PERSONAL VERSION

This is a so called personal version (manuscript as accepted for publishing after the review process but prior to final layout and copyediting) of the article.

Strandvik, Tore and Maria Holmlund 2008, How To Diagnose Business-to-Business Relationships by Mapping Negative Incidents, *Journal of Marketing Management*, Vol. 24, No. 3-4, April, 361-381. [ABS ranked journal: 3] DOI:10.1362/026725708X306149

Readers are kindly asked to use the official publication in references.

How To Diagnose Business-to-Business Relationships by Mapping Negative Incidents

By

Tore Strandvik & Maria Holmlund

HANKEN Swedish School of Economics and Business Administration, Finland
Department of Marketing

CERS - Centre for Relationship Marketing and Service Management
Address: P.O. Box 479, FIN 00101 Helsinki, Finland

Fax (TS and MH): +358-9-431 33 287

Phone (TS, corresponding author): +358-9-431 33 290, E-mail: tore.strandvik@hanken.fi

How To Diagnose Business-to-Business Relationships by Mapping Negative Incidents

Negative incidents represent adverse situations that do not meet with the anticipated and therefore catch customers' attention. Despite these incidents' significance for how relationships develop, they may remain hidden from the seller since they have not been captured with current customer understanding techniques. We suggest a new technique, labelled NIM (Negative Incident Mapping), which explores and maps negative incidents in business-to-business relationships. The key idea is that the seller's understanding of identifiable customers' concerns is compared with the customers' actual experiences. The technique combines qualitative and quantitative information and generates results on the incidents, single relationships, and customer portfolio. Empirical findings from two studies when generating the technique are presented in the article. The technique may be useful to account managers for managing individual relationships and the portfolio of relationships. It may inspire researchers to explore further negative incidents in business relationships, the effect of combined repeated incidents, and customer understanding measurement.

Key words: business-to-business relationship, negative incidents, NIM, customer understanding, dyadic approach, account management

Dr. Tore Strandvik is a professor in marketing at the Swedish School of Economics and Business Administration in Helsinki, Finland. Dr. Maria Holmlund is a (acting) professor in marketing at the Swedish School of Economics and Business Administration in Helsinki, Finland. Current research interests of both authors are different aspects related to service and relationship management in both a consumer and business-to-business setting. They have conducted conceptual and empirical studies resulting in published articles related to for example relationship dissolution, relationship quality, and critical incidents.

Introduction and Purpose of the Study

Despite their significance and links to many current key business concepts, negative aspects in business relationships have received fairly scant attention. Abratt and Kelly (2002), for instance, report that the highest-ranking success factor of an extensive list of factors for both suppliers and customers was "key account managers' ability to identify problems and provide solutions within their key accounts". Many other studies in marketing have also highlighted the problem-solving capability in industrial companies (Geyskens and Steenkamp 2000; Lilly, Porter, and Meo 2003; Song, Xie, and Dyer 2000; Wierenga and van Bruggen 1997). Being able to recognise and solve different problems is thus for relationship managers crucial so that they can manage relationships properly and profitably.

This article proposes that there are situations in business relationships that do not meet with the anticipated and catch involved people's attention, either mere perceptual or both perceptual and behavioural reaction. These experiences that we label negative incidents (NI) are more easily recalled than routine business, and they can therefore be assumed to have an effect on the nature and duration of relationships. An understanding of negative incidents can consequently reveal factors that affect how relationships develop and, not to mention, fade away or dissolve. We therefore suggest an active focus on negative incidents also called problems and concerns in the text.

That customers' positive experiences with a company have positive outcomes for the company's financial results has been verified in numerous studies. But it is a fairly new notion that when customers become disappointed, this would also have an effect (Peppers and Rogers 2005):

"When a customer has a good (or bad) experience with a company and decides on the basis of that experience to give more future business to it (or less), the firm has gained (or lost) value at that very instant, with the customer's change of mind. It doesn't matter that the extra business a customer might give a company won't happen for a few months or a few years – the customer's intent has changed already, and so the customer's lifetime value (LTV) went up immediately, in the same way a share price would go up immediately if the company were suddenly expecting better profits sometime in the future." (Peppers and Rogers 2005, p. 11)

It becomes an element in successful customer relationship management to be able to recognise and manage what customers experience as exceptional and disappointing. Poor experiences with a seller affect how customers behave, and this in turn affects their lifetime value. Not only do the experiences influence revenues and costs, they also impinge on relationship duration. In other words, knowledge of customers' adverse experiences is useful for assessing risks to relationships.

Our aims in this piece of research are to propose that customers' disappointments are important from a business relationship perspective, and to develop a technique for measuring these in a business relationship setting. The technique, called NIM (Negative Incident Mapping) is dyadic in the sense that it compares the seller's understanding of the customer's experiences with the customer's actual experiences. The technique produces a diagnosis of situations in the relationship that are annoying to the customer but may remain hidden from the seller. Major or unique events affecting the relationship are not captured; the seller would most likely know about these in other ways. Customer complaint information may include some of the adverse

experiences but not all. As both parties' evaluations of the same incidents are matched and compared it gives a picture of how well the seller knows its customers. While this kind of incidents extensively has been studied in consumer services and relationships, there are hardly any such studies in business relationships (for a review of adverse incidents studies using the critical incident technique (CIT) suggested by Flanagan (1954) see Gremler 2004). We argue nevertheless that business relationship research and management can benefit from recognizing adverse incidents.

The motives for exploring negative incidents in business relationships are several. First, they are in line with the currently increasing interest in drawbacks and so-called dark side of relationships. Second, exceptional incidents may affect the nature and duration of relationships and can therefore be used to understand relationship dynamics (e.g., Edvardsson 1992; Roos 1999; Stewart 1998) and customer lifetime value. Third, the negative incident perspective is managerially useful and actionable (Stauss 1993). It complements current customer satisfaction information and systematises currently available customer information. Four, there are already extensive examples and reported findings (Gremler 2004) about critical incidents in, e.g., services marketing (e.g., Bitner, Booms, and Tetreault 1990; Keaveney 1995) relationship marketing (e.g., Lockshin and McDougall 1998; Roos 1999), and sales management (e.g., Shepherd and Rentz 1990). These show that adverse experiences indeed can be used in both research and practice.

The rest of the article is structured as follows. First we discuss negativity and customer equity measurement. Then we develop the new technique, NIM (Negative Incident Mapping), and

illustrate the new technique with empirical findings from two empirical studies, generated during the development of the technique. We conclude by discussing the technique and its implications for business relationship research and management.

