
STRATEGIC ANALYSIS OF COMMITMENT IN THE RELATIONSHIPS BETWEEN CUSTOMERS AND SUPPLIERS

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Abstract

In an increasingly dynamic and globalized economic context, establishing and developing enduring relationships with suppliers and customers has become a key strategic concern in SMEs. Customer-supplier relationship management was always very important for the success of any company. The aim of this study is to perform strategic analysis of commitment in the relationships between customers and their suppliers. The target population for this research was companies in Serbia buying products and services for use in their own production process, as well as for resale. The main tool was the questionnaire based on a review of relevant literature, which was used as the concept of the study. The Structural Equation Modeling (SEM) and the path analysis are used in testing the research hypotheses applying LISREL software, version 8.0.

Keywords: *Commitment, Customer, Supplier, SME's, Strategic Analysis*

JEL Classification: C10, L26, M31

1. Introduction

Most researches have focused on building customer - supplier relationships, explaining how relation processes lead to outcomes such as satisfaction, trust, commitment (Cannon & Homburg, 2001; Holger & Vos, 2015). This paper describes the degree to which the development of commitment in the relationship between customer and supplier in the MSPs can improve the business and affect the achievement of competitive advantages. The subjects of this research are small and medium enterprises included into industry sector process in Serbia. SMEs represents very important economy factor in all parts of Europe. Illustrative data shows that SMEs make about 99.8% of total number of enterprises in Serbia (webzrzs.stat. gov.rs).

The global economic crisis still has a negative impact on the business volume of the majority of SMEs. Long periods of payment and short deadlines to meet liabilities represent one of the most common business financial problems especially for small companies. In Serbia, only 56% of SMEs as customers pay their financial liabilities to their suppliers within the stipulated period (www.privreda.gov.rs). Therefore, building commitment relationship between customer and supplier in SMEs has been identified as one of the key characteristics of successful relationships in which trust plays a significant role as a key determinant of commitment relationship (Capo et al., 2011)

Any long-lasting business transaction between a company and supplier require mutual commitment in order to achieve their common goals within supplying chain to SMEs (Ik-Whan & Suh, 2005), based on the idea that social norms of trust and reciprocity improve co-operative behavior, which in turn initiate the accumulation of durable ties (Fehr, 2009). Also, it is proven that buyer-supplier relationships affect supplier innovativeness (Inemek & Matthyssenes, 2013), so it is very important to rush this relations in order to make SME's more successful.

In an increasingly dynamic and globalized economic context, establishing and developing enduring relationships with suppliers and customers has become a key strategic concern in SMEs (Redondo & Fierro, 2008). As such, the supplier is no longer a source for providing reproductive material, but he becomes the partner, who, in the long-term and commitment cooperation can greatly contribute to reduction of material costs, faster turnover of relatively limited working capital, rational development of production processes, resulting in more efficient operation of industrial small and medium-sized enterprises. However, the lack of commitment to the customer's supplier may limit the willingness of the supplier to reduce customer costs, which can lead to increasing of operating costs (Hut & Speh, 2010). Besides, there are still cases where the system of relationships that characterizes the customer-buyer-supplier relation appeared critical factor (Panizzolo, 1998).

The aim of this study is to perform strategic analysis of commitment in the relationships between customers and their suppliers within small and medium enterprises in Serbia. The nature of this relationship (customer-supplier), becomes the subject of strategic analysis and decision-making. There can be the whole range of relationships between customer and supplier in the business market can be a (Inemek & Matthyssenes, 2013), which attracted significant on academic and managerial attention in the last two decades (Redondo & Fierro, 2008).

Selection of quality suppliers in existing business conditions of fast development of small and medium enterprises in Serbia, as well as their growing into significant segment of economy, as a part of transitional process of Serbian economy, is not the simple task at all. Com the course of selecting their suppliers, may apply some additional measures, e.g. in case there are two suppliers they can buy greater quantities from the high quality supplier and less quantities from the less quality supplier, and make that information available to the suppliers that have interest to develop the product and to introduce allowances to the quality.

2. Literature review and definition of hypotheses

Small and medium size enterprises are focusing considerable attention on building sustainable, competitive advantages by developing and maintaining close, cooperative relationships with a limited set of customers, suppliers, and channel members. Through these relationships, SMEs create values by differentiating their offering and/or lowering their costs (Hut & Speh, 2010; Whipple, Lynch & Nyaga, 2010; Berling, 1993). Small and medium size enterprises (SMEs) present one of the major generator of economic development in any market economy. Sector SMEs has been successful in the whole world in the last thirty years, especially in the newly industrialized countries in transition. The process of managing SMEs is very specific because the business activities are carrying out under conditions of scarce resources. The development of SMEs is one of the key development priorities in Serbia.

