

When the Going Gets Tough: Should Customer Service Get Going?

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Abstract

Building on theory from consumer behavior this paper investigates the impact customer service may have on customer satisfaction, relative attractiveness, and commitment (affective and calculative). The findings indicate that independent of level of customer service its impact on all constructs is significant. Interestingly, customers who report a low score on customer service have the strongest correlations but lowest construct scores and vice versa for customers reporting high customer service scores. Whereas customers who report a high score in customer service have a stronger affective commitment, customers who report a low score have a more balanced commitment. The latter indicates that these customers are more likely to switch. For managers these findings imply that customer service is a key driver of consumers' behavioral intentions. It is a revenue generating activity. Following this, customer service is an area in which managers should invest rather than cutting when the going gets tough.

DETTE PAPERET ER SENDT TIL *JOURNAL OF THE ACADEMY OF MARKETING SCIENCE*. IKKE SITER ELLER REFERER UTEN SAMTYKKE FRA FORFATTERE.

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The authors would like to thank companies associated with the Center for Market Oriented Management at the Norwegian School of Management for their support in this project. Data provided by the Norwegian Customer Satisfaction Barometer is greatly appreciated.

Introduction

In the aftermath of the dotcom area the world is experiencing an economic down turn. Fuelled by the September attack on the World Trade Center in the USA this development has taken a steeper turn. Following a tight labor market in the USA and in most economies in Europe and Asia they all report an increase in unemployment and an expected reduction in GDP. During 2001 The Conference Board's Consumer Confidence in the USA has fallen to its lowest reading since 1994. According to Dismal Economist the Economic sentiment for Europe has also experienced a major fall during 2001. Finally, most stock exchanges around the world report a significant fall during 2001 reflecting a substantial potential loss for shareholders. Based on this scenario it is fair to say that most business managers are under attack from various stakeholders. Action is called for!

Faced with reduced demand and increased competition service companies can focus cost cutting activities or revenue generating activities to maintain short term profitability. Layoffs and the search for leaner and meaner business models based on electronic commerce have been the dominant response so far. Independent of the effect cost cutting will have on the bottom line in the short run, the question remains as to what may happen to the top line if people is taken out of the service value equation. The American Customer Satisfaction Index (ACSI) at University of Michigan reports a continued reduction in perceived quality (as opposed to increased expectations). Consequently the consolidated customer satisfaction score is down by 2.0 percentage points from 4Q 1994 to 2Q 2001. However insignificant this change may seem on the aggregate level the critical part of this development becomes apparent when we link customer satisfaction with customer expenditure and business performance. Recent data give strong evidence for the impact a change in customer satisfaction in one quarter has on real personal consumption expenditure (ACSI August 20, 2001) and corporate earnings (ASCI May 21, 2001) in the following quarter. For service companies perceived quality is a function of both core service and human interaction. According to ACSI (2001) service industries relative to ACSI

average experience a larger drop in customer satisfaction from 1994 to 1Q 2001, e.g. airlines – 15.3%, Hotels – 5.3%, Banks –5.4%, Life Insurance – 7.4%, and Utilities – 8%. Based on the above we may claim that the majority of service industries suffer from a negative reduction in perceived quality, followed by a reduced customer satisfaction and finally reduced profitability. Short term cost cutting activities for service companies is to a large extent synonymous with layoffs of onstage and backstage personnel. With fewer hands onboard service experience as perceived by the customers may be threatened causing a further reduction in perceived quality, satisfaction and revenue. Given this outlook the following question begs to be answered: What is the importance of customer service for customer loyalty?

The purpose of this paper is to examine the impact of customer service on customer satisfaction, relative attractiveness, and commitment (affective and calculative). A conceptual model treating customer service, customer satisfaction, relative attractiveness and commitment as latent variables with multiple attributes is proposed. Next, the results of an empirical study from the banking industry testing the model are presented. Finally the implications of the findings are discussed.

The conceptual model

Both profitability and ability to compete is dependent on how companies balance their short term and long term cost cutting and revenue generating activities. Using productivity as an indicator of effective cost cutting implies that companies are successful when they can produce more/ same amount of output with the same/less amount of input. Whereas output is often associated with volume (e.g. number of customers served per day) input for service organizations is more often than not associated with salaries. Improving productivity by reducing costs that are linked to customers' service experience (e.g. reduced customer service) may prove to be counterproductive in the long run. The challenge is to cut costs without reducing the service experience. Redesigning the underlying processes which support upstream activities, i.e. operation, or introducing self-service technology in down stream activities, i.e. customer interaction, are two examples of effective cost cutting activities. Indicators of effective revenue generating activities may include positive changes in customer satisfaction, corporate image and customers' commitment to the company. When service managers reengineer the business model or introduce self-service technology they very often free up human resources and capacity. Employing these people in other areas valued by the customers (e.g. increased customer service) is an example of effective revenue generating activities.

In our model we argue that customer service of high quality is positively linked to customers' satisfaction judgment. We believe that the relationship is described as a classic ideal point or a feasible ideal point (Parasuraman 1994) implying that customer service is a monovalent dissatisfier (Oliver 1997, p 157), i.e. enough is enough after a certain point. Second, in keeping with contemporary ROQ-literature (see for example Rust 1994; 2000) we argue that cumulative customer satisfaction is linked to both affective and calculative commitment. Third, we argue that cumulative satisfaction will update customers' perception of the service provider's relative attractiveness. In our model relative attractiveness contains two dimensions, i.e. value

attractiveness and image attractiveness. Customers who report good/bad experience with customer service will update their perception of the value delivered by the provider and their overall attitude toward the provider. Customers may update their perceived relative attractiveness of the supplier based on what the company does in society at large. For example if the supplier is involved in illegal activities this may update customers' image attractiveness of the supplier. A change in either value or image attractiveness is believed to impact future behavior through loss of relative attractiveness. Loss of relative attractiveness may stimulate exit or switching behavior. Support for this argument is found in the least mean square learning model offered by Gluck and Bower (1988). Finally, and in keeping with recent research using regret theory (see for example Inman 1997) we argue that customers' perception of the supplier's relative attractiveness is positively linked to consumer behavior, i.e. customers' affective and calculative commitment. The conceptual model is illustrated in Figure 1.

