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# Complaining through the Internet: Determinants of after Complaint Satisfaction and Its Impact on Loyalty in the Telecommunication Industry

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Aim: The aim of this study is to address the determinants and consequences of after complaint satisfaction in terms of loyalty when complaints are filed via a service provider's website. Most studies have looked at more traditional communication channels such as face to face (thus more personal and less automated).

Scope: An empirical research among customers of a large telecommunications company who filed their complaint via the service provider's website helps us to offer a clear understanding of how to handle complaints in order to create after complaint satisfaction and loyalty. The telecommunications industry is a highly competitive market where customers have many options to choose their service provider. This would assume that handling complaints to the customers' satisfaction is more important than for companies in less competitive markets, because customers are able to choose between multiple service providers.

Conclusion: There are five determinants in creating satisfied customers who filed their complaint through the Internet: a quick response, apology, attention, correction, and doing a follow up. Two dimensions that influence after complaint satisfaction can be distinguished: the outcome and the handling dimension. After complaint satisfaction has the largest impact on word of mouth and it has a positive impact on repurchase intention and price (in)sensitivity.

**Keywords:** complaint management; after complaint satisfaction; loyalty

### 1. INTRODUCTION

Recently, complaint management has gained more and more interest in scientific research as well as in the business lit-

erature where the primary focus lies on the impact of complaint management on business performance. Most studies find a positive relationship between complaint dissatisfaction and negative future behaviour such as negative word of mouth and turnover of customers. For example Blodgett and Anderson (2000) found that, although the probability that a noncomplainer or a dissatisfied complainant will completely exit is quite low, the probabilities that a satisfied complainant will intend to fully repatronize the retailer and engage in positive word of mouth, on the other hand, are quite high.

Knowing that it costs five times as much to acquire a new customer as compared to the costs of retaining a customer (TARP, 1979), it can be concluded that the handling of customer's complaints in a for the customer satisfying way is important to retain a profitable, loyal customer base. However, before the impact of complaint management on customer loyalty can be established, its effect on satisfaction needs to be addressed, since research on customer loyalty (Zeithaml, 1996) shows the dominant impact of satisfaction on customer loyalty.

Although quite some research has already been done on complaint management (Davidow, 2000), most studies looked at only two or three different aspects of complaint management. In this study (in line with Davidow (2000)), we analyze the relative impact of eight different determinants of the customer's satisfaction after filing a complaint, i.e. accessibility, attention, apology, explanation, compensation, correction, quick response and doing a follow up. In doing so, this research also contributes to the existing literature by investigating the underlying dimensions of complaint handling, i.e. handling itself and the outcome for the customer, and their effect by means of after complaint satisfaction on customer loyalty. Following Zeithaml (1996), we will study the impact of after complaint satisfaction on three different types of loyalty, i.e. word of mouth, repurchase intentions and price insensitivity. So far, price insensitivity has not yet been taken into account in this specific complaint management setting.

Word of mouth and repurchase intentions have been studied previously. For example Blodgett et al. (1997) looked at the impact of perceived justice on word of mouth and repatronage intentions. In their study distributive justice (perceived fairness of the remedy offered) was operationalized by the degree of discount, procedural justice (perceived fairness of the policies and procedures during the complaint process) was defined as speed, operationalized by the amount of trips to the store that had to be made to resolve the problem and interactional justice (perceived fairness of treatment) was operationalized as the manner in which the complainant was treated. They found that higher levels of distributive and procedural justice led to complainants being more likely to repatronize the company and less likely to engage in negative word of mouth. Interactional justice (speed) had no effect on word of mouth and repatronage intentions.

Maxham and Netemeyer (2002) also studied the impact of perceived justice on satisfaction, word of mouth and repurchase intentions. They found that satisfaction with the recovery was a better predictor of the likelihood of spreading positive WOM than overall firm satisfaction. But overall firm satisfaction was a stronger predictor of the repurchase likelihood than satisfaction with the recovery.

In most studies complaints are handled face to face, via telephone or regular mail. But with the growth of the Internet and more and more companies that allow customers to complain through their website, it is interesting to find out what satisfies customers when they file their complaint through the Internet. In our study we surveyed customers of a large telecommunications company, who filed a complaint through the website of this company in the last two months. Moreover, a lot of earlier studies conduct their empirical research in hospitality and tourism.

The overall aim of this research is to offer a clear understanding of how the handling of a complaint impacts after complaint satisfaction and how this satisfaction influences customer loyalty.

This paper will be organised as follows. First, we address the theoretical background and hypotheses. Second, we present the methodology of our research. Third, we fo-

cus on the results of the research we conducted. Fourth, we formulate conclusions and discuss theoretical and managerial implications. Finally, implications for future research and limitations of this study are provided.

# 2. THEORETICAL BACKGROUND AND HYPOTHESES

There have been several studies in the last few years on complaint management. A distinction can be made between studies that focus either on the consequences of after complaint satisfaction and studies that address the determinants of after complaint satisfaction. For instance, Davidow (2000) found that after complaint satisfaction has a strong positive influence on word of mouth communication (b=0.54) and repurchase intentions (b=0.42). This study was executed among students of a large university that had had a complaint. Most complaints concerned the restaurant industry. And Blodgett and Tax (1993) looked at the role of distributive and interactional justice in complaint handling and the impact of both on repurchase behaviour and word of mouth communication. They found that in order to increase the intention to return for more shopping and prevent negative word of mouth communication; the customer has to experience high distributive justice and high interactional justice. They also confirm that after complaint satisfaction plays an important role in positive word of mouth communications and an increase in repurchase intentions.

