones of the disengager and the trusting relationship suffered noticeably. In addition, the disengager believes that its reputation in its professional network has slightly suffered as a result of the supplier switch. The case company regards the behavior of the old supplier in the switching process as rather fair. However, some behavioral characteristics, especially in negotiations concerning the phase-out of deliveries, were perceived as disturbing in the perspective of the disengager. This view of the perceived fairness in the switching process is mirrored by the old supplier. Company "C" believes that the old supplier considers the disengager's behavior in the switching process as moderately fair. All in all, the case company could more or less imagine starting a new supplier-buyer relationship with this company again, but only if certain issues, cost-related ones in particular, can be resolved. *Table 3-5* provides a summary of the core elements of the supplier switch:

Core switching dimensions	Relevant elements	Valuation
Switching environment	Dependence of the disengager on the supplier	Mutual dependent
	Number of alternative suppliers	Very few
	Level of specific investments in the old relationship	Low

Supplier switching decision phase	Reason(s) to switch	Price
	Kind of supplier weakness	Absolute and relative
	Progress of supplier weakness	Absolutely continuous
	Resources for developing the old supplier	Strong effort
	Time granted for the old supplier to improve	Very much
	Satisfaction situation	3) $CL_{alt} > CL_{exp} >$ Outcome
Supplier switching execution phase	Dissolution strategy – degree of egoism	Calculating
	Dissolution strategy – directness of communication	Frank but not immediate
	Integration strategy - support of ramp-up	Strong
	Integration strategy - scope of specific investments	Very few
	Old contract contained an exit clause	No
	Financial damage through old supplier's weakness	Very little
	Production problems during the switch	Very few
	Logistical problems during the switch	Moderate
	Distribution problems during the switch	Very few
	Prompt communication of switching decision	No
	Trust with the old supplier after switch	Neutral
Supplier switch success evaluation phase	Economic situation	Improved
	Technological situation	Same
	Switching-related success	Decently successful

Table 3-5: Core switching elements of case company "C"

3.2.5 Case company "D"

1) The disengager's switching environment

Case company "D" is a big automobile manufacturer (OEM) that has several production facilities all over the world. For reasons of confidentiality, no further details of the company can be disclosed. Generally, the company's purchasing department is decentralized but is has central purchasing responsibilities for certain supply markets. The case interview partner is the Head of Purchasing of a particular plant in Europe. The interviewee led and accompanied the whole switching process, which took place in 2006. The particular supply object was a brake disk, which required specific technological knowledge and development capabilities. These qualifications were especially necessary because of the high security relevance of the brake and its interrelationships with other configurations of the automobile that require intense communication between the engineers of the OEM and the suppliers. Due to the requisite comprehensive engineering capability, the number of suppliers worthy of consideration was relatively limited. The supply strategy for the supply object reflected a single-sourcing approach at the supplier level and a unit-sourcing environment at the object level.

The supply frequency was just-in-time and the supply subject was the individual plant where the demand occurred. As far as the supply technology is concerned, the case company utilized an electronic approach. Furthermore, the company performed global sourcing. Company "D" experienced high dependencies towards the supplier, which are related to extensive specific investments that were made in order to utilize the purchased supply object from the old vendor. Specific investments were made into new handling and assembly production facilities and expensive tools.

2) The old and the new supplier and further actors

The *old supplier* is based in the United Kingdom and is significantly smaller than company "D." For confidentiality reasons, no more general information about the old supplier can be provided. However, the case company does not have any further exchange relationships with the old supplier, but worked for a very long time with this vendor before the switch. The *new supplier* is based in Serbia and is smaller than company "D" too. The disengager already knew the new supplier from former exchange relationships, some of which are still active. Thus, the case company and the new supplier maintain several exchange relationships. However, for the particular supply object, the knowledge about the new supplier's performance was not comprehensive, but due to an initial assessment and former experiences with this supplier, the disengager was very confident of the new supplier's potential for the new exchange relationship. The switch to the new supplier was not combined with an adjustment of the sourcing strategy, so the supplier strategy is still single-sourcing and the object strategy remained unit-sourcing. The supply frequency was left to a just-in-time approach. No economies of scale with external companies were utilized, so the supply subject is still individual. Furthermore, the case company relies on an electronic sourcing technology and a global sourcing approach. In relation to *further relevant actors*, the disengager did not involve further institutions in the switching process. No other institutions influenced the switching process, and the same applies to customers and other suppliers.

3) Supplier-switching decision phase

The primary reasons for switching the old supplier were supply-protection and price considerations. The disengager learned that the old supplier was not covering its overall costs over all products. Thus, company "D" assumed that it was only a matter of time before the supplier became insolvent. Furthermore, the prices of the supply object demanded by the old supplier and the cost effectiveness were not competitive. However, further price reductions would only have worsened the supplier's financial situation. Thus, the switch can be related to an absolute and a relative weakness of the old supplier. This refers to satisfaction situation number three in *Figure 2-16*. The comparison level of the alternative (CL_{alt}) was deemed better than the

current outcome (Outcome) of the incumbent supplier-buyer relationship and the old supplier was not able to meet the expected performance level, so the comparison level (CL_{exp}) was not fulfilled ($CL_{alt} > CL_{exp} >$ Outcome). Thus, exit was the recommended management option.

The supplier weakness grew absolutely continuously, since the cash-flow situation of the old supplier worsened over time and no single event caused this issue. Thus, the switching decision was primarily related to a worsening of the ratio between real performance (Outcome) and expected comparison level (CL_{exp}). The deterioration is related to an increase of the relational effort with the old supplier, which can be traced back to an increase of uncertainty within the relationship, which caused transaction costs to increase. However, the comparison level of the alternative (CL_{alt}) became better as well, since the new supplier offered a more competitive price, so CL_{alt} became more attractive through lower relational efforts with the new supplier (lower production costs). The disengager evaluated the expected switching costs prior to the decision to relocate its demand to another source.

The estimated switching costs were high, since new specific investments were necessary. The urgency to perform the switch to the new supplier was comparatively low, since the old supplier strongly wanted to continue the relationship and the cash flow situation of the old vendor was not critical yet. However, the case company lost money every day due to the comparatively high price of the supply object, which in turn increased the need to switch quickly to some extent. The case company addressed its dissatisfaction regarding the old supplier's performance clearly and directly before the actual decision to switch, since "D" placed a strong emphasis on giving the old supplier an opportunity to improve its weak performance. Thus, even though company "D" lost money on an opportunity-cost basis, it clearly granted the old supplier enough time to improve its performance. In addition to that, the case company heavily spent its own resources to support the old supplier to achieve performance improvements. Those resources included engineers and process-improvement specialists of the OEM, which helped the supplier to overcome its competitive disadvantages. From an *ex post* perspective, the disengager stated that the resources utilized for supplier development were somewhat excessive. Furthermore, the disengager thinks that the need to terminate the relationship with the old supplier became clear as soon as switching was considered. This means that company "D" was not confident that the development initiatives would make a difference to the supplier. In general, case company "D" stated that the interrelationships between the old supplier and themselves had a relatively big impact on the flexibility of the supplier-buyer relationship - it negatively influenced the disengager's ability to switch to another supplier. The chosen degree of integration in the old supplier-buyer relationship led to a very high management complexity, which occupied a decent amount of time resources of the case company's various departments. Besides the high management complexity in the old supplier-buyer relationship, the interviewee stated that the company relied too much on the competencies of the old supplier. This led to a strong neglect of the development of its own capabilities and knowledge related to the supply object. Finally, the disengager thinks that the

form of integration in the old supplier-buyer relationship limited the company's freedom of choice in terms of contracting new suppliers.

4) Supplier-switching execution phase

The disengager planned the whole supplier switch in detail upfront. Therefore, the case company used checklists and a detailed project plan. These project plans have not been reviewed by the researcher, due to confidentiality constraints imposed by the case company. However, "D" assigned a project team that was in charge of coordinating the supplier switch. The project team had to be distinguished from the launch team, which can be regarded as a subcategory of the project team, and was responsible for the support of the new supplier's ramp-up process and supplier integration. The project team incorporated employees from the product development, purchasing, manufacturing, and material management and logistics departments. The responsibility for the supplier switch was taken over by the project team and the progress of the supplier replacement was precisely monitored. If deviations from the planed goals were identified, the case company performed variance analysis and started a continuous improvement process.

The dissolution strategy of company "D" can be described as "warm but taciturn." The disengager was very committed to the well-being of the old supplier and the company tried to prevent the old vendor from any additional trouble in the switching process. Thus, it can be stated that "D" was strongly other-oriented. However, the switching decision was not directly communicated to the old supplier, since the company was afraid that this could cause production stops at the facilities of the old supplier. Thus, the case company implemented a very indirect communication. Nevertheless, right after the decision to switch suppliers, the case company informed relevant network partners about the forthcoming changes. This was done in order to secure the continuous production process. Relevant network partners were third-party logistic service providers and suppliers, which provide a part, system, or module, which is interrelated to the braking disk. Finally, it can be stated that the choice to terminate the old and start a new exchange relationship with another supplier was an irreversible decision, since the switch was combined with comprehensive specific investments into the new supplier-buyer relationship. With regard to the integration strategy of the disengager, it can be stated that the disengager extensively supported the new supplier's ramp-up process. A complete launch team was assigned at the new supplier's production facilities in Serbia for three months. After the three months on site, the disengager changed the mode to on-site visits every two weeks for one week. The launch team incorporated members of different departments of company "D" and was a major investment into the new supplier-buyer relationship. Due to these arrangements, the up-front specific investments into the new supplier-buyer relationship were very extensive. Thus, the disengager's integration strategy is consistent with that of a comprehensive supporter.

As far as the *institutional layer* is concerned, company "D" refrained from suing the old supplier for damages. This is mainly due to the fact that the old supplier did not have any further financial resources that could be used to pay the claim. In addition to that, the disengager did not experience any damages that would warrant a claim. The old vendor did not demand any compensation for its lost revenues. The old supplier and the disengager did not have an explicit exit clause in the contract that would regulate a potential supplier switch or early relationship dissolution. However, the contract included a notice period of three months. After this time, all mutual obligations were absolved. The interviewee stated that contract negotiations with the new supplier were not more difficult than usual.

As far as the *financial layer* of the supplier-buyer relationship is concerned, the disengager only experienced minor and negligible financial damages through the old supplier's weakness. The primary damage occurred in the form of opportunity costs caused by the relative weakness of the supplier. Furthermore, the case company did not involve external financial institutions because none were involved in this relationship before. Additionally, the case company considered the financial risks of the switch to be limited. The interviewee further stated that the supplier switch did not have a negative impact on the company's cash flow.

In order to secure the whole production process on the *operative layer*, the disengager increased the safety stock of the supply good very significantly in comparison to the usual level. The increase of the inventory was performed "secretly," since the old supplier was not immediately informed of the upcoming termination of the exchange relationship. This means that the disengager slowly started to order more than it needed for production. The surplus quantity was stockpiled. Company "D" had no interest in informing the old supplier earlier, since it expected an immediate risk for the continuous supply of production due to strikes at the supplier plant or any kind of unpredictable behavior of the old supplier's management. Another reason for keeping the decision to switch confidential was a long-lasting preparation and launch phase of the new supplier. However, after the decision to switch was finally communicated to the old supplier, the two companies agreed upon a specific date in the future on which the deliveries of the old supplier would stop. This date was fixed by the case company in such a way as to minimize obsolescence costs. Obsolescence costs would have occurred if the old supplier was still delivering its "old" parts when the new supplier was delivering new parts in sufficient quantity.

Due to the great deal of up-front planning and the increased safety stock, the interviewee declared that the company did not face any production problems during the switching phase at all. However, some significant logistical problems occurred in the switching phase. These troubles were caused by missing packaging material at the new supplier's production facilities. In addition, the case company did not face any distribution problems downstream in the supply chain, so all delivery promises towards its customers were met on time, and in the right quantity and quality.

After the old supplier was informed of the disengager's decision to terminate the relationship, the communication between the two actors remained friendly and professional on the *informational layer*. As far as the disengager knows, the old supplier did not damage the case company's reputation in the relevant business network through bad comments about the switching process or anything else related to the decision to terminate the relationship. The old supplier's knowledge of the supply object's configurations and production processes was not transferred to company "D." This was unnecessary, since the new supplier developed all the required parts by itself. Furthermore, no communication took place between the old and the new supplier that could have helped the new supplier to facilitate a fast ramp-up process.

On the *social layer*, the disengager wanted to avoid further negative influences for the old supplier and reduced its order quantity completely in agreement with the old vendor. However, this issue was only discussed with the top management of the old supplier. Furthermore, confidentiality about the upcoming termination was agreed, since this was regarded as necessary in the perspective of the disengager, in order to avoid strikes at the supplier's production facilities. Due to this frankness, the trusting relationship between the disengager and the old supplier was preserved during and after the switching process. As far as coordination and monitoring costs are concerned, the interviewee stated that these have just slightly increased after the switching decision was made. This increase was caused by the double effort to coordinate two suppliers simultaneously.

The trusting relationship with the new supplier developed very fast, and it was already good before the switch, due to the previously-existing exchange relationships. As a result of the fact that the two companies already had a relationship, it was not necessary for the disengager to invest heavily in cultural or team-building training sessions for its employees. Nevertheless, the case company trained its employees in some language and behavioral issues to a moderate extent. Finally, company "D" followed a personal meeting approach with the parties that were involved in the supplier switch. Members of the project team met with all involved parties (not simultaneously) on a two-weekly basis. The employees in the team came from the manufacturing and product-development department, which were mirrored by the corresponding employees on the supplier side.

5) Supplier-switching success evaluation phase

In general, the case company believes that its economic situation very clearly improved through the supplier switch, so an *economic success* was achieved. The main reason for this is related to a very strong decrease of the unit price. Secondly, the total costs of ownership also declined significantly, making the new supplier significantly cheaper than the old one. Due to this, company "D" strongly improved its cash-flow situation with regard to the particular supply object. The payment transaction effort remained the same. However, the disengager overran the anticipated supplier-switching costs, since more investments were made to

establish the new supplier-buyer relationship. As far as the *technological success* of the new supplier-buyer relationship is concerned, company "D" achieved many improvements. The quality of the supply object was strongly enhanced and the new supplier is significantly more innovative than the old one. However, the rejection rate slightly worsened, but this is seen as something that could be improved in the close future without excessive effort. Furthermore, "D" considers its *switching-related success* very high. However, the disengager admitted some troubles in the ramp-up phase of the new supplier, but these were more than offset in the long run by a significant improvement in the company's cash-flow situation for the particular supply object. The switching process clearly took longer than expected and was finalized after 18 months. The delay was caused on the new supplier's side, since certain quality and logistical problems were difficult to solve. However, as far as the social relationships between the old supplier and the case company are concerned, no detrimental effect caused by the switch has been identified. The reputation of company "D" in its professional network did not suffer at all as a result of the supplier switch and the disengager believes that the old supplier retrospectively regards its behavior as very fair. Likewise, the disengager stated that it considered the old supplier's behavior to be very fair too. In consideration of all the pros and cons of the old supplier-buyer relationship, the case company can only imagine starting a new exchange relationship with the old supplier again if the financial risks, the cost situation and some quality issues could be resolved. At the end, company "D" identified opportunities for improvement for a future supplier switch and would perform an even more in-depth starting analysis of the new supplier, particularly its production facilities and the corresponding infrastructure. The disengager believes that this is something the company should pay more attention to next time, in order to consider non-obvious threats and potential problems better in advance. *Table 3-6* provides the reader with a quick overview of the core elements of the supplier switch:

Core switching dimensions	**Relevant elements**	**Valuation**
Switching environment	Dependence of the disengager on the supplier	Buyer dependent
	Number of alternative suppliers	Moderate
	Level of specific investments in the old relationship	Very high
Supplier switching decision phase	Reason(s) to switch	Price, cost effectiveness
	Kind of supplier weakness	Absolute and relative
	Progress of supplier weakness	Absolutely continuous
	Resources for developing the old supplier	Very strong effort
	Time granted for the old supplier to improve	Very much
	Satisfaction situation	3) $CL_{alt} > CL_{exp} >$ Outcome
Supplier switching execution phase	Dissolution strategy – degree of egoism	Strongly other-oriented
	Dissolution strategy – directness of communication	Indirect / disguised
	Integration strategy - support of ramp-up	Extensive

	Integration strategy - scope of specific investments	Very extensive
	Old contract contained an exit clause	No
	Financial damage through old supplier's weakness	Very little
	Production problems during the switch	None
	Logistical problems during the switch	Moderate
	Distribution problems during the switch	None
	Prompt communication of switching decision	No
	Trust with the old supplier after switching	Trustful
Supplier switch success evaluation phase	Economic situation	Strongly improved
	Technological situation	Improved
	Switching-related success	Successful

Table 3-6: Core switching elements of case company "D"

3.2.6 Case company "E"

1) The disengager's switching environment

Case company "E" is a Scandinavian electricity provider that offers its service mainly in the Nordic countries. For reasons of confidentiality, no further details of the company can be disclosed. The company's purchasing department is centralized at the company's headquarter and coordinates supplies of the group.

At the time of the supplier switch in 2004, the interviewee was the Vice President of the central purchasing department and was responsible for the whole switching process. The supply objects in this case were nuclear fuel assemblies, utilized to produce electricity in nuclear power plants. The supply object is very complex and requires highly sophisticated technologies and facilities to produce the fuel assemblies. Due to this, the number of potential alternative suppliers was extremely limited and only three possible suppliers existed for the case company. This limitation is reflected in the previously chosen supplier strategy, which followed a single-sourcing approach. The single supplier was another division of the builder of the nuclear power plant as well. It was contractually fixed between the old vendor and the disengager that the fuel assemblies would be delivered for a certain amount of years after the construction of the power plant was complete. Thus, the supplier was fixed for the first years of operation. This fact reflects the special quality of this case, since the case company was in a unique dependency situation with the old supplier and wanted to get out of it. Nevertheless, the supplier was dependent on the purchasing company too, since both made some specific investments into the relationship. From the perspective of the disengager, test-runs and a governmental licensing process in particular can be regarded as specific investments. However, in general, these investments were moderate. Thus, the objective was to reduce depend-

ency on the incumbent supplier by adding an additional one to implement a dual-sourcing approach. In order to gain a better negotiation position towards the old supplier – which would not lose all the business, but only a part of it – the disengager decided that the old supplier should believe that they were about to switch completely. Only after the new supplier was securely installed was the old supplier informed that they would retain a substantial part of the order volume. As far as the object strategy is concerned, a modular approach was selected. A demand-tailored supply frequency was chosen by the disengager, since massive stockpiling is not very appropriate for these kinds of supplies. The supply subject was individual. Case company "E" additionally applied a manual-sourcing approach and the supply market was global.

2) The old and the new supplier and further actors

The *old supplier* is based in Europe and is a global producer of power and automation technologies. Due to the limited number of available suppliers, no more information can be provided without compromising confidentiality. However, the old supplier is bigger than company "E" and the case company maintains further exchange relationships with the old supplier. The disengager worked for a very long time with the old supplier and both companies maintain a very trusting and close relationship. The *new supplier* is headquartered in the United States of America and has a subsidiary in Germany. It is smaller than company "E." The disengager and the new supplier do not maintain further exchange relationships. Company "E" knew this company beforehand, due to the high transparency in the supply market caused by the limited number of suppliers. Before the disengager decided to switch to the alternative supplier, the company put considerable effort into the evaluation and testing of the new supplier's capabilities and product quality. The new supplier delivered a pilot and testing nuclear fuel assembly to the disengager's power plant, so that company "E" was able to test all relevant functions and parameters of the supply object. Furthermore, technological and production aspects were audited on the spot at the new supplier's production facilities. Thus, the disengager had very comprehensive knowledge of the new supplier's capabilities. The costs for the testing fuel rods were paid by the disengager and can be regarded as up-front specific investments into the relationship. Additionally, the new supplier paid for a necessary verification program, which concerned the technical correctness of the test fuel assembly. After the tests were successfully completed, the disengager placed an invitation to tender on the general market. After the new vendor was up and running, the sourcing strategies did not change a great deal. The case company changed its supplier strategy from a single-sourcing to a dual-sourcing approach. However, the sourcing object remained a module. The supply frequency was left to demand-tailored as well, as the supply subject remains individual. The disengager applied manual sourcing and utilized a global supply market. As far as *further affected actors* are concerned, the disengager involved technical and business consulting

companies in the switching decision process. These consultants aided the evaluation of the technical feasibility and the economic impact. Furthermore, they supported the audits in the production facilities of the new supplier. Thus, the recommendations of the consultancy firms had an influence on the final switching decision, but not on the initial idea to switch. This is true of the governmental authority as well. If the new supplier had not been approved by this department, the disengager would not have been able to perform the switch. Customers were not involved in the switching process, since the product – power – was not affected by it. The interviewee stated that, in general, customers are not overly concerned about supply-side issues in the power business. Finally, the switching process was not influenced by other suppliers.

4) Supplier-switching decision phase

The motivation to change the old supplier-buyer relationship in this case was primarily related to a strategic decision of the purchasing organization - the disengager. Company "E" was experiencing a strong dependency situation and wanted to reduce this by adding a second source to the old supplier. Hence, the disengager did not consider the old supplier to be especially weak, but was in fact highly satisfied with the old supplier's performance. However, besides the strategic decision, it can be stated that the new supplier offered a better price than the old supplier and hence the switch was also related to a relative weakness of the old supplier. Additionally, some concerns about the complacency of the old supplier, who somehow felt too secure in the incumbent exchange relationship, bothered the disengager. Another side aspect of the switching decision is related to the applied technologies of the old and the new supplier. The two suppliers were moving into two different directions with regard to nuclear fuel assembly design, and the case company wanted to be part of both developments. However, in general it can be stated that some price-related and technological reasons made the comparison level of the alternative (CL_{alt}) more attractive. In summary, it can be stated that the old supplier only just missed the expected outcome (CL_{exp} > Outcome) and thus a relative and an absolute weakness can be identified. This refers to satisfaction situation number three in *Figure 2-16*, since $CL_{alt} > CL_{exp} >$ Outcome and thus switching the existing relationship is the recommended strategy. Even though the comparison level of the alternative (CL_{alt}) was improved through lower relational efforts with the old supplier (due to lower production costs), the outcome (Outcome) in the incumbent relationship deteriorated. This was due to an unfavorable strategic fit between the old supplier and the disengager, which caused a high relational effort, due to high uncertainty that again can be related to the risks of depending on one single source. The outcome further suffered through decreased relational rewards, caused by a less efficient government of the exchange relationship. This is related to communication processes that were complicated in the later stage of the old supplier-buyer relationship.

However, the strategic reason to switch is still dominant in this case. Company “E” was aware of its dependency position, but due to contractual agreements it could not break free of this earlier. The costs of adding a second source to the new supplier was estimated in advance and found to be comparatively low. However, the biggest part of the estimated expenses was related to the testing and the governmental release process. A further switching cost was caused by some new software-based monitoring and analysis tools, necessary to operate the new fuel assemblies. Due to the strategic character of the decision to switch the old supplier, there was no need to rush the implementation of the switch. In any case, the critical nature of the supply object precludes hasty or poorly-reasoned decisions. Since the old supplier did not have a concrete weakness, the disengager did not address its dissatisfaction to the old supplier. In this case, the disengager experienced more of a strategic dissatisfaction, which was not caused by the old supplier itself but was borne of the purchasing situation as such. Due to this, it was unnecessary to invest time and effort into the development of the old supplier for performance improvement. Thus, in an *ex post* evaluation it can be stated that the disengager was confident that it was the right decision to decline any time investments. Additionally, the interviewee stated that it was also adequate to refuse resource investments for supplier development initiatives. This is because it was clear that the supply situation would be weak even before the contract to build the nuclear power plant was awarded to the old supplier. Hence the subsequent change to a dual-sourcing strategy was somewhat predetermined, insofar as the disengager is concerned.

Furthermore, in consideration of the supplier-switching decision phase, the disengager stated that the chosen degree of integration had a high impact on the flexibility of the supplier-buyer relationship and therefore strongly influenced the decision to switch. The case company wanted to reduce its dependency and diversify supply risks between two suppliers. The main risks the company considered were of a technical, financial, and quality nature. Furthermore, the disengager did not want to be dependent on a single production plant that is able to produce the fuel rods. However, the degree of integration with the old supplier only had a little impact on management complexity, which is generally very high for these supplies, due to the high risks and security issues that are associated with the supply object. Thus, the selected degree of integration with the old supplier was normal and not extraordinary. Furthermore, company “E” does not believe that the degree of integration consequently led to a neglect of its own capabilities and development activities for the particular supply object. This is because the production of nuclear fuel rods is not considered to be the core business of company “E” at all.

4) Supplier-switching execution phase

The case company planned the necessary switching actions and processes very intensively in advance. A detailed project plan was developed, which included several milestones and

various checklists. These checklists incorporated to-dos for both the old supplier and the disengager. The checklists were not accessible to the researcher due to confidentiality considerations. Furthermore, a cross-functional project team was installed, which included different technical departments and the central purchasing of the disengager. The team members were from the new supplier's engineering and sales department. The switching process was steered and monitored by the project team, but no predetermined escalation process was in place. The interviewee stated that this was unnecessary because the company would have handled critical issues individually. However, the interviewee declared that no serious conflicts arose, since the roles and responsibilities were made clear from the very beginning.

As far as the dissolution strategy of the disengager is concerned, it can be postulated that it was an important issue for company "E" to prevent the old supplier from more negative influences that could go along with a supplier switch or a reduction of the order quantity respectively. Nevertheless, the disengager did the things that are beneficial to it and did not communicate the decision to switch directly and immediately. The old vendor learned of the case company's decision more indirectly, via the invitation to tender. However, the disengager always told the old supplier that they were open to competition in the particular exchange relationship, but the old supplier did not believe them. Nevertheless, after the decision to use the second supplier was made, the company informed relevant network partners immediately: these were governmental authorities to some extent, but mainly internal stakeholders. Furthermore, the decision to switch a substantial amount of the order quantity to another supplier was final and irreversible, since the case company needed to reduce its dependency and supply risk. Thus, it can be stated that the disengager's dissolution strategy was very indirect and strongly other-oriented.

With regard to the integration strategy, as the other part of the switching strategy, specific investments were made in the new supplier-buyer relationship. In particular, the support of the new supplier's ramp-up phase was extensive. They assembled a project team that was in charge of the coordination of the switch and the support of the new supplier. This required many trips and on-site visits at the supplier's production facility. However, the interviewee stated that these costs are almost negligible, since the whole business turns over 50 million Euros per year. Hence, if the purchasing company can generate savings of about 5-10%, travel costs are not a very serious issue. Nevertheless, the case company strongly invested in the pilot and testing phase of the new fuel assemblies so, in conclusion, the amount of specific investments was substantial. Furthermore, the specific investments of the new supplier were much higher than the ones of the disengager. The investments of the new supplier were primarily made on feasibility studies and product design. Thus, the integration strategy of the disengager reflects the characteristics of a comprehensive supporter.

The case company's activities in the supplier-switching execution phase were analyzed with respect to the dyadic relationship layers. With respect to the institutional layer, the case

company did not sue the old supplier for damages. There was simply no basis for that, since the disengager terminated the contract after the regular planned date of maturity. The old supplier did not claim any compensation either. The contract negotiations with the new supplier were a little more difficult than usual, which can be related to a qualification process that was required in order to demonstrate that the new supplier worked well. The contract with the old supplier did not incorporate an exit clause, which would have regulated a termination of the contract before the end of the anticipated duration. However, a termination clause existed, which was special in comparison to other purchasing contracts of company "E," because it required the old supplier to cooperate with the new supplier. The old vendor was further obliged to deliver key technical data, allowing nuclear fuel assemblies from new suppliers to function with the old ones in a transition phase. This was important, since the installed nuclear reactors only required a switch of 1/5 of all assemblies within a year.

As far as the *financial layer* is concerned, the switching process did not cause any financial damage. Company "E" did not use external financial service providers to support the switching process, since no exorbitant costs were expected. Additionally, the switching activities in general did not cause a temporary decrease of the disengager's cash flow.

The disengager did not significantly increase its safety stock on the *operational layer*, since the company's stock contained nuclear fuel assemblies that were sufficient to run the business without new deliveries for up to half a year. Company "E" canceled the deliveries from the old supplier with effect from a certain date. However, this is not something the company could have influenced, since the electricity production process in a nuclear power plant determines it. The fuel assemblies in the power station are usually switched only once a year and that date had already been selected.