Place Figure 1 about here

Since relative attractiveness and commitment (calculative and affective) is not well established in the service marketing and management literature we will elaborate on these two constructs in the following section. We begin by investigating the link between customer satisfaction and relative attractiveness.

Customer Satisfaction and Relative Attractiveness

Since the first article on customer satisfaction by Cardozo in 1965, customer satisfaction has been subjected to comprehensive investigation. The definitions of customer satisfaction tend to fall into two different categories; customer satisfaction as a process or as an end-state (Oliver 1993). For example Bearden (1983, p. 21) consider customer satisfaction "a positive outcome

from the outlay of scarce resources”, a view reflecting customer satisfaction as an end-state-of-mind. However, it seems like most researchers define customer satisfaction in terms of a process. Whereas Hunt (1977) defines customer satisfaction as “the evaluation of emotions”(p. 460), Westbrook defines satisfaction as the “favorability of the individual's subjective evaluation” (Westbrook 1980, p 49). Further, customer satisfaction may also be understood as “summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience” (Oliver 1981, p 27). The most widely accepted of the process theories of satisfaction seems however to be that of “expectancy disconfirmation, in which customer satisfaction is viewed as largely based on meeting or exceeding expectations” (Rust, 1994, p 4). Based on this paradigm (Oliver, 1997, p 13) formulated the following definition of customer satisfaction, which serves as the frame of reference for our understanding of the construct: “Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, included levels of under- or overfulfillment”.

From the above definitions it is understood that customer satisfaction is related to providing what is being sought to the point where fulfillment is reached, resulting in a subjective evaluation of emotions. The emotion occurs as a function of disconfirmation and relative output to input. The end result is a positive or negative feeling of fulfillment.

In the following we will argue that fulfillment is not only absolute (that is meeting or exceeding expectations) but also relative to other real alternatives.

Regret and satisfaction

A business professor takes a student to lunch. In the past she has always been satisfied with her choice of salad. However, seeing what the student orders and receives makes her regret her

choice. Discovering that a forgone alternative would have led to a better outcome than the one chosen is an unpleasant experience (Landman 1987). The experienced regret feeling is a consequence of decision making under risk and can occur when customers appear, even after the fact, to have made the wrong decision. For the customer each decision may have appeared to be the right one at the time it was made. In this respect regret offers a 20-20-hindsight vision that may impact future decisions. In a recent study (Inman, 1997) documented that performance information about alternatives that were not chosen, can have a significant impact on post-choice valuation. Satisfaction with one service encounter may turn into dissatisfaction when the customer learns about the quality of the other supplier, which was forgone. Regret may stimulate variety seeking or exit behavior (Hirschman 1970) if customers have information about a similar, but better offer (Loomes 1982; Bell 1982).

Satisfaction and relative attractiveness

Over the past decade, a new set of models has been developed to explain how people learn, remember, and react to stimuli. In a recent article Janiszewski and Osselaer (2000) elaborates on Gluck and Bower's (1988) adaptive learning model with the least mean squares (LMS) learning rule. From these authors we can learn that LMS learning rule occurs when *"the activation of a set of sensory cues is passed on directly to a layer of output units, which in turn map onto a response. After each response, feedback is received regarding the experienced outcome (e.g. what really happened) for that set of cues. The system then adjusts the connection weights between the sensory cues and the output units so that the discrepancy between expected outcome and experienced outcome for each set of sensory cues is reduced."* Applying this to our setting means that a change in customer satisfaction will over time be reflected in perceived relative attractiveness. Whereas an increase will reinforce the relationship, a reduction may create switching incentives.

Based on the above discussion we propose the following hypotheses for empirical testing:

H₁: Customer service is positively correlated with customer satisfaction.

H₂: Customer satisfaction is positively correlated with Relative attractiveness.

In the following section we will elaborate on affective and calculative commitment.

Commitment

The enduring desire of parties to maintain a relationship is at the core of commitment definitions (Morgan and Hunt 1994). Recently, commitment has been introduced as one of the central variables to ongoing service exchanges (Morgan and Hunt 1994). Based on the works of (Kumar et al. 1994; Meyer and Allen 1984; Samuelsen 1997, Samuelsen and Sandvik 1997) two dimensions of commitment are introduced to satisfaction modeling, i.e. calculative and affective commitment. While calculative commitment is “colder”, more economical and rational, affective commitment is a less rational, more affectionate and emotional based bond that ties the customer to the service provider (Johnson et al. 2001). Findings indicate that customer satisfaction is positively associated with both calculative and affective commitment (Kelley and Davis 1994; Kelley et al. 1993; Samuelsen 1997; Samuelsen and Sandvik 1997) across industries (Johnson et al. 2001). While, research on the relationship between customer satisfaction and commitment slowly is taking form, the relationship between perceived relative attractiveness and commitment remains less explored in marketing. Although, there are studies supporting the positive effect of attraction of salespersons to customers on customers’ commitment to service provider Jacobs et al. (2000), while Crosby and Johnson (2001) discuss the importance of perceived relative attractiveness when building customers commitment to a brand and when developing customer relationship management strategies. Finally, Andreassen and Lervik (1999) found that perceived relative attractiveness today has a positive effect on customers’ loyalty to

service providers in both business to business and business to consumer markets, but future relative attractiveness has an effect on customer loyalty only in business to consumer markets. This is in keeping with Heide and Miner who claim (1992) that shadow of past interactions cast shadows onto future interaction.

Despite the fact that relative attractiveness should be of most relevance to every service marketer as a key factor in keeping up with the increasing competition, further research on the effect of perceived relative attractiveness on behavioral intentions should be conducted. As service marketers are in dire need to tie the customers to their business in different ways we should focus on other aspects or phases of customer loyalty like, affective and calculative commitment (Oliver 1997). From this we can draw that:

H₃: Customer satisfaction is positively correlated with affective and calculative commitment.

H₄: Relative attractiveness is positively correlated with affective and calculative commitment.

Following hypothesis H₁ through H₄ we will anticipate that due to the positive correlations among the constructs that each construct score will be different between customers who perceive the quality of customer service to be high and low. Further, we believe that customers reporting low scores in customer service are characterized by having a somewhat less affectionate relationship with the supplier. In keeping with this we propose the following hypothesis for empirical testing.

