

The Building-Blocks of Trust in Inter-Firm Relationships

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Abstract

The objective of this study is to empirically examine the antecedents and dimensions of trust in inter-firm collaborative relationships. A conceptual model is introduced and tested on survey data. The resulting model is mainly supported, although some findings were unexpected.

1. Introduction

The importance of trust in improving the quality and performance of inter-organizational relationships, even leading to competitive advantage, is well documented. Thus it is quite understandable that the question of how trust develops has also aroused interest among both academics and practitioners. However, the lack of consensus about the factors causing trust in organizational and inter-organizational relationships is somewhat confusing. The purpose of this study is to identify the dimensions of trust in inter-organizational collaborative relationships. A further goal is to explore the factors that evoke trust on the part of the other party. In order to achieve these aims we empirically test the conceptual model that is drawn from the existing theory and our qualitative study. The hypotheses are tested, on a sample of 263 persons in multiple industries.

2. Theoretical background

Dimensions of trust

Research on trust in inter-organizational contexts has identified two major types – or dimensions: competence-based and goodwill trust. *Competence-based trust*, i.e., the set of skills in which trust is placed, includes, besides *competence* [22], *expertise* [18], *ability* [8], *expertness* [15], and *capability* [4]. It refers to skills and characteristics [21], and to a perception of, or a belief in, the other party's ability to perform, meet its obligations, and produce the desired outcomes [1]. Blomqvist [4] uses the term *capability* instead of *competence* in order to better describe future-oriented cooperation and the skills and knowledge required. As in Mayer et al. [21] and Blomqvist [4], *capability* is defined in this study as a group of skills, competences and characteristics that enable people to do the things they are supposed to do, which includes technological/service/product and

business capability, and inter-organizational communication skills. The *capability* layer includes technological and business capability, and the ability to cooperate. [4, 175-176]

Goodwill trust [26] refers to the trust held by one party that the other party intends to behave in a mutually beneficial way [16]. It also includes the extent to which one party is believed to want to respect and act in the interests of the trusting party, and to be loyal, honest, fair, understanding, and responsible [21; 4]. The goodwill component of trust can be realized either in positive behavior, or in withdrawal from negative behavior. [4, 176-177; see also 27, 38-40]

Previous research refers to other dimensions in addition to *capability* and *goodwill*, including perceptions of the intentions of the other party [1], character [28], and contractual trust [27]. An interesting related construct is *self-reference* [20], which is discussed next.

Blomqvist [4] found in an empirical study of technology partnerships that in their perceptions and evaluation of trustworthiness, organizational actors tended to evaluate how well aware the other party, on both the individual and organizational levels, was of its/his/her identity, capabilities, strengths, weaknesses, and values. Following on from the work of Luhmann [20], she names this construct *self-reference*, and suggests that it is one dimension of trust. By definition, *self-reference* means being aware of one's own identity and capabilities in relation to others, the ability to define one's own values, principals and goals, knowing what is important and meaningful and prioritizing it, and using others as a reference for self-reflection [20]. A self-referential organization balances its weaknesses by generating the necessary capabilities internally or externally.

In light of the above discussion and reasoning, we build on Blomqvist's [4] conceptualization and for this study define trustworthiness in the business context as “*an individual actor's expectation of the capability, goodwill, and self-reference of both the counterpart persons and counterpart firm*”.

Antecedents of trust

Previous research has identified several constructs that act as determinants of trust. Such are e.g. information sharing and exchange [25], conflict reduction [19], reputation [10], shared values [23], and transaction-specific investments [13]. Various other studies characterize these determinants as effects of trust, or even as dimensions of the trust construct. Existing research on the antecedents of trust in inter-organizational contexts thus gives somewhat ambiguous and controversial interpretations about linkages between trust and its causes.

In order to reach a better understanding of the concept of trust and its antecedents in inter-organizational collaborative relationships, we adopted a two-phase research design. The first phase comprised qualitative research interviews conducted with a view to identifying the key antecedents and linkages. In the second phase, a survey instrument was used to gather data in order to validate the model drawn from prior research and the findings from the first phase. This process is described in the next two sections.