Theoretical Anchoring of Negative Incidents in Business Relationship Management

Relationship portfolio management is at the core of this study, more precisely the issue that accounts differ and need to be managed differently. A customer equity view puts demands on available information about the relationships and this in turn raises an interest in finding key factors that influence relationships. Adverse aspects are not typically used as information, even though it could be justifiable to do so. Discussing what relationship information is used in customer lifetime value calculations reveals that there are basically two types of information needed: numbers and managerial judgment. The former information is today reasonably available whereas the latter is more difficult to retrieve and measure. Finally customer lifetime value calculations directly involve negativity since risk and duration associated with relationships are inherent in the calculations and need to be assessed.

Negativity

The notion of negativity stems from impression-formation studies in psychology. These studies have in experiments produced considerable evidence which shows that negative information is more diagnostic than positive when making evaluations and decisions (Fiske 1980; Skowronski and Carlston 1987; Skowronski and Carlston 1989; Taylor 1991). This so-called negativity tendency has been explained in two ways. Most outcomes are perceived as positive which means that negativity stands out making it highly informative. In addition, most negative extreme

behaviour is psychologically more extreme from the central tendency than is the comparable positive behaviour. The notion of negativity stemming from psychology research is transferable to a business-to-business setting in order to explore how companies experience disappointments in relationships.

Theoretical and empirical studies on negativity in a business-to-business context are sparse. There are however studies on related issues. Anderson and his colleagues (Anderson and Court Salisbury 2003; Anderson and Sullivan 1993) have in two cross-industrial studies examined market-level expectation formation. They empirically validated that drop-offs have a greater impact on expectations than improvements in perceived quality, and that markets as whole adjust more rapidly to bad news like individuals respond more quickly to negative information. Closest to the current study are some business-to-business studies that have used critical incidents (Backhaus and Bauer 2000; Edvardsson 1988; Heckman and Guskey 1998; Lockshin and McDougall 1998; Odekerken-Schröder, et al 2000). These have typically examined how industrial customers assess service quality and quality failures.

Other studies have examined adverse sides associated to business relationships with different concepts: relationship burdens (Håkansson and Snehota 1998), dark side of business relationships (Grayson and Ambler 1999; Anderson and Jap 2005), relationship unrest (Good and Evans 2001), and relationship stress (Hausman 2001; Holmlund-Rytkönen and Strandvik 2005; Proença and de Castro 2005).

Customer Equity Measurement

Companies increasingly see their customers as assets to be managed in a relationship portfolio (e.g., Bowman and Narayandas 2004; Gupta, Lehmann, and Stuart 2004; Reinartz, Krafft, and Hoyer 2004). The customer portfolio consists of different customers which should be recognised in how relationships with them are managed. Several studies have shown empirical evidence that the measurement of satisfaction and positive aspects is not alone able to reveal the nature of the customer base. This deficiency is especially pertinent when the aim is to reveal dynamisms of relationships, above all those related to fading and downsizing.

Taking a financial perspective on customer portfolio management implies that both short-term profitability and a long-term customer equity perspective become significant. Customer equity is defined as the "total of the discounted lifetime values summed over all the firm's current and potential customers." (Rust, Lemon, and Zeithaml 2004) Customer equity is primarily based on historical quantitative cost and revenue data, but also management judgment is needed (Rust, Lemon, and Zeithaml 2004; Ryals 2003). It has in fact been found that customers constitute the area with the highest gap between perceived importance and available metrics (Gupta and Lehmann 2005, p.6). In Figure 1 key components of customer equity measurement proposed in the literature are presented including our proposition of how negative incidents can be linked to customer equity measurement. The figure shows how the elements are conceptually linked; techniques for studying and tools for managing them are not included.

"FIGURE 1 ABOUT HERE"

Most studies model customer lifetime value as a function of revenues, costs, and relationship duration (Dhar and Glazer 2003; Rakesh, Gupta, and Harasimhan 2001; Rust, Lemon, and Zeithaml 2004; Venkatesan and Kumar 2004). While revenues and costs nowadays are fairly easily retrievable on the account level, risk associated with single relationships is much more difficult to determine. (Dhar and Glazer 2003; Ryals 2002a) In a relationship setting, risk would include sudden swings in buying patterns, defection, or even default which means failure to meet financial obligations (Dhar and Glazer 2003; Ryals 2002a). Ryals (2002a) has suggested that risk comprises two elements: relationship duration and default. There are some techniques available for assessing default, whereas relationship duration seems to be the most difficult element to assess in customer equity. In customer equity studies account managers are typically asked to make subjective evaluations of the length.

Negative incidents would not only affect duration but also costs and revenues associated with a particular relationship. Negative incidents are hidden costs and represent a kind of quality failure cost, and are therefore a cost element. Further, negative incidents causing fading of the relationship may decrease sales and hence have an impact on revenues. The financial effects cannot be assumed to be same for all customers since different customers experience different adverse incidents in terms of number and type.

Negative Incident Mapping (NIM)

A New Technique for Measuring Adverse Experiences in Business Relationships

This study develops a new technique (see Figure 2) that explores and measures negative incidents, from the customer company's perspective in a dyadic manner. The core idea is that a

number of customer respondents are asked to assess to what extent they have experienced a set of concerns with a specific seller. The seller's respondents evaluate how they think the same customers have experienced the identical concerns. The two sets of response are matched and compared. The higher the correspondence is between the two responses, the better the seller's customer understanding is. The technique is labelled Negative Incident Mapping (NIM) which refers to grids called maps showing quantitative findings.

"FIGURE 2 ABOUT HERE"

The technique is based on a four-phase procedure that combines a qualitative with a quantitative phase followed by using the findings by the account teams as well as company wide in order to manage customer relationships. The technique represents a framework rather than a standardised measurement instrument. The details can be customised according to managerial judgments in each case. What is needed to get started is to discover potentially negative incidents which are important in the particular business and in the sellers' business. Making interviews by using CIT type of questions is suitable for this. Besides drawing on the experience of relationship boundary-spanning people from both the company and its customers also customer and complaint data may be used. Each incident represents a vivid description of a process in the relationship that has been perceived to not meet a customer's expectations. The different concerns are those that have occurred or could have occurred. Both industry insights and academic research may give additional potential incidents and categories. The incident list is in itself useful to understand failure points. The aim is at this point to create an extensive list of specific problematic situations and to group them into relevant problem categories. The

categories can be formed either for academic research and be based on theoretical foundation or be more practically oriented and stem from a company's own business and products.