H₅: Customers reporting low scores on customer service are more likely to report significantly lower scores on customer satisfaction, relative attractiveness and affective commitment than customers reporting high scores on customer service.

Since customers who report a low customer service score are believed to have a somewhat colder relationship with the supplier than customers reporting high scores we propose the following:

H₆: Customers reporting low scores on customer service are more likely to report higher scores on calculative commitment than customers reporting high scores on customer service and vice versa.

Initially we believe that customer service is important for relative attractiveness and both forms of commitment to the supplier. However, for customers who report a low score in perceived customer service we anticipate that because it is important to them and because the supplier is not doing a good enough job, we believe that the correlation coefficient between customer service → customer satisfaction; customer satisfaction → relative attractiveness; relative attractiveness → affective and calculative commitment to be stronger thus reflecting a higher importance than for the other group. In keeping with this we propose the following hypothesis for empirical testing.

H₇: For customers reporting low scores on customer service the correlations between constructs are significant stronger than for those who report a high score for customer service.

Methods:

Banking industry is chosen as the context of investigation for this study. There are several reasons for this. First, banking is among the most technological advanced services today. Customers can choose in how they want to interact with the bank or its employees, e.g. calling the bank, visiting the bank, ATMs, pay by phone or pay over the Internet, etc. Second, banking industry around the world is under reorganization, changing from smaller to larger units as well as constantly seeking new and more efficient businesses models. Through mergers and acquisition and intensive use of technology in both upstream and down stream activities numerous employees have been given notice over the years. According to the ACSI customer satisfaction with banks is down by 5 percentage points since 1994.

A cross-sectional study was chosen for the purpose of this study. The data was collected through the annual data collection for the Norwegian Customer Satisfaction Barometer. The collection was conducted by a professional marketing research bureau and took place the winter of 2000. The respondents were interviewed by telephone. Prospective respondents who were not available on the first call were called back three times before a substitute was picked. Each interview lasted approximately 15 minutes. This subsample consists of the banking industry represented by the four most important banks in Norway.

Measures:

Customer satisfaction is operationalized in accordance with the national customer satisfaction indexes (Johnson et al. 2001), and by three indicators, see appendix A. Building on Andreassen and Lervik's (1999) operationalization of relative attractiveness the construct is extended by three indicators (see appendix A). Affective and calculative commitment is operationalized as suggested by Kumar et al. (1994) and Samuelsen (1997) with minor adjustments to this context and measured by 3 items each (see appendix A). A 10 point Likert-type scale was applied,

exclusively with positive values ranging from 1 to 10. The questionnaire consisted of two different scales anchored by “disagree” to “agree” and “dissatisfied” to “satisfied”. Respondents were provided with a “don’t know” and “and cannot answer” in case of indifference or lack of knowledge.

Reliability and validity:

Place Table 1 about here

From Table 1 we learn that the Cronbach’s alpha coefficients for all constructs but calculative commitment (.50) are well above the recommended .70 level (Nunnally 1978).

Customer service:

For the purpose of the rest of the analyses we use a principal component for customer service. We identified this factor by running a principal component analysis (using SPSS) on all of the customer service measures. The program saved the first factor as another variable in the data set. Consequently customer service is a standardized variable, with a standard deviation of 1 and a mean of 0 (SPSS 2001).

Sample Descriptives: high versus low score on customer service

The total sample consists of 899 respondents. Of these respondents 378 report a low score (< 8 on a 10 point scale) on Customer Service and 578 report a high score (= or > 8 on a 10 points scale). There were no particular demographic characteristics distinctive to either group. In the low score sample, 52 % of the respondents are men and 48 % women. In the high score group, 48 % are men and 52 % women. The average duration of the customer bank relation is 15 years in the low score group, and 17 years in the high score sample. In the low score group 26 % of the respondents reported that they have their “personal” contact person in the bank, i.e. 74 % report that they do not have such a contact person. In the high score sample 51 % report that they do not have a personal contact person. In the low score group, 53 % have a degree from a university, while only 37 % have a degree from a university in the high score sample. In the low score sample, the average score on the ease of evaluating services is 4.58 (on a 10 points scale), in the high on customer service group the same average is 5.54.

Model Results: PLS Analysis

The proposed model was estimated using two different estimation methods. We use PLS (Wold 1989) following the procedure suggested by (Fornell 1992; Fornell et al. 1996; Johnson et al. 2001) as the primary estimation method following Fornell and Jaesung (1994), Steenkamp and Trijp (1996). We add covariance analysis using LISREL (Jöreskog and Sörbom 1999), to make sure that the model we test is robust following Kujala and Johnson (1993).

Overall, the measurement variable (MV) loadings in each of the two samples are relatively large and positive. In both samples 11 of 13 indicators (84 %) have correlations coefficients exceeding .707. Thus sharing more than 50 % of the variance with their respective constructs e.g.

Johnson et al. (2001). This is referred to as communality (Fornell and Cha 1994). Table 2 reports the average communality for each latent variable in the two samples.

Place Table 2 about here

The average communality should be $>.50$. From Table 2 we see that there is only one latent variable falling below in each subsample, i.e. calculative commitment. Still, the values are very close to $.50$ (.46 and .44). The rest of the latent variables are all exceeding the 0.5 criterion.

Validity: following Fornell (1992), Fornell et al. (1996) and Johnson et al. (2001) we explored whether each latent variable shares more variance with its indicators than it does with other constructs in the model. This is examined by looking at the percentage of LV loadings (see Appendix B for correlations between the latent variables) that exceed the MV correlations (see Appendix C for factor loadings provided by PLS). When conducting this examination we see that 6 of 104 MVs (6 %) are falling below the correlation between the LVs. All indicators falling below are used to measure calculative commitment. We therefore conclude that both the convergent and discriminant validity in the model is strong. Any weaknesses are concentrated in the calculative commitment part of the model.

