The Impact of Satisfaction, Trust, and Relationship Value on Commitment: Theoretical Considerations and Empirical Results

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ABSTRACT

Commitment is as an essential ingredient for successful long-term relationships. Developing a customer's commitment in business relationships does pay off in increased profits, customer retention, willingness to refer and recommend. Relationship marketing literature suggests customer satisfaction and trust as major determinants of commitment. Recently, practitioners and scholars have identified customer value as a pivotal issue in the management of business relationships. In this article the authors theorize (1) customer satisfaction, (2) customer trust, (3) customer relationship value, and (4) customer commitment as key variables for successful business relationship management. A framework for the interrelationships of these key variables is provided. Drawing upon a database of 230 customer-supplier relationships, this study shows that trust and relationship value are powerful predictors of commitment. The influence of customer satisfaction on commitment is mediated by trust and relationship value. Some theoretical and managerial implications are given.

At present researchers as well as practitioners report changes in the nature of industrial customer-supplier relationships. Customers and their suppliers tend to believe that long-term relationships are a decisive source for competitive advantages (e.g. Kalwani & Narayandas 1995, Ganesan 1994). The outcomes for the customer of such long-term orientation, Anderson and Weitz (1992) refer to it as commitment, are improved quality and process performance as well as access to valued resources and technologies. Suppliers benefit from long-term customers through higher repeat sales and cross-selling opportunities as well as new product ideas, information on competitive activities and products.

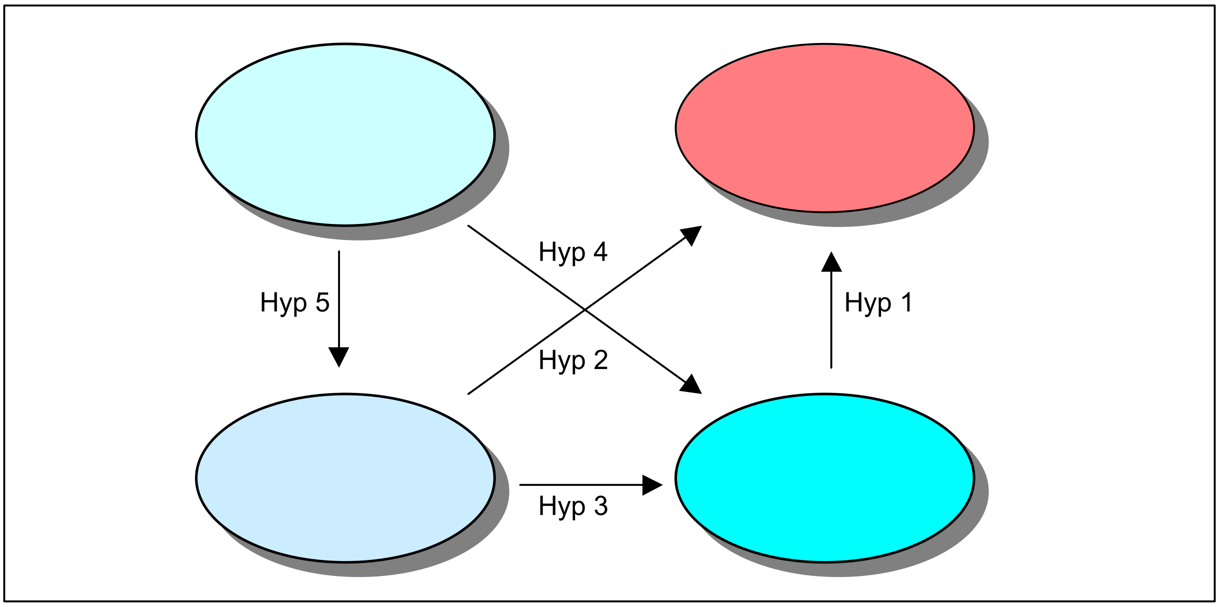
There has been done considerable research in order to illuminate the correlation of social aspects in business relationships such as commitment, satisfaction, long-term orientation, dependence and trust (e.g. Anderson & Narus 1990, Dwyer, Schurr & Oh 1987, Garbarino & Johnson 1999, Morgan & Hunt 1994). Recently, relationship value has become a matter of interest in relationship marketing (e.g. Ravald & Grönroos 1996, Lapierre 1998). Even so, researchers have not discussed the relationship value concept in the context with other social aspects of business relationships so far.