Yet as the aim is to continue and make a survey the list of incidents needs to be shortened in order to suit a questionnaire format. The selection criteria are many, and could be those presumed to be most problematic, but also those that the company has tried to remedy or those on which customers' views seem to greatly vary, for instance. It can be a question of reducing hundreds of potential incidents to 40-60 selected incidents. The vivid descriptions of incidents have to be condensed to a shorter format suitable for the questionnaire. Next appropriate scales have to be developed together with necessary background variables and possible other questions. Selecting dyads can be made with sampling methods but need not be since purposeful selection of dyads of interest can also be made. What is more crucial for the findings is reaching relationship-significant people on different organisational levels and in different positions since the goal is to get a comprehensive understanding of the relationship. Data can be collected in personal meetings, on the phone, via e-mail, or on the Internet. The questions are posed so that the seller's account representatives are asked to assess dyad-wise how the customer perceives the incidents; this hence reflecting the seller's understanding of the particular customers' views. This view is then matched with the information on how the respondents in the customer companies in fact perceived the concerns.

A key element in the technique is to assess how serious the potential problems are. For this diagnosis a three-aspect scale is suggested where the respondents are asked to assess each potential problem on three aspects: recency, frequency, and impact. The three aspects allow

incidents to emerge and disappear, which is important when the aim is to sum up the relationship. The recency aspect refers to when the problem last occurred and reveals whether it has recently appeared. It can be measured with a four-point scale, for instance, covering never, earlier than the past 12 months, within the past 12 months, or within the past four weeks. Recency becomes relevant when using a relationship perspective, as does the second aspect, frequency which refers to how often an incident has occurred, for example, never, very seldom, sometimes, or very often. The scales for recency and frequency are to be adjusted to make a relevant time frame for the questionnaire in each industry. The third aspect concerns how negative an impact an incident has on the operation, for example no impact, very low impact, moderate impact, or very strong impact. The impact of an incident is motivated as an aspect because it points directly to how much harm it causes to the customer's business. The threeaspect scale implies that the more recently and frequently the incident type occurs and the higher its impact is on the customer's business, the more problematic the incident is for the customer. Also, when an incident scores highly on frequency and recency, it means that the incident will most probably occur again. The effect of the three aspects may be compared to the notion to risk (e.g., Sitkin and Pablo 1992) which often is treated as a function of impact and occurrence. Even though different weighting options could be used, the current study in line with previous studies treats all aspect as equally important.

Recency, frequency, and impact reflect the occurrence and impact probability with which the incidents are assessed to take place and affect the customer's business. There are several motives for choosing the aspects. Firstly, previous similar studies have used and found support for each one of them. Recency (Friman, Edvardsson, and Gärling 1998; Strandvik and Friman 1998) and

frequency (Friman 2004; Friman and Gärling 2001; Stauss 1993; Strandvik and Friman 1998) have been used in a consumer relationship setting, showing, for example, that frequency of incidents has a significant effect on overall (relationship) satisfaction and trust. The impact of negative incidents should be included because incidents differ as to whether they have an impact and how different buyers perceive this, as Friman, Edvardsson, and Gärling (1998), Stauss (1993) and Edvardsson and Strandvik (2000) report, for instance. Secondly, each of the three aspects in itself can be a measure of how problematic an incident is, but it makes sense logically from a relationship perspective to combine them to obtain a more comprehensive measure which also is adapted to diagnose and analysing incidents in many ways. It is doubtful whether adding more aspects would improve the technique without increasing its complexity too much. Thirdly, the ultimate aim with the information on annoyances experienced in daily business is to detect flaws that cause systematic problems in the seller's operation. Three aspects, instead of one, that combine and detect new, frequent or influential customer problems are intended to more diligently point to these kinds of seller weaknesses.

Data can be analysed in many ways, of which three are the following. A) How serious problems separate incidents are overall can be diagnosed and portrayed with grids. The focus in these grids would be on single incidents that were assessed in terms of recency, frequency, and importance. The findings can be exposed in three types of diagnostic grids showing: importance compared to frequency, importance compared to recency, and recency compared to frequency. The usefulness of this analysis lies in the diagnostic understanding of the nature of particular incidents. B) Whether the views match in individual dyads can be discovered in an incident gap analysis, and outcomes of this shown in dyad-level gap charts and gap grids. The problem value, which is used

for this, is the mean value of the three aspects on which the incidents were assessed. C) The sum of all incidents each customer experiences compared with the seller's view produces a relationship stress measure and can be depicted in a relationship stress grid comparing stress levels in the customer portfolio. This analysis is thus useful to understand relationships at risk in the portfolio. These three ways of analysing and displaying results are on different level of analysis and linked to each other. Incident diagnostics represent the most detailed level, and this data is used on the next level for analysing dyad-level gaps in views on incidents. The sum of incident-level results is in turn the ingredient in the next portfolio-level analysis.

The next steps in the NIM consist of acting on the findings as well as integrating them into the business. Besides having implications for the account teams, the findings can also be used company wide in a more strategic manner. The increased customer understanding through NIM can be used by the account managers and their teams to improve the relationships. Findings can also be used in personnel training and role plays, for example. Since the intention is that the technique and the incidents are designed so that they are close to business practice, it its recommended that people from account teams are involved from the start, selecting incidents and informants, and becoming active interpreters of the findings. Outside facilitators, such as researchers in our cases, may be in charge of the process, while it is the company and its account management that direct the interest by making significant decisions as well as interpreting the findings and their implications. Engaging the customers as well in these processes is essential. An emic-etic-emic-etic rounds procedure suggested by Woodside, Pattinson, and Miller (2005) could be used to interpret the findings and to reflect and uncover subtle nuances in how the informants think. It would in the NIM case mean that informants from the seller's account teams

and customer counterparts (emic) are asked to interpret the researchers' (etic) interpretations followed by the researchers' interpretations of the informants' interpretations. In this way a deeper understanding would be achieved than when merely the researchers or the account teams make sense of the results.

The final step includes incorporating NIM company wide, and using the findings when developing business and making strategies on a customer portfolio level. Combined with other customer information related to, for instance, financial aspects and market conditions, NIM findings should be especially useful for assessing and enhancing customer lifetime value. Systematic use of the technique in follow-up studies could also be an option. This means repeating the study, going back to discover incidents or redesign the questionnaire or survey before making new studies, or simply reusing and reinterpreting findings from previous NIM studies.

Empirical Findings Generated when Developing the Technique

We will next present two empirical studies applying NIM. The studies had two functions: the technique was developed and refined while conducting them, and they provide empirical data showing the technique in use and validating it and its usefulness. In both studies relationships are based on contracts, and the sellers have assigned an account manager, often also form account teams, to manage its relationships. In both studies the qualitative part is rather extensive and includes interviews with the seller's and the customers' representatives as well as use of secondary data. In the interviews the focus is on collecting stories about unsuccessful or disappointing incidents in the relationships. These stories cover a variety of different situations

and interactions and resulted in several hundreds of incidents. The industrial service case these are grouped first in line with the interaction-seller-customer-network categorisation which then is made denser by adding different situations and variants to them, such as responding to problems, replacing key persons, using external subcontractors, solving technical problems, adapting to changing technical needs, estimating the value of different solutions, and handling exceptional situations. In the business service case the stories group naturally around five themes: physical product offering, service situations, personnel, interactions, and development.