During the switching process, the disengager experienced critical production problems. The fuel rods of the new supplier needed to be repaired shortly after they had been inserted, which is regarded as a critical procedure. However, this was done in a regularly planned inspection campaign during the annual fuel outage. Furthermore, the case company had some moderate logistical problems. These were seen as challenging but solvable. The problems occurred due to the fact that the fuel assemblies need to be transported with a ferry. Although the case company's distance from the new and the old supplier's production facilities was the same, the new means of transport was challenging, since the ferry is mainly used by tourists. Because of this, the operating company of the ferries did not want to carry the nuclear fuel assemblies and the regular traffic at the same time, even though this would have been possible from a security perspective. Finally, the disengager negotiated a charter contract with the operating company so that the fuel assemblies could be transported on their own ferry. As far as the electricity distribution is concerned, the case company did not face any problems that reduced the performance of the power plant.

During the switching phase, the communication between the disengager and the old supplier remained on a professional level on the *informational layer*. However, friendliness occasionally lapsed in discussions, since the old supplier was very displeased with the decision of the disengager. To the best of the case company's knowledge, the old supplier has not talked badly about the disengager and the reputation of the disengager does not appear to have been damaged. Nevertheless, the old supplier made some disparaging comments about the new supplier. In order to enable the new supplier to deliver flawless fuel assemblies to the power plant, relevant knowledge was transferred from the old supplier to the disengager. The transfer of this knowledge was of strategic importance and absolutely necessary in order to achieve a secure nuclear fission process with the new supplier's fuel rods. Due to this, the old supplier was contractually obliged to transfer all necessary information to the disengager if the exchange relationship was terminated. However, this contractual agreement must be seen in the perspective of the fact that the old supplier was also the builder of the power plant. The knowledge transfer from the old to the new supplier was thus managed primarily by the disengager, and direct communication between the two suppliers was limited. In this case, a direct and intensive communication between the old and the new supplier would also have generated cartel issues that would have further complicated the situation. The interviewee also mentioned that important communication happened between the CEO of the old supplier and the CEO of the disengaging company. The old vendor's CEO called the case company to complain about the planned dual sourcing, which was disclosed by the leader of the switching project. Thus, the interviewee stated that it was of paramount importance to inform the CEO of the whole background of the decision to implement dual sourcing. If the CEO had not been informed properly, he could have unintentionally jeopardized the whole process by making compromises.

In order to prevent a strong deterioration of the trusting relationship on the *social layer*, it was not necessary to negotiate an order-quantity reduction plan with the old supplier, since deliveries are pre-determined by the power producing process. No steady delivering process existed, and the fuel assemblies are changed once a year at a particular date. Thus, the disengager was not flexible in this relationship and only informed the old supplier about its reduced order quantity for the next change date. During the whole switching process and afterwards, the trusting relationship between the disengager and the old supplier remained stable on a high level. Only for a short period of time did the trusting relationship suffer slightly, but it recovered quickly again. As far as the control and coordination costs are concerned, the disengager did not experience an increase during the switching process. The trusting relationship with the new supplier developed very fast. The interviewee stated that the pilot project in particular, in which the fuel assemblies were tested, increased the pace of trust development. However, the case company did not invest in intercultural or technical training sessions for its employees, but supported the project leader – the interviewee – with his effort to learn

German. Another means by which to facilitate a successful supplier switch was frequent personal meetings with the parties involved.

6) Supplier-switching success evaluation phase

In general, the case company believes that its economic situation slightly improved through the supplier switch, so an *economic success* was attained. The main reason for this improvement is, on the one hand, related to a decrease of the price per fuel rod. In addition to that, the total costs of ownership slightly decreased as well. On the other hand, the biggest economic impact was generated by the new design of the nuclear fuel assembly, which can realize a better use of the uranium contained. Thus, the disengager realized a large increase of efficiency. However, these improvements did not have an impact on the cash flow situation of the disengager, which remained the same. In contrast to the improvements, the payment transaction effort increased with the new supplier, which is due to the international character of the transaction. Another positive aspect is that case company "E" performed the supplier switch at slightly lower costs than expected. As far as the *technological success* of the new supplier-buyer relationship is concerned, company "E" made strong efficiency improvements, as stated above. The quality of the supply object remained the same. However, one has to consider that nuclear fuel assemblies are not allowed to vary in quality, but have to follow stringent specifications. Due to this, there is no such thing as rejection rate in this business, which therefore remained at its level of zero. In terms of innovativeness of the old and the new supplier, the disengager declared that the two suppliers are alike, so no improvement was made here. All in all, company "E" accomplished a clear success in the *switching-related success* dimension, since its main goal of reducing the supply risk with a second reliable source was accomplished. The time that was needed to bring the new supplier up to its anticipated performance level did not take any longer than expected, and the whole process took three years. As far as the social relationship between the old supplier and the case company is concerned, only a minimal negative impact was identified, and this negative effect remained only for a very short period of time. The reputation of company "E" in its professional network did not suffer as a result of the supplier switch, and the disengager perceives the behavior of the old supplier as very fair. Company "E" believes that the old supplier regards the behavior of the disengager as quite fair as well. In general, the relationship between the old supplier and the disengager remained very stable and they are still engaged in various other ventures.

That said, the case company has identified several areas of possible improvements for upcoming supplier switches. One issue that could have worked better is the internal communication and the information exchange with all involved parties, especially the operations employees. The employees who actually dealt with the supply object were not involved, which led to a kind of skepticism towards the new supplier. This can cause inertia and acceptance problems by certain stakeholders. Furthermore, the disengager regards investments into the relationship

with the new supplier as highly crucial for the success of the later exchange relationship and especially for the integration phase. Thus, more personal meetings of the employees involved could have made the switch even better. Additionally, the relationship with the old supplier should not be neglected, and the case company focused much attention on sustaining a good relationship. The interviewee stated that the disengager is not allowed to be arrogant towards the old supplier, since this would destroy market reputation significantly. *Table 3-7* provides the reader with a quick overview of the core elements of the supplier switch:

Core switching dimensions	**Relevant elements**	**Valuation**
Switching environment	Dependence of the disengager on the supplier	Mutual dependent
	Number of alternative suppliers	Very few
	Level of specific investments in the old relationship	Moderate
Supplier switching decision phase	Reason(s) to switch	Strategic
	Kind of supplier weakness	No direct weakness but strong dependency
	Progress of supplier weakness	Not applicable
	Resources for developing the old supplier	None
	Time granted for the old supplier to improve	None
	Satisfaction situation	3) $CL_{alt} > CL_{exp} >$ Outcome
Supplier switching execution phase	Dissolution strategy – degree of egoism	Strongly other-oriented
	Dissolution strategy – directness of communication	Indirect / disguised
	Integration strategy - support of ramp-up	Extensive
	Integration strategy - scope of specific investments	Comprehensive
	Old contract contained an exit clause	No
	Financial damage through old supplier's weakness	None
	Production problems during the switch	Bigger problems
	Logistical problems during the switch	Moderate
	Distribution problems during the switch	None
	Prompt communication of switching decision	No
	Trust with the old supplier after switch	Trustful
Supplier switch success evaluation phase	Economic situation	Slightly improved
	Technological situation	Very successful
	Switching-related success	Successful

Table 3-7: Core switching elements of case company "E"

3.2.7 Case company "F"

1) The disengager's switching environment

Case company "F" is a German electricity provider, with operations all over Europe. For reasons of confidentiality, no further details of the company can be disclosed. The company runs a central purchasing organization with about 180 purchasers. They are divided into different product teams with responsibilities for steel, information technology, power, or materials, for example. The interviewee is part of the strategic purchasing division, which is incorporated at the central purchasing department, and accompanied the whole switching process.

The supplier switch of the case company took place in 2007. The supply object is a high-precision pin, which is used in turbines in one of the case company's brown coal power plants. The supply object is not in itself very complex, but requires special production technologies and capabilities, since the highest quality and load-bearing capacity are required. However, those capabilities can be offered by several companies, so the number of potential alternative suppliers for the pins was not very limited. Due to the good availability of alternatives, company "F" chose a single-sourcing approach on the supplier strategy level. On the supply object level, a unit-sourcing approach was selected, and due to the relatively low value of the pins, the company ordered the pins and stored them in its own stock. The supply subject was the individual company and a manual sourcing technology was applied. Furthermore, the supply market was in Germany, so a local sourcing approach was selected. In this relationship, the disengager was more dependent on the old supplier than the other way around. This dependence was due to the implemented single-sourcing strategy, which was utilized to gain economies of scale. An alternative supplier would need at least 12 weeks before deliveries could start, which was considered too long for a spontaneous supplier switch. However, specific investments were not made into the old supplier-buyer relationship, due to the comparatively low value of the transaction.

2) The old and the new supplier, and further actors

The *old supplier* is based in Germany and is significantly smaller than company "F." The high-precision pin is the only supply object that "F" purchases from the old supplier, so no further exchange relationships exist. The business between the two companies had not been in place for a very long time before the switch, but both organizations established a very strong trusting relationship from the very beginning. The *new supplier* is based Germany as well, and is also smaller than the disengager. The most important difference between the old and the new supplier is that the new supplier is a wholesaler and the old one a producer. The case company already knew the new supplier from other purchases, and company "F" and the new supplier maintain several exchange relationships. Thus, the disengager had comprehensive

knowledge of the new supplier's qualities through the other transactions. Furthermore, the case company asked for some more information about experiences with the new supplier from some of its business partners. The switch to the new supplier did not cause an adjustment of the sourcing strategy, so the supplier strategy remained single-sourcing and the supply object was the unit. The supply frequency and the supply subject remained the same: stock-sourcing and individual sourcing respectively. No electronic sourcing technology was used, which led to a manual sourcing approach. Since the supply market is Germany, a local sourcing approach was implemented. As far as *other actors* are concerned, the disengager did not involve external institutions in the switching process. The influencing parties in the supplier switch were all internal. In particular, the internal customers of the purchasing department, like the technical department and the local warehouses, played an important role. Other institutions, like the government, were not involved in the switching process either, and external customers were not part of the decision-making process. The exclusion of customers is due to the fact that these are end-customers that do not care about supply objects like turbine pins. Finally, other suppliers did not influence the switching process either.

3) Supplier-switching decision phase

The reason for which the disengager decided to switch to the alternative supplier is primarily related to the poor and unreliable delivery performance of the old supplier. Thus, an absolute supplier weakness was the case. This means that the current performance of the incumbent supplier was worse than expected, so the comparison level (CL_{exp}) was not reached. Although the alternative supplier can offer a better performance than the old vendor, which makes the alternative comparison level (CL_{alt}) more attractive, the new supplier is significantly more expensive. This means that the new supplier is not able to meet the initially defined performance expectations – the comparison level (CL_{exp}) – either. However, the disengager is still better off choosing the new supplier. Thus, this situation refers to satisfaction situation number five in *Figure 2-16,* since $CL_{exp} > CL_{alt} >$ Outcome, and switching is recommended.

The weakness grew continuously, since the performance of the old supplier was good initially but declined over time. The old supplier did not keep certain promises concerning a consignation stock that it had promised to install. This finally led to the case company's increasing dissatisfaction, and it started to look for another, more reliable, source with a better price effectiveness and better technology. It can be stated that the absolute weakness of the old supplier negatively impacted the outcome (Outcome) through an increase of the relational effort and a decreased relational reward. The effort became bigger through increased uncertainties in relation to the deliveries of the old supplier. The relational reward became lower through the unwillingness of the old supplier to invest specifically (consignation stock) into the supplier-buyer relationship, and through difficult adjustment processes between the old supplier and the buyer, which caused an inefficient management structure.

The disengager estimated that the switching costs would be very low and hence would not be a major concern. The disengager came to this estimation because the switch followed a regular invitation-to-tender procedure. Only the labor required to prepare the documents was included in the switching-cost calculation.

The urgency to perform the switch to the new supplier was relatively low, since the purchasing volume was comparatively little. However, the interviewee stated that the old vendor was a completely new supplier to the case company at the beginning of the exchange. Company "F" granted the old supplier a two-year contract, which is a somewhat standard duration for regular non-strategic purchases at the disengager. After one year, the problems began. The disengager directly and immediately communicated its dissatisfaction with the poor delivery performance to the management of the old supplier. Company "F" granted the old supplier absolutely enough time to improve its performance. Furthermore, the disengager intensively supported the old supplier in its improvement process. However, the resources consisted mainly of time spent on negotiations. The promised consignation storage of the old supplier never started and the old supplier did not want to increase its capacity either. However, the effort and time spent did not have any impact on the supplier's performance. Even after half a year, the problems did not improve and the disengager decided to reallocate its demand to another supplier, which lasted twelve weeks. However, in order to stay in tune with the contract between the disengager and the old supplier, the old supplier delivered the remaining quantity of the last order and the disengager was obliged to purchase this remaining amount. If this contractual agreement had not been present, the disengager would have tried to get rid of the old supplier earlier. In an *ex post* perspective, the interviewee declared that the resources spent on supplier development were excessive. Furthermore, the disengager mentioned that the company waited too long to decide for the switch, and was only moderately confident of the impact of the invested resources.

In addition, case company "F" stated that the degree of integration between the old supplier and themselves had no impact on the flexibility of the supplier-buyer relationship and thus did not negatively influence the disengager's ability to switch to another supplier. Contrary to that, the management complexity in the old supplier-buyer relationship was very high, due to the delivery problems that the disengager constantly needed to deal with. The disengager further stated that the company did not neglect the development of its own capacities, since the ability to forge the pin was never regarded as a core competence. Besides the high management complexity in the old supplier-buyer relationship, the interviewee stated that the company relied excessively on the competencies of the old supplier. Finally, the case company thinks that the form of integration in the old supplier-buyer relationship strongly limited the company's decision-making freedom with respect to improving the whole supply situation.

4) Supplier-switching execution phase

In order to secure the switching process, company "F" intensively planned the necessary switching actions and processes in advance. The switching procedure was part of the invitation to tender. However, since the contract with the old supplier ended earlier than its maturity date, the company applied a special invitation-to-tender process, which incorporates shorter periods for offers and allows faster decision-making. The case company did not install a project team to support the switching process, but the respective purchaser at the central purchasing department was responsible for the steering and monitoring of the switch.

With respect to the dissolution strategy, it can be stated that the disengager directly informed the old supplier after the decision to switch was made. Furthermore, the purchasing department of company "F" informed relevant partners immediately. The recipients of the switching information were all internal stakeholders of the case company. No external institution or customers were informed, since nothing would change on the distribution side. Furthermore, no governmental authorities needed to be informed, since the purchasing volume was too low. The most important internal stakeholders for the purchasing department in this case were local on-site warehouses at the power plants that are run by the disengager. These warehouses needed to be informed that they would be receiving the same article from another supplier and another logistics service provider in order to enable them to adjust their IT databases accordingly. The disengager stated that the decision to switch to another supplier and terminate the relationship with the old one was irreversible. Even though the old supplier was allowed to deliver already-ordered quantities, company "F" never doubted that the decision to change the source of supply was correct. As far as the degree of egoism is concerned, it can be stated that it was very important for company "F" to avoid further negative impacts for the old supplier. This is expressed, for example, by the fact that the old supplier received further orders in the twelve-week switching phase. However, we must distinguish between regular orders, which were part of the frame contract with the old supplier, and these additional order quantities. The latter were only made if the disengager was about to run into a serious supply bottleneck. In summary, the switching strategy of the disengager can be characterized as strongly other-oriented, combined with a frank and direct communication approach.

As far as the integration strategy, as the other part of the switching strategy is concerned, it can be stated that the case company did not support the new supplier's ramp-up process. This was not necessary, since the new supplier has no production, but purchases the supply object according to specifications by itself. Thus, no specific investments were made into the new supplier-buyer relationship and the integration strategy is that of a limited supporter.

On the *institutional layer*, company "F" refrained from suing the old supplier for damages. The reason for that is that the exact amount would have been very hard to determine and furthermore would probably exceed the financial power of the old supplier. Since the old

supplier was aware of its poor delivery performance, it made no attempts to claim compensation for lost revenues after the switching decision.

The contract between the old supplier and the disengager incorporated an explicit exit clause, which is standard in all purchasing contracts of company "F." All supply contracts of the disengager have a term of two years. Half a year before the expiry date, the disengager usually starts with the publication of new invitations to tender. In this case the disengager canceled the contract earlier, but then started a regular invitation-to-tender process. The new supplier knew of the problems between the disengager and the old supplier, but did not take advantage of the situation. Thus, the negotiations between the new supplier and the case company were not more difficult than usual. However, in order to achieve the goal of guaranteed delivery dates, the case company now pays 15% more per piece than before the switch. In general, the supplier switch did not lead to any legal actions.

As far as the *financial layer* of the supplier-buyer relationship is concerned, it can be stated that the company did not experience financial damage. Even though the company experienced a standstill of some of the turbines, the magnitude of this damage is hard to determine, since no delivery problems towards the end customer occurred. Due to the relatively low risks and comparatively low value of the transaction, the company did not involve external financial institutions to secure or accompany the supplier switch. The disengager stated that the supplier switch had no negative impact on the case company's cash flow. Even though the price is now higher, no production stalls occur anymore, which offsets the higher price. However, the company has not calculated the benefit or the disadvantage in terms of cash flow.

In order to secure frequent supplies on the *operational layer* during the switching process, the disengager increased its safety stock and purchased extra amounts from the old supplier and additional quantities from the new supplier as well. Since the disengager immediately and directly informed the old supplier of its decision to terminate the exchange relationship and switch to a new supplier, the increase of the safety stock was frankly discussed with all involved parties. Company "F" did not cancel the deliveries from the old supplier to a certain date, but followed a flowing transition of supplies. The reason for this is that the disengager agreed with the old supplier that previously-ordered quantities would still be delivered. Thus, company "F" utilized supply objects from the new and the old supplier simultaneously.

During the switching process, the case company experienced critical production problems. The turbines, which need the pins, were stopped temporarily in order to avoid damage through the abrasion of the supply object. Due to the standstill of the turbines, the brown coal power plant lost some of its power-generating capacity. These production stops were counterbalanced through increased capacities at other power plants of the company. Because of this, there was no recognizable distribution problem on the customer side. Besides the production problems, the company faced very serious logistical problems in the switching phase. These problems were related to delayed deliveries from the old supplier. Since those kinds of

problems were the reason for switching in the first place, the interviewee stated that these problems worsened during the switch. The execution of fast deliveries was a particularly serious problem for the old supplier. Because of poor collaboration between the old supplier and its logistics service provider, fast deliveries were occasionally several days late – which in turn led to the stall of power-production capacity. These late deliveries were a very serious challenge for the case company. In order to avoid a further loss of production capacity, the company sometimes purchased the pins at little locksmith's workshops for prices that were ten times as high as the regular price. This increased the purchasing costs tremendously, but on the other hand, it avoided further production problems, which could have easily surpassed the increased costs for the supply object.

During the switching phase, the communication between the disengager and the old supplier remained on a very professional and friendly level, and no negative interferences were identified by the case company on the *informational layer*. Additionally, the case company has not heard of any complaints or negative statements by the old supplier about its applied switching procedure in the related network. One further topic on the informational layer of supplier-buyer relationships is a potential knowledge transfer between the old supplier and the disengager. In this particular case, no knowledge of the supply object and its production procedures was transferred to company "F." This was not necessary, since the old supplier only produced the pins according to the requirements and drawings of the disengager, so the case company already had all crucial information. The interviewee further stated that there was also no information exchange between the old supplier and the new supplier. Finally, the case company declared that the most important communication processes were the ones with the new supplier. In particular, the assurance to install a dedicated storage of pins for the disengager's demand was the most important information for the case company.

The attitude of the disengager, which aimed at sparing the old supplier from further damages, especially as far as the *social layer* is concerned, did not affect the way the company determined the date on which it would stop its purchases from the old supplier. This date was not discussed with the old vendor at all. After the decision to switch the supplier was made, all new demands were shifted to the new supplier immediately. During the whole switching process and afterwards, the trusting relationship between the disengager and the old supplier decreased to a more neutral level. The decline in trust that the disengager experienced towards the old supplier can be related to several broken promises concerning delivery dates and performance improvements. Due to this, the disengager stated that the lack of trust and the bad performance of the old supplier led to an increase of the transaction costs at the end of the old supplier-buyer relationship. Company "F" needed to run the whole exchange relationship on an exceptional basis, with express deliveries and extra quality controls.

Contrary to the old supplier-buyer relationship, the trusting relationship with the new supplier developed very fast. This was mainly because the case company had already purchased

several items from the new supplier in the past, which created a history of trust. However, the case company did not invest in intercultural or technical training sessions for its employees, since this was not necessary for purchases of this size, and no substantial cultural differences existed. However, in order to ensure a smooth and efficient switching process, the disengager personally met with all involved actors, which were the internal customers, and the new and old supplier.

5) Supplier-switching success evaluation phase

In general, the case company stated that its economic situation slightly improved through the supplier switch, so an *economic success* was accomplished. However, this is not due to an improvement of the unit price, which slightly increased, but is more related to a light improvement of the total costs of ownership. This improvement was caused by the greater certainty and security of deliveries of the supply object. After the switch, the disengager did not need to assign extra management capacity to deal with delays and express deliveries. Nevertheless, the total cost of ownership improvement did not have an effect on the cash flow situation of the company, which remained the same. This is also true of the payment transaction effort. Furthermore, the case company did not exceed its anticipated switching costs, which occurred as expected at the beginning. As far as the *technological success* dimension is concerned, the disengager achieved a clear improvement. This improvement is mainly related to a far better innovativeness of the new supplier, since the quality and the rejection rate of the supply object remained the same. The superior innovativeness of the new supplier is explained by the vendor's opportunities to purchase all kinds of special pins from different innovative suppliers. All in all, company "F" considers the supplier switch to have been very successful, since the main objective of achieving secure supply dates was accomplished. Similarly, on the *switching-related success dimension* a very big success was achieved. The anticipated duration of the supplier switch was estimated at twelve weeks in advance, and was not exceeded or reduced in the switching phase. The interviewee stated that as far as the social relationship between the old supplier and the case company is concerned, a detrimental effect – caused by the switch – was identified, which is connected to the decreased trusting relationship. The reputation of company "F" in its professional network did not suffer at all as a result of the supplier switch, and the disengager believes that the old supplier retrospectively regards its behavior as very fair. On the other hand, the disengager has declared that it regards the behavior of the old supplier as quite unfair, because of the many broken promises regarding delivery dates. All in all, the disengager can imagine purchasing from the old supplier again, since the quality of the supply object was very good. However, new orders would only be placed if the old supplier can strongly improve some of its internal processes and restructure responsibilities. *Table 3-8* provides the reader with a quick overview of the core elements of the supplier switch:

Core switching dimensions	Relevant elements	Valuation
Switching environment	Dependence of the disengager on the supplier	Buyer dependent
	Number of alternative suppliers	Plenty of alternatives
	Level of specific investments in the old relationship	None
Supplier switching decision phase	Reason(s) to switch	Bad technology, price, cost effectiveness, and bad delivery service
	Kind of supplier weakness	Absolute
	Progress of supplier weakness	Very continuous
	Resources for developing the old supplier	Very strong effort
	Time granted for the old supplier to improve	Very much
	Satisfaction situation	5) $CL_{exp} > CL_{alt} >$ Outcome
Supplier switching execution phase	Dissolution strategy – degree of egoism	Other-oriented
	Dissolution strategy – directness of communication	Direct / frank
	Integration strategy - support of ramp up	None
	Integration strategy - scope of specific investments	None
	Old contract contained an exit clause	Yes
	Financial damage through old supplier's weakness	None
	Production problems during the switch	Very big problems
	Logistical problems during the switch	Very big problems
	Distribution problems during the switch	None
	Prompt communication of switching decision	Yes
	Trust with the old supplier after switch	Neutral
Supplier switch success evaluation phase	Economic situation	Slightly improved
	Technological situation	Improved
	Switching-related success	Very successful

Table 3-8: Core switching elements of case company "F"

The table on the next page (3-9) provides an overview of the different findings in the six case studies, which should afford easier comparability. The table further builds the foundation for the cross-case analysis, which is presented in the following chapter.

Core switching dimensions	Relevant elements	Case company "A"	Case company "B"	Case company "C"	Case company "D"	Case company "E"	Case company "F"
Switching environment	Dependence of the disengager on the supplier	Buyer dependent	More dependent than the supplier	Mutual dependent	Buyer dependent	Mutual dependent	Buyer dependent
	Number of alternative suppliers	Many suppliers	Moderate	Very few	Moderate	Very few	Plenty of alternatives
	Level of specific investments in the old relationship	High	Low	Low	Very high	Moderate	None
Supplier switching decision phase	Reason(s) to switch	Price	Price, quality, technology, and strategic decision of the old supplier	Price	Price, cost effectiveness	Strategic	Bad technology, price, cost effectiveness, and bad delivery service
	Kind of supplier weakness	Relative	Absolute and relative	Absolute and relative	Absolute and relative	No direct weakness but strong dependency	Absolute
	Progress of supplier weakness	Very continuous	Very continuous	Absolutely continuous	Absolutely continuous	Not applicable	Very continuous
	Resources for developing the old supplier	Decent effort	Very strong effort	Strong effort	Very strong effort	None	Very strong effort
	Time granted for the old supplier to improve	Much time	Very much	Very much	Very much	None	Very much
	Satisfaction situation	4) CLalt > Outcome > CLexp	3) CLalt > CLexp > Outcome	3) CLalt > CLexp > Outcome	3) CLalt > CLexp > Outcome	3) CLalt > CLexp > Outcome	5) CLexp >CLalt > Outcome
Supplier switching execution phase	Dissolution strategy – degree of egoism	Strongly other oriented	Strongly other-oriented	Calculational	Strongly other-oriented	Strongly other oriented	Other oriented
	Dissolution strategy – directness of communication	Indirect / disguised	Frank but not immediate	Frank but not immediate	Indirect / disguised	Indirect / disguised	Direct / frank
	Integration strategy - support of ramp up	Sound	Extensive	Strong	Extensive	Extensive	None
	Integration strategy - scope of specific investments	Extensive	Very extensive	Very few	Very extensive	Comprehensive	None
	Old contract contained an exit clause	Yes	Yes	No	No	No	Yes
	Financial damage through old supplier's weakness	No	No	Very little	Very little	None	None
	Production problems during the switch	Some distinctive	Very few	Very few	None	Bigger problems	Very big problems
	Logistical problems during the switch	Moderate	Very few	Moderate	Moderate	Moderate	Very big problems
	Distribution problems during the switch	Very few	Very few	Very few	None	None	None
	Prompt communication of switching decision	No	No	No	No	No	Yes
	Trust with the old supplier after switch	Moderate trust	Trustful	Neutral	Trustful	Trustful	Neutral
Supplier switching Success evaluation phase	Economic situation	Improved	Strongly improved	Improved	Strongly improved	Slightly improved	Slightly improved
	Technological situation	Same	Strongly improved	Same	Improved	Very successful	Improved
	Switching related success	Successful	Very successful	Decently successful	Successful	Successful	Very successful

Table 3-9: Overview of core elements of the case studies

3.3 Joint analysis of the supplier switching case studies

The following paragraph compares the different case study examples with each other and presents the gathered data in a consolidated manner. Similarities and differences among the switching environments of the case companies are presented in the first subchapter (3.3.1). The applied activities in the three phases of supplier switching will be revealed. The supplier-switching decision phase (3.3.2), the supplier-switching execution phase (3.3.3), and the supplier-switch success-evaluation phase (3.3.4) of each case example will then be compared.

3.3.1 The disengager's switching environment

As derived in *Chapter Two,* four conditions of the specific switching context in particular are assumed to have an impact on the ease of supplier switching: 1) the scope of relationship-specific investments,[411] 2) the dependence of the buyer,[412] 3) the number of alternative suppliers,[413] and the 4) magnitude of switching costs.[414]

1. The scope of relationship-specific investments can increase the difficulty of supplier switching. The more the buyer and the supplier are interconnected through specific investments, the more difficult the dissolution of the old supplier-buyer relationship becomes due to – for instance – increased dependencies. This is due to the higher complexity of the switching processes, since more interrelationships have to be taken into account.
2. The more dependent a buyer in a specific relationship with a supplier is, the more difficult the switching process. This is mainly due to the behavioral risks listed in *Figure 2-5*. The supplier could try to take advantage of the buyer's dependence on the situation by increasing its switching costs in an attempt to deter the buyer from switching. However, this would only be a temporary effect, since it would strongly decrease the supplier's reputation, thereby reducing the probability of future business with the disengager.
3. As far as the number of alternative suppliers is concerned, it can be declared that the fewer alternative suppliers are available, the worse is the negotiation position of the disengager for entering a new supplier-buyer relationship, and the lower the probability of finding a better supplier at all. Thus, the fewer alternative suppliers are available, the more difficult supplier switching becomes.[415]

---

[411] See Chapter 2.1.2 and 2.2.2 or (e.g.) Wagner and Friedl (2007), pp. 702.
[412] See Chapter 2.2.1 or (e.g.) Verduijn (2004), pp. 140.
[413] See Chapter 2.4.2 or (e.g.) Verduijn (2004), p. 142.
[414] See Chapter 2.2.2 or (e.g.) Heide and Weiss (1995), pp. 32.
[415] This is particularly obvious if one imagines a monopoly situation with only one available supplier. In this situation, switching would be completely impossible.