3. Hypotheses development

The qualitative data was gathered in both focus-group (four sessions, 22 interviewees) and individual (six interviewees) interviews in the interests of data triangulation. The advantage of focus groups is largely to do with the group dynamics and obtaining a variety of perspectives, whereas semi-structured individual interviews provide deeper information and understanding. The transcriptions of the conversations were coded and analyzed using Atlas/Ti qualitative analysis software. The interviewees were from technology industries and firms of varying sizes, and dealt with inter-organizational collaborative relationships on a regular basis, i.e., they were key boundary-spanners in their firms. They comprised upper-level and middle-level managers, and people on operational levels.

The results of the qualitative phase revealed that, in general, when evaluating the trustworthiness of the other party – whether an individual or an organization, trustors looked for signs of trustworthiness in both past and current interaction. Especially at the very early stages of the relationship, the *reputation* of the other party strongly affected perceptions of its trustworthiness. Prior research also offers some empirical support for the argument that a good reputation is positively related to trust on both the individual and the organizational level [e.g. 10].

It is thus hypothesized that:

H1. There is a relationship between the reputation of the counterpart person and trust in him/her.

H2. There is a relationship between the perceived reputation of the counterpart firm and trust in it.

Secondly, the interviewees stressed the importance of *experience* when perceptions about trustworthiness are formed. They were mainly referring to experience of the other party, but the number of past and current relationships and related experiences also came up in our qualitative data as factors that could affect the trust-development process. Experience refers to both relationship-specific experience and experience of collaborative relationships in general. The length of the relationship is acknowledged to have a positive influence on the perceived trustworthiness of the other party [10].

The above discussion leads to next hypotheses, suggesting that:

H3. There is a relationship between experience of a counterpart person and trust in him/her.

H4. There is a relationship between experience of a counterpart firm and trust in it.

Thirdly, the qualitative data revealed that not only the trustee's reputation and the trustor's experience, but also the signs and signals of the other party's capabilities, goodwill and self-reference are interpreted in the light of actual and current *behavior*. The trusting party is looking for consistency, i.e. reliable and predictable behavior. Openness, e.g., a willingness to share ideas and information freely, is an important sign to the other party, especially in the early stages of the trust-formation process, when there is not yet any personal or subjective experience of the other.

In more formal terms, the next hypotheses suggest that:

H5. There is a relationship between the behavior of the counterpart person and trust in him/her.

H6. There is a relationship between the behavior of the counterpart firm and trust in it.

The link between experience and behavior is based on evidence from our data that experience of the other party and of collaborative relationships in general is related to their number and length. Behavior, on the other hand, is connected to perceptions of the quality of the trustworthiness assessments. Furthermore, analysis of the qualitative data also stressed the existing of trust on both inter-personal and inter-organizational level. The whole of the above discussion and the reasoning behind it is summarized

in Figure 1 below, which depicts the research framework.