Apart from the impact of after complaint satisfaction on loyalty, other consequences are being addressed as well. For example Johnston (2001) investigated the impact of complaint management on the performance of the organisation. They found that satisfaction with the complaint handling leads to both operational improvements and improved financial performance. Operational improvements are made by analyzing the complaints and removing the causes of the complaints, thereby increasing after complaint satisfaction and preventing future complaints and saving costs. The improved financial performance is a result of increased customer retention by handling the customers' complaints to their satisfaction. Many other studies show the positive consequences of after complaint satisfaction and complaint management on organizational performance.

Most studies on complaint management though, focus on the determinants of after complaint satisfaction. Davidow (2003) presented an overview of all the studies being published in this field. He shows that redress (41 studies), consisting of compensation and the correction of the problem is the most studied determinant of after complaint satisfaction. Second is attention (21 studies) and the other variables that have been studied are timeliness (18 studies), facilitation (17 studies), apology (13 studies) and credibility (13 studies). These determinants will be addressed in more detail in the next paragraph.

# 3. DETERMINANTS OF AFTER COMPLAINT SATISFACTION

Several variables play a role in creating satisfied customers after they have filed a complaint. Extensive research of the existing literature suggested eight variables that seem to be important in satisfying customers who filed a complaint. These eight variables were selected first of all based on the (relative) impact a variable was found to have on after complaint satisfaction and secondly also based on the number of times this variable was mentioned and researched. This led to the following eight determinants that will be addressed in detail: apology, explanation, quick response, follow up, attention, accessibility, correction and compensation.

Apology (giving an apology for the complaint). According to Davidow (2000) apology can be seen as a form of psychological compensation. Customers expect an apology. It is not so much an admission of guilt but an indication that the organization finds the problem important and is willing to solve it. When a customer experiences a problem with a service provider that was not his own fault, receiving an apology for the inconvenience gives him the feeling that he has been heard by the company and that it takes its customers seriously. Mixed empirical results have been found with regard to the impact of apology on satisfaction. On one hand, previous research shows that giving an apology has a positive influence on the satisfaction of customers who filed a complaint (Bitner et al., 1990; Boshoff and Leong, 1998: Johnston and Fern, 1999). In these studies, apology is one of the variables that is used in the complaint handling,

next to for example variables such as explanation, correction and attention. On the other hand, there are a few studies that show that apology has no influence on satisfaction. (Davidow, 2000; De Ruyter and Wetzels, 2000). De Ruyter and Wetzels (2000) looked at the feeling of equity the customer has with the complaint handling. When they increase the feeling of equity by giving an apology, no significant influence on the quality of the complaint handling was found. In this study we use apology as one of the eight variables that are used to create satisfaction; we do not look at it from a feeling of equity point of view. Therefore, we assume that:

### H1a An apology has a positive influence on after complaint satisfaction.

Explanation (giving an explanation for the complaint). Giving an explanation creates a feeling of acknowledgement for the customer's complaint and it enables the customer to understand what happened to create his complaint. Conlon and Murray (1996) showed that giving an explanation is seen by customers as accepting responsibility for the problem, which increased customers' satisfaction. There is a lot of research that shows the positive influence of giving an explanation in creating satisfied customers (Baer and Hill, 1994; Bitner et al., 1990; Boshoff and Leong, 1998; Morris, 1988). However, Johnston and Fern (1999) found that explanation is not especially important when a complaint is filed initially. When a customer files a complaint initially, variables such as apology are more important for the satisfaction of the customer. But, when that initial complaint is not handled properly and the customer complains about the way his complaint is being handled, then giving explanation of the cause of the complaint is the only opportunity for a company to still turn a dissatisfied customer into a satisfied one. This leads to the following hypothesis:

### H1b Giving an explanation for the cause of the complaint has a positive influence on after complaint satisfaction.

Quick response (the time it takes to resolve the complaint after it has been filed). Speed plays a special role in creating satisfied customers. When a complaint is resolved, but not very quickly, the customer is very satisfied. When a complaint is not resolved, but the customer knows this very quickly, the customer is not satisfied. But when a complaint is resolved and it is done very quickly, the customer is very satisfied. So speed can enhance the feeling of satisfaction combined with other variables that play a role in creating satisfied customers. In most studies, a quick response is found to have a positive influence on satisfaction (Boshoff, 1997; Conlon and Murray, 1996; Johnston and Fern, 1999). Estelami (2000) though, found that attention had a bigger influence than a quick response and Morris (1988) even found that a quick response has no significant influence but that attention is the most important variable. Gilly (1987) showed that not actual speed of the response, but rather perceived speed is important. This leads to the following hypothesis:

### H1c Handling the complaint quickly has a positive influence on after complaint satisfaction.

Follow up (pro-actively asking the customer whether the complaint was handled to his/her satisfaction after his/her complaint has been solved). It is not uncommon for organizations to find that they think that the complaint has been resolved, when in fact - when they ask the customer - it has not been resolved. So there are two important gains in following up: making sure the complaint has been solved and if not, the organization has a second chance to resolve and to give the customer the feeling that the organization really is concerned about the customer experience. This is something customers do not expect, thus being a very helpful in creating satisfied customers. To our knowledge, this variable has only been researched in one of the studies on complaint management, namely the research by Johnston and Fern (1999). In this research it was found that follow up not only leads to satisfied customers, but in fact delighted customers. This leads to the following hypothesis:

# H1d Doing a follow up has a positive influence on after complaint satisfaction.

Attention (treating the customer who filed the complaint in a friendly, carefully listening manner). According to Bitner et al (1990) attention during the complaint handling determines customer satisfaction. Giving attention to the customer is very important to make sure the customer feels he is being heard and that the core of the problem is being found

and resolved. Giving attention to the customers helps to pinpoint the exact problem and find a corresponding solution and thus creates after complaint satisfaction. From the literature it can be concluded that giving attention is a very important variable in satisfying the customer who has a complaint (Bitner et al., 1990; Blodgett et al., 1995; Blodgett and Tax, 1993; Clopton et al., 2001; Estelami, 2000; Hocutt et al., 1997; Morris, 1988; Sparks and McColl-Kennedy, 2001). This leads to the following hypothesis:

# H1e Giving attention to the problem of the customer has a positive influence on after complaint satisfaction.

Accessibility (how easy can the company be reached to file a complaint). There is hardly anything more frustrating for a customer than not being able to contact the organization when something goes wrong. It is crucial to be accessible for customers to file their complaint. Accessible can be giving the opportunity to complain via multiple channels (email, phone, internet, etc.) but also communication to the customers that their complaint has been received and action is being taken. Accessibility thus plays a role in creating satisfied customers. Blodgett (1994) found as one of very few, that accessibility has no significant influence on satisfaction with complaint handling. However, most studies find that accessibility does influence the satisfaction of customers positively (Blodgett et al., 1995; Davidow and Leigh, 1998; De Ruyter and Wetzels, 2000; Fornell and Wernerfelt, 1988). Nyer (2000) found that customers that were stimulated to file a complaint were even more satisfied and evaluated products more positively than customers who had never filed a complaint. This leads to the following hypothesis:

# H1f Accessibility has a positive influence on after complaint satisfaction.

Compensation (offering compensation for the problem). Most customers not necessarily need a compensation straight away when a problem occurs. When a complaint is resolved rather quickly and with little discomfort, not many customers will ask for compensation. Though when a problem has a large impact on the customer (for example he is not able to use his Internet connection for a month) a compensation like a refund of that month's Internet subscription fee would be the

right thing to do in order to create a satisfied customer. Compensation is also a variable that is found to have a significant positive effect on satisfaction with complaint handling in a lot of studies (a.o. Davidow and Leigh, 1998; Gilly, 1987; Johnston and Fern, 1999). In most of these studies no distinction in the level of compensation is made. Garret (1999) though, does make a distinction in the level of compensation and finds that the amount of compensation has no influence on word of mouth and repurchase intentions. Blodgett et al. (1997) also distinguish between several levels of compensation (distributive justice in the form of a discount) and find that it does have a positive impact on word of mouth and repatronage. In this research we do not make a distinction in the level of compensation. But we assume that compensation in general does have a positive influence:

# H1g Offering compensation for the problem has a positive influence on after complaint satisfaction.

Correction (correction of the problem). The main goal of any customer that complains is to resolve the problem. When an organization does not correct the problem, there are very few other means to create a satisfied customer. So solving the problem is necessary to create satisfied customers. In every research, correction of the problem is found to be important for creating satisfied customers after they filed a complaint (Blodgett et al., 1995; Blodgett and Tax, 1993; Hocutt et al., 1997; Johnston and Fern, 1999; McCollough et al., 2000). In addition, Blodgett et al. (1995) and McCollough et al. (2000) found that, though correction has a positive influence, only in combination with attention did correction lead to more satisfied customers. This leads to the following hypothesis:

# H1h Correction of the problem has a positive influence on after complaint satisfaction.

Previous studies have shown that the determinants of after complaint satisfaction can be grouped into two dimensions. In addition, companies that are analyzing complaint satisfaction find that customers find it very difficult if not impossible to distinguish between the way the complaint was handled (process) and the result of the complaint handling (outcome). For example, a customer that filed a

complaint about the amount of money on their phone bill that is resolved within 24 hours (fast process), but with the result that the customer still has to pay this amount (outcome), will not be satisfied overall. Therefore we, in line with Davidow (2003), distinguish between the two dimensions of complaint

up.

# H2b The outcome dimension consists of correction and compensation.

Because of the hypothesized positive effect of the eight

Table 1 Overview of Articles Reviewed for Determinants of After Complaint Satisfaction.