SMEs played a very important role in the early transition period in all economic transformations. They were able to respond to the opportunities of created

system changes better than the larger and numerous established firms. They also absorbed a significant number of employees laid off by larger firms in the restructuring and privatization processes. In developed market economies, of course, SMEs also played an additional and an equally important role in being the means for diffusion of innovation and technology (Berling, 1993). In this paper, we have examined the customer-supplier relationship in order to analyze entrepreneurship and entrepreneurs working in different economy environments and stages of economy and institutional development, with the final aim to develop commitment.

In the existing literature, commitments in relation customer - supplier within SMEs is a multidimensional process. Many scientists have classified commitment into affective, calculated, and, sometimes, normative dimensions (Barton et al., 1999; Piech, 2004). Other researchers explain commitment through dimensions of attitudes and behaviors, confirming that affective and calculated commitments are the part of a broader concept, depending on the attitude and / or behavior (Ganesan, 2010; Gounaris, 2005).

Among the various relationships of marketing constructs, commitment is constantly cited as one of the key elements for successful relationship in the distribution channel in SMEs. Among several factors affecting the commitment, perception of satisfaction between the customer - supplier and the level of trust can be specially noted. (Gounaris, 2005; Gilliland & Bello, 2002).

This study is focusing on some advantages that are believed to affect the commitment in relation customer-supplier within SMEs. They are the impact of satisfaction as an indirect factor and trust as a direct factor. Both concepts, trust and satisfaction, are similar as they represent some overall evaluation, feeling, or attitude about the other party in the relationship. Beside, these two concepts are closely connected, they are expected to have different antecedents and consequences (Gilliland & Bello, 2002).

2.1. Satisfaction

Main subject in the literature concerning relationships is a review of factors necessary to achieve satisfaction in customer-supplier relationships. Customer satisfaction in a business context can be seen as a positive affective state, resulting from the estimation of values by customers in all aspects of his relationship with suppliers (Jap, 2011; Briscoe, 2005).

The supplier will probably have to adopt some of his customers' needs if he wants to satisfy them and, hence, retain them in the customer's portfolio. The level of customer satisfaction is experienced by his assessment of the cumulative impact of suppliers over time in different products / services and quality of delivery. Therefore, quality is increasingly considered as an essential element that determines the degree of satisfaction perceived by the customer (Joreskog & Sorbom, 1989). Resulting from the above discussion we the following hypothesize:

Hypothesis 1. Experienced level of customer satisfaction in SMEs has a positive impact on trust in the supplier.

2.2. Trust

Trust is a major determinant of commitment relationship. It is difficult to imagine a serious business commitment without trust. A high degree of buyer's trust improves the exchange climate of the relationship as a whole, so suppliers can expect increased two-way and quality communication and greater cooperation while experiencing more amicable conflict resolution processes with their customers (Savić, 2014). Accordingly, no commitment is consummated unless the partners feel that unbroken trust has been established. That is the reason why there should develop the framework to link the level of trust and the degree of commitment, whose actions in the SMEs will be benefiting to and to perform general performances in the supply chain. (Fehr, 2009). In the light of the above facts, it can be seen that the confidence is the indicator of commitment, leading to the following hypotheses:

Hypothesis 2. The level of customer trust in SMEs has a positive impact on the commitment in relationship with suppliers.

On the basis of the above given hypotheses, H1-H2, it can be defined the theoretical model of the influence of specific parameters relating to the commitment in relationship customer - supplier, as shown in Figure 1. The model is showing the indirect effect of satisfaction and a direct impact on the trust's commitment in relationship with the supplier.

Figure 1. Conceptual model



3. Methodology

The target population for this research was companies in Serbia buying products and services for use in their own production process, as well as for resale. The questionnaire was formulated on the base of a review of relevant literature including processed concepts used in this study (Fehr, 2009).

From a total of 450 questionnaires, 356 of distributed were useable, resulting with the response rate of 79%.

Companies responded the survey were SMEs. The questionnaires were completed by the procurement managers, and the survey itself was anonymous. For grading, we used a five-level Likert scale.

Examined determinants in this study, satisfaction, trust and commitment, are phenomena developing for many years, and very difficult to be manipulated with. Therefore, respondents were mostly competent to assess their relationships with company suppliers, separating those with whom they have frequent co-operation to the commitment of the relationship.