In this article we provide definitions of the four major theoretical constructs in a business-to-business relationship context we used in our framework and study. Second, we present the theoretical framework with hypotheses between customer commitment, trust, customer satisfaction and customer relationship value. Researchers have investigated the antecedents of commitment before, but we provide for the first time a framework including relationship value in this context. For example, the study indicates that relationship value has pivotal influence on the development of an industrial customer's commitment towards a relationship with a supplier. Third, we explain method and outcomes of our empirical investigation. Relationship value is a rather new area of relationship marketing research. At the end of this article we discuss limitations of our study as well as theoretical and managerial implications in this field.

I Theoretical Constructs

The specification and identification of social aspects in business relationships has made a great leap forward during the past decade. Customer satisfaction, as well as trust and commitment have become focal constructs in relationship marketing research (e.g. Doney & Cannon 1997, Garbarino & Johnson 1999, Morgan & Hunt 1994, Moorman, Zaltman, & Despandé 1992). More recently, researchers have started to theorize about value concepts in the context of business relationships (e.g. Grönroos 1997, Flint, Woodruff & Fisher 1997, Ravald & Grönroos 1996). Considering theory as well as practice in relationship management, we found satisfaction, trust, value and commitment to represent the most important aspects of business relationships. In Figure 1 we provide a graphic overview of the theoretical framework on which we based our empirical study.

Figure 1. Theoretical framework



Customer Commitment

In relationship marketing literature, commitment has widely been acknowledged to be an integral part of any long-term business relationship (cf. Anderson & Weitz 1992, Gundlach, Achrol & Mentzer 1995, Morgan & Hunt 1994). In most cases it is described as a kind of lasting intention to build and maintain a long-term relationship (e.g. Anderson & Weitz 1992, Dwyer, Schurr & Oh 1987, Moorman, Zaltman & Despandé 1992).

Along with Gundlach, Achrol & Mentzer (1995), we believe commitment to entail three different dimensions: *Affective* commitment describes a positive attitude towards the future existence of the relationship. *Instrumental* commitment is shown whenever some form of investment (time, other resources) in the relationship is made. Finally, the *temporal* dimension of commitment indicates that the relationship exists over time (cf. also Garbarino & Johnson 1999).

Customer Trust
Just like commitment, trust is one of the most widely examined and confirmed constructs in relationship marketing research (cf. Crosby, Evans & Cowles 1990, Garbarino & Johnson 1999, Helfert & Gemünden 1998, Mohr & Spekman 1994, Moorman, Zaltman & Despandé 1992, Morgan & Hunt 1994, Schurr & Ozanne 1985, Smith & Barclay 1993, Wilson 1995). Common to all different definitions used to conceptualize trust there is the notion that trust constitutes the belief, attitude or expectation of a party that the relationship partner's behavior or its outcomes will be for the trusting party's own benefit (Andaleeb, 1992).

We, in summarizing the conceptual approaches of other scholars, believe trust to have three essential components: Firstly, there is the belief that the relationship partner will show *benevolence* in his or her actions which affect the relationship in question directly or indirectly (Anderson & Weitz 1989, Geyskens, Steenkamp, Scheer & Kumar 1996). Secondly, trust also encompasses *honesty*, which means that the trusting party relies to the relationship partner being credible (e.g., Doney & Cannon 1997, Ganesan 1994).

Beside these two motivational or intentional trust dimensions, there is a dimension which encompasses an ability-related component of trust: The belief that the relationship partner has the *competence* to act for the benefit of the relationship (cf. Andaleeb 1992, Moorman, Zaltman & Despandé 1992, Ganesan 1994). Therefore, we define customer trust as the customer's belief in the supplier's benevolence, honesty and competence to act in the best interest of the relationship in question.