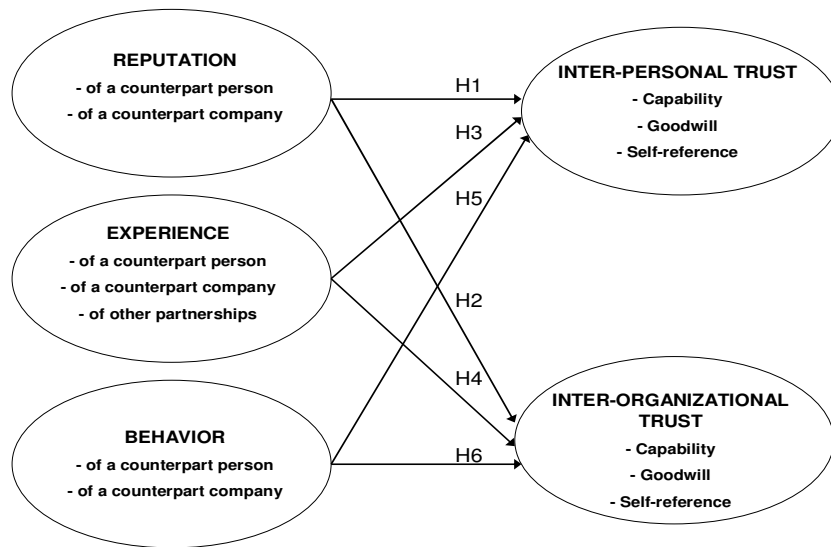


Figure 1. The research framework

4. Methods

Research design and instrument development

The preliminary questionnaire was formed after a review of scales in prior research. Where possible, items validated in prior studies were utilized, the rest were specially developed for this study. Next, the questionnaire was pre-tested with a sub-sample of respondents from the final sample population. Principal component analysis (PCA) with oblique rotation was conducted for each factor separately. These survey-development stages resulted in the final set of 57 items, of which 22 concerned antecedents of trust and 35 the trust construct. Measures for antecedents of trust were adapted from Doney and Cannon [10], Ganesan [13], Möllering [24], and Heimeriks [17]. Seven items were self generated. Items used to measure trust in both inter-personal and inter-organizational level were adapted from Ganesan [13], Cummings and Bromiley [6], Smith & Barclay

[28], Doney and Cannon [10], and Coote et al. [5]. Eight of the items were self-generated.

Multiple technology-field firms of varying sizes were selected as a target-group to data-collection from a member register of the Finnish Technology-industries Association. Respondents were from various organizational levels, all dealing with inter-organizational partnerships. The questionnaire was sent to 1,079 respondents. Altogether 263 usable responses were received, giving a response rate of 24,7%. As the test of non-response bias (one-way ANOVA) showed no differences between the early and late respondents in terms of the modeled constructs and demographic characteristics, non-response bias is not seen to be a problem in this data [3]. The composition of the data sample is depicted in Table 1.

Table 1. Data sample composition

COMPANY CHARACTERISTICS	% ^a
Number of employees	
1-19	14.1
20-49	28.1
50-99	15.6
100-249	14.4
250-999	9.5
> 1,000	17.5

Turnover, €/year	
< 2,000,000	13.7
2,000,000 - 9,999,999	34.2
10,000,000 - 19,999,999	15.2
> 20,000,000	34.6
Industries	
Electronics & electrical engineering	8.0
Machinery engineering & metals	72.2
ICT	11.8
Other	8.0
RESPONDENT CHARACTERISTICS	
<i>%^a</i>	
Position in company	
Employee (worker or team supervisor)	6.8
Director of the unit/department	17.9
Director of the whole company	62.7
Expert, no subordinates	8.7
Expert with subordinates	1.3
Other	1.1
PARTNERSHIP CHARACTERISTICS	
<i>%^a</i>	
Type of partnership^b	
Buyer relationship	41.4
Supplier relationship	53.6
Marketing-collaboration relationship	7.2
R&D relationship	23.6
Joint-manufacturing relationship	14.8
Other	4.2
Duration of this partnership	
< 1 year	0.4
1 year < 2 years	3.4
2 years < 5 years	22.1
5 – 10 years	27.4
> 10 years	46.4

^a Responses with missing values are excluded from these figures.

^b More than one option could be chosen

A confirmatory factor analysis (CFA) was performed for each factor prior to the hypothesis testing in order to assess the reliability and validity of our measures. LISREL 8.5 with Maximum Likelihood was used to estimate the correspondence of the measurement model with the factor structure derived from the theory. We chose CFA (instead of exploratory factor analysis) in order to have a strict assessment of unidimensionality [14]. Items having extensive shared residual variance and large modification indices were dropped out one-by-one in order to achieve unidimensionality and to improve the model fit. The

items that remained for final analysis are listed in Appendix 1.