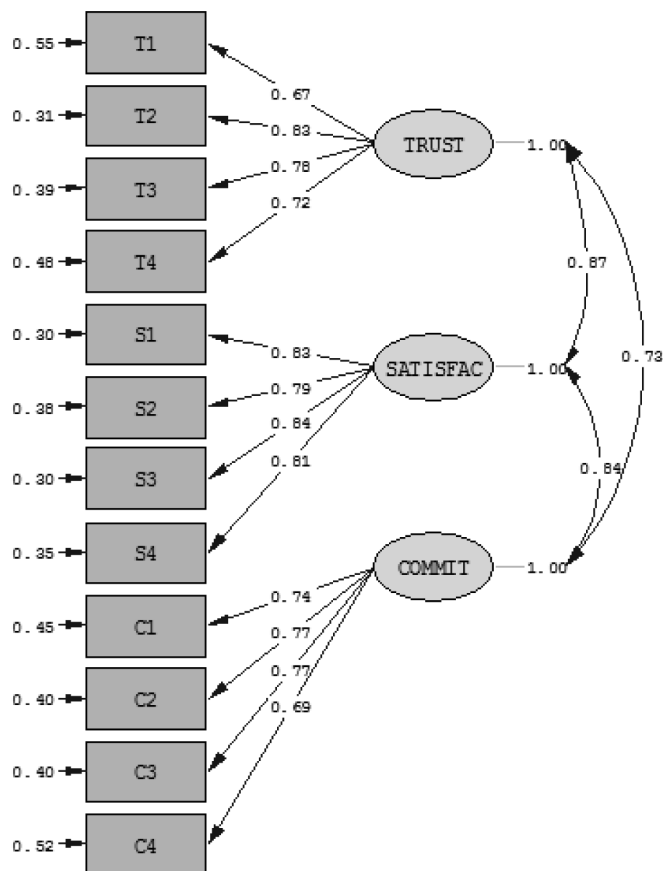
3.1. Measurement model

The proposed model and hypotheses have been tested on data collected from the questionnaires. Measurement and structural models have been tested by software

package LISREL (Linear Structural Relationship) v 8.8, using structural equation model (SEM) (Joreskog & Sorbom, 1989; Savic, 2014). Maximum likelihood estimation method is used to analyze the data.

Before testing the structural model, it is necessary to define the correlation model (Figure 2), which establishes correlation connections between defined groups of questions in order to confirm that the 12 measurable variables reflect three latent variables in a reliable manner.

Figure 2. Measurement model tested in the CFA *Correlation Model



Unidimensionality within all three groups in the considered model was confirmed by using confirmatory factor analysis (CFA). Values obtained by confirmatory factor analysis are presented in Table 1. The internal consistency of a group of items relating to the concepts included in the research was tested. Cronbach's coefficient α

was used to assess the internal consistency (Nannally, 1978), recommending within each group of questions the values $\geq 0,7$ to be considered as priority, and values $\geq 0,60$ (Hair et al., 1998) to be considered as acceptable.

Cronbach's alpha factor for total population is 0.928, while the values per groups are shown in Table 1. CFA was used to estimate the convergent validity. All loading factor indicators on their structures were statistically significant, indicating that convergent validity is achieved (Hair et al., 1998).

Values of the factor loadings and a critical ratio are shown in Table 1, presenting that all structures are of highly convergent validity. Fitting the model indices and measuring statistically significant loading factors ($t > 1.96$, $p < 0.05$), shown in Table 2, demonstrate good fit between the measurement model and the data.

Table 1. The testing results of the measurement model

	Non-standard Loading factor	T-values	Standard loading factors	Convergent validity	Cronbach alpha (α)
TRU ₁	0.62	13.59	0.67	0.568	0.835
TRU ₂	0.83	18.37	0.83		
TRU ₃	0.78	16.72	0.78		
TRU ₄	0.69	14.92	0.72		
SAT ₁	0.73	18.90	0.83	0.668	0.889
SAT ₂	0.71	17.30	0.79		
SAT ₃	0.78	19.03	0.84		
SAT ₄	0.63	18.02	0.81		
COM ₁	0.70	15.44	0.74	0.558	0.832
COM ₂	0.67	16.43	0.77		
COM ₃	0.60	16.43	0.77		
COM ₄	0.56	14.05	0.69		

Table 2. Fit index of the measuring model

χ^2	χ^2/df	NFI	NNFI	PNFI	CFI	IFI	RFI	GFI	RMR
$\chi^2 = 210.74$	4.132	.97	.97	.75	.98	.98	.96	.91	.036
df=51									
p<0.05									
Recommended values	< 5	.90	.90		.90	.90	.90	.90	<.10

3.2. Testing hypothesis

As the results measurement model is very satisfying, indicating the adequate fit, the structural model was tested in the next step, shown in Figure 3. All the loading factors (Table 3), and the Chi-square goodness-of-fit statistics of the structural model $\chi^2=243.33$, $df=52$, $p<0.05$ (Table 4) are statistically significant ($p>0.5$).

Main fit indexes, (Table 4), shows that structural model is applicable mostly on the observed matrix of variation-covariation compared to the measurement model and compliance with conditions for interpretation of structural coefficient (Byrne, 2004).

