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Applying SPAT for understanding B-to-B supplier switching processes

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Abstract

Purpose — This study focuses on the switching path analysis technique (SPAT) application to enlarge the understanding of customer switching from the business to consumer (B-to-C) context to the processes of business-to-business (B-to-B) supplier switches.

Design/methodology/approach — The paper is a theory extension of SPAT, with nine (9) supplier switching cases in different B-to-B settings. The cases shed light also on the actual triggers and determinants of the B-to-B switches.

Findings — The study proves the applicability of SPAT in B-to-B settings. The B-to-B context adds complexity, forming a relationship flow where many driving factors act for switching. Thus, the findings suggest that a comprehensive analysis of the triggers and determinants is required to understand the switching processes. In particular, the characteristics of the active/passive behaviour should be analysed separately in the customer and in the old and new suppliers.

Research limitations/implications — The empirical findings are exploratory in nature. Further research should refine the characteristics of active and passive behaviour at the levels of the relationship, the companies and the individuals to comprehend the notion of the influential trigger in SPAT. Further research should also address the wider topic of the patterns of certain triggers and determinants that actually lead to unstable supplier relationships.

Managerial implications — The B-to-B supplier switches appear to be complex processes. The supplier should be able to be constantly aware of the major changes in the customer's business. Based on this awareness, the supplier may actively affect the development of the relationship to avoid unwanted switches.

Originality/value — The paper combines the relatively mature research stream of B-to-C supplier switches and access to B-to-B supplier-switching cases. The theory contribution of the paper is the extension of the theory to the B-to-B context, with relevant research implications.

Keywords — SPAT, Business-to-business, Active/passive behaviour, Switching process

Article classification — Research paper

1. Introduction

Customer retention has been an important topic in the marketing literature (see, e.g., Rosenberg and Czepiel 1984, Bolton 1998, Gustafsson *et al.* 2005). Understanding how to prevent customers from switching to other suppliers remains highly relevant also from the pragmatic perspective. To capture customers' switching behaviour, the switching processes have been examined, especially in the business-to-consumer (B-to-C) domain of the relationship marketing literature (e.g., Keaveney 1995, Bansal and Taylor 1999, Lopez *et al.* 2006). However, much less is known about the supplier switching processes in the business-to-business (B-to-B) settings (Lam *et al.* 2004).

During recent years, an increasingly strong body of research related to B-to-B supplier switches has been established. Much of this discussion has revolved around the topics of customer and relationship value (e.g., Hogan 2001, Ulaga and Eggert 2006, Matthyssens and Vandembemt 2008). Another stream in B-to-B marketing literature aims to understand the factors affecting the likelihood of supplier switches (e.g., Heide and Weiss 1995, Wilson 1995, Edvardsson and Strandvik 2009).

In general, the knowledge on B-to-B supplier switches and especially on processes underlying them (Halinen and Tähtinen 2002, Michalski 2004) still remains limited and requires further examination.

In the B-to-C context, critical incident techniques (CITs) have been widely applied to build an understanding of how and why customers switch their suppliers. These applications have shown that CITs can provide valuable means to rigorously study issues that has not been previously considered (Gremler 2004). The number of studies using CITs in the B-to-B context has been significantly lower, although their potential has been recognised (Gremler 2004, Edvardsson and Strandvik 2009). The switching path analysis technique (SPAT) (Roos 1999) represents a recent advancement in the CIT stream, with a potential to illuminate the processual nature of supplier switches.

Indeed, plenty of the knowledge on switching behaviour is embedded in the CIT methods. In the present study, we focus on SPAT in order to be able to continue the knowledge development on supplier switching and retention, especially in the B-to-B context. The objective of the paper is two-fold. First, the paper examines the expendability of SPAT to B-to-B context. Although the SPAT has been applied in various contexts, thus far all the applications have been in the B-to-C setting. Second, in order to consider the actual feasibility of such an extension, the paper provides exploratory insights into supplier switching processes in the B-to-B context.

The results of the study highlight the fact that, although the SPAT has been found to be easily and widely applicable to B-to-C context, the B-to-B context raises some distinct challenges. The reason is that while, in the B-to-C context, the link between the factors of the relationship leading to switching behaviour is often rather clear and easily derivable, the B-to-B context adds complexity by including a relationship flow where many driving factors act for switching, as it appears simultaneously. However, as our findings illustrate, there can be patterns amongst these driving factors. In this study, the existence of such a pattern(s) is a key finding, whereas a more detailed description of the related process(es) remains an assignment for future research. Compared to applications of SPAT in B-to-C context, our study in B-to-B revealed that, instead of identifying single driving factors such as triggers (Roos 1999) in the B-to-C context, we noticed an assembly of trigger encounters over time in the relationships that together build up the sensitivity for switching. These “trigger encounters” are the start of the new direction for SPAT in the B-to-B context. In comparison to CITs more broadly, the difference is even larger, because most of the CIT methods, although allowing the flow description, lack the relationship perspective.