Reliability and validity

The resulting CFA indicated that all the remaining items loaded statistically significantly on the constructs to which they were assigned. The fit indices from the second-order analysis are reported in Table 2 below. Overall, the measurements are acceptable, meeting the suggested limits (GFI > .900, RMSEA < .06, NFI > .900, AGFI > .900). [9]

Table 2. The fit indices of the constructs

Construct	X ²	df	p-value	RMSEA	NFI	GFI	AGFI
Inter-personal trust	35.25	32	.317	.022	.964	.967	.943
Inter-organizational trust	50.02	32	.222	.052	.968	.954	.920
Antecedents/inter-organizational level ^a	6.773	4	.148	.058	.990	.987	.951
Antecedents/inter-personal level ^a	8.195	8	.415	.011	.985	.987	.996

^a Except the Experience-construct (measured on single items)

Tests were also conducted to ensure that the model functioned as expected. Table 3 gives the CFA results, and Table 4 the factor intercorrelations for both construct levels. As far as antecedents are concerned, however, the *composite* or *construct reliability* (CR: Behavior/inter-personal: .761; reputation/inter-personal: .852; behavior/inter-organizational: .895; reputation/inter-organizational: .914.) and *average variance explained* (AVE: Behavior/inter-personal: .449; reputation/inter-personal: .664; behavior/inter-organizational: .635; reputation/inter-organizational: .780) analyses are sufficient indicators that the measurement model is acceptable. The results of these analyses also indicate that the values were quite well within the suggested limits: CR > .6 and AVE > .5 [9,

89-91]. The item loadings proved to be high and statistically significant, i.e., the T-values exceeded the critical limit of 2.576 (.01 significance level), thus demonstrating the reliability and convergent validity of the model. The correlations between the dimensions, the squared correlations, and the AVE values demonstrate acceptable discriminant validity [12]. The test results reported above reveal strong evidence of the reliability and validity of our model. All in all, the measures demonstrate the solid psychometric properties required for testing our hypotheses. Furthermore, the analyses support the conceptualized three-dimensional model of trust on both the inter-personal and inter-organizational levels.

Table 3. The CFA results for the constructs of inter-personal and inter-organizational trust

ITEMS	R ²	LOADING	T-VALUE	CR	AVE
<i>Inter-personal trust / capability</i>					
TPERCAP1	.425	.652	1.000 ^a	.689	.425
TPERCAP4	.350	.592	6.641		
TPERCAP7	.490	.700	7.402		
<i>Inter-personal trust / goodwill</i>					
TPERGW1	.709	.842	1.000 ^a	.825	.613
TPERGW5	.537	.733	10.833		
TPERGW6	.593	.770	11.425		
<i>Inter-personal trust / self-reference</i>					
TPERIDE2	.706	.840	1.000 ^a	.855	.599
TPERIDE3	.570	.755	12.023		
TPERIDE4	.717	.847	13.945		
TPERIDE6	.397	.630	9.524		
<i>Inter-organizational trust / capability</i>					
TCOMCAP3	.389	.624	1.000 ^a	.775	.539
TCOMCAP5	.497	.705	8.135		
TCOMCAP6	.731	.855	9.112		
<i>Inter-organizational trust / goodwill</i>					
TCOMGW4	.806	.898	1.000 ^a	.933	.823
TCOMGW5	.918	.958	21.810		
TCOMGW7	.743	.862	18.004		
<i>Inter-organizational trust / self-reference</i>					
TCOMIDE1	.803	.896	1.000 ^a	.928	.763
TCOMIDE2	.876	.936	21.410		
TCOMIDE3	.728	.853	17.426		
TCOMIDE4	.643	.802	15.419		

^a The coefficient is fixed to 1.

Table 4. Factor intercorrelations for the dimensions of inter-personal and inter-organizational trust

Factors	TPERCAP	TPGW	TPREF	TCCAP	TCGW	TCREF
TPERCAP	.427 ^a					
TPGW	.684	.612 ^a				
Squared correlation	.468					

t-value	5.671		
TPREF	.750	.740	.599 ^a
Squared correlation	.563	.548	
t-value	6.023	7.030	
TCCAP			.539 ^a
TCGW			.424
Squared correlation			.823 ^a
t-value			.180
TCREF			4.515
Squared correlation			.844
t-value			.447
			.763 ^a
			.712
			.200
			6.615
			5.407

^a AVE

5. Results

We used linear regression analysis to test the hypotheses, and added the variables to the model according to the enter method. There were no problems with the normality of the data, i.e. the skewness and kurtosis statistics were within accepted limits. The values in the collinearity diagnostics

(Tolerance > .3; VIF < 4; Condition index < 15; Variance proportions –values not being large for more than one explanatory factor) demonstrate that multicollinearity among the independent variables was not a problem either. Furthermore, examination of the residuals showed no evidence of heteroscedasticity. The results of the analyses are reported in Table 5.