Figure 3. Structural model

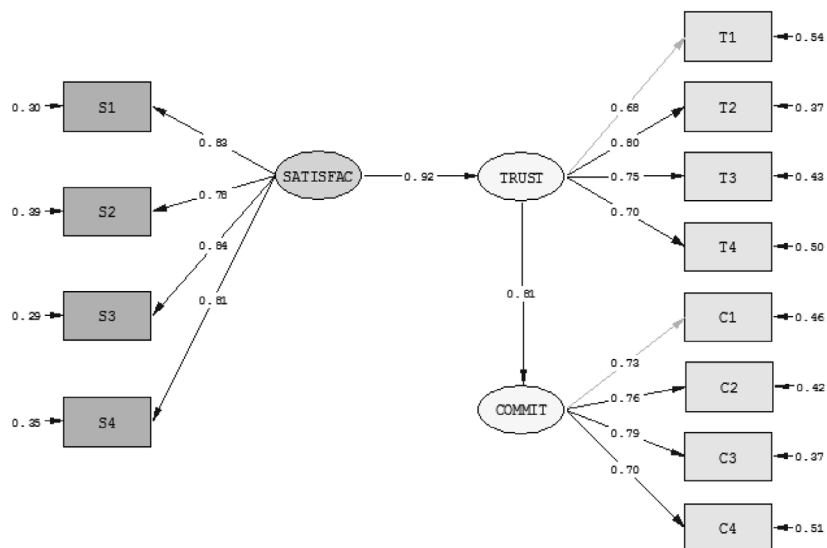


Table 3. The testing results of the structural model

	Non-standard Loading factors	T-values	Standard loading factors	Convergent validity	Cronbach alpha (α)
TRU1	0.63		0.68	0.539	0.835
TRU2	0.79	13.22	0.80		
TRU3	0.76	12.62	0.75		
TRU4	0.68	11.90	0.70		
SAT1	0.73	18.85	0.83	0.665	0.889
SAT2	0.70	17.12	0.78		
SAT3	0.78	19.22	0.84		
SAT4	0.63	17.91	0.81		
COM1	0.69		0.73	0.556	0.832

COM2	0.65	13.30	0.76		
COM3	0.61	13.92	0.79		
COM4	0.59	12.36	0.70		

Table 4. Fit of index of the structural model

χ^2	λ^2/df	NFI	NNFI	PNFI	CFI	IFI	RFI	GFI	RMR
$\chi^2 = 243.33$ $df = 52$ $p < 0.05$	4.679	.96	.96	.76	.97	.97	.95	.90	.043
Recommended values	< 5	.90	.90		.90	.90	.90	.90	<.10
Structural coefficients		Standardized ratings path		t-values					
H1: Satisfaction-Trust		.92 (a)		13.00					
H2: Trust- Commitment		.81 (a)		10.70					

(a) The significance level 99%

For model testing, coefficients of regression (β coefficients) and determination R^2 were used. Coefficients of regression β explain strength and character of connections between dependant and independent variables, shown in Tables 4., and coefficient of determination R^2 shows the share of the explained variance in total, i.e. in which degree the variation of the dependent variable has been explained by the independent variable. The results of path analysis show that the both hypotheses have been validated. Considering the commitment of customers to their suppliers, satisfaction as an indirect determinant of commitment has a very strong influence on trust ($\beta = 0.92$), as well as the confidence of customers, which as a direct determinant, also has a strong influence on commitment ($\beta = 0.81$). The calculated value of the coefficient of determination indicates that 75.5% of the variance of commitment with suppliers is the consequence of the joint effect of three latent determinants.

4. Conclusion

By examining the strategic importance of commitment in customer - supplier relationships within SMEs in Serbia, it is evident that the constructs influencing commitment in this relationship, are trust and satisfaction having direct and significant impact while satisfaction is an indirect determinant in this relationship.

Obtaining advantages in supply relationships is a fundament for understanding the success and survival of many companies, enabling companies (customers) to get greater value added, for the competition itself, through the management of positive and lasting relationships with both suppliers and customers (Barton, et al. 1999).

The results obtained in this paper using the measurement and structural models suggest that satisfaction and trust have positive impact in the customer - supplier relationships, which describes the strength and character relationships, by which establishing hypotheses in conceptual model have been confirmed. To build trust in relation between customer - supplier it is necessary to achieve the strategic

collaboration between the partners, which would be the best way to reduce uncertainty and increase the level of trust. The supplier should demonstrate commitment to the company (customer), to be honest with him, to keep his promise, and to be reliable in terms of relevant information. Otherwise, the barrier due to the uncertainty in the market will not be able to overcome. While customer satisfaction as a critical component of current and future performance of suppliers is an important source of competitive advantage, which is manifested through the fulfillment of the promise given at the beginning of the cooperation, their positive attitude, and the ability of both sides to meet the standards and thus manifest the commitment.

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