To evaluate the latent variable results, we examine the size and the significance of the predicted path coefficient. We then evaluate the model's ability to explain variation in the endogenous variables, relative attractiveness, satisfaction, calculative and affective commitment. Again, following Fornell et al. (1996); Johnson et al. (2001) Jackknife estimates were generated to

evaluate the significance of the paths. As most of the path coefficients are significant only those paths that are not significant $p > .05$ are marked in the table. Out of the 12 paths (6 paths * 2 samples) only 1 was insignificant (8 %). Table 3 reports the size and significance of each path for each sample.

Place Table 3 about here

The only insignificant path is the path between customer satisfaction and calculative commitment, found in the subsample reporting a high score on customer service.

The second indicator of the model's performance is its ability to explain the important latent variables in the model. Explained variance in the endogenous variables by subsample is reported in Table 4.

Place Table 4 about here

From Table 4 we see that the explained variance is varying somewhat across the two groups. Customer satisfaction is only explained by 13 % in the group reporting a high score on customer

service, in the group reporting a low score on customer service, customer satisfaction is explained by 25 %. Whereas the differences between the two groups are smaller concerning the explained variance of relative attractiveness (28 and 24 %), the differences are larger concerning affective and calculative commitment across the two groups. It seems to be a consistent pattern across the constructs that explained variance is lower in the sample reporting high scores on customer service than in the sample reporting a lower score on customer service. We see that explained variance is ranging from 13 to 28 % (23% on average) in the sample reporting high scores on customer service and from 25 to 41 % (33 % on average) in the sample reporting a low score on customer service. Explained variance is somewhat low in the sample reporting a high score on customer service but in line with previous research (see for example Fornell 1996) in the sample reporting a low score on customer service. The relative small amount of variance explained in the latent variables may be due to few antecedents in the model (Johnson et al. 2001). Making the model more complex by adding constructs would improve explained variance.

Model Results: LISREL Analysis

In order to make sure that the model is robust, we analyzed the data using covariance structure analysis (LISREL) as well. As the data are truncated into two different samples both samples are highly skewed and violate the main assumption for running LISREL analyses. Realizing that non normality may cause problems to our analysis we transformed the data set using PRELIS based on Jöreskog and Sörbom's (1999) recommendations. We tested the conceptual model using the two-step approach suggested by Anderson and Gerbing (1988). First, we tested the measurement models and then the causal model. As recommended by Anderson and Gerbing (1988), we looked at all factors and their respective error terms (factor + 2 * error term) and checked that they do not include the number 1. Next, we conducted chi square differences tests on whether or not two constructs belong to the same factor or are different from each other. Our factors and constructs all pass these tests. Although, it should be mentioned that one of the indicators measuring calculative commitment is very high (.99), and that calculative and affective commitment are very close yet distinct constructs. All in all, and based on the measurement models and the tests we conducted, we can draw that the convergent and discriminant validity both are satisfactorily. In between the first and the second step, as recommended by Anderson and Gerbing (1988), we added another step where we entered all the constructs in the model at the same time and computed them as exogenous variables (ksis). We did this in order to reveal any potential conflicts between the constructs before we tested the structural model. This model provided acceptable fit statistics and did not reveal any particular problems between the constructs. Finally, we run the structural model, which provides assessments of nomological validity (Anderson and Gerbing 1988). In Table 5 the fit statistics for the causal model are reported.

Place Table 5 about here

In Table 5 both absolute and incremental fit statistics (Bollen 1989; Gerbing and Anderson 1993; Marsh et al. 1988) are reported. Of the absolute fit statistics we examine the chi-square (Jöreskog and Sörbom 1989), GFI (Jöreskog and Sörbom 1989), SRMR (Bentler 1995), the RMSEA (Browne and Cudeck 1992; Steiger 1989). Of the incremental fit statistics we review AGFI (Jöreskog and Sörbom 1989; Bentler 1983) and NNFI (Bentler and Bonett 1980). According to the different cut off criteria (see Hu and Bentler 1998; 1999 for an overview), we can draw that our causal model is within the acceptable range of all fit statistics but the chi-square. The RMSEA is below .08, the SRMR is low, GFI is well above .90, as is AGFI and NNFI. As the chi-square is sensitive to the sample size and both samples in this study are larger than 250, this is not a very good indicator of model fit, as minor misspecifications may become significant due to sample size. In summary we will claim that the model fits the data reasonably well.

Factor loadings and error terms:

Besides examining these fit statistics we also looked at the factor loadings and the error terms. While the factor loadings are similar to the ones provided by PLS, they are somewhat lower. The error terms are all positive and significant. Most of them are within an acceptable range. Some high terms were found for the measures operationalizing calculative commitment (see Appendix D). Despite some high error terms for two of the calculative commitment indicators, we included

these indicators in the model for theoretical reasons, which is in line with what Anderson and Gerbing (1988) suggest. We then examine the paths and if they were consistent with the PLS results. All in all we conclude that the LISREL analysis support the PLS findings. All of the paths are significant, but the path between customer satisfaction and calculative commitment, although it is only true for the high in customer service sample in the PLS analyses.

Testing Hypotheses:

Before testing the hypotheses, we tested for the differences between the two groups. In order to do so we ran independent t-tests. The results from these tests are reported in Table 6.

Place Table 6 about here

From Table 6 we can see that there are significant differences between the two groups and how they score on customer satisfaction, relative attractiveness, affective and calculative commitment. In all cases, the customers reporting high on customer service score significantly higher than those reporting low on customer service.

Then the 6 hypotheses were tested. The results from the tests are reported in Table 7 below.

Place Table 7 about here

From Table 7 we see that all hypotheses but number 6 are supported. Hypothesis 3 is only partially supported. In summary we find a significant positive correlation between customer service and customer satisfaction, customer satisfaction and relative attractiveness in both samples. We do find that customer satisfaction is positively correlated with affective commitment in both samples, while only positively correlated with calculative commitment in the sample scoring low on customer service. Another finding is that customers scoring low on customer service tend to score lower than the other group on all other constructs as well, i.e. customer satisfaction, relative attractiveness and affective commitment. They do also tend to score lower than the other group on calculative commitment, which is contradicting our hypothesis. Also, the LISREL analyses support this finding. Here we find the path between customer satisfaction and calculative commitment to be insignificant as well.

Customers who report a high score on customer service have weaker correlations among the constructs plus higher construct scores. The fact that hypothesis 6 is supported reflects our anticipation that customer service is important.