In the first study, which is conducted in an industrial technology service context, 16 dyads are studied, while in the second study 29 dyads of a business service company in the hospitality sector are examined. The former study is in the text referred to as the industrial service case, and the latter as the business service case. In each relationship several persons in significant strategic and operational functions on both the seller's and the customers' side are interviewed. The objective is to include all key persons and then assure that responses were obtained from all of them. The respondents represent significant persons on two levels, managers and operative persons. With a few exceptions respondents that are unable to answer the questionnaire can be replaced with another relationship key person than the one originally selected. The response rate is thus close to 100%. The sellers and the customers in each relationship rate the same incidents. As each respondent evaluates all incidents on the three aspects the interview lasts for at least 30 minutes. The empirical material consists in the industrial service study of 56 respondents' evaluations of all 63 incidents, and in the business service study correspondingly of 108 respondents' evaluations of 44 incidents.

"INSERT TABLE 1 ABOUT HERE"

Since the two studies cover completely different business situations, the incidents and incident categories are different. In both cases the incidents that are included in the questionnaire are generated through an extensive qualitative phase. From a large number of potential incidents the management in each seller's company selects those that are both managerially interesting and cover different problem sources. Other selection criteria can obviously also be used, such as random or theoretical sampling. In our cases the companies aim for diversity and insight potential. Purposeful sampling would be suitable for the technique in general since the aim is dyad-specific insights and not necessarily findings representative for the whole customer base or segments. Further, the sellers' managers select the dyads to be included in the quantitative study. In both studies the aim is to cover diversity in relationship types rather than focus on only problematic or high-risk relationships. In the industrial service study representatives of the seller not involved in daily business conduct the interviews with the studied customers. In the business service case a market research agency conducts the interviews by telephone. In both cases the interviewers are trained and given detailed instructions by the researchers who conduct the analysis of the data.

On the incident level of analysis, a basic analysis of the incidents can be done on the three aspects on which they are assessed, producing results on how frequent, recent, and important the incidents were. The results can be shown in grids (see Figure 3) comparing one aspect with another. In the conducted studies the maximum problem value for one aspect is three, since zero on the aspects' four-point scale means that the incident never had occurred, had not occurred

recently, or had no impact. The grid is designed so that the closer to the origin the incident is in the grid the less of a problem it is assessed to be and, correspondingly, the closer to the upper-right-hand corner the incident is the more problematic it is assessed to be.

"FIGURE 3 ABOUT HERE"

The grid shows how all customers in one of the studies assess the incidents. The pattern is remarkably similar to the other study. The grid shows that there is a strong correlation (t-test, significance level .01) between how frequent and how important the incidents are assessed to be. An analysis on the relationship level does however not support this average effect, because each relationship is rather unique in term of what concerns each customer experiences. While there are no incidents at the most serious levels when scores are summed for all customers, individual respondents do give extreme values to quite a lot of incidents.

This analysis gives a diagnosis of which negative incidents overall occur in the studied relationships and in the customer portfolio. It is a matter of judgment when an incident becomes a management issue to be dealt with. The grid is useful in two main ways for deciding on managerial action and setting priorities in accounts. It shows, first, those concerns that are rated as more problematic than others in terms of frequency and impact on the customer's business, and, second, those concerns on which customer and seller views differ. The first type of concerns stands out in the grid as being further from the origin, and the second type comprises those incidents that do not meet with the diagonal of the grid. If the account manager aims to make improvement to the particular account, having quantified information on concerns that the

customer finds frequent and disturbing to its business should be useful, as should knowing differences in views.

On the relationship level of analysis the aim is to compare the customer's and the seller's view. A problem value is generated for each incident separately for the seller and the customer by taking the mean of their responses on all three aspects. The higher the problem value composed of the three aspects is, the more problematic the incident is. A gap chart can be used to illustrate how the values compare dyad-wise. Figure 4 is a representative example of this from the industrial service case. How serious problems the incidents are is not directly shown in this chart, but can be illustrated with a gap grid where the views of the seller and a customer are matched in a grid similar to the diagnostic incident grid.

"FIGURE 4 ABOUT HERE"

The 63 incidents in the industrial service case were grouped into four categories: interaction-based (I), seller-based (S), customer-based (C) and environment-based (E). This categorisation stems from the Interaction and Network Approach's fundamental way of analysing equivalent business-to-business relationships and networks (see for example Håkansson 1982). The chart shows a single relationship. The bar shows the correspondence between the sellers' and the customers' evaluations of incidents. The higher the bar is, the more the seller overestimated the concern for the customer. Correspondingly, the lower under the mid-line the bar reaches, the more the seller underestimated the incident. If the seller had good understanding of the customer,

the bar would be close to the mid-point line. The incidents, numbered from one to 63, are shown in per incident category from the seller's most overestimated to most underestimated incident.

In this particular dyad the seller's most overstated incident concerns lack of personal contacts (No. 5) and profitability aspects of products (No. 41), whereas the most understated concern is technical know-how of a key group of employee (No. 7). The chart shows that the seller's customer understanding is rather incomplete and is so in two ways. There are quite a few problems that the seller overestimates or is not fully recognising. The seller has been able to correctly assess the customer's view for surprisingly few incidents considering that the respondents were relationship-significant persons. An aggregate level analysis (t-test, significance level .05) reveals significant differences in problem values between customers and the seller for 17 incidents of 63 in the industrial service case. These differences are found for the interaction-, customer-, and seller-related, but not environment-related incidents. In the business service study other categories were used: basic-service, special-service, and overall-relationship incidents. This is a natural grouping and based on the seller company's business sectors. In this case views on 8 incidents out of 44 significantly differ between the seller and its customers.

Findings from both studies reveal systematically problematic incidents that concern a large number of relationships. At the same time there are incidents that are relationship-specifically problematic. This became evident when the dyad-level analysis is used to compare relationships. Dyad-specific incident configurations vary greatly. This obviously points to the need to have techniques that can reveal differences between relationships and produce information on the customer portfolio and single dyads.

Figure 5 shows the matched relationship-level views in all studied relationships in the technological and hospitality service studies. The position in the grid is the result of comparing dyad-wise the relationship stress index of the customer with that of the seller. The relationship stress measure is computed as an average of the problem values and presented as a percentage (0-100) of the theoretical maximum value. The grid is designed so that the closer to the origin the relationships are in the grid, the less stress there is in the relationship. Further, the closer to the diagonal of the grid the relationship is, the better the seller's understanding of its customer is.