4. The switching costs are a further element that can make supplier-switching more risky or even impossible. As shown in *Figure 2-9*, high supplier-switching costs can make the whole switch meaningless from an economic point of view. The higher the switching costs, the more time would be needed to benefit from the new supplier's superiority, so the whole switching success would become more uncertain, since future circumstances of the alternative supplier-buyer relationship need to be taken into account and the current situation is not guaranteed to last long enough. Furthermore, the higher the switching costs, the better the chance that a development of the old supplier would be the more efficient solution.

These factors were considered by the case companies in order to assess the feasibility of a potential supplier switch. The context with respect to the four conditions of the switching environment can be illustrated as follows (see *Figure 3-3*):

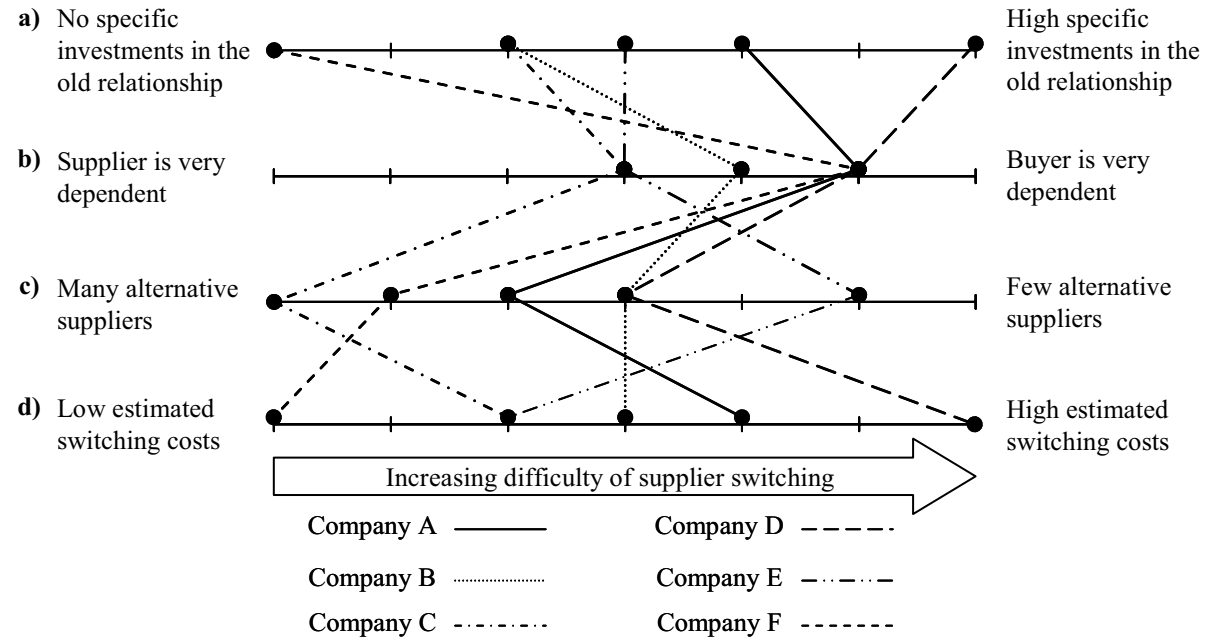


Figure 3-3: Selected condition of the disengagers' switching environments

The figure shows a very heterogeneous picture of the various supplier switches. The more the lines cross the axes on the right-hand side of the figure, the more difficult the respective supplier switch becomes. However, this does not necessarily mean that a supplier switch that exhibits a left-hand bias will be simple to perform. The figure should illustrate that a potential supplier switch with a right-hand bias in the diagram tends to be more difficult to implement than a switch solely located on the left side. The picture indicates that "D" and "F" were the extreme cases. Following the logic of the figure, case "D" tends to be the most difficult supplier switch among the cases, whereas "F" tends to be less difficult than the other cases. In a direct comparison of these cases, they seem to differ according to management complexity (e.g. case "D" was managed by a cross-functional project team, whereas case company "F" utilized a single purchaser to operate the switch) and duration (the whole switching process at

company “D” has lasted 18 months and the one of company “F” three months). Thus, an analysis of the four contextual conditions of supplier switches might be able to indicate the challenges and identify potential threats for a disengager.

3.3.2 Activities in the supplier-switching decision phase

The following paragraph concerns the activities in the supplier-switching decision phase. Firstly, the different kinds of supplier weaknesses that affected the analysis of the disengager’s satisfaction will be discussed. Secondly, the initial reaction of the disengagers after the identified supplier weakness will be analyzed with respect to improving and confirming activities.

1) Satisfaction analysis of the disengager in the switching-decision phase

As derived in *Chapter 2.2.2*, the decision to switch to an alternative supplier is preceded by the identification of a *supplier weakness*. As explained in *Chapter 2.4.4*, the emergence of this weakness is again related to changes in either the current relational reward or the relational effort within the incumbent supplier-buyer relationship (Outcome), or of the reward or effort expectations of an alternative relationship (CL_{alt}). These changes are identified by the disengager in the satisfaction evaluation process and can thus lead to the supplier-switching decision. *Table 3-10* describes selected changes within the drivers of relational rewards and efforts that can cause dissatisfaction of the purchasing company and hence might eventually lead to the decision to replace the incumbent supplier.

	Driver	Absolute (Change of Outcome)	Relative (Change of CL_{alt})
Relational reward	Specific investments	**A1)** The willingness to make specific investments has been decreased on the supplier’s side.	**R1)** The alternative supplier is more willing to make specific investments into the relationship than the old supplier.
	Complementary assets	**A2)** The complementary fit between the assets of the old supplier and the buyer has weakened through contextual changes.	**R2)** The complementary fit between the assets of the alternative supplier and the buyer is better than the fit with the old supplier.
	Knowledge exchange	**A3)** The intensity and the outcome of knowledge exchange between the old supplier and the buyer has decreased.	**R3)** The intensity and the outcome of knowledge exchange between the alternative supplier and the buyer promises to be better than the one with the old supplier.
	Effective governance	**A4)** The way of planning, organizing, and controlling the old supplier-buyer relationship has become more difficult.	**R4)** The way of planning, organizing, and controlling the alternative supplier-buyer relationship is easier than with the old supplier.

Relational effort	Uncertainty	**A5)** The exchange-relationship with the old supplier has become more uncertain in terms of quality, price, technology, or long-term orientation.	**R5)** The uncertainty in the alternative supplier-buyer relationship in relation to quality, price, technology, or long-term orientation is lower in comparison to the old supplier.
	Asset specificity	**A6)** The asset specificity, which is required for smooth operations within the old supplier-buyer relationship, has increased.	**R6)** The assets specificity, which is required for smooth operations, is lower in the alternative supplier - buyer relationship.
	Frequency of exchange	**A7)** The frequency of exchange with the old supplier has declined, leading to lower economies of scale.	**R7)** The frequency of exchange with the alternative supplier can be higher and higher economies of scale could potentially be achieved.
	Production cost	**A8)** The production cost and thus the price of supplies in the old supplier-buyer relationship have increased.	**R8)** The production cost and thus the price of supplies in the alternative supplier-buyer relationship are lower than in the relationship with the old supplier.

Table 3-10: Selected changes of the relational reward and effort drivers, triggering supplier-switching decisions

Each driver can perform either an absolute variation within the existing supplier-buyer relationship – which would refer to a change in the real performance (Outcome) – or a relative variation in comparison to an alternative supplier-buyer relationship. The latter refers to modification of the comparison level of the alternative (CL_{alt}). The described triggers affecting the relational reward or effort drivers were identified in the case studies as well. Lower production costs of the new supplier (R8 has been identified for case company "A," "C," "D," and "E") and an absolute increase of uncertainty in terms of quality and the future of the incumbent exchange relationship (A5 has been identified for case company "B," "D," "E," and "F") were the most common motivations to switch. Thus, within the analyzed supplier switches, motivations linked to the relational effort in a supplier-buyer relationship have been the primary reason for switching suppliers. However, within the relational effort category, relative or absolute changes in the asset specificity and the frequency of exchange did not play a role in the motivation to switch. Within the reward category, the effectiveness of governance of the old and the alternative supplier-buyer relationship in particular motivated the case companies to switch (A4 has been identified for case companies "C," "E," and "F," and R4 for case company "B"). The willingness to invest specifically into the supplier-buyer relationship was relevant for company "B" (decreased willingness of the old supplier (A1) and higher willingness of the alternative supplier (R1), as well as for company "F" (decreased willingness (A1) of the old supplier). A decreased intensity and outcome of knowledge exchange in the old supplier-buyer relationship (A3) was identified for companies "C" and "E." A decrease of complementary assets was only observed in the case of company "B." The purchasing company will detect the changes of the relational reward and effort drivers through satisfaction evaluation activities. As soon as dissatisfaction emerges through a comparison of the disengager's expected performance (CL_{exp}) with the actual outcome of the incumbent

supplier-buyer relationship (Outcome), and the performance of the potential alternative supplier (CL_{alt}), switching tendencies will arise (see *Figure 2-16*).

Case company "A" experienced a "pure" relative supplier weakness and company "F" is the only case company that faced a "pure" absolute supplier weakness. The other case companies faced situations with both kinds of supplier weaknesses (absolute and relative). These supplier weaknesses were related to the satisfaction situations presented in *Figure 2-16* and it can be stated that for the case companies, only situations "3" ($CL_{alt} > CL_{exp} >$ Outcome), "4" ($CL_{alt} >$ Outcome $> CL_{exp}$) and "5" ($CL_{exp} > CL_{alt} >$ Outcome) were relevant. Satisfaction status number "3" reflects a situation in which the disengager experiences both an absolute and a relative supplier weakness. The actual performance of the old supplier is not satisfactory, since it does not meet the expectations ($CL_{exp} >$ Outcome), whereas an alternative supplier would fulfill the expectations ($CL_{alt} > CL_{exp}$) and would be better than the old supplier. Situation "4" represents a situation for the disengaging company that faces a pure relative supplier weakness, since the performance of the old supplier is still satisfying (Outcome > CL_{exp}). Finally, status "5" reflects the absolute supplier weakness situation, since the performance of the old supplier is not satisfying ($CL_{exp} >$ Outcome). However, the alternative supplier does not meet the initially required performance level either ($CL_{exp} > CL_{alt}$), but is still better than the performance of the old supplier. As far as the other satisfaction situations derived in *Figure 2-16* are concerned, none of them were employed in the cases analyzed. This is related to the fact that all of the other situations (1, 2 and 6) would decrease satisfaction, because a switch to an alternative supplier decreases the current outcome of the supplier-buyer relationship. This would either happen to a degree that the minimal expected performance level would not be met anymore (situation 1) or the new supplier's performance is worse than the one of the incumbent vendor (situations 2 and 6).

In summary, it can be postulated that the switching decision is influenced by multiple motivations. These can be related to changes in rewards or efforts either within a specific exchange or in comparison to an alternative relationship. These changes in turn have an impact on the degree of satisfaction of the disengager. The connection among changes in relational rewards or effort, satisfaction, and switching tendencies can be explained in terms of the theoretical model developed (*Figure 2-16*), which therefore seems to be applicable to the explanation of supplier switching.

2) Improving and confirming activities in the supplier-switching decision phase

A further important difference between the supplier switches in the decision phase can be related to the activities of the disengager towards the old supplier. In *Chapter 2.2.2* it was stated that integrated supplier-buyer relationships warrant ample notice before switching and that the supplier should be accorded an opportunity to improve its weak performance. The analysis therefore considered whether the disengager granted the old supplier time to improve

its performance. If a disengaging company grants its old supplier time to improve the performance, it basically reflects a temporary acceptance of a lower outcome than usual (absolute supplier weakness) or in comparison to an alternative supplier's outcome CL_{alt} (relative supplier weakness). However, at the same time, the buying firm expects the supplier to work hard on the performance improvements. If the supplier is successful with its efforts, the dissatisfaction of the disengager may vanish and no switching tendencies will arise. Thus, it can be stated that companies only grant time for improvements when they are confident that the efforts of the supplier will ultimately lead to a return to satisfactory performance levels. However, the probability of success for the improvements can only be estimated and is therefore subject to uncertainties. Due to this, granting the weak supplier time for performance improvements carries the risk that the disengager is only extending the period in which it faces opportunity costs – shown in *Figure 2-8* –[416] that are related to decreased relational reward or increased relational effort, thereby weakening its own competitiveness. *Figure 3-4* shows the amounts of time that the disengaging companies granted the old supplier for performance improvements, and the confidence the disengager had with regard to the probability that the supplier's performance would improve.

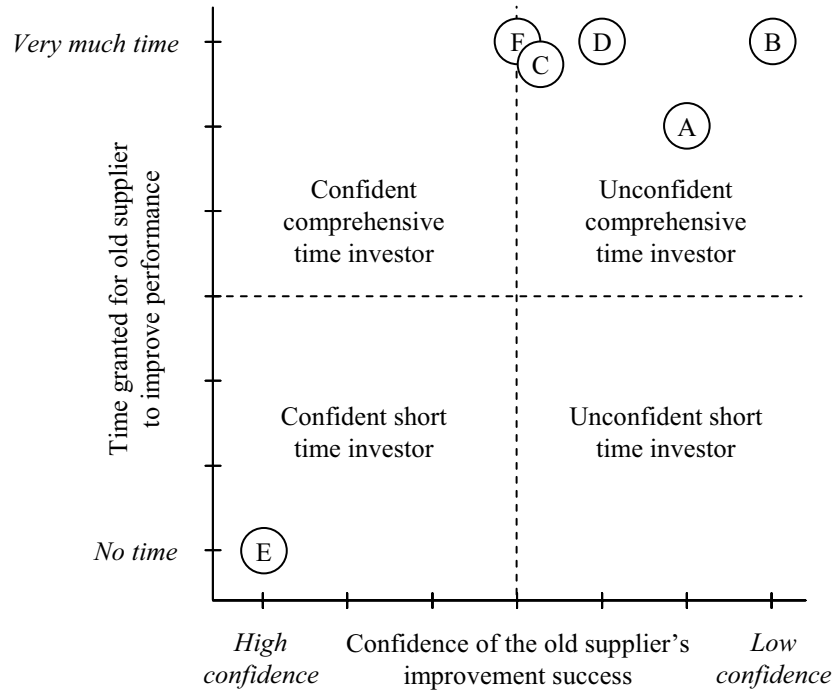


Figure 3-4: Time invested in performance improvements relative to the anticipated improvement success

It can be stated that all case companies granted their old suppliers time to improve their current performance (Outcome) to the expected level (CL_{exp}). However, no absolute value in terms of months or days is displayed, so the position of two or more case companies at the same point on the y-axis not necessarily reflect equal lengths of time. The illustrated relation-

[416] This refers to the resource consumption of type "b" through supplier-development initiatives described in Chapter 2.2.2.

ship between the length of time granted for the old supplier's performance improvements and the disengager's confidence of the old supplier's improvement success reveals that all disengagers invested relatively protracted lengths of time, but at the same time, from the outset they were not very confident of the success of the old supplier's performance-improvement efforts. The companies in the upper right-hand quadrant are labeled as "*unconfident comprehensive time investor.*" These are the ones that actually know that a supplier switch is inevitable, or at least very likely, but still grant time for the old supplier to improve. The "*confident comprehensive time investor*" quadrant refers to disengagers that grant the old supplier plenty of time to improve because they believe that the supplier will get better in a sufficiently short time. The lower quadrants refer to disengagers that do not grant very much time – if any – for the old supplier's performance improvement. They do this because they believe that either no improvements will occur, or they that would simply take too long, making long-term investments a waste of resources. These are "*confident short-term investors.*" The only case company within this category is "E." This company did not grant the supplier time for improvements, since not real supplier weakness was identified and the decision to switch was more related to a strategic decision of the disengager. Hence there was no need to grant time. In the other category, the "*unconfident short-term investor,*" the disengager invested only a small amount of time and was not sure that this was the right strategy. In the case of the supplier switches analyzed, it can be stated that the disengagers had second thoughts about the amount of time they granted their old suppliers. Retrospectively, most disengagers stated that it was actually obvious from the first signs of supplier weakness that the particular supplier-buyer relationship had no future. This leads to the question of why the disengagers granted time for the old suppliers to improve when they doubted that the supplier's improvement efforts would be fruitful. A possible explanation is related to the barriers to supplier switching presented in *Chapter 2.2.2.* A bias towards existing suppliers, internal power structures, habit and an avoidance to change, personal relationships between employees, lack of information and communication, opportunistic behavior, specific investments, switching costs, and lack of alternative suppliers may prevent the disengagers from switching to new suppliers earlier. Another explanation could be the disengager's desire to avoid a potential loss of reputation on the supply market if the supplier was denied a chance to improve its performance.

Besides the time a buyer can grant its supplier for performance improvements, the disengager can decide actively to support the old supplier in its effort to catch up with its absolute or relative weakness by investing its own resources. This can happen in the form of a resource-consuming direct supplier development initiative of the disengager,[417] which aims for an improvement in the performance (Outcome) of the old supplier-buyer relationship. The

[417] This refers to the resource consumption of type "a" through supplier-development initiatives described in Chapter 2.2.2.

following figure shows the *ex ante* invested resources on the disengager's side and their *ex post* perceived adequacy *Figure 3-5*).

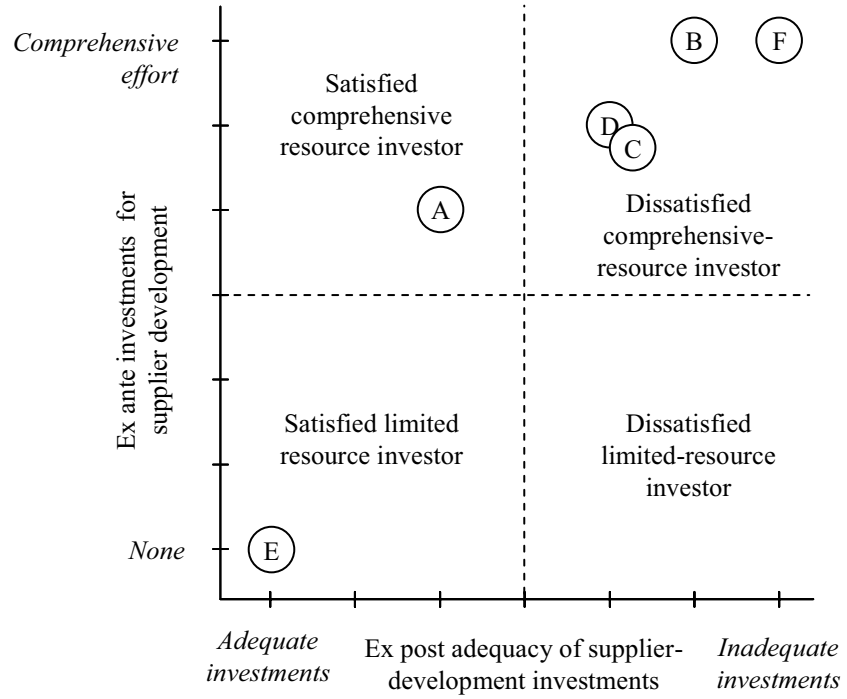


Figure 3-5: Ex ante *invested resources for supplier development and their* ex post *perceived adequacy*

The figure shows that all case companies put very strong efforts in supplier-development initiatives. The dimension of the x-axis is the *ex post* perceived adequacy of the invested resources from the perspective of the disengager. These two dimensions create a matrix with four quadrants, which reflect different combinations of investments and perceived adequacies.

The quadrant on the lower left-hand corner of the matrix represents a situation in which the disengager invested limited resources (if any), which is perceived as adequate retrospectively. Thus, this quadrant describes *"satisfied limited-resource investors.*" The only case company in this quadrant is again company "E." They did not invest any resources, since there was no supplier weakness and they were confident that this was the correct decision. The quadrant in the lower right-hand corner refers to situations in which the buying firm did not invest comprehensive resources in supplier-development initiatives, but doubts the adequacy of this decision. This doubt may be caused by thoughts that even the limited amount of invested resources was excessive, or they can be based on the opposite opinion. The latter would mean that the disengager thinks that they should have invested more into the development of the old supplier-buyer relationship. However, it can be stated that disengagers in this quadrant are unsatisfied due to their inadequate resource investments, so the quadrant is labeled as "*dissatisfied limited-resource investors.*" The upper left-hand quadrant refers to disengagers that invested substantially in the improvement of the old supplier-buyer relationship and think that these investments were adequate, even though the old supplier was ultimately switched. Thus, this quadrant comprises *"satisfied comprehensive-resource investors.*" Case company "A" is

within this quadrant and they stated that it is one of their policies to show strong commitment to the old supplier and emphasize this with visible activities towards the old supplier. The last quadrant in the upper right-hand corner of the matrix displays "*dissatisfied comprehensive resource investors*." The quadrant incorporates four of the six case companies, which reveals that most of the disengagers in this study invested substantially in supplier-development initiatives but subsequently regretted their decision. *Ex post*, they think that it was a waste of resources that could have been used better for something else. The reasons for investing in the old supplier-buyer relationship instead of switching earlier to an alternative supplier can also be related to the barriers of supplier switching.

In general, if a disengager is situated in the upper right or in the lower right quadrant either in *Figure 3-4* or *3-5*, a potential for improvement can be identified, since resources have been used in an unsatisfying way. It should be the goal of the disengagers to end up in either the upper or the lower left quadrant, which represent situations in which the disengager is satisfied with its previously made decision regarding supplier-development initiatives. This can be achieved if the disengager knows what amount of investments (in terms of time and resources for supplier development) would be appropriate for the particular supplier-buyer relationship, in order to make the decision regarding the level of investment less arbitrary and more transparent. This assessment can be defined as another activity in the supplier-switching decision analysis phase.

The empirical research further revealed that the supplier-switching decision analysis phase is triggered by early signs of supplier weakness – either relative or absolute – identified by the disengaging company through supplier-monitoring activities. After this weakness was identified, three kinds of activities were started by the analyzed companies. The first set of activities has already been described and is concerned with an improvement of the performance (Outcome) of the incumbent supplier. These activities are related to the voice strategy, since the majority of the disengagers granted the old supplier time to improve and invested their own resources into supplier-development initiatives (with the exception of company "E.")

The activities in the second and third set are related to the process steps of supplier selection, introduced in *Chapter 2.1.2*, and comprise the activities of supplier identification, supplier delimitation, supplier pre-selection, supplier negotiation and supplier selection. They firstly aim to find potential new suppliers through searching activities. Case companies "A," "B" and "C" found their new suppliers through intensive supply market research. Disengagers "D" and "F" already had exchange relationships with the alternative supplier, who was thus known by the purchasing company, making comprehensive supply market research unnecessary. Case company "E" was approached by the new supplier through marketing activities and thus had a more passive role as far as activities aimed at finding new suppliers are concerned. The second set of activities that are more relevant to the alternative supplier-buyer relationship aim for a verification of the alternative supplier's performance. These activities are related to

the supplier-selection processes of the funnel model, presented in *Chapter 2.1.2*, and primarily comprise self-disclosures of vendors and on-site assessments. All companies performed these verification strategies, with different results. Case companies "A," "B," "C" and "F" stated that they had comprehensive knowledge of the new supplier's capabilities, whereas company "E" intensively tested the new supplies and hence had a very comprehensive picture of the new supplier. Interestingly, even though the alternative supplier of disengager "E" was known to the company beforehand, the interviewee stated that they only had a moderate understanding of the vendor's potential. This is due to the fact that the particular supply object was never delivered to the disengager by this company before.

In summary, it can be stated that disengagers firstly identify a supplier weakness though an evaluation of their satisfaction. Afterwards, activities will be initiated that aim either to improve the old supplier's performance (Outcome), find potential alternative suppliers, or ascertain the alternative supplier's performance level (CL_{alt}). After these activities have been performed, the disengager evaluates its satisfaction again on a continuous basis by comparing the current outcome of the supplier-buyer relationship with the potential outcome of the alternative (CL_{alt}) and the expected outcome for this relationship (CL_{exp}) and decides whether to switch or not. The activities within the supplier-switching decision analysis phase are illustrated and systemized in *Figure 3-6*.

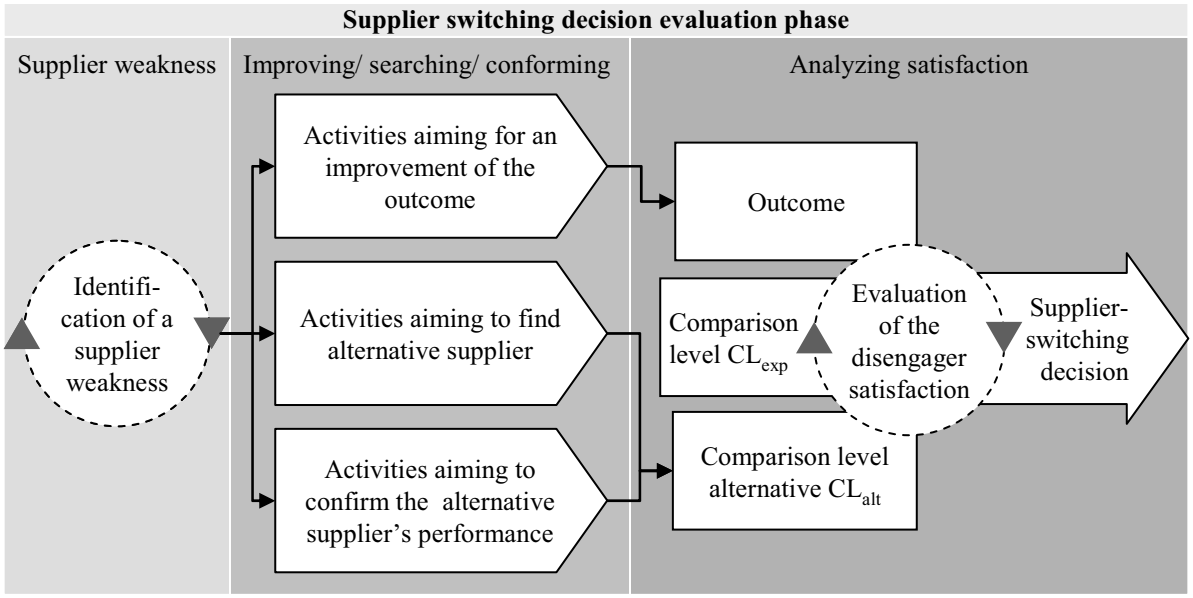


Figure 3-6: Activities in the supplier switching decision evaluation phase

3.3.3 Activities in the supplier-switching execution phase

The paragraph below analyses the activities in the supplier-switching execution phase and first describes the various ways in which the case companies planned the switch and which switching strategy was followed. How the disengagers steered and monitored their switching

activities will then be discussed. The second section presents the analysis of the activities and the conditions with respect to the dyadic relationship layers.

1) Planning, steering, and monitoring activities in the supplier-switching execution phase

The study of activities and conditions in the supplier-switching execution phase revealed various challenges and different approaches taken by the case companies to deal with them. After the decision to replace the incumbent supplier with a new one was made, the disengagers started to plan the upcoming switching processes intensively. However, in a comparison of the effort and scope of *planning*, some differences between the disengagers can be identified. All disengagers installed a project plan for the whole switching process. Some of these plans included detailed process descriptions and milestones (case companies "A," "B," "D," and "E") and others listed "to-dos" (companies "C" and "F"). Only company "A" followed and pre-determined internal directives that defined crucial tasks and activities for supplier switches in general. The plan was adapted for the particular case. The project plan of company "F" is included in a standardized invitation to tender and thus has a predetermined character as well. The other companies tailored an individual switching plan to their particular case.