Customer satisfaction
Customer satisfaction has been discussed extensively as a central element of a firm's marketing concept during the past two decades (cf. Churchill & Suprenant 1982, Oliver 1988, Tse & Wilton 1988, Anderson & Sullivan 1993). In market research there is a tendency towards a cumulative view of satisfaction, measuring it as the general level of satisfaction based on all experiences with the firm (Garbarino & Johnson 1999; Sharma, Niedrich & Dobbins 1999). Various models and theories have been developed in order to define and explain the phenomenon, of which the C/D-paradigm (Confirmation/ Disconfirmation) and perceived performance or quality seem to be the dominating approaches (cf. Anderson & Sullivan 1993, Everelles & Leavitt 1992, Churchill & Suprenant 1982, Fournier & Mick 1999). The C/D-Paradigm states customer satisfaction as developing from a customer's comparison of post-purchase and post-usage evaluation of a product with the expectations held prior to purchase. This implies a transaction-specific rather than a cumulative view of customer satisfaction, since customer satisfaction occurs (or not occurs) immediately after purchasing or using a product or service (Garbarino & Johnson 1999). The transaction-specific approach of customer satisfaction provides "valuable insight into particular short-run product or service encounters" (Johnson, Anderson & Fornell 1995, p.699).

In the case of durable products, as in industrial markets, customer satisfaction may develop over time, being determined by product performance or perceived quality rather than initial expectations. "Customers require experience with a product to determine how satisfied they are with it" (Anderson, Fornell & Lehmann 1994, p. 54). Therefore we define customer satisfaction as attribute satisfaction, i.e. "the customer's subjective satisfaction judgement resulting from observations of attribute performance" (Oliver & DeSarbo 1993, p. 421) regarding a product or service purchased from an industrial supplier.

Customer Relationship Value

Recently, value concepts have entered the discussion about sources for competitive advantage. On a general level, value can be regarded as the "a trade-off of the salient give and get components" (Zeithaml 1988, p. 14), relating to products, services or relationships. Marketing researchers have discussed customer value as a new perspective in the search for excellence in business (cf. Parasuraman 1997; Johnson, Chinuntdej & Weinstein 1999; Flint, Woodruff & Fisher 1997; Anderson & Narus 1998). Summing up these contributions, we can say that understanding business markets implies applying and understanding the value concept. Customer value has become an important concept for re-focusing business activities on customer needs and perceptions. Woodruff (1997) defines customer value on a product level as "a customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving customer's goals and purposes in use situations" (Woodruff 1997, p.5).

In marketing practice and theory we can observe a shift from transaction-oriented to relationship-oriented marketing research (Sheth & Sharma 1997). Several authors have started to theorize about value in business relationships (cf. Wilson 1995, Ravald & Grönroos 1996, Grönroos 1997, Walter, Ritter & Gemuenden 1999). Wilson (1995, p.336) states that "value creation is the process by which the competitive abilities of the hybrid and the partners are enhanced by being in the relationship", but there is little research on what the antecedents and outcomes of value in business relationships are. From a customer's point of view, supplier relationships should be built in order to achieve increased cost efficiency, increased effectiveness, enabling technologies and increased competitiveness (Sheth & Sharma 1997). Accordingly we define customer relationship value as the trade-off between the multiple benefits and sacrifices perceived by a customer, regarding all aspects of the business relationship with a supplier.

II Hypotheses

The Impact of Customer Relationship Value on Commitment

In our definition we described customer commitment as the intention of a customer to maintain a long-term relationship with a supplier. We believe that a customer's aim to stick with a supplier in future is essentially based on positive experience and positive evaluation with the past relationship. A business relationship which a customer considers as important enough to "warrant maximum efforts at maintaining it" (Morgan & Hunt 1994, p.23) leads to commitment. Social exchange theory argues that the intention to stay with an exchange partner depends on how the partners perceive reward and cost (Homans 1958). Therefore we regard customer relationship value as an essential antecedent of customer commitment and assume the following:

Hyp 1: The higher a customer values a business relationship with a supplier, the stronger the customer's commitment towards the relationship with this supplier will be.

The Impact of Trust on Commitment

Trust has a direct positive impact on commitment: Trust diminishes the perceived risk and vulnerability in a relationship and thus leads to a higher commitment to the relationship (Ganesan 1994). Moreover trust reduces transaction costs as there is less necessity to establish expensive control mechanisms. Lower costs in turn increase the probability to continue the relationship in future and therefore increase the commitment to the relationship.