"FIGURE 5 ABOUT HERE"

The distribution of relationship stress is again strikingly similar in the two portfolios. The relationship-stress measures for the sellers vary in the industrial service case from 24 to 64, and in the business service case from 27 to 57. The corresponding numbers for the industrial service customers are between 16 and 67, and for business service customers between 8 and 72. Thus, in both cases, while there are individual customers reporting low relationship stress, the spread in relationship stress is greater for customers than for the sellers. In several relationships both counterparts agree that the customer is experiencing a great deal of stress, with matched customer-seller relationship stress measures such as 67-58 and 39-64 in the industrial service case, and 72-64 and 67-58 in the business service case. At the same time the sellers have customers who they know do not experience a great deal of stress, since there are also customer-seller relationship stress measures such as 21-26 in the industrial service case, and 21-27 and 14-30 in the business service case. Customers' perceptions do not match the sellers' perceptions in many cases, and the sellers generally appear to overestimate the stress. Managerially more

significant nevertheless are the relationships where the seller underestimates the stress. In the industrial service case 9 out of 16 relationships have significant differences between the customers' and the seller's stress perception. The corresponding number in the business service case is 20 relationships out of 29. A key conclusion is hence that both sellers' customer understanding varies; oftentimes the seller does not seem to have a good understanding of its customers' experienced negative incidents. This despite that both studied sellers regularly measure customer satisfaction. When account managers hear about the findings from the NIM studies they recognise individual customers and their concerns. Yet in many cases they are surprised at how their customers responded.

Discussion on the New Technique

Contribution of the Study

From an academic point of view the new technique introduces issues that traditionally have been neglected when measuring customers and their perceptions in relationships. There are three features that distinguish NIM. First, NIM captures trivial concerns that as such are minor but may become major when they repeatedly occur or have an impact on the business. These situations and activities may be difficult to detect with current customer understanding tools such as customer satisfaction surveys and account managers' customer knowledge. Second, NIM is a direct measure of customer understanding since it dyadically compares two matched evaluations. Customer understanding in business-to-business relationships has to our knowledge not, except for Svensson (2004) who used a similar dyadic set-up to discover supplier segments, been approached in this manner. Third, contrary to traditional average-emphasising techniques, NIM

focuses on identifiable relationships. This reveals relationship specifics and business relationship complexity.

The new technique is flexible and can be used in many ways. For example, it can be used in different types of businesses where the role of services and other intangible elements differs from being at the core to being add-ons. The two empirical studies were different in this respect, and the technique's basic principle worked in both cases. In addition, the technique offers a vast number of possibilities. Incident generation and selection in the initial phase have crucial impact on the nature and quality of the findings. Analyses can be applied to the NIM data on different aggregation levels. These can be on different units of observation such as respondent, organisational unit, or relationship, combined with being an analysis of single incidents or an aggregated stress measure.

Customer Lifetime Value and other equivalent concepts such as Customer Equity and Relationship Profitability are calculated with three fundamental elements: relationship duration, revenues, and costs (Ryals 2003; Venkatesan and Kumar 2004). Different company databases and sales data provide the input for the financial measures, while forecasting models and managerial judgment are used to evaluate the length of relationships. How companies make these judgments and what they include in them have not up to now received much academic attention. For instance, relationship duration would be assessed using different risk factors causing relationships to weaken or break. In order to produce this kind of information, there is a need to conceptualise such risks and develop managerial tools that can generate this information. NIM addresses this need by capturing and revealing dyad-specific information hidden risk factors.

Managerial Implications

A major potential benefit from applying a negative incident perspective to business relationships lies in the capacity to detect hidden weakening of relationships. This refers to when relationships fade without visible signs of dissatisfaction and dysfunction (c.f., Campbell and Frei 2004; Grönhaug, Henjesand, and Koveland 1999; Ryals 2002b; Bloemer, Brijs, Vanhoof and Swinnen 2003; Chebat, Davidow and Codjovi 2005). This phenomenon is particularly difficult to identify even though it is quite common. The consulting company McKinsey has even estimated that fading relationships represent a substantially greater loss of value compared to realised relationship endings (Gokey and Coyles 2001). To understand fading is hence essential, and NIM can be used for this purpose.

The focus on adverse incidents rather than overall evaluation such as customer satisfaction data is based on psychological research indicating that negativity is a strong and durable driver of behaviour. The NIM findings are therefore suggested to be a strong predictor of future customer behaviour. Negativity is in NIM broken down into three elements, namely frequency, recency, and importance, which each have diagnostic value. Combining a qualitative and quantitative phase where both are managerially value adding makes the technique more attractive. Such aspects that are related to relationship duration would in turn be particularly useful for analysing customer lifetime value. Negative incidents are of particular interest to account managers since they can be used to manage both individual relationships and the whole customer portfolio.

The benefits from NIM for an account manager are several. Discovering negative incidents as well as revealing their individual impact is valuable for the managers. Additional leverage arises from the comparison of customers' experiences with those of the account team. Significant differences indicate that the account team's understanding of that specific customer can and should be improved. It is possible to fine-tune management of individual relationships by paying attention to incidents that not only customers find problematic but also on which views in individual relationships differ. NIM is therefore a tool for managing individual business relationships. In case customer lifetime value calculations are used to estimate customer equity one of the key elements, i.e. relationship duration, can include NIM findings. Major events affecting the relationship could be combined with the negative incidents.

Limitations of the Study

Many of the limitations associated with the CIT (Gremler 2004) also apply to NIM. For example, the incidents both in the qualitative and quantitative phase can be misinterpreted or misunderstood by the researcher or the respondent. This problem may however apply to any technique within marketing. The recall bias is another issue, as time passes people's memory may affect the results. On the other hand, this can be assumed to apply also to how the perceptions affect decision-making. Another common issue is that the CIT and NIM both are quite demanding for the respondents in terms of time and effort.

NIM is biased towards capturing incidents with at least some degree of regularity. Incidents that are unique will not be covered by the technique. If at all detected in the interviews, these are probably screened out in the phase where the questionnaire for the quantitative phase is constructed. The technique is accumulative in the sense that the time- and resource-consuming

qualitative phase can be used to shape a questionnaire that can be used repeatedly. The questionnaire can be improved when necessary as a separate project. The level of detail can be adjusted to the companies' needs, although there are probably some natural units of processes that will emerge in the respondents' stories.

In the conducted studies the relationships were based on contracts and had seller-designated account managers and account teams. The manager/team had in these cases continuous interactions with its customer which led to customer-specific knowledge and understanding. NIM has been developed for this kind of situations but needs not be limited to them. In cases where there is no relationship-specific responsibility a customer segment approach might be used. A sample of customer responses from different segments could then be compared to managers' understanding of incidents in the segments. This is, however, an area for further research.