Discussion:

The purpose of this study was to investigate the impact of customer service on customer satisfaction, relative attractiveness and commitment (affective and calculative). A conceptual model treating customer service, customer satisfaction, relative attractiveness and commitment as latent variables with multiple attributes is proposed and hypotheses developed. We find support for all hypotheses, but number 5. However, hypothesis 2 is only partially supported. In summary we find a significant positive correlation between customer satisfaction and relative attractiveness in both samples. We do find that customer satisfaction is positively correlated with affective commitment in both samples, while only positively correlated with calculative commitment in the sample scoring low on customer service. Another finding is that customers scoring low on customer service tend to score lower than the other group on all other constructs as well, i.e. customer satisfaction, relative attractiveness and affective commitment. They do also tend to score lower than the other group on calculative commitment, which is contradicting our hypothesis. Also, the LISREL analysis support this finding and we can draw that we have a set of findings that are robust and thus have external validity. Hypothesis 6, was testing the importance of customer service. As anticipated we find that for customers who report low scores on customer service reflect the importance of this function to them through higher correlation coefficients than the other group. This finding implies that customer service is important to customers and a organizational function service companies should proceed with causing when cutting costs.

Managerial implications

There are several managerial implications from this study. Clearly customer service is a key driver of customer satisfaction, which in turn drives relative attractiveness and customers' affective and calculative loyalty to the service provider. Relative attractiveness does also have an important role in this model, driving both calculative and affective customer loyalty.

A service company is competitive when it can (more than) cover its costs through obtained prices in the market. Companies who can maintain profitability in the long run are often characterized as having obtained a sustainable competitive advantage. According to Porter (1980, 1985) a company can pursue one of two strategies; cost leader or differentiator. Whereas cost leaders obtain market price with lower operating costs, differentiators are described as obtaining a higher than market price with higher operating costs than cost leaders. Executed successfully both strategies will generate a return on investment higher than average. By nature making service available to the public for purchase or consumption will generate a need for interaction between the supplier and the customers. Customer service, in one form or another is something most companies will offer in order to provide existing or potential customers information related to their purchase or use of the service. In this study we have investigated the impact customer service may have on perceived relative attractiveness and commitment. For managers of service organizations pursuing a cost leader or differentiator strategy this study will be useful in several ways. First of all, satisfied customers tend to be loyal. Customer service is a strong driver of customer satisfaction, perceived relative attractiveness and commitment (i.e. calculative and affective). As such customer service is a revenue generating activity of interest to both forms of strategy. Improved customer service may stimulate existing customers to maintain their retention rate or to increase current consumption pattern. Second, an improvement in customer services may create a positive surprise and a stronger emotional tie due to customer delight. Third, due to customer satisfaction's direct and indirect link to relative calculative and affective commitment, improving customer service may bring the customer higher up in Oliver's loyalty hierarchy

(1999) thus create a stronger bond between the customer and the supplier. Finally, perceived improvements in customer service by existing customers may create positive word of mouth thus attracting new customers to the supplier. In summary we will claim that improving customer service may help the company to increase existing customers' lifetime value by creating stronger bonds with the supplier, and create more positive word of mouth. All true elements of a revenue creating activity. The prove of this claim may be found in companies known to the market as very good on customer service, e.g. eBay.com, Barnes & Noble, Amazon.com, Charles Schwab. According to ACSI they all were rewarded with very high customer satisfaction in 2000 (80, 77, 84, and 76 respectively; scale 0 – 100) and shares which during the last three years traded at (Amazon, Charles Schwab) or above (eBay.com, Barnes & Noble) the market. Reversing the argument, the airline industry has over the years tried to improve bottom line by becoming more efficient. Both upstream and down stream activities have taken major cuts. Not surprisingly do this industry perform significantly below the ACSI average since 4Q 1994 (ACSI May 21, 2001). Shareholders should be concerned to know that the difference in airline industry satisfaction is accelerating in negative direction compared to ACSI satisfaction. Finally, eToys.com was a short-lived company who, to a large extent, went bankrupt due to mediocre customer service and dissatisfied customers. Service managers' current practice appears to be in stark contrast to these findings as we see a tendency to focus cost cutting activities by reducing people in the service experience equation.

Avenues for Future Research

There are several avenues for future research that crystallize from this study. We have identified the importance of customer service to customer satisfaction, perceived relative attractiveness and commitment. Relevant follow up questions could then be “what is driving customer service?” and “what are the organizational support systems necessary in order for the front personnel to provide excellent customer service for “brick & mortar” companies and “click & mortar companies?” Finally a question in dire need of investigation is “what are the characteristics of excellent front personnel?” After all it is not a matter of whether or not to focus customer service when the going gets tough, it is all about how a service provider can build the most effective support system for the customer service to get going.