Table 5. Results of the regression analysis

Independent variables ^a	Dependent variables ^b	Standardized coefficients	R square	F _{df1,df2}	t
REPPSUM	TPCAPSUM	.540*	.291	F _{1;261} = 107.346*	10.361
	TPGWSUM	.734*	.539	F _{1;261} = 305.404*	17.476
	TPREFSUM	.610*	.372	F _{1;261} = 54.579*	12.433
COPEREXP	TPCAPSUM	.290**	.126	F _{2;257} = 18.515*	2.968
	TPGWSUM	.076	.054	F _{2;257} = 7.282	.746
	TPREFSUM	.164	.065	F _{2;257} = 8.905*	1.622
COPEREXC	TPCAPSUM	.077	.126	F _{2;257} = 18.515*	.782
	TPGWSUM	.166	.054	F _{2;257} = 7.282**	1.631
	TPREFSUM	.103	.065	F _{2;257} = 8.905*	1.019
BEHPSUM	TPCAPSUM	.490*	.240	F _{1;261} = 82.415*	9.078
	TPGWSUM	.681*	.464	F _{1;261} = 225.768*	15.026
	TPREFSUM	.527*	.278	F _{1;261} = 100.459*	15.023
REPCSUM	TCCAPSUM	.675*	.455	F _{1;261} = 217.889*	14.761
	TCGWSUM	.558*	.311	F _{1;261} = 117.748*	10.851
	TCREFSUM	.678*	.459	F _{1;261} = 221.689*	14.889
PARTNERS	TCCAPSUM	-.001	.092	F _{3;253} = 8.495	-.019
	TCGWSUM	.045	.094	F _{3;253} = 8.770*	.742
	TCREFSUM	.104***	.145	F _{3;253} = 14.295*	1.769
EXPERIEN	TCCAPSUM	.273	.092	F _{3;253} = 8.495*	4.451
	TCGWSUM	.306*	.094	F _{3;253} = 8.770*	5.004
	TCREFSUM	.353*	.145	F _{3;253} = 14.295*	5.938
PARTEXP	TCCAPSUM	.085	.092	F _{3;253} = 8.495	1.374
	TCGWSUM	-.012	.094	F _{3;253} = 8.770*	-.188
	TCREFSUM	.043	.145	F _{3;253} = 14.295*	.721
BEHCSUM	TCCAPSUM	.586*	.343	F _{1;261} = 136.398*	11.679
	TCGWSUM	.740*	.548	F _{1;261} = 316.305*	17.785
	TCREFSUM	.666*	.444	F _{1;261} = 208.612*	14.443

^a Summated scales: REPPSUM = Reputation/inter-personal level; COPEREXP = Personal experience of counterpart person; COPEREXC = Organizational experience of counterpart person; BEHPSUM = Behavior/inter-personal level; REPCSUM = Reputation/inter-organizational level; PARTNERS = Number of partnership in last 5 years;

EXPERIEN = Quality of past experiences in partnerships; PARTEXP = Length of this relationship; BEHCSUM = Behavior/inter-organizational level

^b Summated scales: TPCAPSUM = Capability/inter-personal level; TPGWSUM = Goodwill/inter-personal level; TPREFSUM = Self-reference/inter-personal level; TCCAPSUM = Capability/inter-organizational level; TCGWSUM = Goodwill/inter-organizational level; TCREFSUM = Self-reference/inter-organizational level

* $p < .001$; ** $p < .05$; *** $p < .10$

Hypothesis 1 suggesting that reputation is related to the trustworthiness of the counterpart person, and Hypothesis 2 suggesting that reputation is related to the trustworthiness of the counterpart firm are both supported in these data: reputation has a statistically significant positive impact on the perception of both inter-personal and inter-organizational capability, goodwill, and self-reference.