Trust can even be called an essential antecedent of commitment: If a supplier is not perceived to be benevolent, honest or competent enough to show useful behavior regarding the relationship in question, the customer cannot rely on this supplier and thus will show no commitment towards the relationship (Morgan & Hunt 1994). There is only one exception to this rule we can think of: It might be that the supplier has a high amount of power over the customer, which is usually the case when a supplier is in a certain monopoly position and is thus very difficult or impossible to replace. In this case, even though the supplier may not be benevolent, honest or competent with regard to the relationship, the customer will commit himself or herself to the supplier out of dependency (Ganesan 1994, Kumar, Scheer & Steenkamp, 1995).

As we understand commitment, however, it does not encompass this form of forced compliance which can only emerge out of a power or dependency imbalance. As soon as the power balance in our example will change at the cost of the supplier – e.g. because a competitor of the supplier enters the market or because the customer will have the opportunity to replace the supplier by producing the goods or services in question himself or herself – the lack of trust in the supplier will usually result in the customer quitting the relationship. Therefore, we assume the following:

Hyp 2: The more the customer trusts a supplier, the higher the customer's commitment to the relationship with this supplier will be.

The Impact of Trust on Customer Relationship Value

Trust, as we defined it, is a pivotal antecedent for effective relationship management. Benevolence, honesty and competence are the essential components of which trust consists (Anderson & Weitz 1989; Ganesan 1994; Moorman, Zaltman & Despandé 1993) and we regard them as crucial in how customers perceive the value of a business relationship with a supplier. Customer relationship value may only develop when the customer has "confidence in an exchange partner's reliability and integrity" (Morgan & Hunt 1994, p. 23). Safety, credibility and security are believed to reduce the sacrifice for the customer in a relationship and therefore lead to higher relationship value (Ravald & Grönroos 1996). Therefore, we suppose the following:

Hyp 3: The more the customer trusts a supplier, the higher he or she values the business relationship with this supplier.

The Impact of Customer Satisfaction on Customer Relationship Value

We defined customer satisfaction in industrial markets as the customer's satisfaction with relevant attributes of the product or service purchased from a supplier. Customer satisfaction is believed to lead to stronger buyer-seller relationships (Holt 1999). Relationship value has been described as the trade-off between all benefits and sacrifices in a business relationship. Satisfied customers tend to reduce complaint behavior, they spend less effort on variety seeking and less internal hassle because of dissatisfying products or services (Sharma, Niedrichs & Dobbins 1999). Therefore, we assume customer satisfaction in the sense of our definition to have a positive impact on the trade-off between perceived benefits and sacrifices in a business relationship with a supplier.

Hyp 4: The more a customer has been satisfied with a supplier's products or services in the past, the higher he or she values the business relationship with this supplier.

The Impact of Satisfaction on Trust

Satisfaction, as we have defined it, is an attitude based on past experience with an actor. Although trust is usually understood as a future-oriented attitude, i.e. as a state of mind that goes beyond past experience, one can hardly deny that a certain amount of positive experience with a person or organization will at least support the development of trust towards this person or organization.

There are situations in which a person is forced to rely on another person without having (positive) past experience at all or even with negative past experience. This is e.g. the case in life-threatening emergencies that can only be overcome by accepting the aid of a total stranger or even an adversary. In this case, however, the person usually doesn't trust the other party in the narrow sense of the word, but essentially has no choice but to rely on him or her.

Therefore, the most effective way for a supplier to make the actors in a customer firm believe in his honesty, competence and benevolence is to provide them with positive experience: If the actors in the customer firm have already experienced that the supplier is able and willing to fulfill their needs and demands and to be a reliable and predictable partner, i.e. they are satisfied, they will be likely to trust the supplier (Ganesan 1994, Geyskens, Steenkamp & Kumar 1999, Helfert & Gemuenden 1998). Hence, we argue as follows:

Hyp 5: The more satisfied the customer has been with the supplier in the past, the more he/she will trust the supplier for the future of the relationship.

III Method

Data Collection and Sample

The level of analysis of this study is a specific supplier-customer relationship. According to the research questions we chose to seek data from the customer's vantage point. We prepared a six-page questionnaire to be completed by a purchasing professional. Usually it is a purchasing professional's responsibility to be well informed about certain supplier relationships (Cannon & Perreault, 1999). Almost all of the questions focused on the relationship between the customer firm and a specific supplier. The questionnaire directions explained that the questions should be answered with respect to a manufacturing supplier who was sufficiently important to warrant relational exchange behaviors. The directions also noted that the respondents should not be concerned if their firm is more or less satisfied by this supplier. The respondents should directly and continuously be involved in the supplier relationships for at least one year.