The planning of the switching activities comprises the determination of the switching strategy. As explained in *Chapter 2.2.2,* the switching strategy can be divided into the dissolution and the integration strategy. The dissolution strategy refers to the way the disengager communicates its decision to switch to the old supplier and the degree to which the buyer wants to avoid further negative impacts for the old supplier. The integration strategy by contrast is more concerned with the new supplier and describes how the disengager supports its new exchange partner in the ramp-up process, and defines the degree of specific investments.

As far as the *dissolution strategy* is concerned, it can be stated that the majority of the analyzed case companies implemented an other-oriented approach towards the old supplier. This means they were all strongly concerned about the well-being of the old supplier. The dissolution strategies applied are illustrated in *Figure 3-7*.

According to the displayed locations of the case companies within the portfolio, one exception to the other-oriented approach can be discerned. Company "C" seems to be somewhat stuck in the middle, which can be due to the special power within the switched supplier-buyer relationship. The old supplier was substantially bigger than "C" and the company feared the reaction of the supplier, if they were to communicate the supplier switch very frankly. However, this degree of secretiveness led to an unintended situation in which a strong avoidance of negative impacts for the old supplier could not be achieved anymore.

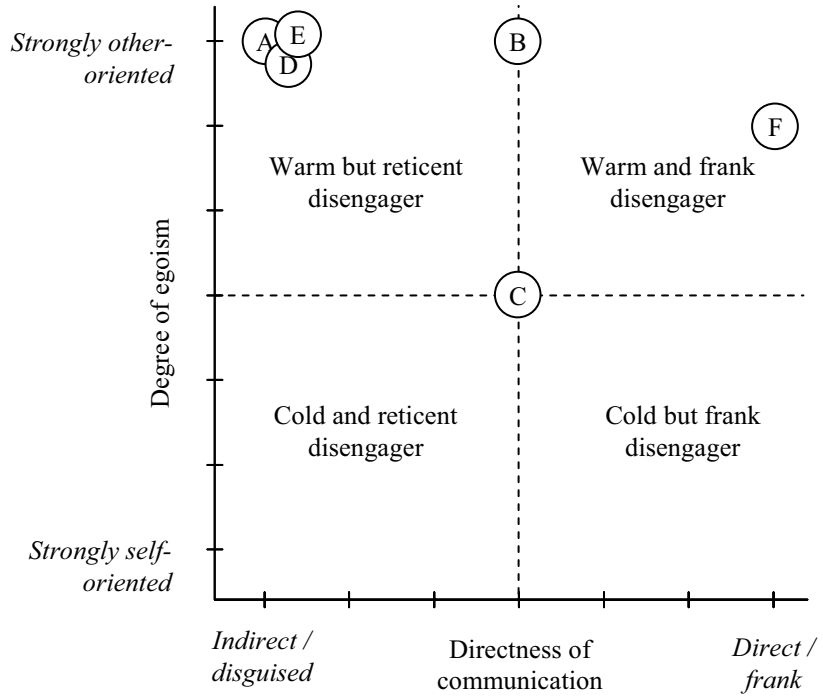


Figure 3-7: Dissolution strategies of the case companies

The lower left-hand quadrant refers to "*cold and reticent disengagers.*" These disengagers take the possibility that the old supplier might experience additional negative consequences from the supplier switch into account, but focus on their own interests. However, they do not communicate their decision to switch frankly and directly to the old supplier, so this strategy usually needs more time than a directly communicated supplier switch. Furthermore, this disengaging strategy increases the old supplier's uncertainty of the relationship's continuity.[418] Companies in the quadrant on the bottom right-hand quadrant are the "*cold but frank disengagers."* These disengagers do not care about the old supplier's well-being too much. This strategy hurts the supplier but makes a rapid disengagement possible. However, these benefits might be mitigated by the damage done to the disengager's reputation. The upper left-hand corner includes the "*warm but reticent disengagers*," which avoid hurting the old supplier. However, the secretive communication behavior increases the old supplier's uncertainty about the future of the relationship. Additionally, this disengaging strategy needs more time than a direct communication approach. The last quadrant is the "*warm and frank disengager.*" Companies in this quadrant avoid hurting the old supplier too, and they communicate their intention to switch very frankly and directly. This makes a rapid disengagement possible, but due to the other-orientation, the disengager gives up some of its self-interest as well.

Besides the dissolution strategy, the integration strategy of the disengager completes the supplier-switching strategy. As stated in *Chapter 2.1.3* the empirical research aimed for a description of the short-term ramp-up support and the long-term specific investments of the

[418] The following statements are related to the theoretical explanations of Chapter 2.2.2.

disengager in order to describe the disengager's integration strategy. The applied integration strategies of the case companies are displayed in *Figure 3-8*.

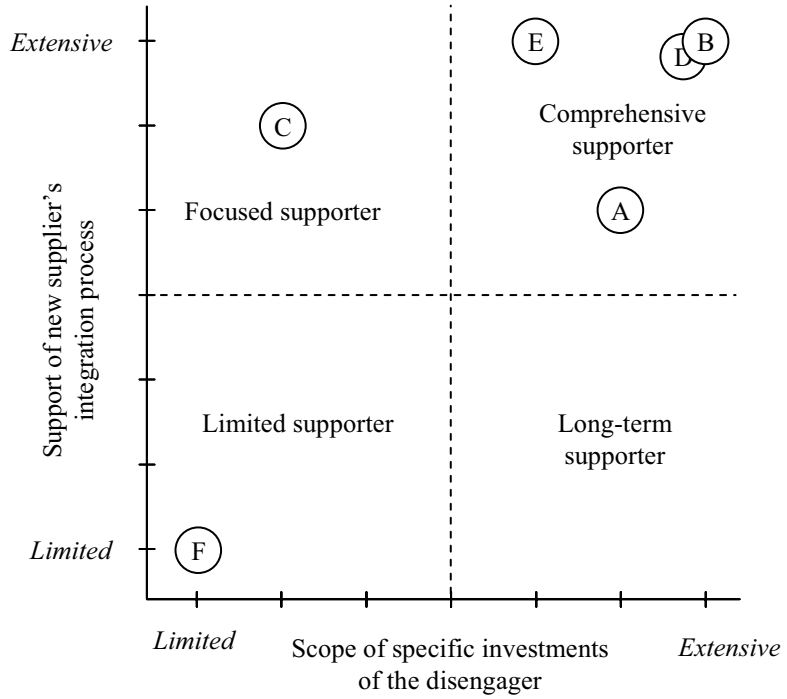


Figure 3-8: Integration strategies of the case companies

The quadrant in the bottom left-hand corner comprises the "*limited supporters.*" These companies do not support their new suppliers comprehensively in the ramp-up phase of the new business, nor do they install comprehensive specific investments. This approach seems to be practical only if the integration between the new supplier and the buying organization is limited and all necessary adjustments can be regulated by the contract. This was the case with case company "F," since after the new supplier was up and running no continuous adjustments or intensive communication was necessary. The disengagers in the lower right corner of *Figure 3-8* represent the "*long term supporters.*" These companies do not focus on the ramp-up phase of the new supplier, but are more engaged in relationship-specific investments that would foster the generation of relational rents in the long run. Examples for this category could be supplier-buyer relationships created in order to develop a new product. In this case, the disengager might not even have the capabilities to support the new supplier in its ramp-up phase, but can only provide general assistance by, for example, making all relevant data easily accessible. The disengagers in the upper left corner are the "*focused supporters.*" They want to make sure that the new supplier achieves superiority relative to the old supplier as soon as possible. Thus, they grant them support for their ramp up-phase but do not heavily invest in relationship-specific resources. One reason for that might be that there is no need for specific investments for a particular supplier-buyer relationship, since the procedures are more or less standard. This was the case for company "C," which needed to support the new supplier very strongly in the beginning, but since the supply object was not very specific, no specific

investments were needed. The last quadrant in the upper right-hand corner represents the "*comprehensive supporters.*" These companies do both: they support the new supplier in its ramp-up phase and they invest in specific resources that should further improve the supplier-buyer relationship. This integration strategy is purposeful when the two companies will be engaged in an integrated relationship that requires continuous communication and mutual adjustments. This is true of companies "A," "B," "D" and "E".

In addition to planning the supplier switch and developing the switching strategy, the disengagers *steered* the activities differently. However, not all case companies used the same type of organizational device. Most of the case companies used a cross-functional project team to steer the switch (companies "B," "C," "D" and "E"). These teams incorporated members of various departments but always included the purchasing department, quality insurance, and engineering. All of the project teams had a project leader that belonged to the purchasing department. Furthermore, the project teams of the disengagers were mostly mirrored by the new suppliers with a similar organization in order to facilitate easy communication processes. Companies "A" and "F" chose another approach and did not install a project team. They assigned the responsibility for the supplier switch to line-members who performed the switch within their regular tasks and responsibilities.

Since the disengagers planned the activities of supplier-switching in the switching execution phase, they monitored the progress of the plan as well. However, the intensity of *monitoring* switching activities differed between the case companies. Only companies "B" and "D" monitored and supervised the supplier-switching progress intensively. They utilized dedicated controllers and used predetermined escalation processes as soon as a deviation from the plan was identified.

The joint discussion of the empirical case examples continues with the activities on the dyadic relationship layers, which will be analyzed in the following section. The analysis is systemized according to the dyadic relational layers presented in *Chapter 2.3.2* and starts with a) the institutional layer, which is followed by b) the financial layer, c) the operational layer, d) the informational layer, and ends with e) the social layer.

a) Institutional layer

The institutional layer of dyadic supplier-buyer relationships was analyzed in order to capture primarily legal issues between the disengager and the old and alternative suppliers. First of all, it can be stated that none of the analyzed case companies sued their old supplier to recover compensation for damages caused by the weak performance of the old supplier. One reason for the disengager's restraint could be the fact that none of the buying companies faced serious financial damages resulting from the old supplier's weakness or the supplier's behavior in the switching phase. Furthermore, the old suppliers in the case studies did not cause any

damage or deliberately reduce their performance, so there was no evidence of malicious activity perpetrated against the disengagers. In addition to that, none of the old suppliers sued the disengaging company. Only case company "C" faced some attempts at legal action from its old supplier, which wanted to get compensated for lost revenues, but the attempts were finally fruitless. Ultimately, legal action might be of low importance while switching suppliers, since many details regarding a potential dissolution with an old supplier tend to be regulated by explicit exit clauses in the contract for the particular supplier-buyer relationship. However, not all of the disengagers had an explicit exit clause in their supply contracts. Interestingly, company "C" was one of those companies, and was the only one that experienced legal problems with its old supplier. Company "D" did not have an exit clause either, but since the old supplier was aware of its bad performance, there was no dissent regarding the switching need of the disengager.

As far as the contract negotiations with the new supplier are concerned, the picture is a little more heterogeneous. Company "C" stated that negotiations with the new supplier were more difficult than usual, due to cultural differences. Company "F" faced some difficulties in the contract negotiation as well, but these were not caused by opportunistic behavior from the supplier, which could have taken advantage of the case company's bad current supply situation, but was associated with the difficult agreement concerning a consignation stock.

In general, it can be postulated that the activities on the institutional layer, such as the termination of the old and negotiation of the new contract, as well as the organization of legal actions against the old vendor, seem to be of secondary importance in the analyzed cases. The termination of the old contract was more or less a standard procedure. However, this might not necessarily be the case for other examples of supplier switches. Legal activities are likely to become paramount for a successful supplier switch as soon as the disengager experiences financial damages and the old supplier is not wiling to pay compensation for those losses.

b) Financial layer

The analysis of the financial layer of dyadic supplier-buyer relationships aims on the identification of the financial impact of supplier switches and supplier weaknesses. All disengagers stated that the supplier weakness did not cause any financial damage to them. This is consistent with the disengager's statements regarding their cash-flow situation during the switch. Only case company "A" experienced a temporary decline of the cash-flow situation within the particular supplier-buyer relationship; the others did not report a change. However, the statement that the supplier weakness has no impact on the disengager's financial performance can be stressed and should be discussed more in depth.

A supplier weakness can be relative or absolute, as shown in *Chapter 2.2.2*. As stated, a relative supplier weakness occurs in the situation in which the old supplier is actually not

performing badly, but an alternative supplier could perform better and could offer a more competitive supplier-buyer relationship. Thus, as long as a disengager does not utilize an available and better-performing alternative for a particular supply object, opportunity costs will be incurred. Although four of the analyzed disengagers experienced a relative supplier weakness, they stated that the supplier weakness did not have any negative impact on their financial situation. However, the neglect of potential negative impacts for the disengager's financial performance through a relative supplier weakness can be related to the fact that opportunity costs in this respect are hard to determine. An exact determination of these costs could require too many resources, thereby making the cost-benefit ratio unattractive. This in turn could drive the disengager's decision to neglect the consideration of opportunity costs.

Besides the relative supplier weaknesses, some disengagers faced absolute supplier weaknesses as well. This kind of supplier weakness refers to situations in which the performance of the existing supplier has declined in comparison to the past. In particular, cases in which the old supplier has increased its prices or the quality has declined (cases "B," "C," "E" and "F") will impact the actual cost per unit. Even if the old supplier compensates the disengager for bad-quality deliveries, the absolute supplier weakness might increase transaction costs through the increased use of rare management resources. This increase in transaction cost was experienced by case companies "A," "B," and "C." However, these companies also stated that the experienced supplier weakness did not negatively influence their financial performance. Another point that makes the statements of the case companies in terms of the financial impact of the supplier weaknesses somehow inconsistent, is the fact that all analyzed case companies strongly supported the old supplier's performance improvement efforts with their own resources before the switching decision was made. These supporting activities consumed either management time or other resources that are valuable to the disengager. These contradictory statements made by the disengagers cannot be properly explained. That said, one possible reason is that the disengagers are simply underestimating the financial impact of weak suppliers on their financial performance. This could be related to a lack of transparency of the actual cost of supplier weaknesses. This in turn can be caused by missing monitoring tools and instruments that would shed light on the costs of supplier weaknesses. Another explanation could be that the companies do not see the increased transaction costs or the supporting activities for the old supplier as "costs," but more as a necessary investment in the old supplier-buyer relationship. However, none of the analyzed case companies actually performed an activity that is related to the calculation of the costs of supplier weaknesses.

As far as the other elements on the financial layer are concerned, it can be stated that none of the disengaging companies involved external financial institutions in the supplier switch. This indicates that the activities that normally require financial institutions were not of major importance for the companies analyzed. Contrary to that, the implementation of specific relational investments for the new supplier-buyer relationship was particularly important for companies "A," "B" and "D." Interestingly, these are the companies with established ex-

change relationships for relatively complex supply objects, which needed to be delivered in a continuous demand-tailored or just-in-time approach. Both are elements that drive the difficulty of managing the supply situations and foster the need of mutual adjustments (see *Chapter 2.1.2*). These investments are further related to supplier-switching costs, since they represent one-time costs of switching from one supplier to another.

In summary, it can be stated that the activities on the financial layer are concerned with the assessment of the financial impact of supplier weaknesses and switching cost. Whereas the switching cost was analyzed by all disengaging companies in advance, the evaluation of the cost of supplier weakness, and hence the assessment of the financial disadvantage a company experiences if it stays with a weak supplier, was somewhat neglected.

c) Operational layer

One important issue that was steered by the disengagers on the operative layer is the increase of safety stock. This was seen as a mandatory activity by almost all case companies (with the exception of "E") in order to secure the smooth supply of the purchased good. As far as the operational layer is concerned, it can be stated that some of the case companies faced challenging problems in the supplier-switching execution phase (see *Figure 3-9*).

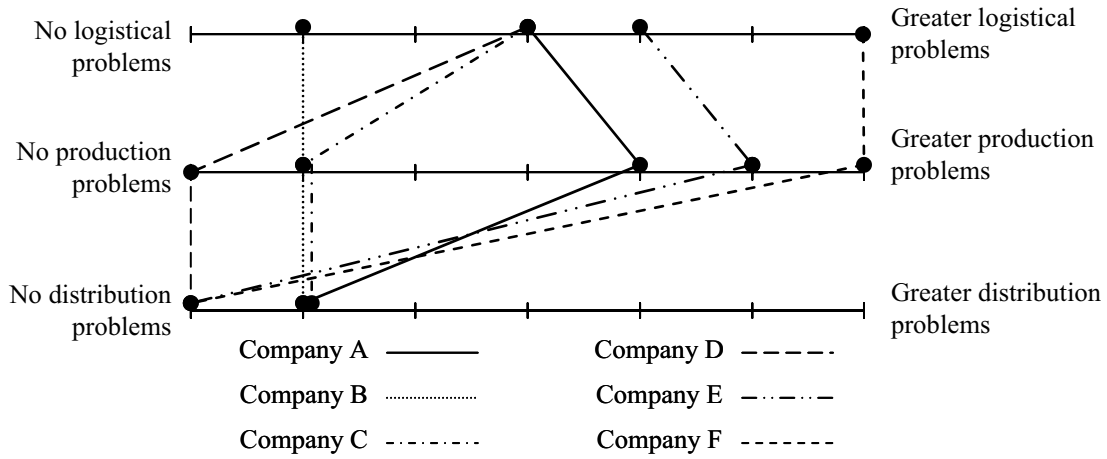


Figure 3-9: Operational problems in the supplier switching execution phase

The majority of problems in the supplier-switching execution phase are related to logistical and production challenges. Five of the six case companies experienced at least moderate logistical problems while they performed the supplier switch. The roots of the logistical problems can be traced back to either the old supplier's bad performance (such as case company "H," which had trouble getting deliveries from the old supplier on time) or unforeseen or unconsidered logistical challenges in the new supplier-buyer relationship (such as case company "E," which needed to deal with new means of transportation). The logistical problems can further lead to production problems if inbound supplies are insufficient to keep the production running (e.g. case company "F" needed to shut down some of its energy-

generating turbines due to a lack of the requisite high-precision pin supplies). Other production problems are rooted in the interaction of the old supply object and the new one (e.g. company “A” experienced a slightly increased rejection rate due to slightly different dimensions of the supply object – even though it was within the specifications – which caused trouble for its production machines). However, none of the case companies faced any noteworthy difficulties on the distribution side, since deliveries towards the customers of the disengagers were continued without any delays or problems of any kind. Even the disengagers with logistical or production problems did not report any distribution difficulties. This might indicate that these disengagers had sufficient buffers, in terms of capacity or time, which protected them from problems on their customer side. The problems that occur in the switching process require management actions that implement countermeasures against logistical, production and distribution-related challenges. These measures are of high importance in supplier switches. Another central activity that is related to the operational layer of the supplier-buyer relationships – the support of the new supplier in the ramp-up phase – was described at the beginning of this subchapter in the explanation of the applied integration strategies of the case companies.

d) Informative layer

As far as the analysis of the activities and conditions on the informative layer of dyadic supplier-buyer relationships is concerned, it was found that the disengagers exchanged relevant switching information between the switching actors differently. The way in which the disengagers communicated their switching decision to the old supplier was discussed in the analysis of the applied dissolution strategies. In the discussion of this strategy it was found that the disengagers chose communication behaviors ranging from direct to indirect communication. Even if the communication of the switching decision differed in terms of directness towards the old supplier, all case companies announced the upcoming supplier switch early and directly to further relevant switching actors. These can be internal stakeholders of the disengagers (e.g. the warehouses of case company “F”) or external organizations (like the customer for company “A”). If external institutions have the power to refuse the supplier switch - due to quality or security concerns, for example - the communication with those institutions becomes a central activity in the supplier-switching execution phase.

Another important communication activity is concerned with the knowledge-sharing processes between the old supplier and the disengager. The transfer of knowledge between these two actors can be crucial for the performance of the new supplier-buyer relationship. This was the case for company “E,” which depended on design information from the old supplier. However, this dependence was anticipated, so the old supplier was contractually required to share its knowledge with company “E” in order to make supplier-switching possible. A similar configuration was found at company “B,” which demanded the product-design

knowledge from its old supplier in order to reduce design efforts in the case of supplier-switching. The other companies did not receive relevant product knowledge to the same extent. This circumstance can be due to the fact that the company already had all relevant information (e.g. company “F”), or knowledge of the supply object was of limited value, since the new supplier could develop, or already had, a new design (e.g. case company “D”). However, independently of the value of the old supplier’s knowledge of the supply object to the disengager, the old and the new supplier did not communicate directly in any of the analyzed cases.

Besides the intensity of communication activities between the actors, the quality of these activities has to be considered too. In all cases, the disengagers found that communication between them and the old supplier remained professional and friendly rather than emotional or subjective. Furthermore, the disengagers were not aware of any serious complaints regarding their behavior during the supplier switch. One reason for this might be that the old suppliers did not want to strain the relationship further, since they were probably eager for future business with the disengager.

e) Social layer

The primary interest of the analysis of the social layer of supplier-buyer relationships was the development of the trusting relationship between the disengager and the old and new suppliers during the supplier-switching execution phase. As far as the old supplier is concerned, the majority of the disengagers managed to maintain a decent trusting relationship. However, the trust toward the old supplier declined to a more neutral level in the case of companies “C” and “F.” This development began even before the switching decision in the two cases. On the one hand, the reason for this might be unfulfilled promises of the old supplier (company “F”); on the other hand, it might be due to an increasing general discomfort in the exchange relationship with the old supplier (company “C”). The development of trust between the disengager and the new supplier was relatively fast for most case companies. Only company “C” reported complications. These difficulties were mainly caused by cultural differences between the two companies. However, the disengager did not prepare its employees in advance with, for example, cultural training sessions that might have helped them to perform better in this relationship. In general, training of employees in respect to cultural or technical understanding has been of low importance for most of the disengagers. Only company “B” conducted training for its employees in order to support a smooth integration of the new supplier. Furthermore, company “B” frequently met all of the involved actors personally. It is assumed that this behavior fostered the quick development of trust within the new supplier-buyer relationship. Case companies “D” and “E” chose intensive personal communication and contact as well, which was regarded as necessary in order to perform a successful supplier switch. However, the other companies chose less personal and less frequent contact with the

parties involved, due to the consideration that the new supplier-buyer relationship did not require intensive personal contacts in order to perform well.

In summary, it can be postulated that the empirical research found that the activities in the supplier-switching execution phase aim for either the dissolution of the old supplier or the integration with the new one. The activities are objective-driven and aim for the achievement of specific technological, economic and switching-related objectives that are associated with the particular supplier switch. The objectives can be derived from the comparison level of the alternative (CL_{alt}) that was used to evaluate the attractiveness of the supplier-switching decision: because the alternative supplier had a higher potential than the incumbent one, the disengager will strive to achieve this level of performance. Thus, the case companies follow some technological, economic, and switching-related objectives in order to achieve the anticipated outcome of the new supplier (CL_{alt}). However, the research further revealed that the disengagers also put strong efforts into planning activities. Accordingly, the supplier-switching execution phase begins with the planning of the dissolution and integration activities. These affect the dyadic relational layers, target the achievement of technological, economic, and switching related objectives, and are guided by a well-defined dissolution and integration strategy. The activities are than steered by dedicated employees on the relational layers. Furthermore, the disengagers monitored the efficiency and effectiveness of the activities with respect to the defined objectives. If a disengager identified plan deviations, corrective activities were performed. These activities will either affect the way of conducting the dissolution or integration activities (activity adjustment), or will have an impact on the previously developed plan (plan adjustment). At the end of the supplier-switching execution phase, the monitoring data gathered is used to evaluate the success of the supplier switch. This is conducted along the dimensions of technological success, economic success and switching-related success in the supplier-switch success evaluation phase. The activities within the supplier-switching execution phase are illustrated and systemized in *Figure 3-10*.

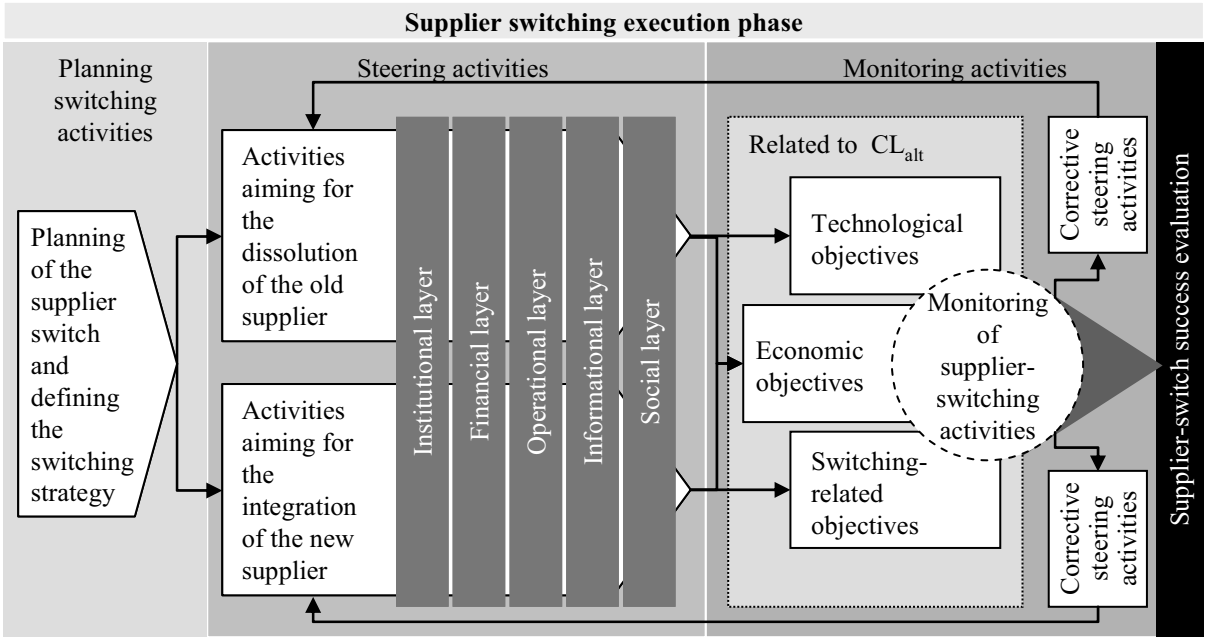


Figure 3-10: Activities in the supplier-switching execution phase

3.3.4 Activities in the supplier switch success evaluation phase

The activities in the supplier-switch success evaluation phase are concerned with the *ex post* assessment of the supplier switch. The success evaluation of the supplier switch incorporates an assessment of *a) the economic success dimension*, *b) the technological success dimension* and *c) the switching-related success dimension*. The performance of the new supplier within these success dimensions represents the outcome of the alternative supplier. In order to evaluate whether the achieved outcome is satisfying, disengagers compare the outcome with the expected performance of the new supplier and the old outcome in the previous supplier-buyer relationship, which now represents the alternative. This comparison leads to the overall supplier-switching success. In order to accomplish the theoretical objective for this research, how the achieved supplier-switch success can lead to a competitive advantage for the disengager must be analyzed.

Isolated assessment of the single success dimensions

Due to monitoring activities in the supplier-switching execution phase, the disengagers gathered information about the current condition of the newly established supplier-buyer relationship. This information allows them to perform an assessment of each of the single switching performance dimensions in relation to the comparison levels, which were determined prior to the supplier switch.

a) Economic success dimension assessment

The case study companies made testimonies regarding the overall economic success, the development of the cash flow situation and the ease of money transfers, the piece price, and the price of the supply object in consideration of total cost of ownership. The opportunity to get a better price for the supply object was the main objective for case companies "A," "C" and "D." These companies obtained a strong or very strong improvement in the unit costs and the total cost of ownership. However, even some of the other disengagers (companies "B" and "E") accomplished strong decreases in prices and total costs of ownership, although this was not their primary concern. Only company "H" experienced a slightly increased unit price in comparison to the old supplier, but this was compensated by an improvement in the total cost of ownership. The cash flow situation with respect to the purchased supply object improved for four of the disengaging companies and remained the same for companies "E" and "F," which also achieved the lowest improvement of the total costs of ownership. However, it has to be stated that these two companies primary motivation for switching was not economic in nature. The money transfer proceedings were not an issue in the analyzed cases, and did not change after the switch.

At the end, the case companies were asked how they would rate their economic situation after the switch on a scale from one to seven, in which the numbers represent different degrees of improvement: 1 = much worse, 2 = worse, 3 = slightly worse, 4 = same, 5 = slightly improved, 6 = improved, 7 = strongly improved.