The structure of the paper is as follows. In the literature review, we deal with the SPAT as a CIT, the characteristics of B-to-B supplier switches and the existing body of knowledge in the B-to-C

supplier switching literature, focusing especially on the SPAT stream. Then we present the methodology of our empirical study. This is followed by the findings section, where the case narratives are used to identify the *triggers* and *determinants* of B-to-B supplier switches. We discuss the findings in the following section, focusing on the viability of extending the SPAT to the B-to-B context and the key observations about customers' switching behaviour in the B-to-B context. We conclude the paper by discussing an agenda for further research and the limitations of this study.

2. Literature review

2.1. SPAT as a critical incident technique

The critical incident technique was introduced almost 60 years ago by Flanagan (1954). He defined an incident as "any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act." Further, a critical incident must "occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects." Recently, the CIT has been widely used by scholars in different fields of research on different practically relevant topics (Chell 2004), including supplier switches.

The CIT methods offer many benefits for the supplier switching literature. Gremler's (2004) review suggested that the CIT holds the ability to conserve the respondent's perspective, create knowledge inductively, gain in-depth insight(s), provide a rich set of data, and provide access to the perceptions of customers from different cultures. On the other hand, the retrospective nature of research data and the respondents' ability and willingness to tell a complete story may threaten the method's reliability and validity. Over time, however, the CIT has proved to be appropriate for analysing supplier switching for scientific and managerial purposes (Keaveney 1995).

Scholars have suggested a few modifications of the method. Edvardsson and Roos (2001) summarize four variants of CIT in service research: the traditional CIT, the sequential incident technique (SIT), the criticality critical incident technique (CCIT), and the SPAT. While the other methods have focused on single events or short-term interactions, the SPAT provides a broader view to the switching process as a whole, i.e., covering the ending of the previous relationship and the beginning of the new one (Roos 1999, Edvardsson and Roos 2001, Gremler 2004). Moreover, the SPAT includes both the consideration stage and choice stage of the switch (Heide and Weiss 1995), to more comprehensively capture the customer behaviour (Edvardsson and Roos 2001).

In the SPAT (Figure 1), the switching process is described by dividing the critical incidents into triggers and determinants.

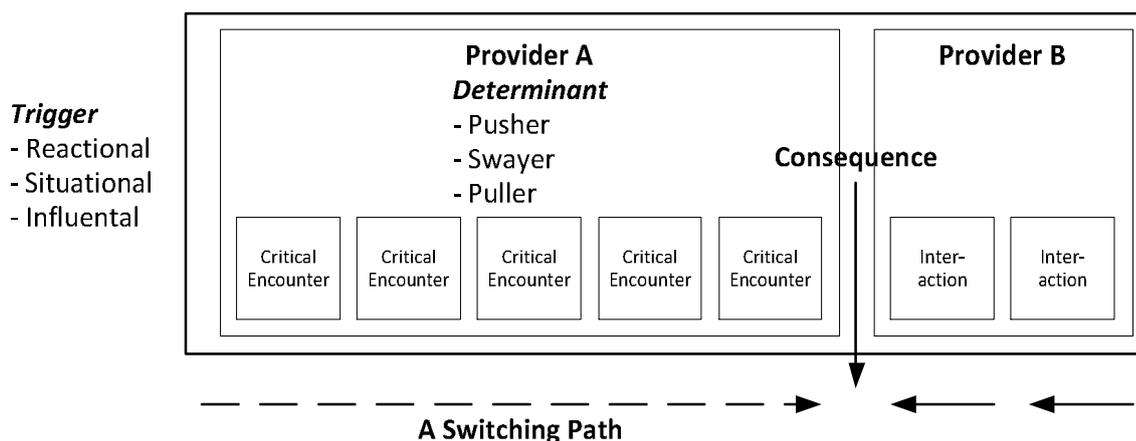


Figure 1. Framework for SPAT analyses (adapted from Roos 2002)

The triggers provide the switching paths with their initial energy and direction, and the determinants provide the path to move along (Roos 1999, 2004). Besides the customer, the analyses include both old (Provider A) and new supplier (Provider B) participating in the critical incidents, either actively or passively (Roos and Gustafsson 2011). The SPAT has been already used in various settings. For example, Roos *et al.* (2004) used the SPAT in retailing, retail banking, telecommunications, insurance, and public administration. However, no cases have been published from the B-to-B setting, in spite of the calls to apply the technique across industries (Roos and Gustafsson 2011).

2.2. Characteristics of B-to-B relationships and supplier switches

Within business organisations, there are many individuals who jointly and individually contribute to the relationships at multiple levels (Dwyer *et al.* 1987, Ring and Van de Ven 1994). Thus, studies have been conducted to capture the dynamics of business relationships at different levels (see, e.g., Holmlund 2004), from single transactions to managing the supplier or customer portfolio. Besides recognizing the contextual embeddedness, Halinen and Tähtinen (2002) have emphasised the temporal nature, i.e., the past, present and (anticipated) future of B-to-B relationships.

In the B-to-B literature, relationships represent an important unit of research inquiry. In fact, the International Marketing Project (IMP) was initiated a few decades ago in response to the knowledge gaps relating to business relationships (Ford and Håkansson 2006). Four challenges were particularly identified as requirements for the business relationship research (Ford and Håkansson 2006):

- transactions are a part of the continuing relationships between the supplier and the customer;
- there are many types of interactions between suppliers and customers;
- there are a number of individuals and heterogeneous groups of customers and suppliers;
- marketing and purchasing processes should be analysed simultaneously.