Research Inspired by the Current Study

This study encourages many research topics. First of all we would like to call attention to customer understanding techniques for business-to-business relationships. It appears that more and better techniques are called for, not only in order to assess relationship duration in customer lifetime value calculations but also other purposes. Developing techniques for account managers would thus be an area that needs more attention from researchers.

Furthermore, one broad area that needs more investigation is negativity in business and in business relationship in particular. Different types of negativity, effects of negativity, and management of negativity are a few suggestions. Negative incidents based on disappointing experiences are merely one type of negativity that affects business. Other more strategic situations and decisions could also be worthwhile to examine since they also affect business in unexpected or unwanted ways. On the other hand, the opposite, namely how customers experience positive incidents, could also be worthwhile to explore. Based on our experience these are more difficult to retrieve, but they could nevertheless be useful from an account management perspective.

Another research topic concerns relationship effects of negative incidents. In the conducted empirical studies the emphasis was on exploring the incidents and developing the technique and not on the effects of the incidents. Therefore we have not at present incorporated effects into the framework. That this kind of incidents does impact fading and dissolution of relationships has been shown by many critical-incident researchers (e.g., Keaveney 1995; Roos 1999; Stewart 1998). For the NIM framework the nature and measurement of incident effect remain areas for further research and development together with companies.

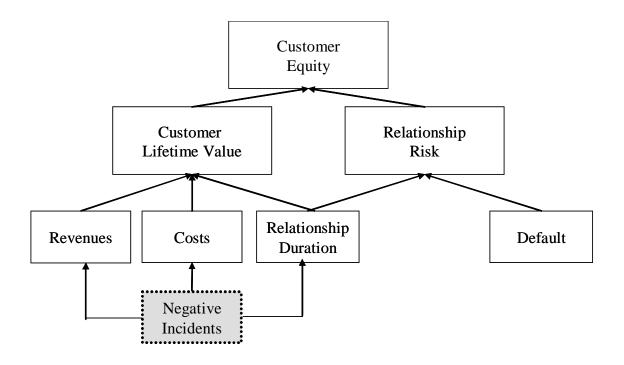


FIGURE 1
Positioning Negative Incidents in the Customer Equity Conceptualisation

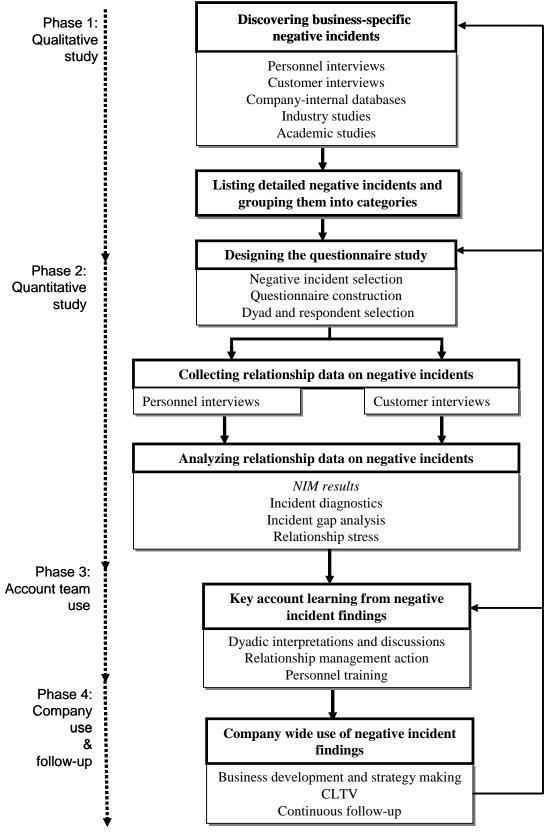


FIGURE 2

Negative Incident Mapping

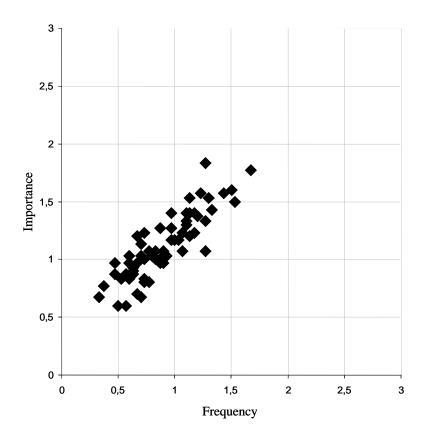
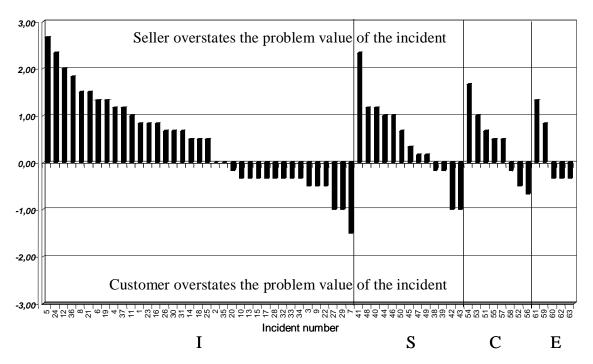


Figure 3

Diagnostic Incident Grid that Shows How All Industrial Service Customers Assessed the

Negative Incidents in Terms of Frequency Compared to Importance



I = Interaction-based incidents

S = Seller-based incidents

C = Customer-based incidents

E = Environment-based incidents

Figure 4

A Gap Chart Comparing Views on the Studied Incidents in a Single Dyad

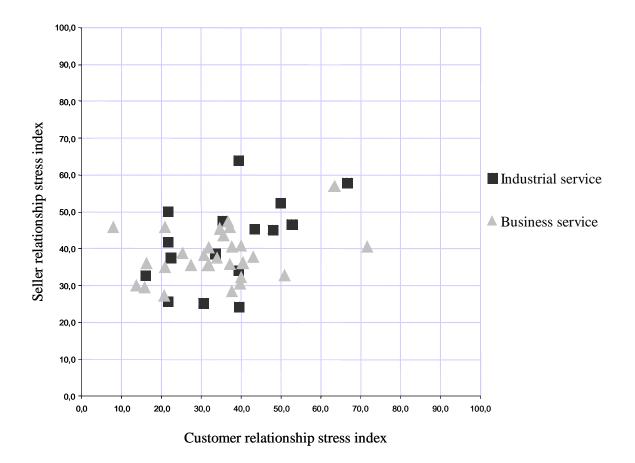


Figure 5

Grid Showing Relationship Stress in the Customer Portfolios of Both Studies

Table 1

Examples of Negative Incidents Used in the Customer NIM Questionnaires

Industrial service study (63 negative incidents in total)		
	Examples of negative incidents in the customer questionnaire	
Interaction based (37 in total) Seller based (13 in total)	# 5: We do not meet the Seller's people in person and it is therefore difficult to discuss problems and questions	
	# 7: The Seller's technical people who come here are inexperienced	
	# 41: It is difficult for us to get help when there are technical problems outside what the contract stipulates	
	# 43: The Seller's organization is becoming so complex that their people do not know what is being/has been done in other units of the company	
Buyer based (8 in total)	# 54: Because we have been working with the Seller's for such a short time period, we have not yet been able to develop a relationship where we openly share information	
	# 56: The Seller's national background affects the relationship and we find it difficult to do business with people whose mentality is different from ours	
Network based	# 61: Local workforce hired by the Seller does not have sufficient experience and this causes	
(5 in total)	technical problems	
	# 63: The Seller's external specialists and consultants are used sporadically and this causes problems for us	