The economic situation of the disengagers improved in all cases. However, the companies that were motivated to switch their supplier by price issues ("A," "B," "C" and "D") improved their economic situation more than companies "E" and "F," which were primarily motivated by strategic or supply-security considerations.

b) Technological success dimension assessment

With respect to this success dimension, the case companies experienced improvements or deteriorations in the quality of the supply object, the rejection rate and the innovativeness of the new supplier, as well as in the overall technological success of the switch. The quality of the supply object remained the same for companies "C," "E" and "F." This result is consistent with an unchanged rejection rate for these companies. In contrast to that, "A," "B" and "D" achieved strong quality improvements. However, while "A" and "B" achieved a clearly reduced reject rate as well, "D" stated that the rejection rate temporarily increased after the switch. As far as the innovativeness of the new supplier is concerned, companies "C" and "E" did not achieve an improvement, so the companies did not gain any improvement in their general technological situation. This general improvement was estimated by the disengagers with reference to a scale from one to seven. As in the economic success dimension, the

answers were interpreted in comparison to the old supplier-buyer relationship. The numbers represent different degrees of improvement: 1 = much worse, 2 = worse, 3 = slightly worse, 4 = same, 5 = slightly improved, 6 = improved, 7 = strongly improved. Because "C" and "E" did not advance the technological performance in the new supplier-buyer relationship, the benefits they derived from their supplier switches are primarily related to an improvement of the economic situation, achieved through a decreased price and total cost of ownership. This applies to company "A" as well. Even though "A's" new supplier offers a better quality and rejection rate, the new vendor is not more innovative than the old supplier is. At the end, company "A" stated that its technological situation remained the same after the switch. In comparison, case companies "B," "C," and "F" all improved their general technological situation and the innovativeness of supplier, so "C" and "F" achieved the targeted objective of improving quality and technology within the new supplier-buyer relationship.

c) Switching-related success dimension assessment

The analysis of the *switching-related success dimension* comprised the development of the social linkages between the disengager and the old supplier, information about the disengager's reputation in its business environment, the duration and costs of the switch, and the accomplishment of goals that are not related to the economic or technological success dimensions. As far as the social linkages between the old supplier and the disengager are concerned, the case companies experienced different developments. With the exception of case company "D," all disengagers reported a deterioration of their social relationship with the old supplier as a result of the supplier switch. However, this decrease in the quality of the social relationships came in different intensities. Companies "A" and "C" in particular stated that the quality of their social relationship with the old suppliers decreased substantially. But while company "A" declared that the supplier switch in general had no negative effect on its reputation in the relevant business environment, which also applies to companies "B," "D," "E" and "F," company "C" identified a decline of its reputation. One explanation for this might be the fact that company "C" chose the most selfish dissolution strategy in comparison to the other disengagers and did not emphasize the old supplier's well-being as much. Furthermore, "C" indicated that they believe that their old supplier perceived their switching behavior as more unfair than fair. This is contrary to the other disengagers, who stated that the old supplier perceived the disengager's switching behavior as rather fair. As far as the behavior of the old suppliers towards the disengagers is concerned, only company "F" holds the view that the old supplier's behavior was unreasonable. The other companies experienced rather fair behavior from their old suppliers. Furthermore, all case companies except "B" can imagine starting a new exchange relationship with their old suppliers in the future, as long as certain performance parameters can be improved. In the case of company "B," the vendor is not available for the particular supply object anymore and thus a new relationship cannot be started anyway.

As far as the anticipated duration of the supplier switch is concerned, only company “D” and “E” experienced a deviation. “D” took more time than anticipated and “E” took less. Case company “D” needed more resources for the supplier switch in general, since the anticipated supplier-switching costs were all higher as well. The switching costs were higher for company “C” too. The other disengagers incurred the costs that were anticipated before the switch was performed. Furthermore, all companies accomplished their *ex ante* defined objectives for the switch, which were primarily economic considerations for companies “A,” “C,” and “D.” The other companies were motivated by more strategic objectives. Company “B” was forced to replace the old supplier due to a strategic decision of the vendor to leave the particular business area. “E” wanted to reduce its dependence to only one source of supply and furthermore wanted to be part of two different technological developments. Finally, company “F” was motivated to switch the supplier in order to improve its supply security. All of these suppliers accomplished the additional goals that were not directly related to economic and technological considerations.

Furthermore, the case companies were asked to rate their overall switching-related success on a scale from one to seven. As in the other success dimensions, the numbers represent different degrees of improvement : 1 = completely failed, 2 = failed, 3 = slightly unsuccessful, 4 = moderate success, 5 = decently successful, 6 = successful, 7 = very successful. In this respect, the overall supplier-switching success of company “C” was the lowest, but it still perceived it as decently successful. Companies “A,” “B,” and “D” had a successful supplier switch and all their expectations and objectives were accomplished. Companies “B” and “F” declared that the particular supplier switch was very successful and that they achieved more than expected. The economic success dimension, the technological success dimension and the switching related-success can be summed up in the overall switching success as illustrated in *Figure 3-11*. The overall switching success can be used to compare the analyzed supplier switches with respect to their achievement of objectives and can be seen as an indicator for the degree of satisfaction of the disengager after the supplier switch. However, the overall switching success is not an absolute measure for the success of supplier switches, since it is based on the individually perceived success of the respective interview partner.

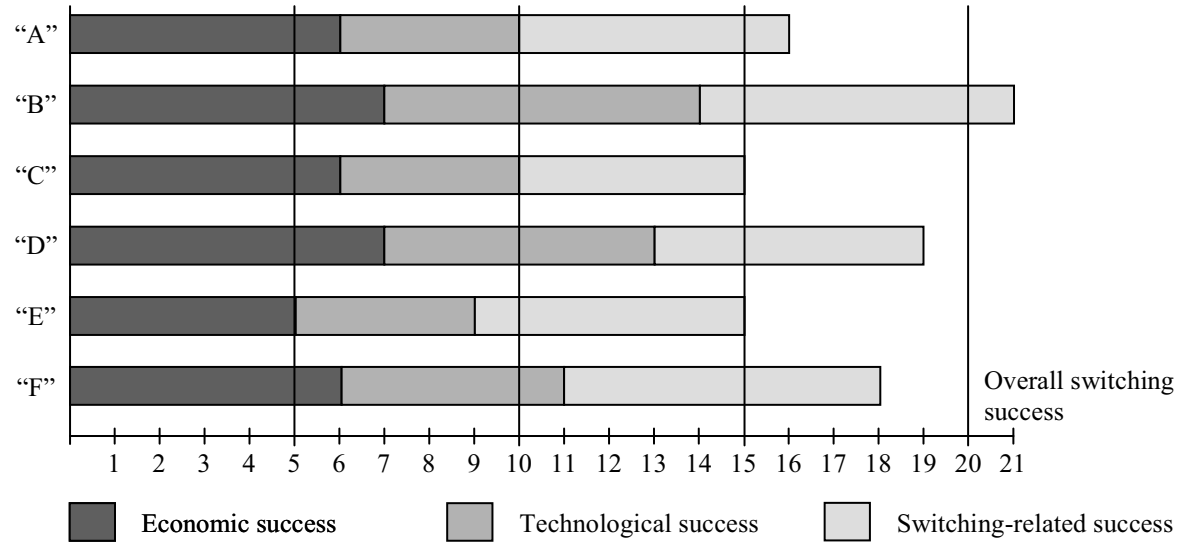


Figure 3-11: Overall supplier switching success

The overview reveals that there are distinctions in the disengager's perceived success of the supplier switches performed. These differences can be interpreted in various ways. On the one hand, they represent the different emphasis placed by the case companies with respect to their pursued objectives. On the other hand, they can be interpreted as real variations of the overall switching success. Taking the definition of a successful supplier switch, which was developed in *Chapter 2.4.4,* into account, it can be stated that a vendor replacement is successful if the outcome of the alternative supplier-buyer relationship (CL_{alt}) is as big as expected prior to the switch, bigger, or at least bigger than the outcome (Outcome) of the old supplier-buyer relationship. This definition indicates that the minimum requirement for a successful supplier switch is that the new supplier performs better than the old one. This was accomplished by all case companies. The different levels of achievement within the overall switching success have to be interpreted carefully. For example, the objective of "E" was more related to a reduction of dependence, so an improvement of the economic or technological performance within the new supplier-buyer relationship was not the main emphasis. Accordingly, these dimensions did not improve (technological success dimension), or only slightly improved. However, the switching-related success was evaluated as "successful" because the strategic objective of reducing dependence was accomplished. However, since the economic and the technological success dimension were not strongly advanced, the sum of all success dimensions was lower in comparison to the other disengagers (with the exception of "C"). This example shows that the overall supplier success, as illustrated in *Figure 3-11*, must be carefully interpreted and cannot be used as an absolute testimony of the success of a particular supplier switch in comparison to another. Company "B" stands out from the other case examples with the highest overall switching success. The company did indeed perform a successful supplier switch, since the *ax ante* defined objectives were not only reached, but were in fact exceeded. Thus, the company is highly satisfied with its achievement. Conversely, company "C" achieved the same overall switching success as company "E." However, this company had the

lowest overall switching success of all disengagers, which can be related to a certain degree of reputation damage and a discord between the company and the old supplier. Companies "A," "D" and "F" are in the middle of the overall supplier-switching success and all accomplished their predetermined switching objectives. In summary, it can be stated that all disengagers were satisfied with their achievements. *Figure 3-12* schematically shows how the different success dimensions and the *ex ante* expectations merge into the evaluation of the supplier-switching success.

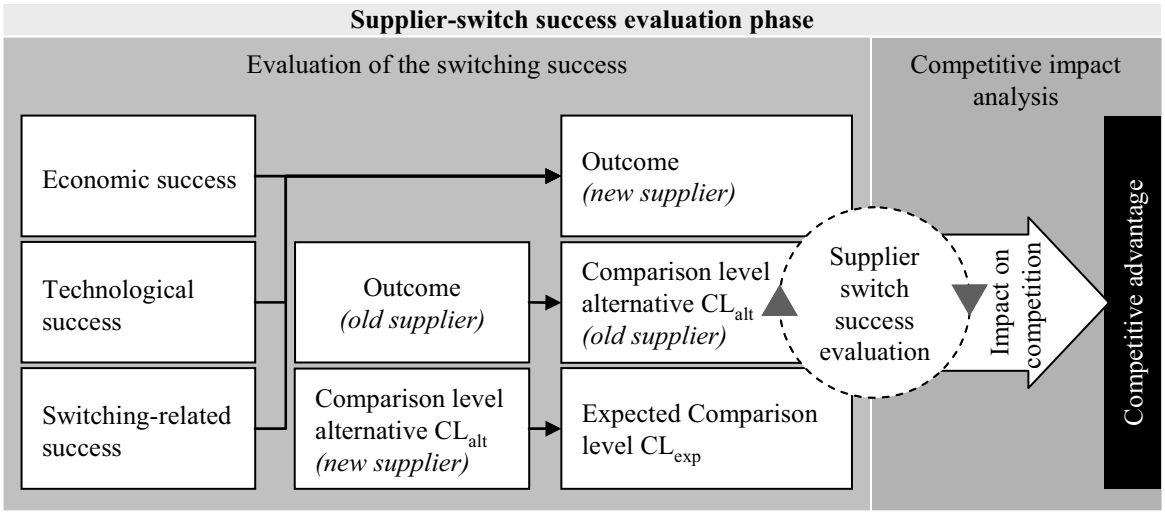


Figure 3-12: Schematic evaluation of the supplier-switch success-evaluation activity

After the supplier-switching execution phase, the disengagers start to evaluate the success of the supplier switch performed. Hence they start to assess every single switching success dimension. As in the previous relationship, the current performance of the new supplier determines the outcome (Outcome) of the current relationship. However, in order to assess the supplier-switching success, the disengagers use comparison levels. The comparison level of the alternative (CL_{alt}) emerges out of the former outcome of the old supplier-buyer relationship. It is assumed that completely new suppliers are not relevant to the disengagers directly after the switch and the old supplier's performance serves as a reference for the new supplier's performance. Nevertheless, after more time elapses after the particular supplier switch, the disengager might consider other suppliers again. The expected comparison level emerges from the old comparison level of alternatives (CL_{alt}) and is therefore related to the expectations that the disengager had towards the new supplier-buyer relationship prior to the switch. Since these expectations are linked to certain economic, technological and switching-related objectives, the disengager utilizes the new comparison level (CL_{exp}) to judge whether the goals of the switch were accomplished. After the comparison levels and the outcome of the current (new) supplier-buyer relationship have been determined, the disengager can start to evaluate the success of the supplier switch. If the supplier switch is deemed successful (see definition above) the disengager has improved its performance and a beneficial impact on its competitiveness is assumed. This will be discussed in the next chapter.

4 Conclusions and managerial implications for successful supplier switching

This final chapter will summarize the main findings of the research. The first section shows how the research objectives were met and how the research questions can be answered. The results are summarized in general findings. The second section provides managerial implications for successful supplier switching. This completes the creation of the explanatory framework, which is the last phase of framework-related research. The following section will discuss the work's contribution to theory (*Chapter 4.1*) and practice (*Chapter 4.2*), and the final subchapter (4.3) presents unresolved issues for the research on supplier switching and suggests further research opportunities.

4.1 Key findings of the research on supplier switching

This research has examined the phenomenon of supplier switching with a focus on switching activities in an industrial context. The increasing importance of this topic in industry has been related to the growing impact of suppliers on the buying company's performance and competitiveness because of a strongly decreased net added value ratio. Due to this development, the ability of a company to form, operate, and switch supplier-buyer relationships becomes a key capability in turbulent business environments. Therefore the identification, description and systemization of supplier-switching activities, their interrelationships, and link to competitive advantages was the *theoretical objective* of this research. The identification of improvement opportunities through an analysis of conformation models used by disengaging companies was the *pragmatic objective* of this research. To meet these objectives, one primary and four secondary research questions were formulated. The secondary research questions will be answered first.

RQ_1: *What is the challenge of switching integrated suppliers?*

The biggest challenge of switching integrated suppliers is related to the supplier-switching decision evaluation phase and therefore precedes the actual vendor replacement. The challenge *ex ante* to the supplier-switching decision is to find the right balance between the activities aiming for an improvement of the outcome of the old supplier and the activities dealing with the alternative supplier. As shown in *Chapter 3.3.2*, the majority of disengagers were retrospectively dissatisfied with the effort they invested into the development of the old supplier. In their opinion, they invested too much time (*Figure 3-4*) and too many resources (*Figure 3-5*) in the improvement of the old supplier's performance. Since these investments did not ultimately lead to the desired effect, resources were used inefficiently. If the resources had been invested in the search of a new supplier or the confirmation of an alternative sup-

plier's performance level, the vendor replacement could have started earlier. This would have improved the buying company's supply situation faster, which in turn is beneficial for the buying firm's performance and competitive position. The reason for these misguided resource investments is likely connected to the barriers to switching integrated suppliers presented in *Chapter 2.2.2*. Other researchers have revealed the sluggish behavior of the buying firm in deciding whether to switch or not. For example, buyers might be averse to switching a supplier if maintaining the *status quo* is considered the norm. This phenomenon is known as decision avoidance, which can be defined as *"the tendency to avoid making a choice by postponing it or by seeking an easy way out that involves no action or no change*.[419]" Staying with the old supplier seems to be the default option of the analyzed disengagers, since none of them decided to replace suppliers immediately after the supplier weakness was identified. *Wagner* and *Friedel* found that the avoidance of switching the supplier seems to occur when the buyer knows the performance of the incumbent supplier better than the performance of an alternative one, when hidden characteristics of the alternative supplier are assumed, or when the switching costs are estimated to be excessive.[420] Thus, the major challenge prior to the switch of integrated suppliers is to overcome decision-making inertia in order to shorten the time that the disengager needs to take advantage of the alternative supplier's potential.

With respect to the empirical findings and other studies, the main challenge in the supplier-switching execution phase is the planning, steering, and monitoring of a smooth and frictionless supplier switch. The analyzed disengagers intensively planned the supplier switches, but the majority still faced serious problems with respect to logistics or production. The need for a systematic planning, steering and monitoring of a supplier switch seems to become even more challenging the more the old supplier is integrated into the value-creation process of the disengager. This applies to the level of interconnectedness of the new supplier and the disengager as well. This challenge was also addressed by *Arnold*, who stated that the structuring of activities in the supplier-switching execution phase is a major challenge.[421] The avoidance of friction in the supplier-switching execution phase seems to be a difficult task, since terminating an integrated supplier-buyer relationship and integrating another one simultaneously is a complex venture, due to various interconnections between the actors. This interrelatedness of the actors makes it hard to anticipate all potential pitfalls in a previous planning process, which can therefore be regarded as a challenge of supplier switching. This judgment is consistent with the findings of *Giller* and *Matear*, who discussed the complex nature of supplier-buyer relationship dissolution.[422]

---

[419] Anderson (2003), p. 139.
[420] Wagner and Friedl (2007), p. 701.
[421] Arnold (2007), pp. 215.
[422] Giller and Matear (2001), p. 107.

RQ$_2$: *What are the theory-related drivers of integrated supplier-switching and how are they related to supplier-switching activities?*

The reasons for supplier switching were theoretically derived in *Chapter 2.2.2*, and are related to either relative or absolute supplier weaknesses. The supplier weakness can emerge through a decline in the quality of the old supplier's product, the availability and attractiveness of alternative suppliers, a decrease of exit barriers (switching costs) within the old supplier-buyer relationship, a decreased likelihood of success of the voice approach, a reduction of the perceived value of product and services, a decrease of the buyer's loyalty, or an inadequate strategic fit between the buyer and the supplier. These triggers were also revealed in the empirical research and caused a specific motivation to switch. In the majority of analyzed supplier switches the motivation to switch is not related to a single motivating criterion. Most of the disengagers experienced situations in which the old supplier's performance was weak in several respects. Furthermore, cost and price issues motivated almost all disengagers, which shows that these motivations are likely to play a major role in supplier switches. The importance of increased prices or costs of the old supplier or lower prices and costs of an alternative supplier was identified as a major switching reason by other researches too.[423]

The emphasis a disengager puts on a certain supplier-switching activity prior to the actual switching phase is influenced by the relative or absolute character of the supplier weakness. If the buying firm experiences a relative supplier weakness, it means that the company has already found a potentially new supplier. Thus, activities that aim to find an alternative vendor are less important, but activities that confirm the potential supplier's capabilities and performance become essential. By contrast, if the disengager faces an absolute supplier weakness, the quest for a capable alternative supplier would be paramount, if activities aiming for an improvement of the old supplier's performance are unlikely to succeed. Supplier-development activities that aim for an improvement of the old supplier's performance can vanish completely if the supplier decides to terminate the exchange relationship.

The kind of supplier weakness can also have an influence on the activities aiming on the integration of the new and dissolution of the old supplier-buyer relationship. The kind of supplier weakness affects the choice of the switching strategy. As far as the dissolution strategy is concerned, it can be assumed that a supplier weakness that is related to a deterioration of the trusting relationship between the old exchange partners leads to a more self-oriented dissolution strategy. This in turn can influence the activities on the dyadic relationship layers in terms of, for example, determining the reduction of the order in a unilateral way, instead of jointly discussing a solution that is mutually beneficial. With respect to the integration strategy, as the second part of the switching strategy, the reason for supplier switching

[423] E.g. Ping and Dwyer (1992); Heide and Weiss (1995); Halinen and Tähtinen (2002); Wagner and Friedl (2007).

can have an impact too. For example, the intensity with which the disengager supports the new supplier in its integration effort can depend on the urgency of the change of suppliers. For example, if an old supplier becomes bankrupt, the disengager needs to find a new and reliable source of supply as quickly as possible and thus might invest much more into the support of the new supplier. In summary, it can be stated that the disengager's switching strategy can cause variations of different switching activities in the supplier-switching execution phase.

As far as the supplier-switch success-evaluation phase is concerned, the kind of the supplier weakness has no impact on the supplier-switching activities, since the evaluation scheme will not be changed or affected.

***RQ*$_3$**: *How can the activities associated with switching integrated suppliers be systemized and performed in a target-oriented manner?*

The activities of switching integrated suppliers can be structured along the different phases of supplier switching. The following figure provides an overview of the consolidated activities a disengager performs in order to terminate an old suppler-buyer relationship and integrate a new one (see *Figure 4-1*).

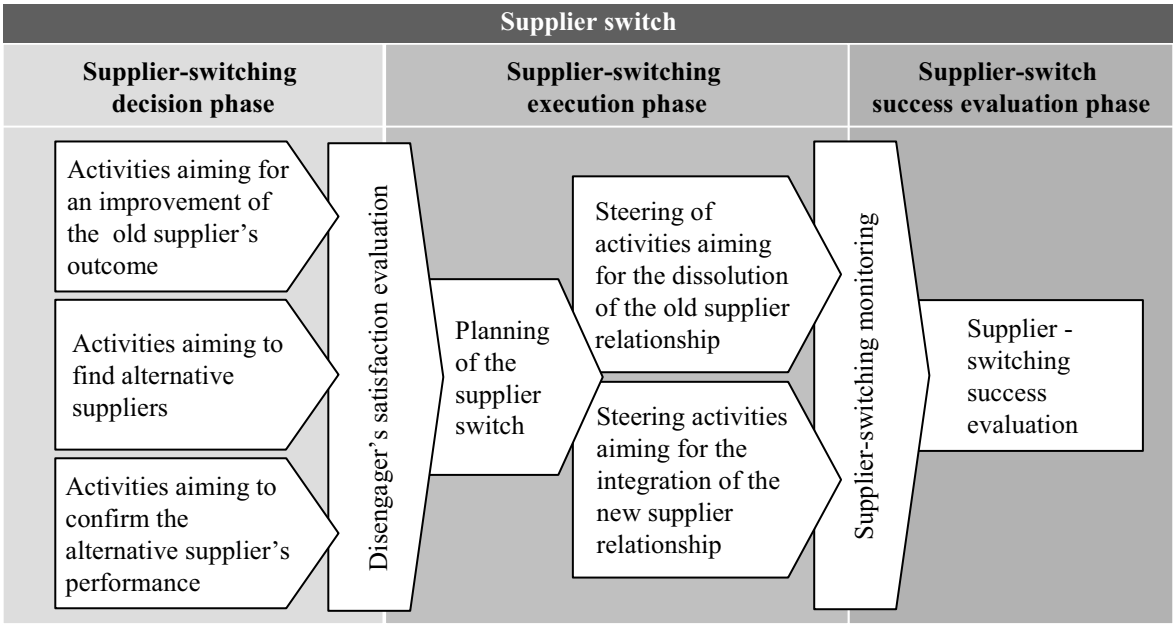


Figure 4-1: Overview of the consolidated supplier switching activities

The activities in the *supplier-switching decision phase* can be consolidated into three main streams. The first stream aims for an improvement of the old supplier's performance in order to increase the outcome (Outcome) to a satisfactory level. The second stream comprises all activities necessary to identify potentially alternative suppliers. The third activity stream is concerned with the confirmation of the alternative supplier's performance level and thus should reduce the uncertainties with regard to the comparison level of the alternative (CL_{alt}). All three activity streams have an impact on the advantageousness of the loyalty, voice and

the exit strategies. In consideration of the different benefits and merits of each strategy, the disengager decides whether to switch or not. The switching decision evaluation is a transition-activity that initiates the activities in the supplier-switching execution phase if the disengager decides to replace the supplier.

The activities in the *supplier-switching execution phase* can be consolidated into three main activity sets too. The first set of activities is concerned with the planning of the supplier-switching dissolution and integration activities. The planning incorporates the definition of the supplier-switching strategy, anticipates potential problems, and provides a guideline that should help the employees concerned to navigate through the supplier-switching process and achieve the defined objectives. The subsequent activities put the plan into practice. They comprise the activities that are necessary for the dissolution and integration of the suppliers on each dyadic relational layer and are steered by dedicated employees. On the one hand, the activities aim for a frictionless termination of the old supplier-buyer relationship without causing any extra costs in terms of time or money. On the other hand, the activities pursue a fast improvement of the real outcome of the new supplier and hence a fast attainment of the anticipated comparison level of the alternative (CL_{alt}). The activities aiming for the dissolution and integration of the suppliers are constantly monitored in order to correct and intervene the steering activities if the desired status has not been accomplished in the required time. The monitoring activities provide the data for the *ex post* success evaluation, which is performed in the next phase.

The activities in the *supplier-switch success-evaluation phase* aim for the determination of the success of the supplier switch. They compare the *ex ante* defined objectives of the supplier switch in terms of economic, technological and switching-related terms with the achieved outcome in the new supplier-buyer relationship and the outcome of the old exchange relationship. After the activities of the supplier-switching success-evaluation have been performed, the disengager is able to determine if the change of supplier has an influence on the company's competitive position. This would be the case if the disengager improved its economic, technological or strategic position in such a way that the advantageousness of all positions together is higher than before the switch.

***RQ$_4$**: How can the "success" of switching integrated suppliers be defined and evaluated?*

The fourth secondary research question was discussed in *Chapter 3.3.3*, so only the summarized results are presented in the following. In general, a successful supplier switch has been achieved if the outcome of the alternative supplier-buyer relationship (CL_{alt}) is as big as expected, bigger, or at least bigger than the outcome of the old supplier-buyer relationship. Two measures have a distinctive influence on the switching success: the time needed and the switching costs. Both are incorporated into the switching-related success dimension and were estimated before the switch. The estimation influences the advantageousness of the compari-

son level of the alternative CL_{alt} prior to the vendor replacement. CL_{alt} transforms into the expected outcome level CL_{exp} after the switch, whereas the actual time needed and the actual switching costs will influence the outcome (Outcome) of the new supplier-buyer relationship. Thus, the achieved switching costs and the time taken by the whole switching process can have a major influence on the success of the supplier switch, independently of the accomplishment of the predefined objectives. The defined objectives represent the expectations of the disengager for the new supplier-buyer relationship and are incorporated in the *ex ante* comparison level of the alternative (CL_{alt}). The expectations can be organized along certain success dimensions that are related to the economic and technological performance of the new supplier, and to the achievement of certain strategic goals incorporated in the switching-related success dimension. To summarize, it can be stated that *if all the objectives and expectations in the economic, technological, and switching-related (including strategic objectives) success dimensions have been accomplished at the anticipated time and cost, the supplier switch can be deemed successful*.

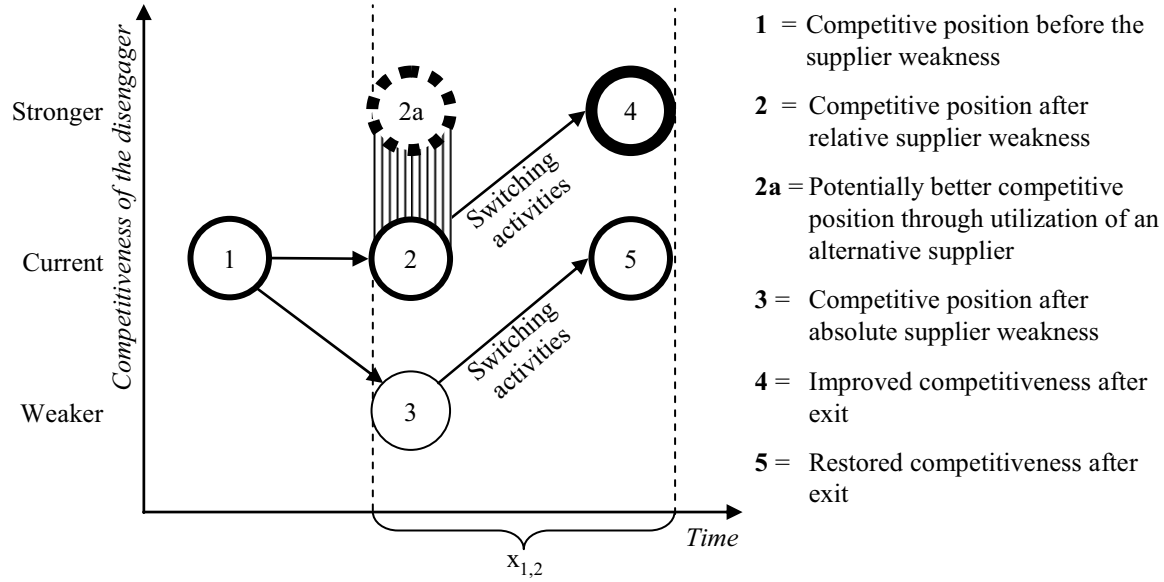
Disengagers that have not completely accomplished their defined objectives in a certain success dimension might have the chance to compensate this shortcoming with a higher achievement in another success element. The definition presented advances others that define the switching success primarily through switching costs and reputation damages.[424] This is because a supplier switch with low switching costs or switching costs that came out as expected can still miss the *ex ante* defined objectives of the disengager. This also applies to supplier switches that were performed without a loss of reputation.