Hypothesis 3 predicting that experience of the counterpart person affects his or her perceived trustworthiness was only partially supported. The length of the relationship with the company and its counterpart person did have a statistically significant yet quite moderate positive effect on perceptions of the capability, and only a weak yet positive effect on goodwill and self-reference. The length of the relationship on the inter-personal-level is a stronger factor than the length of the organizational-level relationship, explaining the trust in the counterpart person.

Hypothesis 4 holds that experience of the counterpart firm affected the perceived trustworthiness towards it. Here, experience had a statistically significantly positive but quite weak effect on perceptions of capability and goodwill, and a statistically significant and positive effect on self-reference, but a moderate. On all three dimensions the quality of the experiences alone explained the effect: the other two items describing the number of partnerships and the length of the partnership in question had either a zero or a minor negative effect on perceptions of trust in the counterpart company. These results suggest, in other words, that on both inter-personal and inter-organizational levels, experience is a weak predictor of the perceived trust in the other party.

Hypotheses 5 and 6, suggesting that there is a relationship between the behavior of the counterpart person and counterpart firm, and trust in him/her/it are supported in this data: behavior was statistically significantly and positively related to perceptions of inter-personal and inter-organizational capability, goodwill, and self-reference.

In sum, the results of the study provide strong support for four of the six hypotheses. A good reputation has a strong positive impact on perceptions of all three dimensions of trust on both the inter-personal and the inter-organizational level. The behavior construct also has a strong effect on perceptions of capability, goodwill, and self-reference on both levels. The positive effect was particularly prominent on the inter-organizational level. A noteworthy finding is that reputation and behavior appear to have a strong and positive effect on perceptions of trust on all three dimensions. Furthermore, this strong effect exists on both the inter-personal and inter-organizational levels.

The number and extent of earlier experiences, on the other hand, do not seem to affect trust in the other party to any great extent, on neither the inter-personal nor the inter-organizational level, although earlier positive experiences explain most of the effect on the inter-organizational level. These somewhat unexpected findings may indicate that it is merely the current behavior of the other party that breeds trust, not past experience or familiarity. It seems that companies tend to rely on the reputation of the other party, especially during the early phases of collaboration, and later when the relationship has developed they evaluate its trustworthiness continuously.

6. Discussion and conclusions

All in all, the results of our study contribute to the theoretical discussion in two significant ways. Firstly, they give support to the notion of trust as a multi-dimensional concept incorporating capability, goodwill, and self-reference on both the individual and the organizational level. In terms of the capability and goodwill dimensions, the findings confirm the results of prior research [27; 21; 4]. Goodwill as a dimension of inter-organizational trust is a new and interesting finding, however, and the self-reference dimension brings a new and significant insight into the research, having been touched upon only once [4] prior to this study. Secondly, a good reputation and current behavior were found to enhance both inter-personal and inter-organizational trust. Reputation has been acknowledged to be an antecedent of trust [2; 13], but the construct of behavior [4] as such is seldom mentioned in the theoretical or empirical literature.

Furthermore, the finding that experience of the other party and of collaborative relationships does not breed trust is somewhat contradictory to earlier results [e.g., 2; 10]. The results of this study indicate that both the inter-personal and inter-organizational levels have to be taken into account in the conceptualization, operationalization, and measurement of trust in inter-organizational settings. Further, the relevance of a three-dimensional definition that includes self-reference is substantiated in these settings.

The results of this study also have significant implications for practitioners. It has repeatedly been shown that trust has positive effects on both firm and inter-firm management and performance. Therefore it is obvious that managers need to pay attention to, and to invest in, the conscious development and maintenance of the trustworthiness of their firm. This requires an emphasis on maintaining one's good reputation by constantly behaving in a manner signaling one's own capabilities, goodwill, and self-reference: one cannot count on the length of the relationship. Furthermore, both levels of trust really count in relationships between firms.