The study questionnaire was mailed to 560 appropriate informants, that were initially called by phone and motivated to complete the questionnaire. The telephone contacts were also made to ensure that the persons were best able to report on the constructs being investigated. The identified key informants typically held the title of purchasing manager or purchasing agent. Follow-up reminders were mailed to each informant three weeks after the primary mailing. We sampled a broad range of industries using a commercial list, including both consumer and industrial goods manufacturers. A total of 230 usable questionnaires were obtained that represent a 41.1 % response rate. We performed a non-response analysis by comparing early versus late responses (Armstrong & Overton, 1977). Tests indicated no statistically significant differences in the mean responses for the constructs used between the first and the last third. Therefore, it is unlikely that non-response bias is an issue in interpreting the findings of the study.

Most of the customers came from the sectors vehicle manufacturing (23.1 %), mechanical engineering (21.8 %), electronics industry (13.3 %), metal-processing industry (8.0 %), and chemical industry (5.8 %). The suppliers of these respondents were all manufacturers and mainly stemmed from electronics industry (46.3 %), mechanical engineering (23.9 %), and chemical industry (7.3 %). The average number of employees on the part of the customers was 1.345. The supplier companies employed 385 persons on average.

Measures

The scales employed in the present study were either developed specifically for this study or adapted from existing scales to suit the context of the present study. We started by developing an initial pool of scale items based on a thorough review of literature and five extended interviews with marketing and purchasing personnel who were responsible for the management of supplier-customer relationships. The wording of the scale items was refined on the basis of a pilot study with eight purchasing managers (three of them participated already in the extended interviews). We conducted personal interviews that lasted 50 minutes on average. All scales were pre-tested in three successive rounds. In each round two to three interviewees were asked to complete the questionnaire. The managers answered the questionnaire and verbalized any thoughts that came to mind. The items were revised following each interview round. At the end of round three the feedback from the respondents indicated that the scale items were clear, meaningful, and relevant.

All constructs were measured using seven point multiple-item scales. A complete listing of the scales used in the study is provided in the Appendix. The final relationship model includes twenty-two measures and four constructs. We used traditional and advanced psychometric approaches to evaluate scale properties. Assessing their reliability and uni-dimensionality purified the proposed reflective measures. Measurement development followed procedures recommended by Anderson and Gerbing (1988). First, item-to-total correlation was examined in each of the proposed scales and items with low correlation were deleted if they tapped no additional domain of interest. To help ensure uni-dimensionality, items in each multi-item scale were factor analyzed separately. In all but one case, a single factor emerged.

In this study we used a multi-attribute level approach (Mittal, Ross & Baldasare, 1998) to measure *customer satisfaction*. As the first step towards measuring customer satisfaction we reviewed previous corporate research studies (e.g., Perkins, 1993). Next, we generated several product and service attributes by interviewing sales and purchasing managers from the manufacturing industry. Satisfaction was measured finally using a 13-item scale. The measures ask the informants to indicate how satisfied they were with the performance of each attribute using a seven-point scale ranging from "absolutely dissatisfied" to "absolutely satisfied". Employing a principal components factor analysis, four factors with eigenvalues over 1 explained 78.5 % of the variance in the ratings. The varimax-rotated factor pattern implies that the first factor concerns "product development" (4 items, $\alpha = .893$). The second factor relates to "technical service" (3 items, α = .917). The third factor consists of characteristics to the "product" itself (3 items, α = .834). The fourth factor relates to "order processing" (3 items, α = .822). The arithmetic means of the four multi-item scales were used to build the construct customer satisfaction.

The *customer's trust* in the supplier was measured by 5 items. All items were scored on a 7-point scale, ranging from "strongly disagree" to "strongly agree". Adapted from scales of Kumar, Scheer, and Steenkamp (1995) and Ganesan (1994), these items were related to honesty, benevolence, and competence of the supplier.