The recognition of these challenges has enabled scholars to enhance understanding on the dynamics of business relationships. There are studies that focus on understanding and assessing the relationship value in the B-to-B context (e.g., Hogan 2001, Ulaga and Eggert 2006, Matthyssens and Van-

denbempt 2008). Growing awareness and visibility of customers' value creation has even been seen as a prerequisite for the supplier to gain a stronger position in its customers' business (Holmström *et al.* 2010, Laine *et al.* 2012). Recently, the idea of customer needing (Strandvik *et al.* 2012), understanding the customer value beyond the limits of current offering(s) of the supplier(s), has been proposed to help suppliers better understand the customer value and thus customers' switching behaviour. Furthermore, it has been argued that the awareness of the customers' value creation should be supplemented with an broader awareness of different factors', such as customer satisfaction and switching costs, effects on the customers' loyalty (Lam *et al.* 2004).

Earlier studies have also examined the causes of the B-to-B supplier switches. Heide and Weiss (1995) studied the decision processes of organisational buyers in a high-tech context. Thus, the perception of rapid technological change is found to increase buyers' likelihood of choosing old suppliers. The buyers experience and centralised decision-making are, in turn, found to increase the likelihood of a supplier switch. Wilson (1995) outlined a model for studying how the relationship variables work in a different way at different phases of a relationship, from supplier selection to relationship maintenance. He concluded that reputation, power, and dependence have an influence on the earlier phases of the relationship, whereas structural bonds, cooperation, and commitment affect later phases of the relationship.

2.3. *Applying the SPAT in the B-to-B context*

In the supplier-switching literature, a common premise is that the switching behaviour is initiated by a mismatch between customer expectations and product features (Keaveney 1995). However, customers might perceive this mismatch as causing inconvenience long before they actively start to look for alternative suppliers to switch to (Roos and Gustafsson 2007). A trigger can be any factor that alters the current state of the relationship in such a way that the switching process is initiated (Roos 1999). In the SPAT, triggers have been categorised into three separate groups (see, e.g., Roos 1999, 2004, Edvardsson *et al.* 2005):

- Reactional triggers originate from suppliers' actions.
- Situational triggers originate from changes in the customer companies' organisational settings or something affecting these settings.
- Influential triggers derive from changes in the markets that have an influence on the competitive situation of suppliers.

In relationships marketing literature, it has been generally acknowledged that customers' relational modes with their suppliers can be either active or passive (Grönroos 1997, Gummesson 1998). Whereas customers in active mode seek and contact supplier(s) and hence make decisions either on keeping or switching suppliers, customers in passive mode do express such seeking behaviour, but are nevertheless still susceptible to supplier switching decisions. In SPAT literature, these two behavioural patterns related with customers' market sensing have been further incorporated with influential triggers (Roos and Gustafsson 2007, Roos and Gustafsson 2011). Hence, in SPAT terminology, active customer behaviour means that the influential market effect originates from inborn

customer sensitivity. Passive customer behaviour, on the other hand, refers to a situation where an influential trigger occurs when a new supplier contacts the customer and forms a new standard of comparison.

This emphasis on triggers stems from the very grounding premises of CIT methodologies to focus on those aspects that caused the favourable or unfavourable incidents (Bitner *et al.* 1990, Gremler *et al.* 1994). Hence, assessing the triggers can provide both an idea as to why switches are initiating and how to prevent these switches from happening. All in all, assessing the triggers can be connected to the wider discussion on causes and inhibitors of supplier switches prevailing in the B-to-B literature. For example, the elements highlighted by Wilson (1995) seem to relate to customers' perception on performance that stems from suppliers' actions (i.e., reactional triggers) and factors recognised by Heide and Weiss (1995) appear to be mainly connected with customers' organisational settings (i.e., situational triggers). To better understand customers' behaviour in the B-to-B context, the influence of different types of triggers in supplier switches should be further explored.

Switching determinants have been defined as describing the respondents' own perceptions of the reasons for switching (Roos 2004, Roos and Friman 2008). The SPAT recognises three groups of switching determinants (see, e.g., Roos 1999, Roos and Friman 2008):

- Pushing determinants, the main causes of switching perceived by the customer;
- Swayer determinants, more minute factors that do not cause the switch by themselves, but that can promote (positive swayer) or delay (negative swayer) the change;
- Pulling determinants, causes that make customers go back to suppliers from which they have recently switched.

Research examining why customers select one supplier over another has been conducted in various fields. In the purchasing literature, Dickson's (1966) seminal study recognised 23 factors affecting vendor selection decisions in the B-to-B context. This work has been elaborated in different contexts (see, e.g., the review of Weber *et al.* 1991). In these studies, the traditional determinants (cost, quality, and delivery) have often been emphasised (van der Rhee *et al.* 2009). In the relationship marketing literature, Keaveney's (1995) list, which includes eight categories of service switching, is probably the best established. Although, various factors have been suggested as influencing the supplier switches, the researchers have not yet been able to provide any concluding account of these factors (Halinen and Tähtinen 2002).