Variable	Articles
Apology	Boshoff and Leong, 1998; Bitner et al., 1990; Bell and Zemke in Johnston and Fern, 1999; Johnston
	and Fern, 1999; Davidow, 2000; De Ruyter and Wetzels, 2000
Explanation	Baer and Hill, 1994; Bitner et al., 1990; Boshoff and Leong, 1998; Morris, 1988; Johnston and Fern,
	1999
Quick response	Boshoff, 1997; Conlon and Murray, 1996; Johnston and Fern, 1999; Estelami, 2000; Morris, 1988;
	Gilly,1987
Follow up	Johnston and Fern, 1999
Attention	Blodgett et al., 1995; Blodgett and Tax, 1993; Clopton et al., 2001; Hocutt et al., 1997; Morris, 1988;
	Sparks and McColl-Kennedy, 2001; Estelami, 2000; Bitner et al., 1990
Accessibility	Blodgett, 1994; De Ruyter and Wetzels, 2000; Blodgett et al., 1995; Davidow and Leigh, 1998;
	Fornell and Wernerfelt, 1988; Nyer, 2000
Compensation	Gilly, 1987; Davidow and Leigh, 1998; Johnston and Fern, 1999; Garret, 1999
Correction	Blodgett et al., 1995; Blodgett and Tax, 1993; Hocutt et al., 1997; Johnston and Fern, 1999;
	McCollough et al., 2000; Blodgett et al., 1995; McCollough et al., 2000

handling: a handling (process) and an outcome dimension. In line with Davidow, accessibility (facilitation), attention (attentiveness) and quick response (timeliness) can be labeled as handling variables and compensation and correction (redress) can be labeled as outcome variables. In addition, in our opinion, giving an apology for the complaint (apology), giving an explanation for the complaint (explanation) and proactively asking the customer whether the complaint was handled to his/her satisfaction after the complaint has been solved (follow up) might be considered as process variables. Stauss (2002) also distinguishes between a process and an outcome dimension. He labels variables such as access, friendliness, empathy, speed of response as process variables. Adequacy or fairness of the outcome, fairness of the compensation offered are labeled as outcome variables. Therefore we hypothesize that:

H2a The handling dimension consists of accessibility, attention, quick response, apology, explanation and follow

variables separately, we assume a positive effect of each dimension on after complaint satisfaction. However, the question is what is the relative impact of these dimensions on after complaint satisfaction? Davidow (2003) finds that in a financial loss situation the outcome dimension has the largest impact on satisfaction with complaint handling. Stauss (2002) also finds that outcome has a larger impact on overall satisfaction than process (handling). Therefore we hypothesize:

H2c The outcome dimension has a larger positive influence on after complaint satisfaction than the handling dimension.

Now that we have described the eight determinants of after complaint satisfaction and their two dimensions, we will address the relationship between after complaint satisfaction and the types of loyalty.

### 4. CONSEQUENCES OF AFTER COMPLAINT SATISFACTION

There are several studies that explore the relationship between after complaint satisfaction and lovalty (a.o. Davidow. 2000; Johnston, 2001; Spreng et al., 1995). Mattila (2001) studied this relationship for three different service providers. namely hairdressers, restaurants and dry cleaners. In this study, she operationalized lovalty consisting of five items based on Zeithaml et al. (1996). She found a positive relationship in all three settings, although the influence of satisfaction with complaint handling on lovalty with hairdressers appeared to be larger than with restaurants and dry cleaners. It is characteristic of the type of service that Mattila (2001) studied that is mostly provided in direct interaction between the company and the customer. In the telecommunications industry (the present study) however, customers have hardly direct interaction with the company as long as there is no service failure (an intangible service directed at possessions). Furthermore, Zeithaml et al. (1996) have shown that it is important to distinguish between different types of loyalty, namely word of mouth, price (in)sensitivity, repurchase intention and complaining behaviour. Therefore, in this research, three different types of loyalty are distinguished according to Zeithaml et al. (1996): word of mouth,

repurchase intention and price insensitivity. The fourth dimension, complaining behaviour, is not taken into account in this research, because complaining behaviour itself is the main topic.

Blodgett and Tax (1993) and Davidow (2000) explored the relationship between after complaint satisfaction and word of mouth and between after complaint satisfaction and repurchase intentions. Both found that handling a complaint to the satisfaction of the customer leads to positive word of mouth and the intention to repurchase at the same company. In other studies on complaint handling, the relationship between satisfaction and word of mouth and/or repurchase intention is explored and these studies also found a positive relationship between satisfaction with complaint handling and word of mouth and repurchase intention. This leads to the following hypotheses:

H3a After complaint satisfaction has a positive influence on word of mouth.

### H3b After complaint satisfaction has a positive influence on repurchase intentions.

There are very few studies that look at the relationship between after complaint satisfaction and price sensitivity. Zeithaml et al. (1996) showed that the price insensitivity of

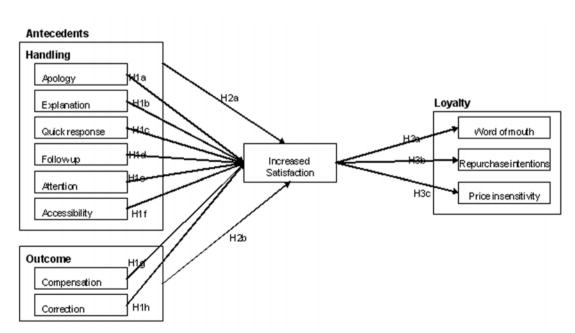


Figure 1 Conceptual Model

customers whose complaint has been handled to their satisfaction is much higher than the price insensitivity from customers whose complaint was not handled to their satisfaction. This means that these customers (whose complaint was handled to their satisfaction) are less willing to leave the company when the competition offers lower prices. Based on this study the following hypothesis can be formulated:

## H3c After complaint satisfaction has a positive influence on price insensitivity.

Figure I shows the conceptual model of our study.