We don't know of any study which has operationalized c*ustomer relationship value.* In this study customer relationship value was measured using a 4-item scale. Following the research of Anderson and Narus (1999), Anderson, Jain, and Chintagunta (1993), Ravald and Grönroos, (1996), Walter, Ritter, and Gemuenden (1999), and Wilson (1995), these items assessed several key features of value in a relationship context. We included value as a perceived trade-off between benefits and sacrifices, value depending on role perceptions of the respondents, value as a measure relative to the offerings of competitors, and value as a multi-attribute concept. The key informants were asked to rate the value of the supplier relationships in question considering all benefits and sacrifices associated with the relationships on a 7-point scale. The second item assessed the value of the focal supplier relationship in comparison with alternative supplier relations of the customer on a 7-point scale. With the third item, we asked respondents about the degree to which they agreed that the supplier relationship was very valuable for their firm on a 7-point scale ranging from "strongly disagree" to "strongly agree". The fourth item is a judgmental item asking the informant to assess the value of all performance contributions that were gained from the supplier (e.g., volume, market information, technologies) using a 7-point scale that ranged from "very low" to "very high".

The customer's *commitment* to the supplier relationship was measured using a 5-item scale adapted from Anderson and Weitz's (1992) as well as Ganesan's (1994) studies. These items tap the multiple facets of commitment incorporated in our definition, including the customer's loyalty, willingness to make short-term sacrifices, long-term orientation, and intention to invest in the relationship.

As a more rigorous test, confirmatory factor analysis was then conducted using LISREL 8 (Jöreskog and Sörbom, 1996) with covariance matrix as the input. The fit indices suggested by Jöreskog and Sörbom (1996) and Bentler (1990) were used to assess the model adequacy. The estimates generated by LISREL 8 provided evidence of an adequate model fit ($\chi^2_{(129)}$ = 220, p = .000; GFI = .912, AGFI = .883, CFI = .963, RMSEA = .049). Although the χ^2 is significant, it is not necessarily an indicator of poor fit (Bagozzi and Yi, 1988). Following a recommendation by Jöreskog and Sörbom (1996), the ratio of the chi square statistic over the degrees of freedom was used as a measure of overall goodness-of-fit. We consider the overall fit of the model to be satisfactory as the measure is 1,7 (Medsker, Williams, and Holahan, 1994). This assessment is supported by the GFI, AGFI, and CFI for which a minimum value of .9 usually is considered to be acceptable (Bagozzi and Yi, 1988; Baumgarten and Homburg, 1996). For the RMSEA usually values up to .08 are considered to indicate reasonable model fit (Browne and Cudeck, 1993). Our assessment of the overall model was also confirmed by the Q-plot of standardized residuals that is characterized by points falling approximately on a 45^{o} line (Jöreskog and Sörbom, 1996).

Table 1 contains standardized ML parameter estimates for the measurement model, proportions of variance extracted, construct reliability values, and Cronbach's Alpha values. All items exhibit reasonably high reliabilities. All Cronbach's Alphas exceed the threshold value of .7. The average variance extracted except one and all of the construct reliabilities exceeds the threshold values of .5 and .7 respectively (Fornell and Larcker, 1981). Support for discriminant validity was provided by a series of model estimations in which the individual factor correlation was constrained to unity one at a time (Bagozzi, Yi, and Phillips, 1991). The conducted chi-square difference tests were all significant ($p < .001$). Discriminant validity between the four factors is also given applying the criterion suggested by Fornell and Larcker (1981). Thus, the measurement model results can be interpreted as acceptable. Appendix B reports correlations among the constructs.

Table 1. Confirmatory factor analysis results

Factor/Item	**Standardized factor loading**[a]	**Average variance extracted**	**Construct reliability**	**Cronbach's Alpha**
Commitment				
C1	.84***	.56	.86	.86
C2	.80***			
C3	.69***			
C4	.67***			
C5	.73***			
Relationship value				
RV1	.89***	.79	.94	.93
RV2	.85***			
RV3	.93***			
RV4	.87***			
Trust				
T1	84***	.57	.87	.86
T2	.80***			
T3	.75***			
T4	.61***			
T5	.76***			
Customer satisfaction				
CS1	.60***	.51	.80	.76
CS2	.64***			
CS3	.82***			
CS4	.77***			

[a] ***: Parameter estimates are significant at the .001 level

Hypotheses tests

Tests of the hypotheses were then performed using a structural equation model. This model, too, reflected a good fit to the data ($\chi^2_{(130)} = 220$, $p = .000$, GFI = .912, AGFI = .884, CFI = .963, RMSEA = .048). All of the relationships predicted in the structural model were found to be in the hypothesized direction. Furthermore, the model explains a substantial portion of the variance (SMC) of the endogenous variables: commitment 41 %, relationship value 50 %, and trust 39 %.