Business service study (44 negative incidents in total)		
	Examples of negative incidents in the customer questionnaire	
Basic service based (2 in total)	# 1: The physical product component in the service does not meet our expectations	
	# 2: The special physical product alternatives are not varied enough	
Special service based	#7: The Seller's personnel does not attend to details in connection to special service A	
(17 in total)	#15: It is difficult to know whom to turn to in the Seller's organisation when we want to ask for offers for special service B	
Relationship based (25 in total)	#33: Our and the Seller's responsibilities are unclear in joint development projects	
	#38: The Seller does not sufficiently take changes in our business (organisation and culture) into consideration	

References

- Abratt, Russell and Michael Kelly Phillip (2002), "Customer-Supplier Partnerships: Perceptions of a Successful Key Account Management Program," *Industrial Marketing Management*, Vol. **31**, (August), pp.467-476
- Anderson, Erin and Sandy D. Jap (2005), The Dark Side of Close Relationships, *Sloan Management Review*, Spring, Vol. **46**, No. 3, pp.75-82
- Anderson, Eugene W. and Mary W. Sullivan (1993), "The Antecedents and Consequences of Satisfaction for Firms," *Marketing Science*, Vol. **12**, (2), pp.125-143
- ---- and Linda Court Salisbury (2003), "The Formation of Market-Level Expectations and Its Covariates," *Journal of Consumer Research*, Vol. **30**, (June), pp.115-124
- Backhaus, Klaus and Mathias Bauer (2000) "The Impact of Critical Incidents on Customer Satisfaction in Business-to-Business Relationships," *Journal of Business-to-Business Marketing*, Vol. **8**, (1), pp.25-54
- Bitner Mary Jo, Bernard M. Booms, and Mary Stanfield Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," *Journal of Marketing*, Vol. **54**, (January), pp.71-84

- Bloemer, Josée M.M., Tom Brijs, Koen Vanhoof, and Gilbert Swinnen (2003), "Comparing Complete and Partial Classification for Identifying Customers at Risk," *International Journal of Research in Marketing*, Vol. **20**, (June), pp.117-131
- Bowman, Douglas and Das Narayandas (2004), "Linking Customer Management Effort to Customer Profitability in Business Markets," *Journal of Marketing Research*, Vol. **41**, (November), pp.433-447
- Campbell, Dennis and Francis Frei (2004), "The Persistence of Customer Profitability: Empirical Evidence and Implications from a Financial Services Firm," *Journal of Service Research*, Vol. **7**, (November), pp.107-123
- Chebat, Jean-Charles, Mosche Davidow, and Isabelle Codjovi (2005), "Silent Voices. Why Some Dissatisfied Customers Fail to Complain," *Journal of Service Research*, Vol. 7, (May), pp.328-342
- Dhar, Ravi and Rashi Glazer (2003), "Hedging Customers," *Harvard Business Review*, Vol. **81**, (May), pp.86-92
- Edvardsson, Bo (1988), "Service Quality in Customer Relationships: A Study of Critical Incidents in Mechanical Engineering Companies," *The Service Industries Journal*, Vol. 8, July, pp.427-445

- ---- (1992), "Service Breakdowns: A Study of Critical Incidents in an Airline," *International Journal of Service Industry Management*, Vol. 3, (4), pp.17-29
- Edvarsson, Bo and Tore Strandvik (2000), "Is a Critical Incident Critical for a Customer Relationship?," *Managing Service Quality*, Vol. **10**, (2), pp. 82-91
- Fiske, Susan T. (1980), "Attention and Weight in Person Perception: The Impact of Negative and Extreme Behavior," *Journal of Personality and Social Psychology*, Vol. **38**, (6), pp. 889-906
- Flanagan, John C. (1954), "The Critical Incident Technique," *Psychological Bulletin*, Vol. **51**, (July), pp.327-57
- Friman, Margareta (2004), "The Structure of Affective Reactions to Critical Incidents," *Journal of Economic Psychology*, Vol. **25**, (June), pp.331-353
- ---- and Tommy Gärling (2001), "Frequency of Negative Critical Incidents and Satisfaction with Public Transport Services. II," *Journal of Retailing and Consumer Services*, Vol. 8, (March), pp.105-114
- ---, Bo Edvardsson, and Tommy Gärling, (1998), "Perceived Quality of Public Transport

 Service: Inference from Complaints and Negative Critical Incidents," *Journal of Public Transportation*, Vol. 2, (1), pp.69-91

- Geyskens Inge and Jan-Benedict E. M. Steenkamp (2000), "Economic and Social Satisfaction: Measurement and Relevance to Marketing Channel Relationships," *Journal of Retailing*, Vol. **76**, (Spring), pp.11-32
- Gokey, Tim and Stephanie Coyles (2001), *The New Era Of Customer Loyalty: Opportunities to Create Profitable Growth, Marketing Solutions*, McKinsey Marketing Solutions.

 McKinsey&Company, September, pp. 1-12
- Good, David J. and Kenneth R. Evans (2001), "Relationship Unrest A Strategic Perspective for Business-to-Business Marketers", *European Journal of Marketing*, Vol. **35**, (5/6), pp.549-565
- Grayson, Kent and Tim Ambler (1999), "The Dark Side of Long-Term Relationships in Marketing Services," *Journal of Marketing Research*, Vol. **36**, (February), pp. 132-141
- Grönhaug, Kjell, Inge Jan Henjesand, and Anita Koveland, (1999), "Fading Relationships in Business Markets: An Exploratory Study", *Journal of Strategic Marketing*, Vol. 7, (September), pp.175-190
- Gremler, Dwayne D. (2004), "The Critical Incident Technique in Service Research," *Journal of Service Research*, Vol. **7**, (August), pp.65-89