Figure 1: The Conceptual Model

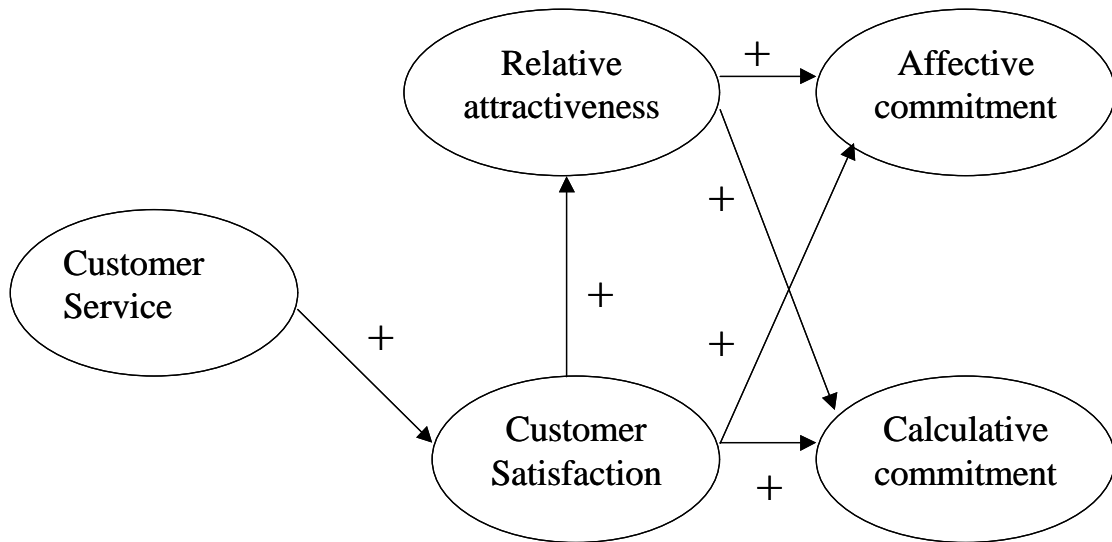


Figure 2: The Theoretical Model

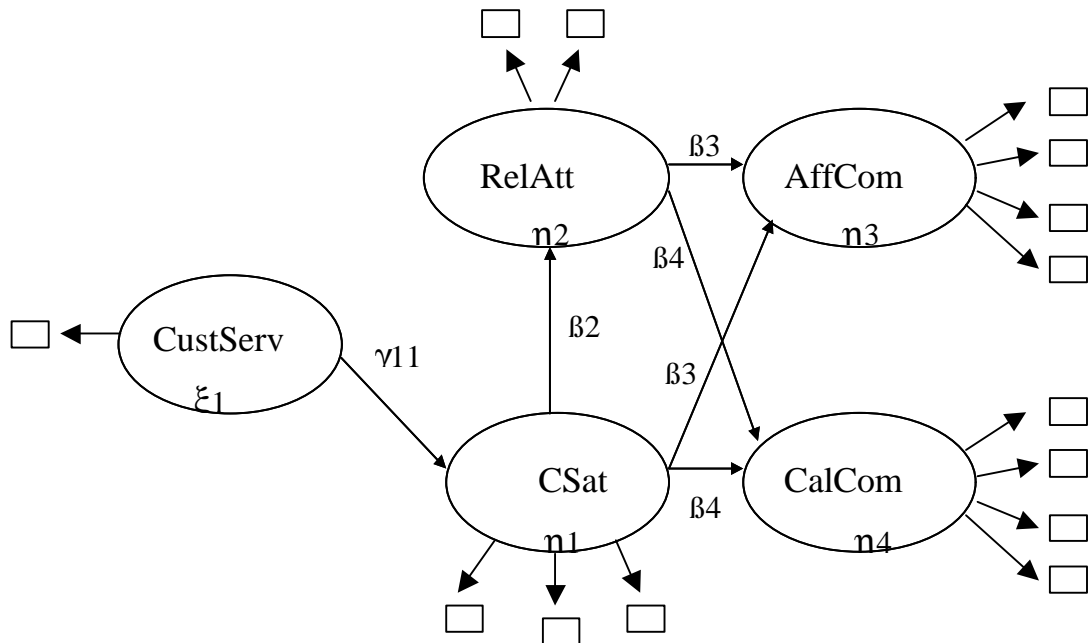


Table 1: Cronbach Alpha for the Different Constructs

| Construct | Cronbach's alpha |
|-------------------------|-------------------|
| Customer service | 0.93 ^a |
| Customer satisfaction | 0.76 |
| Relative attractiveness | 0.75 |
| Affective commitment | 0.87 |
| Calculative commitment | 0.50 |

Table 2: Average Communality for Each Latent Variable in both Subsamples

| Average Communality | Low in Customer Service | High in Customer Service |
|-------------------------|-------------------------|--------------------------|
| Customer Service | 1.0 | 1.0 |
| Customer Satisfaction | 0.68 | 0.65 |
| Relative Attractiveness | 0.59 | 0.58 |
| Affective Commitment | 0.73 | 0.68 |
| Calculative Commitment | 0.46 | 0.44 |

^a Principal component

Table 3: Paths Coefficients in the Causal Model

| Path Coefficient | Low in Customer Service | High in Customer Service |
|------------------|-------------------------|--------------------------|
| CustServ → CSat | 0.50 | 0.37 |
| CSat → RELatt | 0.53 | 0.49 |
| CSat → AFFcom | 0.41 | 0.38 |
| CSat → CALcom | 0.31 | 0.09* |
| RELatt → AFFcom | 0.31 | 0.23 |
| RELatt → CALcom | 0.36 | 0.45 |

* not significant

Table 4: The Explained Variance in the Key Latent Variables

| Variance Explained R ² | Low in Customer Service | High in Customer Service |
|-----------------------------------|-------------------------|--------------------------|
| CSat | 0.25 | 0.13 |
| RELatt | 0.28 | 0.24 |
| AFFcom | 0.41 | 0.28 |
| CALcom | 0.37 | 0.25 |

Table 5: Fit Statistics for the Causal Model

| Chi-square | RMSEA | SRMR | GFI | AGFI | NNFI |
|-----------------------------|-------|-------|------|------|------|
| 211.52 (df=60) p=0.00 | 0.055 | 0.037 | 0.96 | 0.94 | 0.95 |

Table 6: T-test Results

| | Mean Low | Mean High | Mean Difference |
|-------------------------|----------|-----------|-----------------|
| Customer satisfaction | 6.26 | 8.00 | 1.74 p=0.0 |
| Relative attractiveness | 5.88 | 7.17 | 1.29 p=0.0 |
| Affective commitment | 5.14 | 7.31 | 2.17 p=0.0 |
| Calculative commitment | 4.64 | 5.58 | 0.94 p=0.0 |

Table 7: Results from hypotheses testing

| Hypotheses | Result |
|--|------------------|
| H1: Customer service is positively correlated with customer satisfaction. | Supported |
| H2: Customer satisfaction is positively correlated with relative attractiveness. | Supported |
| H3: Customer satisfaction is positively correlated with affective and calculative commitment. | Partly supported |
| H4: Relative attractiveness is positively correlated with affective and calculative commitment. | Supported |
| H5: Customers reporting low scores on customer service are more likely to report significantly lower scores on customer satisfaction, relative attractiveness and affective commitment than customers reporting high scores on customer service. | Supported |
| H6: Customers reporting low scores on customer service are more likely to report higher scores on calculative commitment than customers reporting high scores on customer service and vice versa. | Not supported |
| H7: For customers reporting low scores on customer service the correlations between constructs are stronger than for those who report a high score for customer service. | Supported |