### 5. METHODOLOGY

We will describe the data collection and sampling procedure, the response, the construct measurement, reliability and validity measures and the data analysis procedures in this paragraph.

### 5.1 Data Collection and Sampling Procedure.

The cross-sectional online survey was conducted among customers of a large telecommunication company in the Netherlands in the spring of 2004. Customers that filed a complaint with the telecommunication company in the last two months were included in the survey. This resulted in a randomly selected customer base of 1983 customers that were randomly selected. All these customers were sent a personalized email with the explanation of the research and a hyperlink in the email to the survey itself. Online surveys offer a fairly easy and quick data collection and the high response rate as compared to written surveys with online response rates, after sending one or two reminders, varying between 30-40%, while written survey response rates vary between 10% and 15%.

### 5.2 Response

252 usable surveys were collected. This means a response rate of 13%. This was the response without a reminder being sent. We did not send a reminder because there were several frustrated customers that had not had any response from the company yet after they had filed their complaint. Sending a reminder therefore might unnecessarily damage the image of the company. And even more important the response of 252 was large enough to make valid and reliable

statistical analysis in order to test our hypotheses.

### 5.3 Construct Measurement

The eight determinants of complaint handling were measured by one item each on a five-point Likert scale. In order to be able to measure the reliability of the measurements it is preferable to measure each variable by a minimum of three items. But to make sure the online survey would not be too long and to ensure a fair response rate, we chose to measure each determinant with one item only. This implicates that the reliability of the determinants can not be tested. However, since these determinants are independent variables and the variables are not at all abstract (for example giving an apology leaves no room for differences in interpretation, making it less necessary to measure a latent construct), it can be justified to measure these variables with one item (Malhotra, 1999: Rossiter, 2002). To measure after complaint satisfaction and lovalty multiple-item measurement scales were used that have been validated and found to be reliable in previous research (Davidow, 2000; De Ruyter et al., 1998; Lee et al., 2001: Zeithaml et al., 1996). The measurement items of the different constructs are shown in Appendix I.

### 5.4 Reliability and Validity

The psychometric properties of the multiple-item scales were assessed, following recommendations provided in the literature (Churchill, 1979; Gerbing and Anderson, 1988). We performed exploratory factor analysis and Cronbach's alpha coefficients. While the purpose of the exploratory factor analysis was to examine the structure of the measures, we calculated Cronbach's coefficient alphas to estimate the reliability of each scale. The results of these analysis indicated that all measures were unidimensional and showed acceptable reliability levels. All coefficient alpha's exceeded the 0.7 level recommended by Nunnally (1978).

### 5.5 Data Analyses

In order to test for the relationships between the eight determinants and after complaint satisfaction and the relationships between after complaint satisfaction and the three types of loyalty, we used multiple regression analysis. To make sure there is no multicollinearity present among the eight determinants, we analysed the correlation matrix. Vari-

ables that correlate more than 0.9 might cause problems here (Hair, 2006). There were no variables that correlate more than 0.6 so multicollinearity was not at all a problem.

### 6. RESULTS

First we analyzed the data through factor analysis in order to make sure the factors can be used in the regression analysis. In the tables below the results of the factor analysis of the determinants of after complaint satisfaction, after complaint satisfaction itself and the loyalty dimensions are shown.

### 6.1 Factor Analysis

### (1) Determinants of after Complaint Satisfaction

To test whether the eight determinants can be grouped into two dimensions of complaint handling, we used Explorative Principal Axis factor-analyses and reliability analyses (see Table 2). These analyses confirmed a clear two-dimensional structure underlying these characteristics. One factor can be labeled as a Handling factor (Cronbach's alpha = 0.82) and a second factor can be labeled as an Outcome

factor (Cronbach's alpha = 0.72). This means that the clear structure points at two important aspects of complaint handling, i.e. handling and outcome of the complaint.

Hypotheses H2a and H2b provided two dimensions in the eight determinants of after complaint satisfaction. That is, the determinants accessibility, attention, a quick response, apology, explanation and follow up constitute the Handling dimension as stated by the hypothesis H2a and the determinants correction and compensation appear to be part of the outcome dimension as stated by hypothesis H2b. The results in Table 2 show that the determinant follow up is seen by customers as a result of the complaint handling, not as an aspect of complaint handling itself. Taking a closer look at the operationalisation of follow up ("Company X contacted me, after the complaint had been handled, to inform whether the complaint was handled to my satisfaction") explains why customers experience this as being part of the outcome in this study. Follow up takes place after their complaint has been handled and not during the han-

Table 2 Results of the Explorative Principal Axis Factor Analyses and Reliability Analyses of The Eight Determinants of After Complaint Satisfaction.