The marketing literature studying business relationships has recently emphasised the importance of customer value. For example, the study of Ulaga and Eggert (2006) has proposed that the importance of cost, product quality, and delivery performance has diminished in recent times, whereas a supplier's service support, personal interaction, know-how, and ability to improve a customer's time to market have become the core differentiators. This reasoning has been further connected with Vargo and Lusch's (2004) service-dominant logic, as it emphasises the importance of intangibles, long-term relationships, and value co-creation (Matthyssens and Vandenbempt 2008). The market-

ing literature has also presented some rather contradictory findings. For example, the study of Anderson *et al.* (2000) recognised that, in practice, purchasing managers seek easily claimable cost savings and prefer lower-valued and lower-priced products over higher-valued and higher-priced product in their decisions. This contradiction further highlights the importance of exploring the B-to-B switching determinants.

3. Methodology

3.1. Research setting

The applicability of SPAT in the B-to-B context is examined with the help of multiple (9) cases of actual B-to-B switches. The cases represent a variety of different businesses, and the cases varied from food supplies to assembly services and industrial maintenance services (Table 1). In each case, 1-3 case company representatives participated in semi-structured interviews, for a total of 16 case interviews. The switching cases were acquired from companies the researchers were already familiar with. Although convenient selection could threaten the reliability of our findings, the familiarity of the case companies also provides major advantages on this account. The familiarity provided access to relevant decision-makers and the interviewees had more trust in the researchers. Thus, they were more comfortable talking about unsuccessful supplier relationships that often included personal aspects. Moreover, as the interviewees knew that the researchers were already familiar with their companies, they also knew that they had fewer opportunities to colour their stories. In addition, due to the previous cooperation, the researchers had access to relevant background data on the switches.

Table 1. *The supplier switch cases of the study*

| Case | Customer industry | Market structure | Relationship length | Totality of change | Number of interviewees |
|---------------------------|-----------------------------------|---------------------|---------------------------|----------------------|------------------------|
| 1) Software tools | Industrial machinery – OEM | Oligopoly | 4 years | Total | 2 interviewees |
| 2) Software tools | Software & Computer services | Oligopoly | Earlier produced in-house | Change in preference | 2 interviewees |
| 3) Food supplies | Food products | Oligopoly | 30 years | Total | 1 interviewee |
| 4) Chemicals | Automobiles & Parts | Bilateral oligopoly | 3 years | Change in volume | 1 interviewee |
| 5) Chemicals | Building materials & Fixtures | Bilateral oligopoly | 10 years | Change in preference | 2 interviewees |
| 6) Sheet metal assemblies | Industrial machinery – OEM | Competitive | 2,5 years | Selected products | 1 interviewee |
| 7) Steel components | Industrial machinery – OEM | Competitive | 5 years | Selected products | 2 interviewees |
| 8) Industrial maintenance | Industrial machinery – Components | Competitive | 5 years | Total | 3 interviewees |
| 9) Electrical components | Industrial machinery – Assemblies | Competitive | More than 4 years | Selected products | 2 interviewees |

As Table 1 illustrates, the switching cases represent a versatile mix of businesses in terms of the customer industries and the roles of the suppliers in their customers' businesses. Although the supplies of physical products played a significant role in many cases, each case included a substantial set of service elements, as analysed later in this paper. It is also noteworthy that market structures varied among the cases. In the first three cases, there were only a handful of suppliers and an almost countless number of potential customers (oligopolies). Cases 4 and 5 are related to special industrial chemicals, and the number of both suppliers and customers is rather small (bilateral oligopolies). The markets in the last four cases were more strongly competitive, as there were a number of suppliers and potential customers.

The supplier relationships had been relatively long, ranging from a few years to three decades, before the recent supplier switch. In case 2, interviewees brought out a supplier switch, where a software tool had been developed and administrated in-house approximately for the last 10 years. In some cases, the customer's mutual history with the previous supplier was (even) longer than the interviewees' work histories. Typically, the interviewees were aware of customer-supplier relationship histories. Case 9, however, was an exception and interviewees could only answer "perhaps quite some time" or "at least the time that I have been in this organisation". In addition, six switches were partial, which seems to be somewhat typical in the B-to-B context. In one case, the switch meant (only) a major change in the purchased volume. In some cases, the switch meant a change in the favoured supplier, but the old supplier was retained as part of the sourcing portfolio.

3.2. *Data collection and analysis*

The interviews focused on actual decision-makers (typically procurement managers) and other individuals, such as production and product development managers, who had been influential in the cases. Consequently, the interview data emphasises customers' perspectives on the supplier switches. During the interviews, the respondents were (simply) asked to recall "some recent supplier switching case" that they were interested in talking about (similarly to Stauss and Weinlich 1997).

The interview proceeded with the interviewees' "storytelling," interrupted when needed by the researchers' questions (related to aspects of the SPAT) about the switch. In most cases, the respondents were able to tell a long and detailed switching story with only minimal support from the researchers. Sometimes, the respondents gave briefer answers, thus more questions were required. The length of the interviews varied from 70 minutes to 130 minutes. Interviews were recorded when it was possible. In every interview, there either were two researchers present to make notes or it was possible to record the discussion. After the interviews, the field notes were completed with the help of the transcripts and/or email confirmations from the interviewees. The case stories of different interviewees were highly consistent, although there were some small differences in how the interviewees emphasised different facets of the switch. The larger number of interviewees provided richer insights rather than conflicting perceptions into the stories.