***RQ_0**: How can a systematic structured switch of integrated suppliers lead to a competitive advantage for the disengager?*

In order to answer the primary research question, the answers of the secondary research questions must be taken into account. Firstly, it was shown that supplier switches occur when buying companies face a relative or absolute supplier weakness. This means that the currently used supplier is not competitive anymore with respect to its economic, technological or strategic-related performance. Due to the close interconnectedness of integrated supplier-buyer relationships, the weak performance of the vendor can also lead to a performance decline at the buying company, which again weakens the competitiveness of the disengager. Depending on the kind of supplier weakness, the loss of competitiveness of the buyer can be relative or absolute. A relatively weak competitiveness occurs if the performance of the disengager would be better in another – newly identified – supplier-buyer relationship, meaning that the current competitiveness has actually not weakened but could be better. An absolute decrease in the buyer's competitiveness is the case when the old supplier actually

[424] E.g. Arnold (2007), pp. 224.

performs worse than in the past, which adversely affects the performance of the disengager. Both kinds of weak competitiveness lead to a situation that requires improvement. As shown in *Chapter 2.2.2*, the buying company can choose between an exit and a voice strategy (the loyalty strategy is neglected, since no improvements will occur). As the empirical research has revealed, disengagers usually try to improve the old supplier's performance – the outcome of the old supplier-buyer relationship – before they decide to replace the incumbent supplier. Due to the focus of this research on the exit strategy and supplier switching, it is assumed that the buying company finally decides to leave the old supplier and shift its demands to an alternative supplier. The way in which a relative or an absolute supplier weakness affects the competitiveness of the buying company and the ways in which the competitiveness can be improved is illustrated in *Figure 4-2*.



x_1 = Period of time with a relatively or absolutely weaker competitiveness

x_2 = Time for supplier-switching decision analysis and supplier-switching execution phase

Figure 4-2: Impact of relative and absolute supplier weaknesses on the competitiveness of the disengager

The figure schematically shows a buying company's current competitive position (1) before the weakness occurred. After some time has elapsed, the buyer identifies a relative (2) or absolute (3) supplier weakness, which causes the need for improvement activities. After the company has evaluated the different reaction options (exit and voice), the exit strategy will be applied and the supplier-switching execution phase begins. In the case of an absolute supplier weakness, the disengager wants at least a restoration of its former competitiveness. In the case of a relative supplier weakness, the disengager aims for an improvement of its competitive position in comparison to its old one (1). Until these objectives are achieved, the disengaging company experiences a weaker competitive position than before (absolute supplier weakness) or a weaker one than would be attainable with another supplier (relative supplier weakness). This period of weak competitiveness of the disengager is drawn as x_1 in the figure. It corre-

sponds to the length of the supplier-switching decision analysis and supplier-switching execution phase x_2.

Thus, in order to avoid a protracted period of weak competitiveness, a systematic structured switch of integrated suppliers needs to achieve the targeted new competitive position (4 or 5) as quickly as possible with reasonable resources. Since the new competitive position should be higher than the one preceding the switch, supplier switching can cause a competitive improvement. However, in order to gain a competitive advantage, the definition[425] requires that the firm create economic value by engaging in activities that only a few companies perform well. Therefore, in order to achieve a competitive advantage through a systematic structured switch of integrated suppliers, disengagers need to perform activities that help them to be quicker and more efficient in realizing their switching objectives than competitors.[426] The activities necessary to perform a supplier switch were derived in this research and are presented in *Figure 4-1*. This systemization of supplier-switching activities enables disengagers to plan and structure supplier switches up front and organize the switching tasks along different phases and activities. The developed structure of supplier-switching activities enables disengagers to identify time- and resource-saving potentials by, for example, parallelizing or pulling forward certain switching activities, in a more systematic manner. Thus, in comparison to the situation in which the disengager needs to start from scratch and a structure for supplier switching is missing, potential problems are more likely to remain unconsidered. Furthermore, time for the development of a structure for a possible supplier switch can be saved. Thus, the *ex ante* systemization on a aggregated level of supplier-switching processes, even before a supplier weakness causes a possible need to switch, can help future disengagers to accomplish time reductions and an increase of efficiency for a potential vendor replacement. Therefore, a systematic structure for switching integrated suppliers leads to a competitive advantage. However, since the activities need to aim for time and switching-cost reductions in order to create an economic value for the disengaging company, the following chapter will present managerial implications that suggest selected time- and cost-saving activities for each supplier-switching phase.

---

[425] See Chapter 1.1.

[426] The relation between switching speed (time needed until the alternative supplier is superior to the old one) and efficiency (switching costs) on the one side and the performance of the disengager on the other has been discussed in Chapter 2.2.2 as well.

4.2 Managerial implications for successful supplier switching

The research at hand has analyzed activities of supplier switching. These activities have been structured along three phases of supplier switches – the supplier switching-decision phase, the supplier-switching execution phase, and the supplier-switch success-evaluation phase. The following managerial implications are related to the activities within these phases and reflect good practices gleaned from the case studies and identified shortcomings of analyzed supplier switches. The implications can further be used as a basis for the formulation of hypotheses that are needed for the continuous quantitative causal-analytic research in the field of supplier switching.

Supplier-switching decision analysis phase

The activities in the first phase of supplier switching start as soon as the supplier weakness is identified by the disengager and end with the decision on whether to switch or not. It was found that buyers facing a supplier weakness tend to use excessive amounts of time and resources in the development of the old supplier, meaning that too much attention is paid to activities that aim for the improvement of the old supplier's outcome. It is assumes that this behavior is mainly related to inertia, which can be decreased by engaging in the following activities:

The potential outcome of activities aiming for the improvement of the old supplier's performance should be more critically analyzed and the associated expectations need to be clearly defined.

Disengagers seem to support the old supplier with their own resources and grant time for improvements without a clear perception of the possible outcome of such ventures. However, instruments that help to analyze the meaningfulness of supplier-development initiatives exist and should be used throughout.[427] Quantified assessments of the advantages of a supplier-development initiative rationalize the choice between the voice and exit strategies and can help the disengager to overcome its bias towards the old supplier more rapidly if supplier-development does not make sense. However, if disengagers want to give the old supplier a chance to improve, it is recommended that the amount of time and resources that they want to grant for improvements be clearly defined in advance. This is supposed to avoid further sluggish behavior if no improvements occur. These recommendations help to avoid investing too much in the wrong strategy (voice) and may reduce the time needed in the supplier-switching decision analysis phase if the suggested assessment reveals that developing the old supplier is a waste of time and resources.

---

[427] E.g. Batran (2008).

Disengagers should take the switching option into account as soon as the current supplier shows early signs of a weakness.

Buying companies should be encouraged to consider the exit option earlier and take supplier-switching into account as soon as they experience a supplier weakness. If the disengager starts early with activities aimed at finding alternative suppliers and confirming the alternative supplier's performance, time can be saved up front. Furthermore, the neglect of the exit option in the early stages of a supplier weakness in favor of the voice strategy supports the emergence of a vicious circle. If a disengager opts for the voice strategy first, the company makes further relationship-specific investments in terms of resources and time in the old supplier-buyer relationship. These investments in turn increase the bias towards the old supplier and decrease the willingness to switch. Hence performing a supplier switch might become even more difficult.

Time for switching can be reduced through a continuous supply market research that aims to find potential alternative suppliers for important supply goods.

Buying companies need to monitor the supply market for supply objects continuously in order to be aware of potential alternative suppliers. If the disengager experiences an absolute supplier weakness, time related to the activities that aim to find an alternative supplier can be saved. Furthermore, by carefully studying the supply market, the disengager increases its chance of identifying relative supplier weaknesses that threaten its competitiveness.

Inertia and skepticism can be reduced by improved supplier-evaluation techniques that reduce the uncertainty associated with the alternative supplier's performance.

One reason for the sluggish behavior and inertia of buying companies in the case of supplier weakness is the uncertainty associated with the alternative supplier's real performance.[428] These uncertainties may be reduced through proficient supplier-assessment and auditing methods, which help the disengager to obtain a clearer picture of the potential supplier's real performance. Some of the case companies used test runs with the suppliers from the prospective vendor at a very early stage – even before contracting – in order to verify the quality of the supply object. These testing activities had another positive side effect: they led to a better understanding of the potential exchange partners and fostered the creation of trust. Due to this, disengagers can reduce uncertainty caused by a lack of information and communication, which was revealed as a barrier to supplier switching.

[428] See Chapter 4.1.

Supplier-switching execution phase

The supplier-switching execution phase starts after the decision to switch is made. It ends after the new supplier reaches its anticipated performance level and the business with the old supplier has been terminated or reduced to the planned level. The study revealed that disengaging companies already actively manage the activities within this phase. They plan, steer and monitor the relevant activities on each dyadic relational layer. However, improvement opportunities have been identified with regard to each layer that can help the disengager to save time and switching costs and hence foster the advantageousness of the supplier-switching option. As discussed in *Chapter 4.1*, this can help to increase the purchasing company's flexibility in supplier-buyer relationships.

As far as the *institutional layer* is concerned, it can be stated that legal actions in terms of lawsuits generally did not play a role in the analyzed supplier switches. However, it was revealed that some of the case companies did not use explicit exit clauses in their contracts, which predetermine important issues in case the contract ends before its expiry date. One company without an explicit exit clause (case company "C") reported lawsuit attempts by the old supplier. Since the study is not able to make significant testimonies concerning causal links, it cannot be proved, but it is assumed, that in general supplier switching in supplier-buyer relationships without an explicit exit clause is more complex than in relationships with such a contractual provision. This assumption is due to the consideration that an exit clause predetermines certain critical issues and can therefore reduce complications and disagreements in the switching execution phase. Therefore, it is recommended that disengagers implement explicit exit clauses in their supply contracts, which regulate key issues in case the contract is terminated before it expires. Selected issues are related to regulations for dividing shared assets (ownership regulations), knowledge transfer from the old supplier to the disengager, and deliveries. In any case, an explicit exit clause can support the reduction of time spent for negotiations and legal action in the switching execution phase and thus helps the supplier to achieve the anticipated competitive position earlier and more cheaply.

With respect to the *financial layer*, it is recommended that companies assess the financial damage a supplier weakness has caused more in depth. This is especially true for cases of absolute supplier weaknesses. Some of the analyzed disengagers experienced serious production problems due to the old supplier's bad performance. However, at the same time, they indicated that these problems did not cause financial damages. This leads to the assumption that increased transaction costs due to higher coordination efforts for the management of the disengager were not taken into account. However, those costs should be included when calculating the financial damage caused by a weak vendor. The integration of transaction costs can make the disengager more sensitive to the costs of a weak supplier-buyer relationship, which may cause a decrease of inertia for future supplier switches.

In order to reduce the time needed and increase efficiency in regards to the switching activities on the *operative layer*, it is recommended that the disengagers plan the operative switching processes in advance. The creation of a proceedings directive can help the disengagers to be prepared in case a supplier weakness occurs. The proceeding directive does not need to be very detailed, but should give the relevant employees an idea of the general activities and tasks that need to be performed. The consolidated overview of supplier-switching activities in *Figure 4-1* can be used as a general structure to plan supplier-switching activities up front. The creation of a proceedings directive can thus help to save time for the planning activities in the supplier-switching execution phase.

Because the majority of the analyzed disengagers experienced logistical and production-related challenges while switching suppliers, it is further recommended that buying companies emphasize threats in these areas more than usual. However, this goes along with the aforementioned recommendation for a comprehensive assessment of the new supplier.

As far as the *informative layer* is concerned, the study of the case companies revealed that it is important to identify relevant further affected actors in the supplier switch. These can be customers, other suppliers, logistic service providers or governmental institutions, for example. Other actors besides the disengager, the old, and the new supplier may need to approve the supplier switch and can therefore have a big influence on the time needed for the replacement. The earlier these critical actors are identified by the disengager, the earlier the switching decision can be discussed with them. This increases the time for the disengager to gain commitment for the supplier switch and enables the affected organizations themselves to prepare for the switch. The disengager may communicate the switching decision or start to inform relevant actors even before the switch in order to get their opinion of it. The latter case might be especially applicable when the new supplier uses new technologies that have an effect on the disengager's end product, or when the supply object interacts with purchased parts, modules or systems of other suppliers. In those cases, time consuming technical testing and validation is required.

A recommendation for the *social layer* of dyadic supplier-buyer relationships focuses on the internal commitment in the disengager's organization. Top management support is especially recommended for switches that involve a big purchasing volume or affect a long-lasting supplier-buyer relationship with the old supplier. This is important, since it is most likely that the old supplier will escalate the potential loss of a big customer to the top management, if it is not involved from the very beginning. Due to social relationships that might exist between the top management of the old supplier and the disengager, the relevant employee at the disengager's site needs to make sure that their own top management is informed of some details and of the history of the supplier switch. By pursuing this course of action, it can be assured that no unintended disclosures are made from the disengager's top management as a result of their being unaware of relevant details. Besides the participation of the top manage-

ment, it is recommended that key employees of the buying company that need to deal with the supply object in production or logistics be involved too. Making them feel involved in the switching process can foster the commitment of these employees and helps to reduce their resistance to change. The recommendations aim to avoid additional time spent on, for example, agreements between the top management of the old supplier and the disengager, which would grant the old supplier more time to improve their performance. They further aim at the avoidance of additional costs due, for example, to extensive necessary adoptions of the new supply object that occur because the knowledge of the key employees, such as masters in the production departments, has not been considered up front.

Supplier-switch success-evaluation phase

The supplier-switch success-evaluation phase starts when the new supplier has reached its anticipated performance level and the business with the old supplier has been terminated or reduced to the planned volume. With respect to the activities in this phase, it can be stated that disengagers should also incorporate and quantify problems that occurred in the switching phase, in order to achieve a more comprehensive picture of the success of the supplier switch. This is related to the recommendations for the financial layer in the switching execution phase. The analyzed disengagers partly neglected the assessment of problems due to the difficulties of an exact quantification. However, a comprehensive assessment might give valuable information about certain challenges that could be used to improve the success of future supplier switches. In general, it is recommended that the challenges and problems that were encountered by the disengager during the switch should be analyzed and discussed in a "lessons learned" meeting with the relevant employees. This procedure can further improve the disengager's ability to perform a systemized switch of integrated suppliers successfully, thereby supporting the achievement of a competitive advantage for the buying firm.

4.3 Recommendations for further research on supplier switching

Research projects usually have their limitations in terms of scope and time. This means that some interesting research questions were not considered and were left out for future research. Furthermore, new insights obtained during the research process have opened new perspectives and led to new questions. The following chapter addresses selected topics that are considered potentially valuable for further research.

This study identified and structured relevant supplier-switching activities and developed a definition for successful supplier switches. However, the chosen qualitative research method and the exploratory character of the study do not allow conclusions to be drawn about causal relationships between single switching activities and the switching success. Thus, future research should apply a quantitative research method and perform a causal-analytic study that allows the derivation of testimonies about the success factors of supplier switching. Because of the various kinds of supplier-buyer relationships, their differences with respect to the "difficulty of managing the purchase situation" and the "strategic importance of the purchase," focusing on specific supplier-buyer relationships within a single industry is recommended. This would allow inferences to be made regarding causal links between switching activities and success. A first starting point for the development of a hypothesis that should be researched in a quantitative study is offered in *Chapter 4.2*. The managerial recommendations derived should be tested in order to evaluate their impact on the success of supplier switching. The results could be used to define instruments and methods for supplier-switching management.

Further empirical research should investigate the behavior of companies in the supplier-switching decision phase more closely. The research on activities involved in switching integrated suppliers revealed that companies seem to stick too long to poorly-performing suppliers. This behavior wastes valuable resources in the *ex ante* phase of supplier-switching and sacrifices competitiveness. The inertia of the disengager's organization was identified as a possible reason for the sluggish behavior and resistance to change the supplier. Existing research on supplier-switching inertia is very limited[429] and further research, particularly with regard to the roots of switching inertia, could help to reveal opportunities to make companies more flexible and hence more competitive.

An additional research opportunity is related to the defined supplier-switching strategies. The question of which strategy is the most applicable to specific switching circumstances was left out. An analysis of this question would demand the development of clusters of different supplier-switching situations that take the various reasons for switching and the different purchasing situations into account.

---

[429] Examples are: Kalwani and Narayandas (1995); Li *et al.* (2006); Wagner and Friedl (2007).

The final recommendation for future research is related to the success of supplier switches. This study revealed that disengagers tend to neglect the monetary assessment of problems they faced during the supplier switch. The development of a detailed success-evaluation method should help disengagers to achieve a more objective picture of future supplier switches. In this respect, it seems appealing to include the perspective of the old supplier into the success evaluation of the supplier replacement. In particular, this would contribute to the objective assessment of the switching-related success dimension, since the quality of measures such as loss of reputation or fairness in the switch are unlikely to be assessed objectively by the disengager in isolation.

References

Abel, B. (1979): Denken in theoretischen Modellen als Leitidee der Wirtschaftswissenschaften, in: *Raffée, H.* and *Abel, B*. (Eds.): Wissenschaftstheoretische Grundfragen der Wirstchaftswissenschaften. München 1979, 139-190.

Ahmadjian, C.L. and *Lincoln, J.R.* (2001): Keiretsu, governance, and learning: case studies in change from the Japanese automotive industry, in: Organization Science, 12(6), 683-701.

Alajoutsijärvi, K. / Möller, K. / Tähtinen, J. (2000): Beautiful exit: how to leave your business partner, in: European Journal of Marketing, 34(11/12), 1270-1289.

Aldrich, H. (1979): Organizations and environments. Englewood Cliffs, 1979.

Andersen, O. and *Buvik, A.* (2001): Inter-firm co-ordination: international versus domestic buyer-seller relationships, in: Omega, 29(2), 207-219.

Anderson, C.C. (2003): The psychology of doing nothing: forms of decision avoidance result from reason and emotion, in: Psychological Bulletin, 129 (1), 139-167.

Anderson, J. / Rungtusanatham, M. / Schroeder, R. (1994): A theory of quality management underlying the Deming method, in: Academy of Management Review, 19(3), 472-509.

Appelfeller, W. and *Buchholz, W.* (2005): Supplier Relationship Management: Strategie, Organisation und IT des modernen Beschaffungsmanagements. Wiesbaden 2005.

Arnold, U. (1997): Beschaffungsmanagement. 2. Ed. Stuttgart 1997.

Arnold, U. (2002): Global Sourcing: Strategiedimensionen und Strukturanalyse, in: *Hahn, D.* and *Kaufmann, L.* (Eds.): Handbuch industrielles Beschaffungsmanagement. 2 Ed. Wiesbaden 2002, 201-220.

Arnold, U. (2007): Beendigung von Lieferantenbeziehungen in Unternehmensnetzwerken - Effiziente und flexible Supply Chains erfolgreich gestalten, in: *Sanz, F.J.G. / Semmler, K. / Walther, J.* (Eds.): Die Automobilindustrie auf dem Weg zur globalen Netzwerkkompetenz. Berlin 2007, 215-229.

Arnold, U. and *Eßig, M.* (2000): Sourcing-Konzepte als Grundlage der Beschaffungsstrategie, in: Wirtschaftswissenschaftliches Studium, 29(3), 122-128.

Arnold, U. / Karner, H. / Schnabel, M. (2005): Target-oriented use of strategic sourcing tools: a critical analysis creating process awareness for electronic reverse auctions, in: Journal of Purchasing and Supply Management, 11(2-3), 116-128.

Arnolds, H. / Heege, F. / Tussing, W. (1998): Materialwirtschaft und Einkauf: Praxisorientiertes Lehrbuch. 10. Ed. Wiesbaden 1996.

Artz, K.W. (1999): Buyer-supplier performance: the role of asset specificity, reciprocal investments and relational exchange, in: British Journal of Management, 10(2), 113-126.

Axelrod, R.M. (2003): The evolution of cooperation. 36. Ed. New York 2003.

Bachmann, R. and Lane, C. (1997): Vertrauen und Macht in Zwischenbetrieblichen Kooperationen - zur Rolle von Wirtschaftsrecht und Wirtschaftsverbänden in Deutschland und Großbritannien, in: *Schreyögg, G.* and *Sydow, J.* (Eds.): Managementforschung 7. Gestaltung von Organisationsgrenzen. Berlin *et al.* 1997, 79-110.

Bagchi, P.K. and *Skjøtt-Larsen, T.* (2005): Supply chain integration: a European survey, in: International Journal of Logistics Management, 16(2), 275-294.

Bakos, J.Y. and *Brynjolfsson, E.* (1993): Information technology, incentives, and the optimal number of suppliers, in: Journal of Management Information Systems, 10(2), 37-53.

Ballwieser, W. (1987): Transaction cost analysis of structural changes in the distribution system: reflections on institutional developments in the Federal Republic of Germany, in: Journal of Institutional and Theoretical Economics, 143(1), 86-90.

Barney, J.B. (1991): Firms resources and sustained competitive advantage, in: Journal of Management, 17(1), 99-120.

Barney, J.B. (1999): How a firm's capabilities affect boundary decisions, in: MIT Sloan Management Review, 40(3), 137-145.

Barney, J.B. (2002): Gaining and sustaining competitive advantage. 2. Ed. Reading 2002.

Barth, T. (2003): Outsourcing unternehmensnaher Dienstleistungen. Frankfurt a.M. 2003.

Barzel, Y. (1982): Measurement costs and the organization of markets, in: Journal of Law and Economics, 25(1), 27-48.

Bask, A.H. and *Juga, J.* (2001): Semi-integrated supply chains: towards the new era of supply chain management, in: International Journal of Logistics: Research & Applications, 4(2), 137-152.

Batran, A. (2008): Realoptionen in der Lieferantenentwicklung: Bewertung von Handlungsspielräume dynamischer Wertschöpfungspartnerschaften. Wiesbaden 2008.

Bea, F.X. and *Haas, J.* (1997): Strategisches Management. 2. Ed. Stuttgart 1997.

Becker, F.G. (1993): Explorative Forschung mittels Bezugsrahmen - Ein Beitrag zur Methodologie des Entdeckungszusammenhangs, in: *Becker, F.G.* and *Martin, A.* (Eds.): Empirische Personalforschung: Methoden und Beispiele. München 1993, 111-127.

Becker, M. / Johnson, P.H. / Ruijsenaars, N. (2003): Collaborative product development - Case study within the Swedish automotive industry. Lund 2003.

Bensaou, M. (1999): Portfolios of buyer-supplier relationships, in: Sloan Management Review, 40(4), 35-44.

Bidault, F. / Despres, C. / Butler, C. (1998): New product development and early supplier involvement (ESI): the drivers of ESI adoption, in: International Journal of Technology Management, 15(1/2), 49-69.

Boer, L.d. / Labro, E. / Morlacchi, P. (2001): A review of methods supporting supplier selection, in: European Journal of Purchasing & Supply Management, 7(2), 75-89.

Bogaschewsky, R. (2004): Analyse und Auswahl ausländischer Beschaffungsmärkte: Konzepte und Methoden, in: *Zentes, J. / Morschett, D. / Schramm-Klein, H.* (Eds.): Außenhandel. Wiesbaden 2004, 679-698.

Bonoma, T.V. (1985): Case research in marketing: opportunities, problems, and a process, in: Journal of Marketing Research, 22(2), 199-208.

Bortz, J. and *Döring, N.* (2005): Forschungsmethoden und Evaluation für Human- und Sozialwissenschaftler. 3. Ed. Berlin 2005.

Borys, B. and *Jemison, D.B.* (1989): Hybrid arrangements as strategic alliances: theoretical issues in organizational combinations, in: Academy of Management Review, 14(2), 234-250.

Bössmann, E. (1983): Unternehmungen, Märkte, Transaktionskosten: Die Koordiantion ökonomischer Aktivitäten, in: Wirtschaftswissenschaftliches Studium, 12(3), 105-111.

Bouncken, R.B. (2000): Dem Kern des Erfolges auf der Spur? State of the Art zur Identifikation von Kernkompetenzen, in: Schmalenbachs Zeitschrift für Betriebswirtschaftliche Forschung, 70(7-8), 865-885.

Boutelier, R. / Kiss, E. / Locker, A. (1995): Lieferantenbeurteilung und -auswahl, in: Einkäufer, Revue de l'acheteur, 29(11), 22-35.

Boutellier, R. and *Locker, A.* (1998): Beschaffungslogistik: Mit praxiserprobten Konzepten zum Erfolg. München *et al.* 1998.

Boutellier, R. / Wagner, S.M. / Peter, W.H. (2003): Handbuch Beschaffung. München *et al.* 2003.

Brenner, W. (1996): Information technology enables purchasing to integrate supplier in an optimal way, in: *N.A.o.P.* (Edt.): Proceedings of the 1996 National Association of Purchasing Management Academic Conference. Portland 1996, 225-243.

Brenner, W. and *Hamm, V.* (1996): The role of information technology in reengineering procurement processes, in: *Dias Coelho, J.E.A.* (Edt.): Proceedings of the 4th European Conference on Information Systems. Lisbon 1996, 213-227.

Brenner, W. and *Wenger, R.* (2007): Anforderungen an Electronic Sourcing Systeme, in: *Brenner, W.* and *Wenger, R.* (Eds.): Elektronische Beschaffung: Stand und Entwicklungstendenzen. Berlin *et al.* 2007, 1-21.

Bretzke, W.-R. (1998): "Make or buy" von Logistikleistungen: Erfolgskriterien für eine Fremdvergabe logistischer Dienstleistungen, in: *Isermann, H.* (Edt.): Logistik: Gestaltung von Logistiksystemen, Landsberg 1998.

Bretzke, W.-R. (2005): Supply Chain Management: Wege aus einer logistischen Utopie, in: Logistik Management, 7(2), 21-30.

Bretzke, W.-R. (2006): SCM: Sieben Thesen zur zukünftigen Entwicklung logistischer Netzwerke, in: Supply Chain Management, 6(3), 7-15.

Bühner, R. and *Tuschke, A.* (1997): Outsourcing, in: Die Betriebswirtschaft, 57(1), 20-30.

Bundeszentrale für Politische Bildung (Edt.) (2007): Globalisierung. URL: [http://www.bpb.de/wissen/H75VXG,,.html?wis_search_action=search&wis_search_alltext=globalisierung&wis_search_type=0], viewed on July 29, 2007.

Burnham, T.A. / Frels, J.K. / Mahajan, V. (2003): Consumer switching costs: a typology, antecedents, and consequences, in: Journal of the Academy of Marketing Science, 31(2), 109-126.

Burrell, G. and Morgan, G. (1979): Sociological paradigms and organizational analysis. Hants 1979.

Cammish, R. and *Keough, M.* (1991): A strategic role for purchasing, in: McKinsey Quarterly, 27(3), 22-39.

Cannon, J.P. and *Perreault JR., W.D.* (1999): Buyer-seller relationships in business markets, in: Journal of Marketing Research, 36(4), 439-460.

Carr, A.S. and *Pearson, J.N.* (1999): Strategically managed buyer-supplier relationships and performance outcomes, in: Journal of Operations Management, 17(5), 497-519.

Chakrabarti, A.K. (1990): Organizational factors in post-acquisition performance, in: IEEE Transactions on Engineering Management, 37(4), 259-268.

Child, P. and *Diederichs, R.* (1991): The management of complexity, in: McKinsey Quarterly, 27(4), 52-68.

Chmielewicz, K. (1994): Forschungskonzeptionen der Wirtschaftswissenschaft. 3. Ed. Stuttgart 1994.

Choi, T.Y. and *Hartley, J.L.* (1996): An exploration of supplier selection practices across the supply chain, in: Journal of Operations Management, 14(4), 333-343.

Christopher, M. (2000): The agile supply chain: Competing in volatile markets, in: Industrial Marketing Management, 29(1), 37-44.

Coase, R.H. (1937): The nature of the firm, in: Economica, 16(4), 386-405.

Collis, D. and *Montgomery, C.* (1998): Corporate strategy: A resource-based approach. New York 1998.

Colsmann, P. (1999): Global Sourcing als eine Beschaffungsstrategie für globale Unternehmen. Köln 1999.

Combe, I.A. and *Greenley, G.E.* (2004): Capabilities for strategic flexibility: A cognitive content framework, in: European Journal of Marketing, 38(11/12), 1456-1480.

Conner, K.R. and *Prahalad, C.K.* (1996): A resource-based theory of the firm: Knowledge versus opportunism, in: Organization Science, 7(5), 477-501.

Cook, K.S. (2000): Advances in the micro-foundations of Sociology: recent developments and new challenges for Social Psychology, in: Contemporary Sociology, 29(5), 685-692.

Cook, K.S. and *Emerson, R.M.* (1978): Power, equity, and commitment in exchange networks, in: American Sociological Review, 43(5), 721-739.