	Factors loadings*		
Determinants of Satisfaction with Complaint Handling	Process	Outcome	
Accessibility	.664	078	
Attention	.867	047	
Apology	.525	.260	
Explanation	.536	229	
Compensation	007	.530	
Correction	067	.720	
Quick response	.330	.447	
Doing a follow-up	.082	.635	
Eigenvalue	3.69	1.12	
% of Variance	46%	14%	
adj. Cronbach's Alpha	0.82	0.72	
(highlighted items)	(5 items)	(4 items)	

<sup>\*</sup> Pattern Matrix: Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization

dling of their complaint. Although previous research has repeatedly shown speed is part of the handling dimension (Davidow, 2003; Stauss, 2002), customers in our study (in the telecom industry) see the determinant quick response as a part of the Handling dimension as well as the Outcome dimension. As a result hereof, we come to the conclusion that four determinants constitute the Outcome dimension, i.e. compensation, correction, a quick response, and a follow-up. And five determinants constitute the Handling dimension, i.e. accessibility, attention, apology, explanation and quick response. The results shown in Table 2 confirmed the hypotheses H2a and H2b to a large extent.

### (2) After Complaint Satisfaction

Table 3 shows the explorative Principal Axis factor-analyses and reliability analyses of after complaint satisfaction and reveals a clear one dimensional scale underlying the items (Cronbach's alpha = 0.94).

### (3) Consequence of after Complaint Satisfaction

Table 3 Results of the Explorative Principal Axis
Factor Analyses and Reliability Analyses of the
three After Complaint Satisfaction items.

	Factors loadings*			
Satisfaction items	0.938			
Satisfaction	0.976			
Positive Attitude	0.970			
Image				
	2.85			
Eigenvalue	94%			
% of Variance	0.97			
adj. Cronbach's Alpha	(3 items)			

<sup>\*</sup> Pattern Matrix: Extraction Method: Principal Axis Factoring.

The results of the explorative Principal Axis factor-analyses and reliability analyses of the three types of loyalty are presented in Table 4.

Table 4 shows that three types of loyalty could be distinguished with explorative factor analysis. Word of mouth, repurchase intentions and price insensitivity are three factors with internal consistency coefficients far above the generally excepted cut of level of 0.70 (Cronbach's alpha of 0.94, 0.81 and 0.78 respectively).

### 6.2 Regression Analysis

The factor analyses show that the data can be used in the regression analysis to find the causal relationships between the constructs. First we look at the impact of the eight determinants on after complaint satisfaction. Then the impact of the two dimensions (handling and outcome) on after complaint satisfaction are discussed. Finally we analyse the impact of after complaint satisfaction on the three dimensions of loyalty.

### (1) The Determinants of after Complaint Satisfaction

Table 5 shows that five out of the eight tested variables have a significant positive impact on after complaint satisfaction: quick response, apology, correction, attention and follow up. This means that hypotheses H1c, H1a, H1h, H1e and H1d could be confirmed. We found no significant effect of accessibility, explanation and compensation on after complaint satisfaction. This means that hypotheses H1f, H1b and H1g have to be rejected. Table 5 also shows the relative importance of the determinants. Quick response has the largest impact on after complaint satisfaction (Beta=0. 36) and its impact is twice as large as on follow up and giving attention (Beta=0.11 and Beta= 0.18 respectively). Apology has the second largest impact on after complaint satisfaction (Beta=0.22).

With respect to the effect of the Outcome and Handling of complaints, we hypothesized that the Outcome dimension would have a relatively larger impact on increased satisfaction than the Handling dimension (H2c). Results shown in Table 6 confirmed this hypothesis (b= 0.536 versus b=0.386). Nevertheless, we should also stress that both factors appeared to be correlated in the perspective of the customers (r =0.57). This means that in the perception of the customers handling and outcome

Table 4 Results of the Explorative Principal Axis Factor Analyses and Reliability Analyses of the Three Dimensions Loyalty.

	Factors loadings	s Fa	Factors loadings*		
Word of Mouth		Repurchase Intentions		Price Insensitivity	
Telling positive things	0.849	First to mind	0.728	Not buying of competito	or 0.644
Recommend to others	0.952	Take more services	0.866	Still buying if price incre	eases 0.732
Stimulate others	0.933	Take no less services	0.723	Stay given advantages	0.837
Eigenvalue	2.66		2.19		2.08
% of Variance	89%		73%		69%
adj. Cronbach's Alpha	0.94		0.81		0.78
	(3 items)		(3 items)	)	(3 items)

<sup>\*</sup> Pattern Matrix: Extraction Method: Principal Axis Factoring.

Table 5 Results of the Multiple Regression Analysis of the Eight Determinants on After Complaint Satisfaction.

Determinants of satisfaction	Beta		T	Sig
Quick response	0.362	**	7.313	0.000
Apology	0.217	**	4.229	0.000
Correction	0.180	**	3.798	0.000
Attention	0.179	**	3.477	0.001
Follow up	0.113	*	2.365	0.019
Accessibility	0.040		0.853	0.395
Explanation	0.097		1.876	0.062
Compensation	0.055		1.239	0.216
AdjR2	0.614			
Fdf (5.242)	80.854			0.001

<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .001

do go hand in hand and that a positive handling does not always lead to the desired outcome.

# (2) After Complaint Satisfaction and the Dimensions of Loyalty

Hypotheses 3abc predicted positive effects of after complaint satisfaction on all three types of loyalty.

The results (see Table 8) confirm this for all three types of lovalty, although the size of the effect differs. After com-

plaint satisfaction has the strongest impact on word of mouth (b=.781, p<.001), followed by repurchase intention (b=.520, p<.001) and price insensitivity (b=.350, p<.001). All three effects support the importance of complaint handling satisfaction in creating loyal customers.