The data analysis focused on the triggers and determinants appointed by the SPAT. The analysis of the interview was made by the same researchers who conducted the interviews. This was important,

as the interviewees sometimes made sarcastic remarks, such as “that went well” when meaning total failure. In addition to triggers and determinants, the researchers examined other aspects, such as the customers’ competitive situation, relationship length, decision unanimity, and completeness of the switch as they were brought up by the interviewees. To support the richness of analysis, the researchers first read and analysed the interviews independently. After that, the researchers discussed their findings and merged them into tables, which supported the synthesis of case findings. At this point, the data were already proposing some patterns in supplier switches. However, the researchers still aimed to recognise some patterns prevailed within the observed aspects. Altogether, this was an iterative process of examining the interview data in light of the aim of the paper.

4. Findings

The switching cases varied, and no single pattern was recognised to be dominant in the interview data. However, when the cases were further analysed with the help of the SPAT, the aspects pointed out by the triggers and determinants “opened” the switching cases and started providing insights into supplier switches in the B-to-B context. The cases in the B-to-B setting revealed various triggers initiating supplier switches. Moreover, the analysis of triggers helped us shed light on how the supplier switches began in the B-to-B context. Surprisingly, in almost every case, all three triggers were present at least to some extent (Table 2). The vast majority of cases suggest that supplier switches are typically done in the B-to-B context only when the customer has perceived a reactional trigger (the inferiority of the old supplier). Case 4 was the only exception, where the situational change affected the switch, because of changes made to the customer’s sourcing strategy.

Table 2. Triggers for switching suppliers

| Case | Situational Trigger | Reactional Trigger | Influential Trigger |
|---------------------------|---|--|---------------------|
| 1) Software tools | Growing importance of software in the customer’s machinery; “the more users there will be the faster development [is required]” | Customer perceived lack of commitment to product | Customer active |
| 2) Software tools | Change in customer’s operating philosophy | The old products did not develop to match the new requirements, “this kind of change is not based on a single unit’s need, but on the common ones” | Customer active |
| 3) Food supplies | The level of automation rose at the customer; “there are many quality issues related to that” | Supplier was not developing at the customer’s pace → quality problems | Customer active |
| 4) Chemicals | Rise in demand and changes in procurement organisation. “As I became purchasing manager, I wanted to re-think this case to sleep better.” | Not detected | Customer active |
| 5) Chemicals | Customer company’s procurement function acquired more resources | “[Old]suppliers made price increases although the raw material prices were stable” | Customer active |
| 6) Sheet metal assemblies | Rise in demand and changes in procurement organisation | Quality and delivery problems, “if they got something delivered, we needed return it to be fixed” | Customer active |

| | | | |
|---------------------------|--|---|--|
| 7) Steel components | Strong rise in customer's capacity needs across the supplied products. "The overall quality was always good, we rarely returned anything." | Continuous delivery problems due to the lack of capacity | Customer active, "but after a relatively long time" |
| 8) Industrial maintenance | Customer acquired second-hand machinery that caused problems | Service quality was not seen as high enough for the price asked | Customer passive, "it was [the new supplier] who was active" |
| 9) Electrical components | Strong competition from customer's Asian rivals | Supplier's product family was re-defined, which led to price increases: "it seemed to us that they increased their price twice in a short time" | Customer passive |

Situational triggers affected all switching cases, which seems to be due to the constant change taking place in the companies and their environments. In general, there were at least four focal drivers for situational changes:

- Changes in customers' production processes (cases 3, 8) and other work practices (cases 1, 2) required re-thinking of the supplier base and individual relationships.
- The volume of demand varied over time (cases 4, 6–7), which affects very much the suppliers of the assembly services and other businesses with a direct link to the customers key operations.
- Personnel changes sometimes triggered the supplier switch by providing more resources for supplier analysis (case 5) and by offering new mindsets (cases 4–6). In the raw material supplies, such situational changes could be noticed by the monitoring tools at hand.
- A change in the market setting may force the customer company to be more cost-conscious and alert to switching suppliers (case 9).

Based on this dataset, situational triggers appear to often precede reactional triggers. In several cases (1–3, 6–8), situational triggers culminated in reactional ones. In those primarily service contexts, besides meeting the initial customer requirements, the supplier(s) should be actively aware of the emerging customer requirements and show commitment to them, to avoid unwanted switches. For example, in case 3, the customer's level of automation rose (situational trigger), and the supplier was not developing at the same pace. This led to quality problems (reactional trigger) in comparison with the new quality standards in food production, although the supplier's quality did not change *per se*. However, in some cases (5, 9) the reactional triggers merely gave significance to situational triggers. In case 5, for example, switching was enabled by personnel changes—especially because of the procurement department's improved resources (situational trigger). However, the supplier's price increase (reactional trigger) occurred independently, and hence, both triggers were needed for the company to switch suppliers.