Cooper, M.C. / Ellram, L.M. / Gardner, J.T. / Hanks, A.M. (1997): Meshing multiple alliances, in: Journal of Business Logistics, 18(1), 67-89.

Corsten, H. (1994): Beschaffung, in: *Corsten, H.* and *Reiss, M.* (Eds.): Betriebswirtschaftslehre. München *et al.* 1994, 609-736.

Corsten, H. and *Gössinger, R.* (2001): Einführung in das Supply Chain Management. München 2001.

Coulter, R.A. and *Ligas, M.* (2000): The long good-bye: The dissolution of customer-service provider relationships, in: Psychology & Marketing, 17(8), 669-695.

Cox, A. / Lonsdale, C. / Watson, G. / Wu, Y. (2005): Supplier relationship management as an investment: evidence from a UK study, in: Journal of General Management, 30(4), 27-42.

Cox, A. / Lonsdale, C. / Watson, G. / Qiao, H. (2003): Supplier relationship management: a framework for understanding managerial capacity and constraints, in: European Business Journal, 15(3), 135-145.

Croom, S.R. (2000): The impact of web-based procurement on the management of operating resources supply, in: Journal of Supply Chain Management, 36(1), 4-13.

Das, A. / Narasimhan, R. / Talluri, S. (2006): Supplier integration: finding an optimal configuration, in: Journal of Operations Management, 24(5), 563-582.

Demski, J.S. / Sappington, D.E.M. / Spiller, P.T. (1987): Managing supplier switching, in: The RAND Journal of Economics, 18(1), 77-97.

Denzin, N.K. (1978): The research act. New York 1978.

Dierickx, I. and *Cool, K.* (1989): Asset stock accumulation and sustainability of competitive advantage, in: Management Science, 35(12), 1504-1511.

Dietl, H.M. (1993): Institutionen und Zeit. Tübingen 1993.

Dowlatshahi, S. (1998): Implementing early supplier involvement: a conceptual framework, in: International Journal of Operations & Production Management, 18(1/2), 143-167.

Dowlatshahi, S. (1999): Early supplier involvement: theory versus practice, in: International Journal of Production Research, 37(18), 4119-4139.

Dreyer, B. and *Gronhaug, K.* (2004): Uncertainty, flexibility, and sustained competitive advantage, in: Journal of Business Research, 57(5), 484-494.

Duck, S.W. (1982): A topography of relationship disengagement and dissolution, in: *Duck, S.W.* (Edt.): Personal relationships 4: dissolving personal relationships. London 1982, 1-30.

Duclos, L.K. / Vokurka, R.J. / Lummus, R.R. (2003): A conceptual model of supply chain flexibility, in: Industrial Management & Data Systems, 103(6), 446-456.

Duschek, S. (2002): Innovation in Netwerken. Renten - Relationen - Regeln. Wiesbaden 2002.

Duschek, S. and *Sydow, J.* (2002): Ressourcenorientierte Ansätze des strategischen Managements - Zwei Perspektiven auf Unternehmenskooperation, in: Wissenschaftliches Studium, 8(31), 426-431.

Dwyer, F.R. / Schurr, P.H. / Oh, S. (1987): Developing buyer-seller relationships, in: Journal of Marketing, 51(2), 11-27.

Dyer, J.H. and *Singh, H.* (1998): The relational view: cooperative strategy and sources of interorganizational competitive advantage, in: Academy of Management Review, 23(4), 660-679.

Easterby-Smith, M. / Thorpe, R. / Lowe, A.M. (1991): Management research: an introduction. London 1991.

Ebers, M. / Gotsch, W. (2002): Institutionenökonomische Theorien der Organisation, in: *Kieser, A.* (Edt.): Organisationstheorien. Stuttgart 2002.

Eiriz, V. and *Wilson, D.* (2006): Research in relationship marketing: antecedents, traditions and integration, in: European Journal of Marketing, 40(3/4), 275-291.

Eisenhardt, K.M. (1989): Agency theory: an assessment and review, in: Academy of Management Review, 14(1), 57-74.

Eisenhardt, K.M. (1989): Building theories from case study research, in: Academy of Management Review, 14(4), 532-550.

Eisenhardt, K.M. and *Martin, J.A.* (2000): Dynamic capabilities: what are they? in: Strategic Management Journal, 21(4), 1105-1121.

Eisner, E.W. (1991): The enlightened eye: qualitative inquiry and the enhancement of educational practice. New York 1991.

Elschen, R. (1991): Gegenstand und Anwendungsmöglichkeiten der Agency-Theorie, in: Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung, 43(11), 1002-1012.

Emerson, R.M. (1962): Power-Dependence relations, in: American Sociological Review, 27(1), 31-41.

Emerson, R.M. (1976): Social Exchange Theory, in: Annual Review of Sociology, 2(1), 335-362.

Engelsleben, T. (1999): Marketing für Systemanbieter: Ansätze zu einem Relationship Marketing-Konzept für das logistische Systemgeschäft. Wiesbaden 1999.

Eßig, M. (2002): Cooperative Sourcing, in: *Hahn, D.* and *Kaufmann, L.* (Eds.): Handbuch Industrielles Beschaffungsmanagement. 2 Ed. Wiesbaden 2002, 263-280.

Eßig, M. (2003): Supplier Lifetime Value als Ansatz zur Neuberwertung von Lieferantenbeziehungen, in: *Bogaschewsky, R.* (Edt.): Integrated Supply Management, Einkauf und Beschaffung: Effizienz steigern, Kosten senken. Köln 2003, 323-346.

Eßig, M. and *Wagner, S.* (2003): Strategien in der Beschaffung, in: Zeitschrift für Planung & Unternehmensführung, 14(4), 279-296.

Fawcett, S.E. and *Magnan, G.M.* (2002): The rhetoric and reality of supply chain integration, in: International Journal of Physical Distribution & Logistics Management, 32(5), 339-361.

Fine, C.H. (2000): Clockspeed-based strategies for supply chain design, in: Production and Operations Management, 9(3), 213-221.

Fine, C.H. (1998): Clockspeed: using business genetics to evolve faster than your competitors. London 1998.

Fleisch, E. (2000): Das Netzwerkunternehmen. Berlin *et al.* 2000.

Flick, U. (1995): Qualitative Forschung. Theorie, Methoden, Anwendung in Psychologie und Sozialwissenschaften. 4. Ed. Reinbek *et al.* 1995.

Friedrich, S.A. (1995): Mit Kernkompetenzen im Wettbewerb gewinnen, in: IO New Management, 64(4), 87-91.

Friedrichs, J. (1990): Methoden empirischer Sozialforschung. 14. Ed. Opladen 1990.

Frohlich, M.T. and *Westbrook, R.* (2001): Arcs of integration: an international study of supply chain strategies, in: Journal of Operations Management, 19(2), 185-200.

Fröhling, O. (2002): Portfolios für die Beschaffung, in: *Hahn, D. and Kaufmann, L.* (Eds.): Handbuch Industrielles Beschaffungsmanagement, Wiesbaden 2002, 475-488.

Fröhling, O. and *Nonnenmacher, M.G.* (2002): Purchasing portfolio analysis in the future market environment, in: *Hahn, D.* and *Kaufmann, L.* (Eds.): Handbuch Industrielles Beschaffungsmanagement. 2 Ed. Wiesbaden 2002, 593-612.

Fudenberg, D. and *Tirole, J.* (2000): Game theory. 7. Ed. Cambridge 2000.

Gadde, L.-E. and *Jellbo, O.* (2002): System sourcing: opportunities and problems, in: European Journal of Purchasing & Supply Management, 8(1), 43-51.

Garvin, D. (1987): Competing on the eight dimensions of quality, in: Harvard Business Review, 65(6), 101-110.

Gelderman, C.J. and *Semeijn, J.* (2006): Managing the global supply base through purchasing portfolio Management, in: Journal of Purchasing and Supply Management, 12(2), 209-217.

Gelderman, C.J. and *van Weele, A.J.* (2002): Strategic direction through purchasing portfolio management: A case study, in: Journal of Supply Chain Management, 38(2), 30-37.

Geyskens, I. / Steenkamp, J.-B.E.M. / Kumar, N. (2006): Make, buy, or ally: a transaction cost theory meta-analysis, in: Academy of Management Journal, 49(3), 519-543.

Giesa, F. and *Kopfer, H.* (2000): Management logistischer Dienstleistungen der Kontraktlogistik, in: Logistik Management, 2(1), 43-53.

Giller, C. and *Matear, S.* (2001): The termination of inter-firm relationships, in: Journal of Business & Industrial Marketing, 16(2), 94-112.

Goffin, K. / Szwejczewski, M. / New, C. (1997): Managing suppliers: when fewer can mean more, in: International Journal of Physical Distribution & Logistics Management, 27(7/8), 422-436.

Golafshani, N. (2003): Understanding reliability and validity in qualitative research, in: The Qualitative Report, 8(4), 597-607.

Gomm, M. and *Trumpfheller, M.* (2004): Netzwerke in der Logistik, in: *Pfohl, H.-C.* (Edt.): Netzkompetenz in Supply Chains: Grundlagen und Umsetzung. Wiesbaden 2004, 44-65.

Gouldner, A. (1960): The norm of reciprocity: a preliminary statement, in: American Sociological Review, 25(2), 161-178.

Graves, S.C. and *Tomlin, B.T.* (2003): Process flexibility in supply chains, in: Management Science, 49(7), 907-919.

Griffith, D.A. / Harvey, M.G. / Lusch, R.F. (2006): Social exchange in supply chain relationships: the resulting benefits of procedural and distributive justice, in: Journal of Operations Management, 24(2), 85-98.

Grossman, S.J. and *Hart, O.D.* (1983): An analysis of the principal agent problem, in: Econometrica, 51(1), 7-46.

Gulati, R. (1995): Does familiarity breed trust? The implications of repeated ties for contractual choice, in: Academy of Management Journal, 38(1), 85-113.

Gulati, R. / Nohria, N. / Zaheer, A. (2000): Strategic networks, in: Strategic Management Journal, 21(3), 203-215.

Gunipero, L.C. (1990): Motivating and monitoring JIT supplier performance, in: Journal of Purchasing and Materials Management, 26(3), 19-24.

Hagedoorn, J. and *Duysters, G.* (2002): The effect of mergers and acquisitions on the technological performance of companies in a high-tech environment, in: Technology Analysis & Strategic Management, 14(1), 67-85.

Håkansson, H. and *IMP Project Group* (1982): International marketing and purchasing of industrial goods an interaction approach. Chichester *et al.* 1982.

Håkansson, H. and *Snehota, I.* (1989): No business is an island: The network concept of business strategy, in: Scandinavian Journal of Management, 4(3), 187- 200.

Halinen, A. and *Tähtinen, J.* (2002): A process theory of relationship ending, in: International Journal of Service Industry Management, 13(2), 163-180.

Hallén, J.J. and *Seyed-Mohamed, N.* (1991): Interfirm adoption in business relationships, in: Journal of Marketing, 55(2), 29-37.

Hamel, G. (1991): Competition for competence and inter-partner learning within international strategic alliances, in: Strategic Management Journal, 12(4), 83-104.

Handfield, R.B. / Krause, D.R. / Scannell, T.V. / Monczka, R.M. (2000): Avoid the pitfalls in supplier development, in: MIT Sloan Management Review, 41(2), 37-49.

Handfield, R.B. and *Nichols, E.* (1999): Introduction to supply chain management. Upper Saddle River 1999.

Harrigan, K.R. (1985): Exit barriers and vertical integration, in: Academy of Management Journal, 28(3), 686-697.

Hartmann, H. / Orths, H. / Pahl, H.-J. (2004): Lieferantenbewertung - aber wie? Lösungsansätze und erprobte Verfahren. Band 2: Praxisreihe Einkauf / Materialwirtschaft. 3 Ed. Gernsbach 2004.

Heide, J.B. and *John, G.* (1990): Alliances in industrial purchasing: The determinants of joint action in buyer-supplier relationships, in: Journal of Marketing Research, 27(2), 24-36.

Heide, J.B. and *Weiss, A.M.* (1995): Vendor consideration and switching behavior for buyers in high-technology markets, in: Journal of Marketing, 59(2), 30-43.

Helper, S. (1990): Comparative supplier relations in the U.S. and Japanese auto industries: an exit / voice approach, in: Business and Economic History, 19(2), 153-162.

Helper, S. (1991): Strategy and irreversibility in supplier relations: the case of the U.S. automobile industry, in: The Business History Review, 65(4), 781-824.

Herriot, R. and *Firestone, W.* (1983): Multisite qualitative policy research: optimizing description and generalizability, in: Educational Researcher, 12(1), 14-19.

Heusler, K.F. (2004): Implementierung von Supply Chain Management: Kompetenzorientierte Analyse aus der Perspektive eines Netzwerkakteurs. Wiesbaden 2004.

Heusler, K.F. / Stölzle, W. / Bachmann, H. (2006): Supply Chain Event Management: Grundlagen, Funktionen und potenzielle Akteure, in: Wirtschaftswissenschaftliches Studium, 36(1), 19-24.

Hill, C.W.L. (1990): Cooperation opportunism and the invisible hand: Implications for transaction cost theory, in: Academy of Management Review, 15(3), 500-513.

Hill, W. and *Ulrich, P.* (1979): Wissenschaftliche Aspekte ausgewählter betriebswirtschaftlicher Konzeptionen, in: *Raffée, H.* and *Abel, B.* (Eds.): Wissenschaftstheoretische Grundlagen der Wirtschaftswissenschaften, München 1979, 161-190.

Hines, P. and *Rich, N.* (1998): Outsourcing competitive advantage: the use of supplier associations, in: International Journal of Physical Distribution & Logistics Management, 28(7), 524-547.

Hirschmann, A.O. (1970): Exit, voice, and loyalty: responses to decline in firms, organizations, and states. Cambridge 1970.

Hocutt, M.A. (1998): Relationship dissolution model: antecedents of relationship commitment and the likelihood of dissolving a relationship, in: International Journal of Service Industry Management, 9(2), 189-200.

Hofmann, E. (2004): Strategisches Synergie- und Dyssynergiemanagement. Lohmar 2004.

Hofmann, E. (2006a): Entkopplungsmanagment: Ein relevanter Schritt auf dem Weg zur Selbststeuerung von Supply Chains, in: *Pfohl, H.-C.* and *Wimmer, T.* (Eds.): Wissenschaft und Praxis im Dialog: Steuerung von Logistiksystemen - auf dem Weg zur Selbststeuerung, Bobingen 2006, 75-95.

Hofmann, E. (2006b): Entkopplung von Supply Chains: Konzeptionelle Anregungen zum lebenszyklusgerechten Verständnis von Wertschöpfungsnetzwerken, in: Logistik Management, 8(1), 10-27.

Holden, M.T. and *Lynch, P.* (2004): Choosing the appropriate methodology: understanding research philosophy, in: The Marketing Review, 4(4), 397-409.

Homans, G. (1958): Social behavior as exchange, in: American Journal of Sociology, 63(6), 597-606.

Hopp, W.J. and *Spearman, M.L.* (2004): To pull or not to pull: what is the question? in: Manufacturing & Service Operations Management, 6(2), 133-148.

Humphreys, P. / Huang, G. / Cadden, T. (2005): A web-based supplier evaluation tool for the product development process, in: Industrial Management & Data Systems, 105(2), 147-163.

Hunt, S.D. (1993): Objectiving in marketing theory and research, in: Journal of Marketing, 57(2), 76-94.

Hussey, J. and *Hussey, R.* (1997): Business research: a practical guide for undergraduate and postgraduate students. London 1997.

Jackson, B.B. (1995): Winning and keeping industrial customers. Lexington 1995.

Janich, P. (1992): Die methodische Ordnung von Konstruktionen, in: Schmidt, S. (Edt.): Kognition und Gesellschaft. Frankfurt a.M. 1992, 24-41.

Jap, S.D. (1999): Pie-expansion efforts: collaboration processes in buyer-supplier relationships, in: Journal of Marketing Research, 26(4), 461-475.

Jaspers, F. and *Ende, J.v.d.* (2006): The organizational form of vertical relationships: Dimensions of integration, in: Industrial Marketing Management, 35(7), 819-828.

Johanson, J. and *Mattsson, L.-G.* (1987): Interorganizational relations in industrial systems: a network approach compared with the transaction-cost approach, in: International Studies of Management and Organization, 17(1), 34-48.

Johnston, D.A. / McCutcheon, D.M. / Stuart, F.I. / Kerwood, H. (2004): Effects of supplier trust on performance of cooperative supplier relationships, in: 22(1), 23-38.

Kalwani, M.U. and *Narayandas, N.* (1995): Long-term manufacturer-supplier relationships: do they pay off for supplier firms? in: Journal of Marketing, 59(1), 1-16.

Kamath, R.R. and *Liker, J.K.* (1994): A second look at Japanese product development, in: Harvard Business Review, 72(6), 154-170.

Karrer, M. (2006): Supply Chain Performance Management: Entwicklung und Ausgestaltung einer unternehmensübergreifenden Steuerungskonzeption. Wiesbaden 2006.

Kaufmann, L. (1995): Strategisches Sourcing, in: Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung, 47(3), 275-296.

Kaufmann, L. (1999): Purchasing and supply management: a conceptual framework, in: *Hahn, D.* (Edt.): Handbuch industrielles Beschaffungsmanagement internationale Konzepte - innovative Instrumente - aktuelle Praxisbeispiele. Wiesbaden 1999, 3-34.

Kaufmann, L. (2001): Internationales Beschaffungsmanagement: Gestaltung strategischer Gesamtsysteme und Management einzelner Transaktionen. Wiesbaden 2001.

Kaufmann, L. and *Carter, C.R.* (2006): International supply relationships and non-financial performance: a comparison of U.S. and German practices, in: Journal of Operations Management, 24(5), 653-675.

Keaveney, S.M. (1995): Customer switching behavior in service industries: An exploratory study, in: Journal of Marketing, 59(2), 71.

Kirk, J. and *Miller, M.L.* (1986): Reliability and validity in qualitative research. Newbury Park 1986.

Kirsch, W. (1977): Einführung in die Theorie der Entscheidungsprozesse, Part 1-3. 2. Ed. Wiesbaden 1977.

Kirsch, W. (1990): Unternehmenspolitik und strategische Unternehmensführung. München 1990.

Kirst, P. and *Hofmann, E.* (2007): Supplier integration and the challenge of relationship-exit strategies, in: *Otto, A.* and *Obermaier, R.* (Eds.): Logistikmanagement: Analyse, Bewertung und Gestaltung logistischer Systeme. Wiesbaden 2007, 397-425.

Knudsen, C. (1994): The competence view of the firm: what can modern economists learn from Philip Selznick's sociological theory of leadership, in: *Scott, W. R.* and *Chris-*

tensen, S. (Edt.): The institutional construction of organizations: international and longitudinal studies. Thousand Oaks 1994, 135-163.

Kogut, B. (1988): Joint Ventures: Theoretical and empirical perspectives, in: Strategic Management Journal, 9(4), 319-332.

*Kogut, B. (*1989): The stability of joint ventures: Reciprocity and competitive rivalry, in: Journal of Industrial Economics, 38(2), 183-198.

Konegen, N. and *Sondergeld, K.* (1985): Wissenschaftstheorie für Sozialwissenschaftler - Eine problemorientierte Einführung. Opladen 1985.

Koppelmann, U. (1995): Beschaffungsmarketing. 2. Ed. Berlin 1995.

Koppelmann, U. (2000): Beschaffungsmarketing. 3. Ed. Berlin 2000.

Koppelmann, U. (2004): Beschaffungsmarketing. 4. Ed. Berlin 2004.

Kraljic, P. (1983): Purchasing must become supply management, in: Harvard Business Review, 61(5), 109-117.

Krampf, P. (2000): Strategisches Beschaffungsmanagement in industriellen Grossunternehmen: Ein hierarchisches Konzept am Beispiel der Automobilindustrie. Lohmar *et al.* 2000.

Krause, D.R. / Scannell, T.V. / Calantone, R.J. (2000): A structural analysis of the effectiveness of buying firm's strategies to improve supplier performance, in: Decision Sciences, 31(1), 33-55.

Krause, D.R. / Handfield, R.B. / Tyler, B.B. (2007): The relationships between supplier development, commitment, social capital accumulation and performance improvement, in: Journal of Operations Management, 25(2), 528-545.

Krystek, U. (2002): Beschaffung und Vertrauen, in: *Kaufmann, D.* (Edt.): Handbuch Industrielles Beschaffungsmanagement: Internationale Konzepte - Innovative Instrumente - Aktuelle Praxisbeispiele. 2 Ed. Wiesbaden 2002, 1040-1057.

Kubicek, H. (1977): Heuristische Bezugsrahmen und heuristisch angelegte Forschungsdesigns als Elemente einer Konstruktionsstrategie empirischer Forschung, in: *Köhler, R.* (Edt.): Empirische und handlungstheoretische Forschungskonzeptionen in der Betriebswirtschaftslehre, Stuttgart 1977, 5-36.

Kuhn, T.S. (1999): Die Struktur wissenschaftlicher Revolution. 15. Ed. Frankfurt a.M. 1999.

Lambe, C.J. / Wittmann, C.M. / Spekman, R.E. (2001): Social exchange theory and research on business-to-business relational exchange, in: Journal of Business-to-Business Marketing, 8(3), 1-36.

Lambert, D.M. / Cooper, M.C. / Pagh, J.D. (1998): Supply chain management: implementation issues and research opportunities, in: International Journal of Logistics Management, 9(2), 1-19.

Lamnek, S. (1989): Qualitative Sozialforschung: Methodologie, Band 1. Weinheim 1989.

Lamnek, S. (1995): Qualitative Sozialforschung: Methoden und Techniken, Band 2, 3 Ed. Weinheim 1995.

Lamnek, S. (2005): Qualitative Sozialforschung: Lehrbuch. 4. Ed. Weinheim 2005.

Larson, P.D. (1994): Buyer-supplier co-operation: product quality and total costs, in: International Journal of Physical Distribution & Logistics Management, 24(6), 4-9.

Lasch, R. and *Friedrich, C.* (2004): Integration eines durchgängigen Lieferantenmanagements im E-Procurement, in: *Spengler, T. / Voss, S. / Kopfer, H.* (Eds.): Logistik Management: Prozesse, Systeme, Ausbildung. Heidelberg 2004, 91-110.

Lavie, D. (2006): The competitive advantage of interconnected firms: An extension of the resource-based view, in: Academy of Management Review, 4(3), 638-658.

Lavie, D. and *Rosenkopf, L.* (2006): Balancing exploration and exploitation in alliance formation, in: Academy of Management Journal, 49(4), 797-818.

Lechner, C. and *Müller-Stewens, G.* (1999): Strategische Prozessforschung. Zentrale Fragestellungen und Entwicklungstendenzen. Diskussionsbeitrag Nr. 33, Institut für Betriebswirtschaft. St. Gallen 1999.

Lee, H.L. (2002): Aligning supply chain strategies with product uncertainties, in: California Management Review, 44(3), 105-119.

Leenders, M.R. / Fearon, H.E. / England, W.B. (1989): Purchasing and materials management. 9. Ed. Boston 1989.

Leenders, M.R. / Johnson, P.F. / Flynn, A.E. / Fearon, H.E. (2006): Purchasing and supply management. 13. Ed. New York 2006.

Lewis, T.R. and *Yildirim, H.* (2005): Managing switching costs in multi-period procurements with strategic buyers, in: International Economic Review, 46(4), 1233-1269.

Li, S. / Madhok, A. / Plaschka, G. / Verma, R. (2006): Supplier-switching inertia and competitive asymmetry: a demand-side perspective, in: Decision Sciences, 37(4), 547-576.

Lillis, A.M. and *Mundy, J.* (2005): Cross-sectional field studies in management accounting research: closing the gaps between surveys and case studies, in: Journal of Management Accounting Research, 17(2), 119-141.

Lin, B.W. (2004): Original equipment manufacturers (OEM) manufacturing strategy for network innovation agility: the case of Taiwanese manufacturing networks, in: International Journal of Production Research, 42(5), 943-957.

Lin, H.-M. (2006): Interorganizational collaboration, social embeddedness, and value creation: a theoretical analysis, in: International Journal of Management, 23(3), 548-558.

Lingnau, V. (1995): Kritischer Rationalismus und Betriebswirtschaftslehre, in: Wissenschaftliches Studium, 24(3), 124-129.

Lofland, J. (1974): Styles of reporting qualitative filed research, in: American Sociologist, 9(3), 101-111.

Luhmann, N. (1973): Vertrauen - Ein Mechanismus zur Reduktion sozialer Komplexität. 2. Ed. Stuttgart 1973.

Lummus, R.R. / Vokurka, R.J. / Duclos, L.K. (2005): Delphi study on supply chain flexibility, in: International Journal of Production Research, 43(13), 2687-2708.

Macaulay, S. (1963): Non-contractual relations in business: a preliminary study, in: American Sociological Review, 28(1), 55-69.

Mahoney, J.T. and *Pandian, J.R.* (1992): The resource-based view within the conversation of strategic management, in: Strategic Management Journal, 13(5), 363-380.

Maloni, M. and *Benton, W.C.* (2005): The influence of power driven buyer / seller relationships on supply chain satisfaction, in: Journal of Operations Management, 23(1), 49-73.

Mangan, J. (2004): Combining quantitative and qualitative methodologies in logistics research, in: International Journal of Physical Distribution & Logistics Management, 34(7), 565-578.

Männel, W. (1996): Make-or-Buy-Entscheidungen, in: Kostenrechnungspraxis, 40(3), 148-150.

Martínez Sánchez, A. and *Pérez Pérez, M.* (2005): Supply chain flexibility and firm performance: a conceptual model and empirical study in the automotive industry, in: International Journal of Operations & Production Management, 25(7), 681-700.

Martínez-de-Albéniz, V. and *Simchi-Levi, D.* (2005): A portfolio approach to procurement contracts, in: Production and Operations Management, 14(1), 90-114.

Mason-Jones, R. / Naylor, B. / Towill, D.R. (2000): Lean, agile or league? Matching your supply chain to the marketplace, in: International Journal of Production Research, 38(17), 4061-4070.

Maxwell, J.A. (1996): Qualitative research design: an interactive approach. Thousand Oaks 1996.

Mayring, P. (2002): Einführung in die qualitative Sozialforschung: Eine Anleitung zum qualitativen Denken. 5. Ed. Weinheim *et al.* 2002.

Michalski, S. (2004): Types of customer relationship ending processes, in: Journal of Marketing Management, 20(9/10), 977-999.

Mikkola, J.H. and *Skjøtt-Larsen, T.* (2003): Early supplier involvement: implications for new product development outsourcing and supplier-buyer interdependence, in: Global Journal of Flexible Systems Management, 4(4), 31-41.

Mikkola, J.H. and *Skjøtt-Larsen, T.* (2004): Supply-chain integration: implications for mass customization, modularization and postponement strategies, in: Production Planning & Control, 15(4), 352-361.

Miles, M.B. and *Huberman, A.M.* (1994): Qualitative data analysis: an expanded sourcebook. London *et al.* 1994.

Miles, R.E. and *Snow, C.C.* (1992): Causes of failure in network organizations, in: California Management Review, 34(4), 53-72.

Milgrom, P. and *Roberts, J.* (1990): Bargaining costs, influence costs, and the organization of economic activity, in: *Alt, J.E.* and *Shepsle, K.A.* (Eds.): Perspectives on positive political economy. Cambridge 1990, 57-89.

Milgrom, P.R. and *Roberts, D.J.* (1992): Economics, organization, and management. Englewood Cliffs 1992.

Mintzberg, H. and *Westley, F.* (1992): Cycles of organizational change, in: Strategic Management Journal, 13(8), 39-59.

Mitroff, I. and *Mason, R.O.* (1982): Business policy and metaphysics: some philosophical considerations, in: Academy of Management Review, 9(3), 361-371.

Modi, S.B. and *Mabert, V.A.* (2007): Supplier development: improving supplier performance through knowledge transfer, in: Journal of Operations Management, 25(1), 42-64.

Mol, M.J. (2001): Outsourcing, supplier relations and internationalization: global sourcing strategy as a Chinese puzzle. Diss. Erasmus University Rotterdam 2001.

Monczka, R. and *Morgan, J.P.* (1996): Supplier integration a new level of supply chain management, in: Purchasing, 120(1), 110-113.

Monczka, R. / Trent, R. / Handfield, R.B. (1998): Purchasing and supply chain management. Cincinnati 1998.