Appendix A – Measurement and Latent Variables

| Measurement variable | Latent variable |
|--|-------------------------|
| Overall satisfaction | Customer satisfaction |
| Performance versus the customer's ideal service provider in the category | Customer satisfaction |
| Expectancy disconfirmation (performance that falls short of or exceeds expectations) | Customer satisfaction |
| Attractiveness compared to other companies | Relative attractiveness |
| Price compared to other companies | Relative attractiveness |
| Reputation compared to other companies | Relative attractiveness |
| The pleasure taken in being a customer of the company | Affective commitment |
| Identification with what the company stands for | Affective commitment |
| Feeling of belongingness to the company | Affective commitment |
| The most profitable alternative | Calculative commitment |
| Location advantages versus other companies | Calculative commitment |
| Alternative service providers | Calculative commitment |

Appendix B – Correlations between Latent Variables

| Latent Variable | HI Cust Serv | LO Cust Serv | HI CSat | LO CSat | HI AFF com | LO AFF com | HI CAL com | LO CAL com | HI REL att | LO REL att |
|-------------------------|--------------------|--------------------|------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Customer Service | 1 | | | | | | | | | |
| Customer Satisfaction | .37 | .50 | 1 | | | | | | | |
| Affective Commitment | .42 | .40 | .49 | .58 | 1 | | | | | |
| Calculative Commitment | .22 | .30 | .31 | .50 | .48 | .62 | 1 | | | |
| Relative Attractiveness | .20 | .34 | .49 | .53 | .42 | .53 | .49 | .52 | 1 | 1 |

Appendix C – Factor Loadings (PLS)

| Measurement variable | HI CSat | LO CSat | HI REL att | LO REL att | HI AFF com | LO AFF com | HI CAL com | LO CAL com |
|--|------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Overall satisfaction | 0.85 | 0.86 | | | | | | |
| Performance versus the customer's ideal service provider in the category | 0.81 | 0.83 | | | | | | |
| Expectancy disconfirmation (performance that falls short of or exceeds expectations) | 0.76 | 0.77 | | | | | | |
| Attractiveness compared to other companies | | | 0.77 | 0.79 | | | | |
| Price compared to other companies | | | 0.78 | 0.74 | | | | |
| Reputation compared to other companies | | | 0.73 | 0.78 | | | | |
| The pleasure taken in being a customer of the company | | | | | 0.84 | 0.86 | | |
| Identification with what the company stands for | | | | | 0.81 | 0.84 | | |
| Feeling of belongingness to the company | | | | | 0.82 | 0.88 | | |
| The economics (benefits versus costs) of the alternative | | | | | | | 0.92 | 0.91 |
| Location advantages versus other companies | | | | | | | 0.58 | 0.70 |
| Alternative service providers | | | | | | | 0.39 | 0.19 |

Appendix D – Factor Loadings and Error Terms (LISREL)

| Measurement variable | CSat | REL att | AFF com | CAL com |
|--|--------------|--------------|--------------|--------------|
| Overall satisfaction | .79 (.37) | | | |
| Performance versus the customer's ideal service provider in the category | .71 (.49) | | | |
| Expectancy disconfirmation (performance that falls short of or exceeds expectations) | .68 (.54) | | | |
| Attractiveness compared to other companies | | .65 (.57) | | |
| Price compared to other companies | | .60 (.64) | | |
| Reputation compared to other companies | | .65 (.57) | | |
| The pleasure taken in being a customer of the company | | | .76 (.42) | |
| Identification with what the company stands for | | | .61 (.63) | |
| Feeling of belongingness to the company | | | .70 (.50) | |
| The economics (benefits versus costs) of the alternative | | | | .76 (.43) |
| Location advantages versus other companies | | | | .41 (.83) |
| Alternative service providers | | | | .25 (.94) |

References

Anderson, J. C. and D. W. Gerbing. 1988. Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103, 411-423.

Andreassen, T. W. and L. Lervik. 1999. Perceived Relative Attractiveness Today and Tomorrow as Predictors of Future Repurchase Intention. *Journal of Service Research*, 2(2), 164-172.

Bearden, W. O., J. E. Teel, 1983. Selected Determinants of Consumer Satisfaction and Complaint Reports. *Advances in Consumer Research*. ed. T. C. Kinnear. Provo, UT: Association for Consumer Research.

Bell, D. E. 1982. Regret in Decision Making under Uncertainty. *Operational Research*, 30, 961-980.

Bentler, P.M. 1983. Some Contributions to Efficient Statistics for Structural Models. *Psychological Bulletin*, 107, 238-246.

Bentler, P. M. 1995. EQS: Structural Equations Program Manual. Encino, Multivariate Software.

Bentler, P. M. and D. G. Bonett .1980. Significance Tests and Goodness of Fit in the Analysis of Covariance Structures. *Psychological Bulletin*, 88, 588-606.

Bollen, K. A. 1989. A New Incremental Fit Index for General Structural Equation Models. *Sociological Research and Methods*, 17, 256-259.

Browne, M. W. and R. Cudeck. 1992. Alternative Ways of Assessing Model Fit. *Sociological Methods and Research* 21(2), 230-258.

Crosby, L. A. and S. L. Johnson. 2001. Branding and Your CRM Strategy. *Marketing Management*, July/August, 6-7.

Fornell, C. 1992. A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56, 6-21.

Fornell, C. and J. Cha. 1994. Partial Least Squares. *Advanced Methods of Marketing Research*. R. Bagozzi, P. Cambridge, Blackwell, 52-78.

Fornell, C., M. D. Johnson, E.W. Anderson, J. Cha and B. E. Bryan. 1996. The American Customer Satisfaction Index: Nature, Purpose and Findings. *Journal of Marketing*, 60(October), 7-18.

Gerbing, D. W. and J. C. Anderson. 1992. Monte Carlo Evaluations of Goodness-of-Fit Indexes for Structural Equation Models. *Sociological Methods and Research*, 25, 186-192.

Gluck, M. and G. H. Bower. 1988. From Conditioning to Category Learning: An Adaptive Network Model. *Journal of Experimental Psychology: General*, 117, 227-47.