The influential trigger, including active and passive customer behaviour, was a more challenging dimension. The dichotomy of active and passive customer behaviour traditionally divides customer behaviour into extremes (Roos and Gustafsson 2011). In Table 2, the rough division between active

and passive customer behaviour is made, with brief illustrations of exceptional types of active and passive stances toward the switching cases. Passive behaviour, in its pure form, before contact was made with a new supplier, was witnessed in two cases (8, 9). In two cases (6, 7), the customer was behaving relatively passively before the problem escalated (reactional trigger). In other words, the reactional trigger changed customer behaviour from passive tolerance to active search. Active behaviour dominated in five cases (1–5). In addition to recognising different degrees of activeness and passivity, the cases made us wonder whether the passive/active behaviour was related to the behaviour of the procurement manager, the purchasing representative, or the user. Moreover, was the old or new supplier active or passive? These issues are further elaborated in the discussion section.

The determinants brought up by the interviewees provided new information about the switches. Altogether, the determinants helped us more comprehensively assess the factors affecting supplier selection across the cases.

Table 3. *Determinants of supplier switches (note: +, positive; -, negative)*

| Case | Pushing Determinant | Swayer Determinant | Pulling Determinant |
|---------------------------|--|--|---|
| 1) Software tools | Price, familiarity of product elements | The new supplier was already providing other products + | Not detected |
| 2) Software tools | Availability of suitable commercial products | Earlier in-house development enabled higher information security - | Not detected |
| 3) Food supplies | Quality, transport costs | Personal relationships between company representatives - | Not detected |
| 4) Chemicals | Supply risk management, price, level of co-operation | The high level of the new supplier's product development + | Not detected |
| 5) Chemicals | Price, level of co-operation | Remembering the new supplier's former quality problems - | Not detected |
| 6) Sheet metal assemblies | Delivery reliability, quality, total costs | Back-shoring could improve communications with supplier + | Not detected |
| 7) Steel components | Delivery reliability | New supplier was already providing other products + | Delivery and quality problems with the new supplier |
| 8) Industrial maintenance | Price, availability, ambiguity of quality | Personal relationships between company representatives+ | Quality problems with new supplier, personnel changes |
| 9) Electrical components | Price | New supplier was corporate approved + Uncertainty about quality - | Not detected |

An analysis of the pushing determinants reveals that the case companies face typical problems, and the traditional determinants, cost, quality, and delivery performance, are still the most important. The price and wider cost implications were mentioned as pushing determinants in seven of the nine cases. These determinants are strongly present in businesses ranging from (special) raw material suppliers to comprehensive industrial maintenance services. In contrast, in two service contexts (2,

7), the direct cost effect was not a major issue, but the case was connected either to a major change in demand or to a wider change at the customer, both yielding indirect cost implications.

Interestingly, the two cases where customer behaviour was interpreted as passive included price as a pushing determinant. These seemed to be special cases of customer's passivity, with no significant role of the industry characteristics. Delivery reliability, supply risk management, and availability in general were other important pushing determinants affecting five cases. Poor quality (or ambiguity of quality differences between different suppliers) also affected three cases. In addition to these traditional determinants, two cases (4, 5) highlighted the importance of co-operation, which was seen as an instrument for attaining higher-quality end products. In these cases, the price of the raw material is strongly affected by the global market prices, but the customer still places emphasis on the supplier's ability to further develop the special raw material to fit in the requirements of the customer.

In two cases (7, 8), we witnessed a pulling determinant. In both cases, the companies switched back to the old supplier because of disappointments with the new supplier. Interestingly, these disappointments were due to the same reasons the supplier switched in the first place.

The swayer determinants illustrate that personal relations and the convenience of the personnel involved in selecting suppliers matters across the cases. Being a known (or even an audited) supplier was a positive swayer to switch to a new supplier in three cases (1, 7, 9). Following the same logic, in case 2, doubts about the new provider's information security issues appeared as a negative swayer. Three cases (3, 5, 8) showed that earlier experiences and personal relationships may either promote or hinder the switch (swayer). The personal relationships seem to affect the switches in different types of industries and regarding different types of suppliers.

5. Discussion

5.1. *Extending the SPAT to the B-to-B context*

We found applying the SPAT to be feasible in analysing B-to-B supplier switches. However, the application of the SPAT was different from the existing B-to-C applications due to the characteristics of the B-to-B relationships. As expected, neither a single organization nor an individual is responsible for a relationship, but the B-to-B context adds complexity in the relationship management. Another source of complexity stems from the existence of a relationship flow where many driving factors affect simultaneously on switching. The different types of triggers were recognized in all the cases, altogether constituting an assembly of trigger encounters that together build up the sensitivity for switching. However, although some possible patterns of triggers and determinants underlying the switches were already recognized, such patterns require still further examination.

Thus, further refinements to the SPAT could be useful for B-to-B applications. Recent studies have analysed, specifically, how different perceptions of influential triggers (active/passive customer behaviour) affect supplier switches (Roos and Gustafsson 2011). From the B-to-B perspective, the division between active and passive behaviour seems to lack sufficient detail. There are many individuals who contribute to business relationships at different levels. These individuals affecting dif-

ferent phases of relationship can have both active and passive roles. There can be, for example, active users (e.g., production function) and passive decision-makers (e.g., procurement function) in the customer company. Therefore, judging the degree of activity or passivity on the level of the entire organisation remains challenging. Perhaps, the active/passive dimension should be interpreted not as a dichotomy but rather as a continuum.