- Gupta, Sunil, Donald R. Lehmann, and Jennifer Ames Stuart (2004), "Valuing Customers," *Journal of Marketing Research*, Vol. **41**, (February), pp.7-18
- Gupta, Sunil and Donald R. Lehmann (2005), Managing Customers as Investments: The Strategic Value of Customers in the Long Run, Wharton School Publishing/Pearson
- Håkansson, Håkan (ed.) (1982), International Marketing and Purchasing of Industrial Goods:

 An Interaction Approach, Chichester, John Wiley & Sons
- ---- and Ivan Snehota (1998), "The Burden of Relationships or Who's Next?," In *Network Dynamics in International Marketing*, Naudé, Peter and Peter Turnbull, (eds.), Oxford UK, Elsevier Science, 16-25.
- Hausman, Angela (2001), "Variations in Relationship Strength and Its Impact on Performance and Satisfaction in Business Relationships", *Journal of Business & Industrial Marketing*, Vol. **16**, (October), pp.600-616
- Heckman, Robert and Audrey Guskey (1998), "Sources of Customer Satisfaction and Dissatisfaction with Information Technology Help Desks," *Journal of Market-Focused Management*, Vol. **3**, (March), pp.59-89
- Holmlund-Rytkönen, Maria and Tore Strandvik (2005), "Stress in Business Relationships," Journal of Business & Industrial Marketing, Vol. 20, (February), pp.12-22

- Keaveney, Susan M. (1995), "Customer Switching Behavior in Service Industries: An Exploratory Study," *Journal of Marketing*, Vol. **59**, (April), pp.71-82
- Lilly Bryan, Thomas W. Porter, and William A. Meo (2003), "How Good are Managers at Evaluating Sales Problems," *Journal of Personal Selling & Sales Management*, Vol. 23, (Winter), pp.51-60
- Lockshin, Larry and Gordon McDougall (1998), "Service Problems and Recovery Strategies: an Examination of the Critical Incident Technique in a Business-to-Business Market," *International Journal of Retail & Distribution Management*, Vol. **26**, (11), pp.429-438
- Odekerken-Schröder, Gaby, Marcel van Birgelen, Jos Lemmink, Ko de Ruyter, and Martin Wetzels (2000), "Moments of Sorrow and Joy: An Empirical Assessment of the Complementary Value of Critical Incidents in Understanding Customer Service Evaluations," *European Journal of Marketing*, Vol. **34**, (1/2), pp.107-125
- Peppers Don and Martha Rogers (2005), Return on Customer: Creating Maximum Value From Your Scarcest Resource. New York, Doubleday & Company, Inc
- Proença João F., and Luís M. de Castro (2005), ""Stress" in Business Relationships: A Study on Corporate Bank Services," *International Journal of Bank Marketing*, Vol. 23, (7), pp.527-541

- Rakesh, Niraj, Mahendra Gupta, and Chakravarthi Narasimhan (2001), "Customer Profitability in a Supply Chain," *Journal of Marketing*, Vol. **65**, (July), pp.1-16
- Reinartz, Werner, Manfred Krafft, and Wayne D. Hoyer (2004), "The Customer Relationship Management Process: Its Measurement and Impact on Performance," *Journal of Marketing Research*, Vol. **41**, (August), pp.293-305
- Roos, Inger (1999), "Switching Processes in Customer Relationships," *Journal of Service Research*, Vol. **2**, (August), pp.376-393
- Rust, Roland T., Katherine N. Lemon, and Valarie A. Zeithaml (2004), "Return on Marketing:

 Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, Vol. **68**,

 (January), pp.109-127
- Ryals, Lynette (2002a), "Measuring Risks and Returns in the Customer Portfolio," *Journal of Database Marketing*, Vol. **9**, (3), pp.219-227
- ---- (2002b), "Are Your Customers Worth More than Money?," *Journal of Retailing and Consumer Services*, Vol. **9**, (5), pp.241-251

- ---- (2003), "Making Customers Pay: Measuring and Managing Customer Risk and Returns," *Journal of Strategic Marketing*, Vol. **11**, (September), pp.165-175
- Shepherd, David C. and Joseph O. Rentz (1990), "A Method for Investigating the Cognitive Processes and Knowledge Structures of Expert Salespeople," *Journal of Personal Selling & Sales Management*, Vol. **10**, (4), pp.55-70
- Sitkin, Sim B. and Amy L. Pablo (1992), "Reconceptualizing the Determinants of Risk Behavior," *Academy of Management Review*, Vol. 17, (1), pp.9-38
- Skowronski, John J. and Donal E. Carlston (1987), "Social Judgment and Social Memory: The Role of Cue Diagnosticity in Negativity, Positivity, and Extremity Biases," *Journal of Personality and Social Psychology*, Vol. **52**, (4), pp.689-699
- ---- and ---- (1989), "Negativity and Extremity Biases in Impression Formation: A Review of Explanations," *Psychological Bulletin*, Vol. **105**, (1), pp.131-142
- Song, Michael X., Jinhong Xie, and Barbara Dyer, (2000), "Antecedents and Consequences of Marketing Managers' Conflict-Handling Behaviors," *Journal of Marketing*, Vol. **64**, (January), pp.50-66

- Stauss, Berndt (1993), "Service Problem Deployment: Transformation of Problem Information into Problem Prevention Activities," *International Journal of Service Industry Management*, Vol. **4**, (2), pp.41-62
- Stewart, Kate (1998), "An Exploration of Customer Exit in Retail Banking," *International Journal of Bank Marketing*, Vol. **16**, (1), pp.6-14
- Strandvik, Tore and Margareta Friman (1998), "Negative Critical Incident Mapping," In *QUIS 6 Proceedings*, Edvardsson, Bo et al., (eds.), Warwick, UK, International Service Quality

 Association, pp.161-169
- Svensson, Göran (2004), "Supplier Segmentation in the Automotive Industry. A Dyadic Approach of a Managerial Model," *International Journal of Physical Distribution & Logistics Management*, Vol. **34**, (1), pp.12-38
- Taylor, Shelley E. (1991), "Asymmetrical Effects of Positive and Negative Events: The Mobilization-Minimization Hypothesis," *Psychological Bulletin*, Vol. **110**, (1), pp.67–85
- Venkatesan, Rajkumar and V. Kumar (2004), "Customer Lifetime Value Framework for Customer Selection and Resource Allocation Strategy," *Journal of Marketing*, Vol. **68**, (October), pp. 106-125

- Wierenga, Berend and Gerrit van Bruggen (1997), "The Integration of Marketing Problem-Solving Modes and Marketing Management Support Systems," *Journal of Marketing*, Vol. **61**, (July), pp.21-37
- Woodside, Arch G., Hugh M. Pattinson and Kenneth E. Miller (2005). "Advancing Hermeneutic Research for Interpreting Interfirm New Product Development, *Journal of Business & Industrial Marketing*, Vol. **20**, (7), pp.364-379.