The standardized solution estimated by the LISREL 8 program was used for interpreting the structural relations results (Table 2). As was expected, relationship value and trust were found to be significant predictors of commitment (H1 supported: $p<0.01$; H2 supported: $p<0.01$). Trust has a significant positive effect on relationship value ($p<0.01$). Thus, there is support for H3. Finally, customer satisfaction is significantly related to relationship value (H4 supported: $p<0.01$) and trust (H5 supported: $p<0.01$).

Table 2. Parameter estimates of the relationship model

Proposed Model *Path*	**Estimate (standardized)**	**t-Value**
Relationship value → Commitment	.470	5.72
Trust → Commitment	.233	2.83
Trust → Relationship value	.325	4.03
Customer satisfaction → Relationship value	.458	4.99
Customer satisfaction → Trust	.626	6.63

IV Discussion and Conclusions

Managerial Implications

With an increasing trend towards developing, managing, and maintaining ongoing customer relationships on a global basis suppliers will have to learn about bonding processes and mechanisms. Our model, as proposed, suggests some implications for supplier firms seeking to develop and strengthen their customers' commitment to a relationship. First, managers have to orient their bonding strategies towards building trust of their customers. Suppliers should move from arm's-length, and often adversarial relationships to trusting relationships with customers. Trust develops over time. This process may be accelerated by joint training and role playing of the partners as well as fostering organizational similarities, particularly in terms of goals, exchange behaviors, control procedures, and strategic horizons (cf. Smith and Barclay, 1993).

In short, value can be regarded as trade-off between benefits and sacrifices. The customer's perceived relationship value has a strong impact on his intention to stay in the focal relationship, to be a loyal and a tolerant partner, and to invest resources in a long-term cooperation. Therefore, for defining an effective bonding strategy, managers in supplier firms must recognize that relationship value perceived by customers is the cornerstone of the customers' commitment to a relationship.

The concept of value in business markets has attracted attention from both academics and managers. The basic notion is that business markets can only be understood applying the concept of value (cf. Anderson and Narus, 1999). Thus, suppliers need to understand which drivers create value for their customers in order to build a competitive advantage. The present study suggests that a realistic view of value creation within a relationship setting covers the performance of several product and service attributes as well as the social benefit of experiencing trust.

Research Implications

We introduced customer relationship value for the first time as a focal construct in a theoretical relationship management framework. The aim of our research has been to conceptualize customer relationship value and to verify this concept through a field study. The empirical results strongly support the relevance of customer relationship value and justify an addition to relationship marketing theory.

In accordance with existing literature (cf. Anderson & Narus 1990, Ganesan 1994, Garbarino & Johnson 1999) we found strong support for the positive effect of customer satisfaction on trust, and the positive effect of trust on commitment in customer-supplier relationships. As expected we found customer satisfaction and trust to be significantly related to customer relationship value, which has on its part a strong positive effect on the customers commitment to the relationship with a supplier. We exposed for the first time an operationalization for customer relationship value. Several researchers have discussed relationship satisfaction or relationship value (Grönroos 1997, Biong, Parvatiyar & Wathne 1996) theoretically, but we know of no empirical study which provided evidence for the relevance of relationship value in relationship marketing research.

Some authors (Ravald & Grönroos 1996; Walter, Ritter & Gemuenden 1999) have already presented a theoretical approach for direct and indirect value creating functions in business relationships. Future research in this field should further consider the antecedents of relationship value.

Limitations

There is no empirical study without certain limitations. In our study, we have shown that the commitment of a customer to a supplier is positively influenced when the customer judges the relationship to be valuable and when he or she trusts the supplier and is satisfied with past transactions in the relationship. We gathered our data by interviewing mainly a single person in each customer company, because we believe that the customer's perceived value of a relationship as well as the customer's satisfaction, trust, and commitment to a supplier relationship can best be measured by asking the customer directly. This so-called key informant approach is very common and also accepted in marketing research (cf. Philipps 1981, John and Reve 1982). In order to gain a more complex view and be able to consider further influences, one might however add the supplier's view and/or gather data from more than one person in the customer company.