Previous studies using the SPAT have recognised that the type of influential trigger depends on the activity or passivity of the customer behaviour. This notion relies on assumptions that suppliers are inherently active towards customers and that supplier switches could be comprehended merely by analysing a customer's actions. However, these premises do not seem to be self-evident. As noted, in B-to-B, customer and supplier(s) engage in similar activities that should be analysed simultaneously (Ford and Håkansson 2006). This could mean simultaneous analyses of the active and passive behaviour of the customer and the suppliers involved in a given supplier switch. Table 4 provides a more comprehensive view of influential triggers in the switching cases. In addition to customer behaviour, the activity or passivity of suppliers and competitors seems to vary in the B-to-B context. Some cases demonstrate that suppliers might sometimes be relatively passive (3), also in the competitive markets (6, 7).

Table 4. Sources of influential triggers (first initiators bolded)

| Case | Customer | Old Supplier | New Supplier /New potential suppliers |
|---------------------------|--|--|---|
| 1) Software tools | Active , recognised the new needs and requirements for the product | Passive, were not interested in developing their old product further | Active, were already providing other products and striving to increase their sales |
| 2) Software tools | Active , analysed the markets and selected the new supplier based on this insight | Not available | Active, competing suppliers (including the new supplier) offered their products |
| 3) Food supplies | Active , after problems escalated the customer decided to source a better supplier | Passive, the supplier focused on development in other markets | Passive, provided price offerings to customer by routine |
| 4) Chemicals | Active , recognised the strategic need to strengthen their supplier base | Semi-active, were building a new factory to ensure reasonable prices and capacity needed | Semi-active, were interested in strengthening the relationship with the customer in various areas |
| 5) Chemicals | Active , recognised the importance of the product and started to scan the markets | Passive, supplier relied on their bargaining power | Semi-active, supplier wanted to correct the customer's idea about their quality |
| 6) Sheet metal assemblies | Semi-active , after problems with the current supplier, a possible supplier was contacted | Semi-active, aimed to develop their offering according to customer wishes but did not succeed in this goal | Semi-passive, activated to expand their operations after customer asked |
| 7) Steel components | Semi-active , after a long period of problems, an already known supplier was contacted | Passive, the supplier already had problems to solve about demand | Semi-passive, after customer asked the new supplier was interested in providing the product |

| | | | |
|---------------------------|---|--|---|
| 8) Industrial maintenance | Passive, maintenance was first seen mainly just as a cost element | Semi-passive, activated to “teach” the customer after the supplier switch | Active , promoted themselves strongly to the customer company |
| 9) Electrical components | Passive, activated after the competitors contacted to analyse the markets | Passive, relied on their position as the leading manufacturer in the markets | Active , aimed to increase their market share and gain new customers |

The notion of the influential trigger could benefit from further refinement for enhancing wider SPAT application. First, the activity and passivity of an organization could be seen as the sum of the behaviour of the individuals. In the customer organizations, independently on the industries, there are typically some individuals who are actively aware of the supplier alternatives and some who are not. For example, the semi-active behaviour of the customers in cases 6-7 refers to situations where the knowledge of the active individuals was taken into consideration only after the problems in the supplier relationships affected the customers’ operations more widely. Second, we propose that besides the behaviour of the customers and old suppliers, the behaviour of (potential) new suppliers involved in the switching cases may also significantly affect the switch. We suggest that the influential trigger is first initiated either internally (at the customer) or externally. The old supplier could try to interrupt the switching process by responding actively to customer needs. After the influential trigger is initiated internally or externally, any other party may be activated as a response to this change. However, passive customer behaviour can allow passive supplier behaviour, and hence, resulting in a passive customer relationship.

5.2. Insights into B-to-B supplier switches for researchers and managers

The SPAT provided us with insights into supplier switches in the B-to-B setting. Analysing the triggers enhanced our current understanding of supplier switch initiators. Previous researchers (Roos 2004, Gustafsson *et al.* 2005) found situational and influential triggers were involved in the majority of switches. This seems to hold true in our cases, as we recognised the effect of both types of triggers in all cases. More specifically, the switching processes were often initiated by a situational change that led to the emergence of reactional triggers and an increased awareness of influential triggers. In other words, importantly, most supplier switches could have been avoided if the old suppliers had adapted to changing customer requirements better. Although the accumulation of triggers seems to be the dominant model causing the switching process to start, other possible mechanisms appear. For example, a pattern of simultaneous weak triggers might altogether initiate the switching process.

Our finding on the importance of situational change preceding supplier switches might seem to be somewhat contradictory with Heide and Weiss’ (1995) conclusion that rapid technological change decreases the likelihood of supplier switches. In our finding, there were situational triggers, such as technology development, that actually initiated some switches. On the other hand, more careful examination reveals that rapid technological change was not situational, but rather an influential factor in Heide and Weiss’ (1995) study. That is, they especially focused on how the customer perceived

the change in computer workstation technology markets, not the changes in customers' situation as such. Our findings on triggers are also in line with Wilson's (1995) conclusions on the importance of structural bonds, cooperation and commitment in business relationships. Moreover, our findings highlight the importance of perceived justice and satisfaction with supplier performance as important aspects also in more mature phases of business relationship.