### 7. CONCLUSION AND DISCUSSION

The results show that in the telecommunication industry - a market with many competitors and very few opportunities

to differentiate based on the products - complaint handling through the Internet can be a helpful tool in creating satisfied customers and moreover in creating positive word of mouth.

In handling a complaint, there are five variables that play a major role in creating satisfied customers. These five variables are: quick response, apology, correction, attention and follow up. When we look at the relative impact of these five variables, than quick response has the largest impact on after complaint satisfaction, followed by apology. The impact of correction, attention and follow up is somewhat smaller than the impact of quick response and apology. A conclusion that can be drawn based on these results is that when an organisation uses the possibility for customers to file their complaints through the Internet, they have to make sure to be able to respond quickly. This can be explained by the property of the Internet as being a fast medium where customers expect a speedy response.

Accessibility, compensation and explanation did not have a significant impact on after complaint satisfaction. Although most studies find a positive relationship between accessibility and complaint satisfaction, there are two other studies that do not find a significant effect, namely Blodgett (1994) and Davidow (2000). The explanation that this study does not find a positive effect might be the sample we used. We only selected those customers who filed their complaint through the Internet. Because this medium is accessible 24 hours a day, 365 days a year, customers experience an opti-

mal accessibility and find it "normal" that the company is that accessible for filing a complaint.

Most studies find a positive effect of compensation on complaint satisfaction. The fact that this study does not find such a positive relationship can possibly be attributed to the way compensation was operationalised. Most studies operationalise a specific amount or form of compensation. In this study we operationalised compensation as "The company gave a compensation for the complaint (for example a coupon)". This makes it difficult to draw strict conclusions around compensation based on our results.

Explanation is the third variable that did not have a significant effect on after complaint satisfaction in our study. Johnston and Fern (1999) in their study found that explanation is not that important when the complaint is filed initially. When customers file a complaint, their first need is that their problem is solved and they don't really care what caused the problem. But when the complaint is not solved (quickly) and the customer has to complain a second time about the same problem, then giving an explanation is the only way to create a satisfied customer in this stage.

Furthermore, we found that the eight determinants can be grouped into two dimensions. There were two variables that deviated from the hypothesized dimension. Quick response was hypothesized to be part of the handling dimension and was found to be part of both the handling and outcome dimension in this study. Because several other studies found quick response to be part of the handling

Table 6 The Results of the Multiple Regression Analysis of Both Aspects of Complaint Handling on After Complaint Satisfaction.

	Impact of the Handling and Outcome dimensions on Satisfaction						
		Unstandardized Coefficients	Std. Error				
	(Constant)	005		.040			
	Process aspects in complaint handling	.386	***	.061			
	Outcome aspects in complaint handling	.536	***	.064			
	R	.772		.001			
Model	Adj. R-square	.593					
	Fdf(2.245)	180.8	***				

<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .001

Table 7 The Results of the Regression Analysis of After Complaint Satisfaction on Loyalty, i.e. Word of Mouth, Repurchase Intention, And Price Insensitivity

Dependent:	Word of Mouth Unstandardized	Std.Error	Repurchase Intention Unstandardized	Std. Error	Price Insensitivit	•	Std. Error
(Constant)	Coefficients	Stat. Zaror	Coefficients	Std. Effor	Coefficients		
After Complaint	.000	.035	.004	.043	.000		.044
Satisfaction	.781	.036	.520	.044	.350	***	.045
R Adj. R-square F	.822		.679		.630		
df(3,248):	.671		.454		.390		
	171.7		70.3		54.4		

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001

dimensions, we also let quick response be part of the handling dimension. And follow up was hypothesized to be part of the handling dimension and was found to be part of the outcome dimension. This can be explained by the operationalisation of follow up in this research. Therefore it may be concluded that the two dimensions of after complaint satisfaction consists of the following determinants.

These are the handling the complaint, which consists of

- \* Accessibility (how easily can a complaint be filed)
- \* Attention (the customer is treated in a friendly, carefully listening manner)
- \* Apology (the company gives an apology for the complaint)
- \* Explanation (the company gives an explanation for the cause of the complaint)
- \* Quick response (the complaint is handled quickly as perceived by the customer)

And the outcome of the complaint, which consists of

- \* Compensation (a compensation is given to the customer for the complaint)
  - \* Correction (the complaint is solved)
- \* Doing a follow up (pro-actively asking the customer whether the complaint was handled to their satisfaction after their complaint has been resolved)

Another important conclusion of our study is that in the perception of customers, there is a high correlation between

these two dimensions. This means that both dimensions have to be perceived positively in order to create a satisfied customer. If one of both dimensions does not create a positive experience, than creating a satisfied customer is very difficult

Still, another interesting finding of our study is that after complaint satisfaction has the largest influence on word of mouth, which means that complaint handling is a good instrument in generating positive word of mouth for the company. Both repurchase intentions and price sensitivity are, though not as much as word of mouth, also positively influenced by this increased satisfaction.

### Managerial implications

This research clearly demonstrates that complaint management, due to its direct impact on after complaint satisfaction, is important for the creation of loyal customers. Especially in a market like the telecommunications market where differentiation on price and product is becoming more and more difficult and thus service and handling the moments of truth' is becoming essential in creating satisfied and loyal customers. It is important to communicate the importance of complaint management convincingly throughout an organisation. This in order to create company wide support for the efforts that are put into improving complaint management.