Heide, J. B. and A. S. Miner. 1992. The Shadow of the Future: Effects of Anticipated Interaction and Frequency of Contact on Buyer-Seller Cooperation. *Academy of Management Journal* 35, 265-291.

Hirschman, A. O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* Cambridge: Harvard University Press.

Hu, L. and P. M. Bentler. 1999. Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling*, 6(1), 1-55.

Hunt, H. K. 1977. CS/D-Overview and Future Research Direction. In *Conceptualization and Measurement of Customer Satisfaction and Dissatisfaction*, ed. H. K. Hunt, L. Hu and P. M. Bentler. 1998. Fit Indexes in Covariance Structure Modeling: Sensitivity to Underparametrized Model Misspecification. *Psychological Methods*, 3(4), 424-453.

Inman, J. J., J.S. Dyer and J. Jia. 1997. A Generalized Utility Model of Disappointment and Regret Effects on Post-Choice Valuation. *Marketing Science*, 16, 2, 97-112.

Jacobs, R. S., Hyman, M. R. and McQuitty, S. 2000. Exchange-Specific Self-Disclosure, Social Self-Disclosure and Personal Selling. *Journal of Marketing Theory and Practice*, (Winter), 48-62.

Janiszewski, C. and S.M.J. Osselaer. 2000. A Connectionist Model of Brand-Quality Associations. *Journal of Marketing Research*, XXXVII, 331-350.

Johnson, M. D., A. Gustafson, T. W. Andreassen, L. Lervik and J. Cha. 2001. The evolution and future of national customer satisfaction index models. *Journal of Economic Psychology*, 22(2), 217-245.

Jöreskog, K. and D. Sörbom. 1999. LISREL. Chicago, Scientific Software International, Inc.

Jöreskog, K. G. and D. Sörbom. 1989. LISREL 7: A Guide to the Program and Applications. Chicago, Scientific Software.

Kelley, S. W. and M. A. Davis .1994. Antecedents to customer expectation for service recovery. Journal of the Academy of Marketing Science, 22(1), 52-61.

Kelley, S. W., K. D. Hoffman and M. A. Davis. 1993. A typology of retail failures and recoveries. Journal of Retailing, 69(4), 429-452.

Kujala, J., T. and M. D. Johnson. 1993. Price knowledge and search behavior for habitual, low involvement food purchases. Journal of Economic Psychology, 14(2), 249-266.

Kumar, N. J., J. D. Hibbard and L. W. Stern. 1994. An empirical assessment of the nature and consequences of marketing channel intermediary commitment. Cambridge, Marketing Science Institute.

Landman, J. 1987. Regret: A Theoretical and Conceptual Analysis. Journal of Theory of Social Behavior, 17, 135-160.

Loomes, G., Sugden, R. 1982. Regret Theory: An Alternative Theory of Rational Choice under certainty. The Economic Journal, 92, 805-824.

Marsh, M. W., J. R. Balla and K. T. Hau. 1988. An Evaluation of Incremental Fit Indices: A Clarification of Mathematical and Empirical Properties. *Advanced Structural Equation Modeling: Issues and Techniques*. G. A. & R. E. Schumacker. Mahwah, Earlbaum, 315-353.

Meyer, J. P. and N. J. Allen .1984. Testing the "side-bet theory" of organizational commitment: some methodological considerations. *Journal of Applied Psychology*, 69, 372-378.

Morgan, R., M. and S. D. Hunt, D. 1994. The Commitment--Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(July), 20-38.

Nunnally, J. C. 1978. *Psychometric Theory*. 2 ed. New York: McGraw-Hill.

Oliver, R. L. 1981. Measurement and Evaluation of Satisfaction Process in Retailer Selling. *Journal of Retailing*, 57,25-48.

Oliver, R. L. 1993. A Conceptual Model of Service Quality and Service Satisfaction: Compatible Goals, Different Concepts. In *Advances in Services Marketing and Management: Research and Practice*, ed. T. A. Swartz, D. E. Bowen, S. W. Brown, vol. 2, pp. 65-85. Greenwich, CT: JAI Press.

Oliver, R. L. 1997. *Satisfaction: A Behavioral Perspective on the Consumer*. New York: McGraw-Hill Companies, Inc.

Oliver, R. L. 1999. Whence Consumer Loyalty? *Journal of Marketing*, 63, 33-44.

Parasuraman, A., V. A. Zeithaml and L. L. Berry. 1994. Reassessment of Expectations as a

Comparison Standard in Measuring Service Quality. *Journal of Marketing*, 58, 111-124.

Porter, M. E. 1980. *Competitive Strategy*. The Free Press.

Porter, M. E. 1985. *Competitive Advantage*. New York: The Free Press.

Rust, R. T., R. L. Oliver. 1994. Service Quality: Insights and Managerial Implications from the Frontier. In *New Directions in Theory and Practice*, ed. R. T. Rust, R. R. L. Oliver, pp. 1-19. Thousand Oaks, CA: SAGE Publications , Inc.

Rust, R. T., V. A. Zeithaml and K. N. Lemon. 2000. *Driving Customer Equity: How Customer Lifetime Value is Reshaping Corporate Strategy*. New York, The Free Press.

Samuelsen, B. M. 1997. *Customer loyalty: Causes and Effects (Kundelojalitet, Årsaker og effekter)*. Hønefoss, Buskerud College.

Samuelsen, B. M. and K. Sandvik. 1997. The concept of customer loyalty. The 25th EMAC Conference, University of Warwick, UK.

SPSS .2001. , SPSS, Inc.

Steenkamp, J.-B. E. M. and H. C. M. v. Trijp .1996. Quality guidance: A consumer-based approach to food quality improvement using partial least squares. *European Review of Agricultural Economics*, 23, 195-215.

Steiger, J. H. 1989. EzPATH: A Supplementary Module for SYSTAT and SYGRAPH. Evanston, SYSTAT.

Westbrook, R. A. 1980. A Rating Scale for Measuring Product\Service Satisfaction. Journal of Marketing, 44, 68-72.

Wold, H. 1989. Theoretical Empiricism: A General Rationale for Scientific Model Building. New York.