The analysis also highlights some interesting findings that complement the existing knowledge on switching determinants. Although some earlier studies suggest that suppliers' service support, personal interaction, know-how, and ability to improve a customer's time to market have now become the core differentiators (Ulaga and Eggert 2006), our findings show that the traditional supplier selection determinants, cost, quality, and delivery performance, are still often the main determinants in the actual supplier switches. However, while focusing on supplier differentiators, Ulaga and Eggert (2006) acknowledged the importance of traditional supplier selection determinants as must-haves. Although the service-dominant perspectives have become popular, the traditional (i.e., goods-dominant) reasons have not lost their importance. In general, the importance of recognizing the difference between differentiators and "must-haves" should be highlighted.

As Grönroos (2008) has noted, customers are not predominantly interested in goods or services, but in how they can be used for value creation at the customer level. Hence, the suppliers should aim to understand their customers' value-generating processes more broadly (Strandvik *et al.* 2012) to understand the underlying customer logic (and related value-drivers) in a specific supplier selection case. Although the switching cases in our dataset were complex and the switches were the results of a set of factors affecting them, there were quite often problems where the supplier was not able to serve the customer in the primary role allowed by the customer (Grönroos 2008) and there were practically no other option than considering a switch. In all, customers may tolerate shortcomings in "higher-level" determinants, but the problems in price, quality, or delivery times may cause significant problems for the customer itself or for the customer's customer (Wynstra *et al.* 2006), and may lead to an immediate need to switch suppliers.

Altogether, supplier switches in the B-to-B context seem to be characterised by complex settings and various people (parts of those organisations) are involved in the process (Ring and Van de Ven 1994). In the B-to-B context, using multi-sourcing, and hence making partial switches or just re-locating sourcing volumes, is quite typical. Therefore, to address activity and passivity as process characters in the B-to-B context the state might change during the progress of the process, which highlights the importance of acknowledging the temporal nature of business relationships (Halinen and Tähtinen 2002). For example, when a relationship is defined as passive before problems arise (e.g., cases 6, 7), the activity may increase after problems are identified and the relationship can be active during later stages of process. As a managerial challenge, the supplier should be able to constantly be aware of the major changes in the customers' business. Based on this awareness, the supplier may actively affect the development of the relationship, to avoid unwanted switches.

5.3. Conclusion and further work

The results of the present study support the applicability of the SPAT in B-to-B settings. However, the B-to-B context was also found to raise some distinct challenges over the earlier B-to-C applications of the method. For example, instead of looking at single driving factors such as triggers in the B-to-C context, we noticed that an assembly of encounters builds up the sensitivity for switching over time in the business relationships. These “trigger encounters” are the start of the new direction for SPAT in the different B-to-B contexts. In comparison to other CITs, the difference is even larger because, although these methods allow the flow description, they lack the broader relationship perspective. As an implication, we propose a further refinement of the notion of active/passive behaviour (Roos and Gustafsson 2011) to capture different types of behaviour within the customer regarding the switch and different types of behaviour of the previous and new suppliers. This would enable analyses on the interactions in the business relations, which is required by the characteristics of B-to-B settings (Ford and Håkansson 2006).

This study has also its limitations. These relate especially to our empirical findings on supplier switches. In order to examine the SPAT expendability and the feasibility of such extension to the B-to-B context, we explored the supplier switches across industries and related to different types of products. To ensure the access to this kind of dataset, we choose convenience sampling. Although the selection of the cases was not randomized, these examples that showed the diversity of the switching cases in B-to-B served the purposes of this study very well. Moreover, although we strived to ensure high reliability of the data, the informants might have forgotten to tell us about some details or even coloured their stories. Hence, the interviews could have failed to bring up some of the true triggers and determinants related to switching behaviour. However, due to our research design, we consider this risk smaller compared to that of many published studies on relationship management. To overcome this threat to reliability, participatory cases could have been used, for instance. Yet another limitation in our study is its predominant focus on customers’ perceptions. Dyadic (or even polyadic) studies, acknowledging also suppliers’ perspectives, could provide even richer understanding on supplier switches. However, even without dyadic data, the customer representatives in B-to-B setting were able to some extent to elaborate the views of both sides. Naturally, the general limitations of qualitative studies apply also to this study. One might, for example, question the generalizability of our empirical findings. However, the study was intended to be primarily a theory extension, and hence, more detailed elaboration of the findings should be assessed with forthcoming evidence.

As a major research implication, applying CIT methods (i.e., the SPAT) more broadly to supplier switches in B-to-B settings is favourable for more comprehensively understanding the variety of B-to-B supplier switching processes. More particularly, further research should refine the influential trigger of SPAT to further define the characteristics of active and passive behaviour from temporal and contextual perspectives (Halinen and Tähtinen 2002) and address the patterns of certain triggers and determinants that actually lead to unstable supplier relationships from multiple perspectives.

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