An organisation that wants to use the Internet first of all

needs to be sure that they can respond quickly to the complaints. If not with an instant solution, they definitely should send a speedy response in which they confirm the complaint has been received and address the expected timeframe in which the complaint will be solved.

Apart from a speedy response an organisation should not hesitate to apologize to its customers. It does not necessarily mean that the organisation has to accept the blame, but it should acknowledge the trouble that the customer has gone through and empathize with the inconvenience of the customer. This also applies to attention. Of course, the question is whether a complaint that has been filed through the Internet can best be handled through the Internet as well. Giving attention through such an impersonal channel is a challenge. An apology can easily be made in an email, but showing clear attention is not that simple. The tone of voice of a digital response (email mostly) can certainly help in creating a feeling of attention and importance toward the customer. So a respons through this channel is certainly not impossible, the organisation just has to make sure to embed all the elements into this digital message. A follow up can also be done through the Internet. Especially when the complaint has indeed been resolved and the organisation wants to know the level of satisfaction about the process and the outcome. But when the complaint has not been resolved (even though the organisation believes so) following up through this impersonal channel might be the worst thing to do. The customer is certainly not satisfied with the process because is has not been completed yet and than he is being asked to evaluate the process. So implementing a follow up process is a delicate decision. A personal contact (by phone for example) is to be preferred over impersonal contact when creating satisfied customers or even trying to exceed their expectations.

When implementing complaint management organizations should focus on both the handling and the outcome dimension. For customers it is very difficult to differentiate between these dimensions, so an organization needs to do well in both.

The results of the impact of after complaint satisfaction on the three dimensions of loyalty confirm the importance of complaint handling. Especially for organisations that focus on customer intimacy, retention and customer satisfaction, complaint management needs to be well addressed.

### Limitations and Directions for Future Research

An important limitation of our research is that it was executed with only one company in only one branch. This has consequences for generalising the results to other companies and/or branches. A generalisation might be made to branches that are comparable to that of the telecommunications branch. A comparable branch would be the Internet branch, which also has these characteristics. But further research shall have to determine whether such generalizations can be made. Possible extensions lie in intangible services directed at people, and tangible service directed at possessions.

Another limitation is that the results of this research have not been compared to a group of customers that did not file a complaint. This would have made it possible to confirm or invalidate the so-called service recovery paradox (e.g. Hart et al., 1990). Therefore this could be another interesting option for further research.

Further research should include all three groups complaining customers (customers who filed a complaint through telephone, internet and mail) and see whether there are differences between different groups of customers based on how they filed their complaint. This could lead to a challenging perspective on the multi-channel view on complaint management. It would be interesting to investigate whether handling complaints by telephone, asks for different requirements for realizing satisfied customers, than for example complaints that are filed by regular mail or internet.

Finally, there is a fair amount of research in the area of complaint handling, satisfaction and loyalty, but there has been hardly any research on the financial impact of complaint management. What are the costs of complaint management? What are the financial benefits of complaint management? This is an area that is of great interest to organisations, because they need to be able to make a business case to see what implications their complaint

management, and thus their investments in improving it, has on their company's bottom line. This is another area into which this research could expand.

### **FOOTNOTES**

Although, an overall test of the two processes using Structural Equation Modelling has been preferred, this analysis technique is still in development with respect to the incorporation of multiple non-linear effects. However, the incorporation of one or two non-linear effects appears to be hopeful (see Joreskog and Yang, 1996; Cortina and Chen, 2001; Ping, 1995; Muthén and Asparouhov, 2003). Klein and Moosbrugger (2002) stated that more study is needed for multiple non-linear effects in Structural Modelling.

### APPENDIX I: THE QUESTIONNAIRE

### **Determinants**

- (1) Company X was well accessible when I wanted to file my complaint. (accessibility)
- (2) The employee of Company X who handled my complaint gave attention to my complaint. (attention)
- (3) I received a sincere apology for my complaint. (apology)
- (4) Company X gave an explanation for my complaint. (explanation)
- (5) Company X offered compensation for my complaint (for example coupon). (compensation)
  - (6) Company X fully corrected the complaint. (correction)
- (7) Company X handled my complaint quickly. (quick response)
- (8) Company X contacted me, after the complaint had been handled, to inform whether the complaint was handled to my satisfaction. (follow up)

### Satisfaction

- (9) My satisfaction with Company X has increased.
- (10) I have a more positive attitude towards Company X.
- (11) The image of Company X has improved.

### Loyalty

(12) I will tell positive things about Company X because of the way they handled my complaint.

- (13) I will recommend Company X to someone who asks my advice on which telecom provider he/she should choose.
- (14) I will encourage friends and family to become a customer of Company X.
- (15) Company X is the first company that comes to mind when I think of telephone services.
- (16) When Company X slightly increases their price, I will still buy my telephone services with Company X.
- (17) I will not buy less telephone services of Company X in the next few years.
- (18) I will not buy part of my telephone services from another provider as soon as that provider offers me a better price.
- (19) Because of the advantages that Company X offers me, I am willing to pay more for the telephone services than I am willing to pay for another provider.

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