Finally; this study is not without limitations. Given the national context of the study, the results may not be generalizable throughout the cultures and environments in which firms function. Furthermore, even though the study concerned the field of technology, which is quite wide, care must be taken in generalizing the results. Researchers are thus encouraged to validate them on samples from other industries (such as services), countries, and cultures.

7. References

- [1] Andaleeb, S.S. (1992). The trust concept: Research issues for channel distribution. *Research in Marketing*, 11, 1-34.
- [2] Anderson, E. & Weitz, B. (1989). Determinants of continuity in conventional industrial channel dyads. *Marketing Science*, 8(4), 310-323
- [3] Armstrong, J.S. & Overton, T.S. (1977). Estimating non-response bias in mail surveys. *Journal of Marketing Research*, 14, 396-402.
- [4] Blomqvist, K. (2002). *Partnering in the dynamic environment: The role of trust in asymmetric technology partnership formation*. Doctoral thesis, Acta Universitatis Lappeenrantaensis.
- [5] Coote, L., Forrest, E. J. & Tam, T. W. (2003). An investigation into commitment in non-Western industrial marketing relationships. *Industrial Marketing Management*, 32(7), 595-604.
- [6] Cummings, L.L. & Bromiley, P. (1996). The organizational trust inventory (OTI): Development and validation. In: Kramer, R.M. & Tyler, T.R. (Eds.), *Trust in organizations: frontiers of theory and research*. SAGE Publications, Thousand Oaks.
- [7] Denize, S. & Young, L. (2007). Concerning trust and information. *Industrial Marketing Management*, 36, 968-982.
- [8] Deutsch, M. (1960). The effect of motivational orientation upon trust and suspicion. *Human Relations*, Vol. 13, 123-139.
- [9] Diamontopoulos, A. & Siguaw, J.A. (2000). *Introducing Lisrel*. Sage Publications, London.
- [10] Doney, P. M. & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 6, 35-51.
- [11] Dyer, J.H. & Chu, W. (2000). The determinants of trust in supplier-automaker relationships in the US, Japan, and Korea. *Journal of International Business Studies*, 31(2), 259-285.
- [12] Fornell, C. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- [13] Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, 58, 1-19.
- [14] Gerbing, D.W. & Anderson, J.C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 25, 186-192.
- [15] Giffin, K. (1967). The contribution of studies of source credibility to a theory of interpersonal trust in the communication department. *Psychological Bulletin*, Vol. 68, 104-120.
- [16] Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal*, 38, 85-112.
- [17] Heimeriks, K. (2004). *Developing alliance capabilities*. Eindhoven University Press, Eindhoven.

- [18] Hovland, C.I., Janis, I.L. & Kelley, H.H. (1953). *Communication and persuasion*. Yale University Press, New Haven.
- [19] Leonidou, L.C., Talias, M.A. & Leonidou, C.N. (2008). Exercised power as a driver of trust and commitment in cross-border industrial buyer-seller relationships. *Industrial Marketing Management*, 37, 92-103.
- [20] Luhmann, Niklas (1979). *Trust and power*. John Wiley & Sons.
- [21] Mayer, R.C., Davis, J.H. & Schoorman, F.D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- [22] Mishra, A. (1996). Organizational responses to crisis: The centrality of trust. In: R.M. Kramer & T.R. Tyler (eds.). *Trust in organizations – frontiers of theory and research*. Sage, London.
- [23] Morgan, R.M. & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.
- [24] Möllering, Guido (2002). Perceived trustworthiness and inter-firm governance: empirical evidence from the UK printing industry, *Cambridge Journal of Economics*, 26(2), 139-160.
- [25] Plank, R. E., Reid, D. A. & Pullins, E. B. (1999). Perceived trust in business-to-business sales: A new measure, *Journal of Personal Selling and Sales Management*, 19 (3), 61-71.
- [26] Ring, P.S. & Van de Ven, A. (1994). Developmental processes of cooperative inter-organizational relationships. *Academy of Management Journal*, 19, 90-118.
- [27] Sako, M. (1992). *Prices, quality and trust: Inter-firm relations in Britain and Japan*. Cambridge University Press, Cambridge.
- [28] Smith, J.B. & Barclay, D. W. (1997). The effects of organizational differences and trust on the effectiveness of selling partner relationships. *Journal of Marketing*, 61, 3-21.
- [29] Strickland, L.H. (1958). Surveillance and trust. *Journal of Personality*, 26, 20-215.