With our model we have explained a considerable amount of variance of the customer's commitment to the supplier relationship. Nevertheless, the model didn't account for the total variance of this construct. Relationship commitment is a very complex matter which is certainly influenced by a whole bundle of different predictors. In this paper, we had to restrict on measuring those variables relevant to confirm our hypotheses. In earlier studies, other variables like e.g. power/dependence have proven to account for the variance of customer commitment as well (e.g., Anderson and Weitz 1992, Ganesan, 1994). Therefore, it is understandable that portions of the variance of customer commitment had to remain unexplained in our study.

Finally, in our study we have focused on manufacturer-customer relationships. If we would have looked at relationships between service providers and their customers or at channel relationships, there might have been different results as the nature of these relationships is also different. In other relationships, e.g., there might be a very strong influence of the power imbalance than in our sample: Service companies in certain industries are much easier to replace than manufacturers. The same holds true for retailers and manufacturers: In these relationships, there are also much less lock-in effects for a retailer than for a user of the products in question. Therefore, the variables we have examined might not have accounted for such a high part of the variance of commitment which means that our findings can only be generalized to relationships in other industries to a certain amount.

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Appendix A: Summary of measures

Commitment (1 = strongly disagree, 7 = strongly agree) (Mean = 4.58, SD = 1.24)
C1: We focus on long-term goals in this relationship.
C2: We are willing to invest time and other resources into the relationship with this supplier.
C3: We put the long-term cooperation with this customer before our short-term profit.
C4: We expand our business with this supplier in the future.
C5: We defend this supplier when outsider criticize the company.

Relationship value (Mean = 4.81, SD = 1.22).
RV1: Considering all benefits and sacrifices associated with this supplier relationship, how would you assess its value? (1 = very low, 7 = very high)
RV2: The value of the relationship with this supplier is in comparison with alternative supplier relations very high. (1 = strongly disagree, 7 = strongly agree)
RV3: All in all this supplier relationship has a high value for our firm. (1 = strongly disagree, 7 = strongly agree)
RV:4 How do you rate the value of all performance contributions that your company gain from this supplier (e.g., volume, market information, technologies)? (1 = very low, 7 = very high)

Trust (1 = strongly disagree, 7 = strongly agree) (Mean = 5.27, SD = 1.12).
T1: When making important decisions, the supplier is concerned about our welfare.
T2: When we have an important requirement, we can depend on the supplier's support.
T3: We are convinced that this customer performs its tasks professionally.
T4: The supplier is not always honest to us. (reverse scored)
T5: We can count on the supplier's promises made to our firm.

Customer satisfaction (1 = totally dissatisfied, 7 = totally satisfied) (Mean = 5.26, SD = 0.94)

	CS1	CS2	CS3	CS4
CS1: Satisfaction with the supplier's product development				
Employees' knowledge about conditions of use	.802		-	-
Creativity of R&D personnel	.802	-	-	-
Openness of R&D personnel to new product ideas	.840	-	-	-
Attention of R&D personnel for our technical problems	.725	-	-	-
CS2: Satisfaction with the supplier's technical service				
Competence of service personnel	*.303*	.838.	-	-
Availability of service	-	.844	-	-
Technical quality of service	-	.871	-	-
CS3: Satisfaction with the supplier's product				
Reliability of the products	-	-	.876	-
Operating efficiency of the products	-	*.304*	.795	-

Fulfillment of technical demands	*.356*	-	.730	-
CS4: Satisfaction with the supplier's order processing				
Time to order confirmation	-	-	-	.811
Adherence of delivery dates	-	-	*.329*	.763
Management of order process	*.303*	-	-	.802

Appendix B. Correlation Matrix of Measurement Scales

Construct	**1**	**2**	**3**	**4**	**5**
1. Commitment	1.0				
2. Relationship value	.61	1.0			
3. Trust	.52	.61	1.0		
4. Customer satisfaction	.46	.66	.63	1.0	