Monczka, R.M. / Handfield, R.B. / Scannell, T.V. / Ragatz, G.L. / Frayer, D.J. (2000): New product development: strategies for supplier integration. Milwaukee 2000.

Monteverde, K. and Teece, D.J. (1982): Supplier switching costs and vertical integration in the automobile industry, in: Bell Journal of Economics, 13(1), 206-213.

Montgomery, C.A. and *Wernerfelt, B.* (1988): Diversification, Ricardian rents, and Tobin's q, in: The RAND Journal of Economics, 19(4), 623-632.

Morgan, G. and *Smircich, L.* (1980): The case for qualitative research, in: Academy of Management Review, 5(4), 491-500.

Narasimhan, R. and *Kim, S.W.* (2002): Effect of supply chain integration on the relationship between diversification and performance: evidence from Japanese and Korean firms, in: Journal of Operations Management, 20(3), 303-323.

Nellore, R. and *Soderquist, K.* (2000): Portfolio approaches to procurement: analyzing the missing link to specifications, in: Long Range Planning, 33(2), 245-267.

Nellore, R. and *Taylor, J.E.* (2000): Using portfolio approaches to manage engineering-purchasing interaction, in: Production & Inventory Management Journal, 41(1), 6-12.

Nielson, C.C. (1996): An empirical examination of switching cost investments in business-to-business marketing relationships, in: Journal of Business & Industrial Marketing, 11(6), 38-60.

Nogatchewsky, G. (2006): L'impact de la dépendance sur les stratégies de contrôle d'un équipementier automobile vis-à-vis de ses fournisseurs: une lecture militaire, in: Finance Contrôle Stratégie, 9(2), 89-119.

Nooteboom, B. (2004): Governance and competence: how can they be combined? in: Cambridge Journal of Economics, 28(4), 505-525.

Noordewier, T.G. / John, G. / Nevin, J.R. (1990): Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships, in: Journal of Marketing, 54(10), 80-93.

Olsen, R.F. and *Ellram, L.M.* (1997): A portfolio approach to supplier relationships, in: Industrial Marketing Management, 26(2), 101-113.

Osegowitsch, T. and *Madhok, A.* (2003): Vertical integration is dead, or is it? in: Business Horizons, 46(2), 25-34.

Osterloh, M. and *Frost, J.* (2000): Prozessmanagement als Kernkompetenz. 3. Ed. Wiesbaden 2000.

Pagell, M. and *Krause, D.R.* (2004): Re-exploring the relationship between flexibility and the external environment, in: Journal of Operations Management, 21(6), 629-649.

Park, S.H. and *Russo, M.V.* (1996): When competition eclipses cooperation: an event history analysis of joint venture failure, in: Management Science, 42(6), 875-890.

Park, S.H. and *Ungson, G.R.* (1997): The effect of national culture, organizational complementarity, and economic motivation on joint, in: Academy of Management Journal, 40(2), 279-308.

Park, S.H. and *Ungson, G.R.* (2001): Interfirm rivalry and managerial complexity: a conceptual framework of alliance failure, in: Organization Science, 12(1), 37-51.

Parkhe, A. (1993): "Messy" research, methodological predispositions and theory development in international joint ventures, in: Academy of Management Review, 18(2), 227-268.

Paulraj, A. / Chen, I.J. / Flynn, J. (2006): Levels of strategic purchasing: impact on supply integration and performance, in: Journal of Purchasing and Supply Management, 12(3), 107-122.

Peng, M.W. and *Shenkar, O.* (2002): Joint venture dissolution as corporate divorce, in: Academy of Management Executive, 16(2), 92-105.

Peteraf, M.A. (1993): The cornerstones of competitive advantage: a resource-based view, in: Strategic Management Journal, 14(3), 179-191.

Petersen, K.J. / Frayer, D.J. / Scannel, T.V. (2000): An empirical investigation of global sourcing strategy effectiveness, in: Journal of Supply Chain Management, 36(2), 29-38.

Pfeffer, J. and *Salancik, G.* (1978): The external control of organizations: a resource dependence perspective. New York 1978.

Pfohl, H.-C. (2000b): Logistiksysteme: Betriebswirtschaftliche Grundlagen. 6. Ed. Berlin *et al.* 2000.

Pfohl, H.-C. (2001): Management von Produktionsnetzwerken, in: Baumgarten, H. (Edt.): Logistik im E-Zeitalter. Die Welt der globalen Produktionsnetzwerke. Frankfurt a.M. 2001, 35-54.

Pfohl, H.-C. / Elbert, R. / Hofmann, E. (2003): Management der "finanziellen" Supply Chain. Charakterisierung - Aufgabenbereiche - Interdependenzen, in: *BVL* (Edt.): Finanzierung - eine neue Dimension der Logistik. Berlin 2003, 1-64.

Picot, A. (1991): Ein neuer Ansatz zur Gestaltung der Leistungstiefe, in: Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung, 43(4), 336-357.

Picot, A. / Dietl, H. / Franck, E. (1998): Organisation. Stuttgart 1998.

Picot, A. / Dietl, H. / Franck, E. (2002): Organisation: Eine ökonomische Perspektive. 3. Ed. Stuttgart 2002.

Picot, A. and *Neuburger, R.* (1995): Agency Theorie und Führung, in: *Kieser, A. / Reber, G. / Wunderer, R.* (Eds.): Handwörterbuch der Führung. 2 Ed. Stuttgart 1995, 14-21.

Picot, A. / Reichwald, R. / Wigand, R.T. (2001): Die grenzenlose Unternehmung Information, Organisation und Management Lehrbuch zur Unternehmensführung im Informationszeitalter. 4. Ed. Wiesbaden 2001.

Piller, F.T. (2006): Mass Customization, in: *Picot, A. / Reichwald, R. / Franck, E.* (Edt.): Ein wettbewerbsstrategisches Konzept im Informationszeitalter, Wiesbaden 2006.

Ping, R. and *Dwyer, F.R.* (1992): A preliminary model of relationship termination in marketing channels, in: F*razier, G.L.* (Edt.): Advances in distribution channel research. Greenwich 1992, 215-233.

Popper, K.R. (1965): The logic of scientific discovery. London 1965.

Porter, E.M. (1980): Competitive strategy - Techniques for analyzing industries and competitors. New York 1980.

Porter, M.E. (1998): Competitive advantage: creating and sustaining superior performance. London 1998.

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

Prahalad, C.K. and *Hamel, G.* (1991): Nur Kernkompetenzen sichern das Überleben, in: Harvard Business Manager, 13(2), 66-78.

Prater, E. / Biehl, M. / Smith, M.A. (2001): International supply chain agility - Tradeoffs between flexibility and uncertainty, in: International Journal of Operations & Production Management, 21(5/6), 823-839.

Radnitzky, G. and *Andersson, G.* (1980): Gibt es objektive Kriterien für den Fortschritt der Wissenschaft? Induktivismus, Falsifikationismus, Relativismus, in: *Bellmann, K. / Freiling, J. / Hammann, P. / Mildenberger, U.* (Eds.): Fortschritt und Rationalität der Wissenschaft. Tübingen 1980, 3-24.

Raffée, H. (1989): Gegenstand, Methoden und Konzepte der Betriebswirtschaftslehre, in: *Bitz, M. / Dellmann, K. / Baetge, J.* (Eds.): Vahlens Kompendium der Betriebswirtschaftslehre. München 1989, 3-46.

Raffée, H. and *Abel, B.* (1979): Wissenschaftstheoretische Grundfragen der Wirtschaftswissenschaften. München 1979.

Rapoport, A. (1998): Decision theory and decision behavior. 2. Ed. London 1998.

Rapoport, A. / Chammah, A.M. / Orwant, C.J. (1965): Prisoner's dilemma a study in conflict and cooperation. Ann Arbor 1965.

Rasche, C. and *Wolfrum, B.* (1994): Ressourcenorientierte Unternehmensführung, in: Die Betriebswirtschaft, 54(4), 501-517.

Richards, L. (1993): Writing a qualitative thesis or grant application, in: *Beattie, K.* (Edt.): So where's your research profile? A resource book for academics. South Melbourne 1993.

Richter, R. and *Furubotn, E.G.* (1999): Neue Institutionenökonomik. 2. Ed. Tübingen 1999.

Rindfleisch, A. and *Heide, J.B.* (1997): Transaction cost analysis: past, present, and future applications, in: Journal of Marketing, 61(4), 30-54.

Ripperger, T. (1998): Ökonomik des Vertrauens - Analyse eines Organisationsprinzips. München 1998.

Robins, J.A. (1987): Organizational economics: notes on the use of transaction-cost theory in the study of organizations, in: Administrative Science Quarterly, 32(2), 68-86.

Röhrs, A. (2003): Produktionsmanagement in Produktionsnetzwerken. Frankfurt a.M. 2003.

Roloff, M.E. (1987): Interpersonal communication: the social exchange approach. Newbury Park 1987.

Rosenzweig, E.D. / Roth, A.V. / Dean Jr, J.W. (2003): The influence of an integration strategy on competitive capabilities and business performance: an exploratory study of consumer products manufacturers, in: Journal of Operations Management, 21(4), 437-456.

Ross, S. (1973): The economic theory of agency: The principal's problem, in: American Economic Review, 63(2), 134-139.

Rossetti, C. and *Choi, T.Y.* (2005): On the dark side of strategic sourcing: experiences from the aerospace industry, in: Academy of Management Executive, 19(1), 46-60.

Roth, A.V. (1996): Neo-operations strategy: linking capabilities based competition to technology, in: *Gaynor, G.H.* (Edt.): Handbook of technology management. New York 1996, 38.31-38.44.

Rüegg-Stürm, J. (2002): Das neue St.Galler Management-Modell: Grundkategorien einer integrierten Managementlehre: Der HSG-Ansatz. 2. Ed. Bern 2002.

Rumelt, R.P. (1984): Towards a strategic theory of the firm, in: *Lamb, R.B.* (Edt.): Competitive Strategic Management. Englewood Cliffs 1984. 556-570.

Sahin, F. and *Robinson, E.P.* (2002): Flow coordination and information sharing in supply chains: review, implications and directions for future research, in: Decision Sciences, 33(4), 505-536.

Sakakibara, S. / Flynn, B.B. / Schroeder, R.C. / Morris, W.T. (1997): The impact of Just-In-Time manufacturing and its infrastructure on manufacturing performance, in: Management Science, 43(9), 1246-1257.

Salmi, A. (2006): Organizing international supplier relations: an exploratory study of western purchasing in china, in: Journal of Purchasing and Supply Management, 12(4), 197-208.

Sanchez, R. (1995): Strategic flexibility in product competition, in: Strategic Management Journal, 16(5), 135-159.

Sánchez-Rodríguez, C. / Hemsworth, D. / Martínez-Lorente, Á.R. (2005): The effect of supplier development initiatives on purchasing performance: a structural model, in: Supply Chain Management, 10(4), 289-301.

Sarkis, J. and *Talluri, S.* (2002): A model for strategic supplier selection, in: Journal of Supply Chain Management: A Global Review of Purchasing & Supply, 38(1), 18-28.

Schade, C. and *Schott, E.* (1993): Kontraktgüter im Marketing, in: Zeitschrift für Forschung und Praxis, 14(1), 15-25.

Schanz, G. (1977): Jenseits von Empirismus, in: *Köhler, R.* (Edt.): Empirische und handlungstheoretische Forschungskonzeptionen in der Betriebswirtschaftslehre. Bericht über die Tagung in Aachen, März 1976. Stuttgart 1977, 65-84.

Schanz, G. (1990): Die Betriebswirtschaftslehre als Gegenstand kritisch-konstruktiver Betrachtungen. Stuttgart 1990.

Schierenbeck, H. (1998): Grundzüge der Betriebswirtschaftslehre. München *et al.* 1998.

Schildknecht, C. (1998): Management ganzheitlicher organisationale Veränderung. Wiesbaden 1998.

Schneider, D. (1981): Geschichte betriebswirtschaftlicher Theorie: Allgemeine Betriebswirtschaftslehre für das Hauptstudium. München *et al.* 1981.

Schnell, R. / Hill, P.B. / Esser, E. (1995): Methoden der empirischen Sozialforschung. München *et al.* 1995.

Sharma, N. and *Patterson, P.G.* (2000): Switching costs, alternative attractiveness and experience as moderators of relationship commitment in professional, consumer services, in: International Journal of Service Industry Management, 11(5), 470-491.

Simatupang, T.M. and *Sridharan, R.* (2005): Supply chain discontent, in: Business Process Management Journal, 11(4), 349-369.

Simon, H. (1988): Management strategischer Wettbewerbsvorteile, in: Zeitschrift für Betriebswirtschaft, 58(4), 461-480.

Singh, N. and *Kundu, S.* (2002): Explaining the growth of e-commerce corporations (ECCs): an extension and application of the eclectic paradigm, in: Journal of International Business Studies, 33(4), 679-697.

Singh, K. and *Mitchell, W.* (1996): Precarious collaboration: business survival after partners shut down or form new partnerships, in: Strategic Management Journal, 17(7), 99-115.

Sitkin, S.B. and *Pablo, A.L.* (1992): Reconceptualizing the determinants of risk behavior, in: Academy of Management Review, 17(1), 9-38.

Sjurts, I. (1998): Kontrolle ist gut, Vertrauen ist besser? Ökonomische Analysen zur Selbstorganisation als Leitidee neuer Organisationskonzepte, in: Die Betriebswirtschaft, 58(3), 283-298.

Skinner, B.F. (1950): Are theories of learning really necessary? in: Psychology Review, 50(4), 193-216.

Skjøtt-Larsen, T. (2007): Design and management of supply chain relationships: a theoretical framework, in: *Delfmann, W.* and *Klaas-Wissing, T.* (Eds.): Strategic supply chain design: theory, concepts, and applications. Köln 2007, 83-108.

Smith, R. (2002): Environmental change and the dissolution of relationships, in: Marketing Management Journal, 12(2), 39-52.

Solem, O. (2003): Epistemological considerations in research: a vehicle to logistics improvement, in: *Ojala, L.* and *Hilmola, O.-P.* (Eds.): Case study research in logistics. Turku 2003, 125-147.

Spremann, K. (1990): Asymmetrische Information, in: Schmalenbachs Zeitschrift für Betriebswirtschaftliche Forschung, 60(5), 561-586.

Stake, R.E. (1995): The art of case study research. London *et al.* 1995.

Steinmann, H. and *Schreyögg, G.* (2005): Management. 6. Ed. Wiesbaden 2005.

Stenbacka, C. (2001): Qualitative research requires quality concepts of its own, in: Management Decision, 39(7), 551-555.

Steward, K. (1998): The customer exit process - a review and research agenda, in: Journal of Marketing Management, 14(5), 235-250.

Stolte, J.F. / Fine, G.A. / Cook, K.S. (2001): Sociological miniaturisim: seeing the big through the small in social psychology, in: Annual Review of Sociology, 27(1), 387-413.

Stölzle, W. (1999): Industrial Relationships. München 1999.

Stölzle, W. and *Hoffmann, A.* (2004): Herausforderungen an ein globales Supply Chain Management, in: *Zentes, J.* (Eds.): Außenhandel: Marketingstrategien und Managementkonzepte. Wiesbaden 2004, 965-987.

Stölzle, W. and *Kirst, P.* (2006): Portfolios als risikoorientiertes Instrument zur Steigerung des erwarteten Wertbeitrags im Lieferantenmanagement, in: *Jacquemin, M. / Pibernik, R. / Sucky, E.* (Edt.): Quantitative Methoden der Logistik und des SCM: Festschrift für Prof. Dr. Heinz Isermann. Hamburg 2006, 239-265.

Stölzle, W. and *Kirst, P.* (2007): Lieferantenintegration im Kontext des Global Sourcing, in: *Bogaschewsky, R.* (Edt.): Beschaffung vor dem Hintergrund der Globalisierung - Entwicklungen, Strukturen, Prozesse. 2007,

Swafford, P.M. / Ghosh, S. / Murthy, N. (2006): The antecedents of supply chain agility of a firm: scale development and model testing, in: Journal of Operations Management, 24(2), 170-188.

Swift, C.O. (1995): Preferences for single sourcing and supplier selection criteria, in: Journal of Business Research, 32(2), pp. 105-111.

Swift, C.O. and *Coe, B.J.* (1994): Sourcing preference scale: Measuring preferences of purchasing managers for single sourcing or multiple sourcing of products, in: Industrial Marketing Management, 23(2), 171-180.

Sydow, J. and *Möllering, G.* (2004): Produktion in Netzwerken: Make, Buy & Cooperate. München 2004.

Tähtinen, J. (2001): The dissolution process of a business relationship - A case study from tailored software business. Oulu 2001.

Takeishi, A. (2001): Bridging inter-and intra-firm boundaries: management of supplier involvement in the automobile product development, in: Strategic Management Journal, 22(5), 403-433.

Tang, C.S. (1999): Supplier relationship map, in: International Journal of Logistics: Research & Applications, 2(1), 39-56.

Tani, T. and *Wangenhein, v.S.* (1998): Vergleichende empirische Analyse des Serienanlaufes bei Automobilzulieferern in Deutschland und Japan, in: *Horváth, P.* and *Fleig, G.* (Eds.): Integrationsmanagement für neue Produkte. Stuttgart 1998, 23-53.

Teece, D.J. and *Pisano, G.* (1998): The dynamic capabilities of firms: an introduction, in: *Dosi, G. / Teece, D. J. / Chytry, J.* (Eds.): Technology, organization, and competitiveness: perspectives on industrial and corporate change. New York 1998, 17-66.

Teece, D.J. / Pisano, G. / Shuen, A. (1997): Dynamic Capabilities and Strategic Management, in: Strategic Management Journal, 7(3), 509-533.

Thibaut, J. and *Walker, L.* (1978): A theory of procedure, in: California Law Review, 66(1), 541-566.

Thibaut, J.W. and *Kelley, H.H.* (1959): The social psychology of groups. New York 1959.

Ticehurst, G.W. and *Veal, A.J.* (2000): Business research methods. Australia 2000.

Trent, R.J. and *Monczka, R.M.* (2002): Pursuing competitive advantage through integrated global sourcing, in: Academy of Management Executive, 16(2), 66-80.

Trumpfheller, M. and *Hofmann, E.* (2004): Supply Chain Relationship Management, in: Pfohl, H.-C. (Edt.): Netzkompetenz in Supply Chains - Grundlagen und Umsetzung. Wiesbaden 2004.

Tschamler, H. (1983): Wissenschaftstheorie. Eine Einführung für Pädagogen. Bad Heilbrunn 1983.

Ulrich, D. and *Barney, J.B.* (1984): Perspectives in organizations: resource dependency, efficiency, and population, in: The Academy of Management Review, 9(3), 471-481.

Ulrich, H. (1984): Die Betriebswirtschaftslehre als anwendungsorientierte Sozialwissenschaft, in: *Dyllick, T.* and *Probst, G.* (Eds.): Management, Bern 1984, 168-199.

Vaaland, T.I. (2004): Avoiding business divorce, in: Journal of General Management, 29(3), 37-52.

van Gigch, J.P. (1997): The design of an epistemology for the management discipline which resolves dilemmas among ethical and other imperatives, in: Systems Practice, 10(4), 381-394.

Verduijn, T.M. (2004): Dynamism in supply networks: actor switching in a turbulent business environment. Diss. Erasmus University Rotterdam 2004.

Vickery, S. / Calantone, R. / Dröge, C. (1999): Supply chain flexibility: an empirical study, in: Journal of Supply Chain Management: A Global Review of Purchasing & Supply, 35(3), 16-24.

Voigt, K.-I. / Saatmann, M. / Schorr, S. (2006): Einsatzfelder und Grenzen der Selbststeuerung in flexiblen Logistiksystemen, in: *Pfohl, H.-C.* and *Wimmer, T.* (Eds.): Wissenschaft und Praxis im Dialog: Steuerung von Logistiksystemen - auf dem Weg zur Selbststeuerung. Hamburg 2006, 96-115.

Vokurka, R.J. / Zank, G.M. / Lund Iii, C.M. (2002): Improving competitiveness through supply chain management: a cumulative improvement approach, in: Competitiveness Review, 12(1), 14-25.

von Glasersfeld, E. (1992): Aspekte des Konstruktivismus, Vico, Berkeley, Piaget, in: *Rusch, G.* and *Schmidt, S.* (Eds.): Konstruktivismus: Geschichte und Anwendung. Frankfurt a.M. 1992, 20-33.

von Wangenheim, S. (1998): Integrationsbedarf im Serienanlauf dargestellt am Beispiel der Automobilindustrie, in: *Horváth, P.* and *Fleig, G.* (Eds.): Integrationsmanagement für neue Produkte, Stuttgart 1998, 58-86.

Wagner, S.M. (2001): Strategisches Lieferantenmanagement in Industrieunternehmen: Eine empirische Studie von Gestaltungskonzepten. Diss University of St.Gallen 2001.

Wagner, S.M. (2003): Intensity and managerial scope of supplier integration, in: Journal of Supply Chain Management, 39(4), 4-15.

Wagner, S.M. and *Friedl, G.* (2007): Supplier switching decisions, in: European Journal of Operational Research, 183 (1), 700-717.

Wagner, S.M. and *Hoegl, M.* (2006): Involving suppliers in product development: Insights from R&D directors and project managers, in: Industrial Marketing Management, 35(8), 936-943.

Wagner, S.M. and *Johnson, J.L.* (2004): Configuring and managing strategic supplier portfolios, in: Industrial Marketing Management, 33(8), 717-730.

Walsham, G. (1993): Interpreting information systems in organizations. Chichester 1993.

Watts, C.A. and *Hahn, C.K.* (1993): The supplier development program: An empirical analysis, in: International Journal of Purchasing and Material, 29(2), 11-17.

Weber, M. (2000): Wissenschaft und Praxis: Plädoyer für eine organisationstheoretische Betrachtung. München 2000.

Welge, M. K. (1980): Management in deutschen multinationalen Unternehmungen. Stuttgart: Poeschel 1980.

Wenger, E. and *Terberger, E.* (1988): Die Beziehung zwischen Agent und Prinzipal als Baustein einer ökonomischen Theorie der Organisation, in: Wirtschaftswissenschaftliches Studium, 10(4), 506-513.

Wernerfelt, B. (1984): A resource-based view of the firm, in: Strategic Management Journal, 5(2), 171-182.

Wheeler, B.C. (2002): NEBIC: a dynamic capabilities theory for assessing net-enablement, in: Information Systems Research, 13(2), 125-146.

Williamson, O.E. (1975): Markets and hierarchies: analysis and antitrust implications. New York 1975.

Williamson, O.E. (1979): Transaction-cost economics: the governance of contractual relations, in: Journal of Law and Economics, 22(2), 233-261.

Williamson, O.E. (1985): The economic institutions of capitalism: firms, markets, relational contracting. New York *et al.* 1985.

Williamson, O.E. (1990): Die ökonomischen Institutionen des Kapitalismus. Unternehmen, Märkte, Kooperationen. Tübingen 1990.

Williamson, O.E. (1991): Comparative economic organization: the analysis of discrete structural alternatives, in: Administrative Science Quarterly, 36(2), 269-296.

Wilson, D.T. (1995): An integrated model of buyer-seller relationships, in: Journal of the Academy of Marketing Science, 23(4), 335-345.

Wilson, D.T. and *Mummalaneni, V.* (1986): Bonding and commitment in supplier relationships: a preliminary conceptualization, in: Industrial Marketing and Purchasing, 1(3), 44-58.

Windsperger, J. (1987): Zur Methode des Transaktionskostenansatzes, in: Zeitschrift für Betriebswirtschaft, 57(1), 59-76.

Womack, J.P. and *Jones, D.T.* (2003): Lean Thinking. Bath 2003.

Womack, J.P. / Jones, D.T. / Roos, D. (2003): The Machine that changed the World. New York 2003.

Yen Chun Wu, R. (2003): Lean manufacturing: a perspective of lean suppliers, in: International Journal of Operations & Production Management, 23(12), 1349-1376.

Yin, R.K. (1994): Case study research - design and methods. London 1994.

Yin, R.K. (2003): Case study research - design and methods. 3. Ed. London 2003.

Zahn, E. (1996): Kernkompetenzen, in: *Kern, W. / Schröder, H.-H. / Weber, J.* (Eds.): Handwörterbuch der Produktionswirtschaft, Stuttgart 1996, 883-894.

Zahn, E. / Barth, T. / Hertweck, A. (1999): Erfolgreiches Dienstleistungsmanagement - ein Weg zu mehr Innovation, Wachstum und Ertragskraft, in: *Bullinger, H.-J.* and *Zahn, E.* (Eds.): Conference proceedings of "Service Engineering 99 - Entwicklung und Gestaltung innovativer Dienstleistungen." Stuttgart 1999, 87-98.

Zajac, E.J. and *Olsen, C.P.* (1993): From transaction costs to transaction value analyses: implications for the study of interorganizational strategies, in: Journal of Management Studies, 30(1), 131-145.

Zsidisin, G.A. (2003): A grounded definition of supply risk, in: Journal of Purchasing and Supply Management, 9(5/6), 217-224.

Zsidisin, G.A. / Panelli, A. / Upton, R. (1999): Purchasing organization involvement in risk assessments, contingency plans, and risk management: An exploratory study, in: Supply Chain Management: An International Journal, 5(4), 187-197.

Appendix A

Results of the preliminary expert interviews:

The objective was to explore the practical relevance and certain problems that are associated with supplier-switching management. In order to achieve this, three companies with experiences in supplier switching were chosen. The results of the interviews will be presented anonymously for reasons of confidentiality. In the following, each company (labeled X, Y, and Z) will be briefly introduced and the key findings of each preliminary expert interview will be presented.

Company X is a German automotive OEM[430] with different production plants all over the globe. The interview was conducted with a representative of the production materials purchasing department. In summary, it can be stated that supplier switching at this company is uncommon. In the opinion of the company, switching leads to higher risks and probably higher costs due to a difficult switching process. Making switches easier is not considered a high priority, since it is believed that a supplier would price-in the possibility of being switched and hence increase the prices. On the other hand, company X stated that they do switch suppliers frequently in the case of new projects or facelifts. However, these stages in the product-lifecycle are considered as non-critical for switching. According to this interview, it can be postulated that supplier switches in this company are more negatively imposed, which made the interview process more difficult. As a consequence, this interview led to a bigger emphasis on the positive aspects of switching, like flexibility gains and reduction of dependencies, in order to present the topic in a more positive light.

Company Y is a Swiss telecommunications provider. The supply department of this company deals with purchases of services and hardware for their GSM and UMTS network. The interviewee was the director of purchasing in Switzerland. One key statement of this interview was that suppliers generally have to be switched from time to time in order to improve the buyer's credibility. If a poorly-performing supplier does not experience any consequences, a company will lose reputation in the supply-market in the long-run. Furthermore, the interviewee stated that supplier-buyer relationships should be created with change in mind and should have a sound exit strategy. This strategy must be developed in advance and certain aspects, like the division of joint assets after one party wants to exit, have to be provided for in the contract. In addition, the interview revealed that a very important aspect of supplier switching is the communication strategy. Depending on the specific circumstances of a particular supplier-switch, it can either be useful to inform the old supplier right away or it might be better to get the new supplier ready first and than communicate the switching decision to the old supplier. This preliminary interview helped to understand the impact of

[430] Original equipment manufacturer.

different relationship-specific circumstances in supplier switching and led to a bigger emphasis on the switching communication strategy.

Company Z is a German automotive supplier with some decentralized purchasing responsibilities at the segment-level and some sourcing duties at the group level. The interview partner is the vice president of the purchasing department of one of the company's segments. The interviewee stated that the company is more concerned with stability than flexibility. Thus, most contracts have a product-lifecycle horizon. The company expects that it can gain substantial economies of scale that ultimately offset the disadvantages of reduced flexibility due to single sourcing. However, in order to reduce dependencies between the buyer and supplier the company puts lots of effort into supply-market research to find potential second sources and alternative suppliers in general. Additionally, the company found that certain organizational settings have a big influence on a company's switching inertia. In particular, personal relationships that have been developed over time between employees of the purchasing departments and employees of the supplier are considered as potential pitfalls. One reason for this is that companies might become too accustomed to each other, which will make it difficult to separate personal preferences from business needs. Thus, the company tries to reduce this influence by centralizing as much of the purchasing responsibilities as possible, since central departments tend to have more employee turnover. This tends to reduce the time that the buyer and supplier representative spend with each other, making the emergence of personal relationships less likely. This preliminary interview revealed more insights into the functioning and challenges of structural relationship flexibility in comparison to flexibility within relationships.