Appendix 1. Questionnaire items

MEASURES AND ITEMS	ADAPTED FROM
Antecedents of inter-personal trust	
<i>Behavior</i>	
The contact person maintains regular contact with us	Doney & Cannon (1997)
The contact person is not open in dealing with us	Ganesan (1994)
If problems such as shipment delays arise, the contact person is honest about them	Ganesan (1994)
The contact person has done everything s/he can for our collaboration	Plank et al. (1999)
<i>Reputation</i>	
The contact person has a reputation for being honest	Ganesan (1994)
The contact person is known to be a person who takes care of his/her partners	Doney & Cannon (1997)
The contact person has a reputation for being fair	Ganesan (1994)
<i>Experience</i>	
How long has this contact person been dealing with you?	Doney & Cannon (1997)
How long has this contact person been dealing with your company?	Doney & Cannon (1997)
Antecedents of inter-organizational trust	
<i>Behavior</i>	
The partner company treats us well	Möllering (2002)
The partner company continuously seeks to maintain a good relationship with us	Möllering (2002)
The partner company keeps its promises	Doney & Cannon (1997)
The partner company is genuinely concerned that our business succeeds	Doney & Cannon (1997)
The partner company sometimes acts unpredictably or inconsistently (R) ^b	New item
<i>Reputation</i>	
The partner company has a reputation for being capable	New item
The partner company has a reputation for being honest	Doney & Cannon (1997)
The partner company has a reputation for being fair	Ganesan (1994)

<i>Experience</i>	
How many partnerships has your company had during last five years? ^c	Heimeriks (2004)
What kind of experiences does your company have of these partnerships? ^d	New item
For how long has your company been in partnership with this company? ^e	Doney & Cannon (1997)
Inter-personal trust	
<i>Capability</i>	
The contact person knows this branch well	Smith & Barclay (1997)
The contact person has good business know-how	New item
The contact person is not a real expert (R)	Plank et al. (1999)
<i>Goodwill</i>	
The contact person is open when dealing with us	Doney & Cannon (1997)
The contact person is not trustworthy (R)	Doney & Cannon (1997)
The contact person could take advantage of me if it would benefit him/her	Smith & Barclay (1997)
<i>Self-reference</i>	
The contact person is aware of his/her own potential	New item
The contact person is aware of his/her own goals	New item
The contact person has good self-knowledge	New item
The contact person is aware of the strengths of the products/services of the company s/he represents	New item
Inter-organizational trust	
<i>Capability</i>	
The products/services of our partner company are of good quality	New item
The partner company knows how to price its products/services profitably	New item
The partner company has the necessary technological know-how	New item
The partner company has the necessary business know-how	New item
<i>Goodwill</i>	
When making important decisions, the partner company also considers our welfare	Doney & Cannon (1997)
The partner company keeps our best interests in mind	Doney & Cannon (1997)
The partner company also wants us to succeed	Doney & Cannon (1998)
<i>Self-reference</i>	
The partner company is aware of its own capabilities	New item
The partner company has a clear understanding of its own potential	New item
The partner company is aware of its goals	New item
The partner company is aware of its values	New item

Unless indicated otherwise, the items are measured on a seven-point Likert scale (ranging from 1 – *Strongly disagree*, to 7 – *Strongly agree*).

^{a, e} 1) Under 6 months, 2) 6 months-under 1 year, 3) 1 year-under 2 years, 4) 2 years-under 5 years, 5) 5-10 years, 6) over 10 years

^b (R) Reverse-scored items

^c 1) 1-5, 2) 6-10, 3) 11-20, 4) 21-50, 5) over 50, 6) don't know

^d Scale 1 (mainly negative) – 7 (mainly positive)

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