

**Trust and Risk in Business Networks:  
Towards a Due Diligence for Electronic Commerce**

**Melanie Fritz**

*Division of Business Management, Organization and Information Management,  
Department of Food and Agricultural Economics, University of Bonn,  
Meckenheimer Allee 174, D-53115 Bonn, Germany,  
m.fritz@uni-bonn.de*



**Paper prepared for presentation at the 99<sup>th</sup> EAAE Seminar 'Trust and Risk in Business Networks', Bonn, Germany, February 8-10, 2006**

*Copyright 2006 by Melanie Fritz. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

# Trust and Risk in Business Networks: Towards a Due Diligence for Electronic Commerce

*Melanie Fritz*

*Division of Business Management, Organization and Information Management,  
Department of Food and Agricultural Economics, University of Bonn,  
Meckenheimer Allee 174, D-53115 Bonn, Germany,  
m.fritz@uni-bonn.de*

## Abstract

This paper develops a due diligence for electronic transactions with new partners in business networks with complex goods such as food products to enable the use of e-commerce potentials in first time transactions. The e-commerce due diligence is a means to reduce perceived risks and uncertainties for businesses and create trust and confidence in the electronic transaction with appropriate information. The paper presents a conceptual framework for the due diligence integrating the principles of transaction decision making and the four phases of a transaction process. The operationalization of the framework assigns trust signals and control elements to the four process phases to be communicated during the process.

**Keywords:** *Trust, risk, electronic commerce, first time transactions, due diligence, food networks*

## 1 Introduction

Business networks are situations where companies in principle act in relatively stable relationships where complex products are exchanged along the production chain and where the product quality is difficult to analyze and needs explanations. However, dynamic changes in the supply or demand situation repeatedly force companies to start new relations to open new supply sources and to find new markets for their products. E-commerce with its potentials for market transparency and transaction efficiency opens a wide range of opportunities to start new business relations. Transactions with new partners in general involve various uncertainties and risks, though. This is particularly true for complex products such as, e.g., food products. E-commerce is often considered as anonymous, which enhances the perception of risks and uncertainties as opposed to the traditional way of starting new relations where decision makers often rely on their personal impression of a potential business partner.

To reduce risk and uncertainties in transactions with a new partner, many different kinds of information need to be communicated between seller and buyer to create trust and confidence in the transaction process and to lead to decisions for the transaction. This information includes, a.o., hard information about product characteristics and production methods as well as soft information such as the impression of a potential partner. In e-commerce environments being based on information and communication technology, the support and provision of new potentials of information and communication is inherent. It offers a wide range of opportuni-

ties to provide and exchange information and support communication between businesses. However, it is not known which information needs to be communicated in electronic transaction environments to support the set-up of transactions with new partners and how the communication of this information can be supported electronically.

Due diligence is a mechanism known in company mergers and acquisitions and refers to the reduction of risks and uncertainties from the transaction through the provision of information about the company, its organization, or its market (Berens et al., 2005). It is the objective of this paper to develop a due diligence for electronic transactions with new partners in business networks with complex goods. The due diligence is meant as a means to reduce perceived risks and uncertainties for the businesses and create trust and confidence in the transaction with appropriate information. The paper first introduces the application scenario of business networks in more detail and describes the problem situation and food networks. Next, it develops a conceptual framework for e-commerce due diligence and operationalizes the framework.

## **2 Application scenario food networks**

In food networks, transactions between companies take place to exchange goods between the different levels of the value chain (Zylbersztajn, 1996; McCorriston, 2002). Often, transactions occur within a network of companies with relatively stable relationships (Galizzi, Venturini, 1999; O'Reilly et al., 2003). This phenomenon is caused by the need for explanation of food products where certain quality characteristics cannot be determined in the product at hand and the resulting information asymmetry between buyers and sellers (see Akerlof, 1970; Nelson, 1970). In these networks, varying supply and demand situations in food networks caused by production conditions and consumption dynamics regularly create the urgency for companies to search for new buyers and for new suppliers outside an existing network. This is particularly true for perishable food products. However, fragmented and therefore intransparent food markets, the complexity of food products causing an information asymmetry between sellers and buyers create uncertainty and induce buyers to perceive risks, in particular in a first transaction with a new and so far unknown transaction partner. This is particularly true when it comes to food products only to acquire on international markets where not only uncertainties caused by differences in legal systems come into play, but also cultural differences between business partners are a barrier for effective communication (see Hofstede et al., 2002).

To overcome uncertainties and perceived risks, sellers and buyers need information, e.g., about the partner, his trustworthiness, production method, payment habits, or supervision and control opportunities. Various control and safeguard mechanisms have emerged as communication device of such information in food networks. They include quality signs, third party auditing, or guarantees. The search, analysis, and monitoring of this information to reduce the transaction risk are transaction costs (Williamson, 1985) is an upfront investment for companies. An important supplement and sometimes substitute for control and safeguards in transactions is trust between transaction partners (Fynes et al. 2001). Control and trust in transactions are highly interlinked and complex mechanisms. Trust between transaction partners is of interest for the efficiency of transactions as it is less costly than control and safeguards (see Dyer, 1997, Zak, Knack, 2001). Trust in relationships between buyers and sellers lowers transaction

costs by reducing, e.g., the efforts for contracting or the costs for control and monitoring (Dyer, Chu, 2000; Wilson, Kennedy, 1999). This is why trust in transactions is often considered as an economic asset creating value. Literature provides many definitions of trust in business relationships, but their essence is that trust is one party's belief that the other party will not exploit its vulnerabilities (see Barney, Hansen, 1995) and builds on obligations and expectations (Koenig, Van Wijk, 1991). In general, trust is an expectation into the future behavior of others and a mechanism to reduce complexity in a social decision situation (Luhmann, 2000).

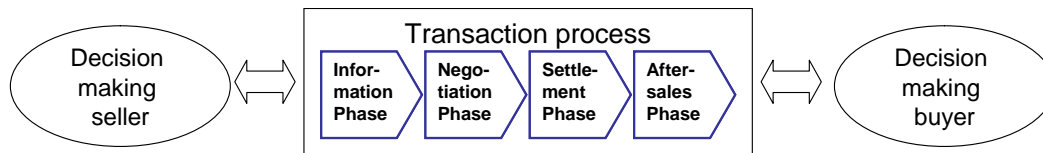
Electronically supported transactions, also referred to as electronic commerce, offer support potentials for both the efficient organization and coordination of transactions within existing buyer-seller relationships (Hausen, 2005; Hausen et al., 2006) as well as the identification of new transaction partners. Next to transaction process efficiency, e-commerce increases market transparency and market coverage and therefore opens access to new suppliers and markets including international marketing opportunities. At present, potentials from electronic commerce for the efficient organization of transactions are increasingly utilized within existing relationships in food networks (Fritz et al., 2004). However, controversial to its potentials electronic commerce is only reluctantly exploited for the setup of new relationships in food networks. Reasons for this are that electronic commerce transaction environments are often perceived as anonymous as trustworthiness and control mechanisms are not appropriately and sufficiently communicated. A so far unsolved question concerns the appropriate selection and communication of trust and control elements in electronic transaction environments to support the set up of new buyer-supplier relationships in food networks.

### **3 Conceptual framework for e-commerce due diligence**

The development of a due diligence for e-commerce transactions in food networks to create trust and confidence is a complex problem without clear cause and effect relations as it intends to influence human decision making and behavior and involves the dynamics of a marketplace as well as unforeseeable changes in supply and demand situations. In general, the identification of a solution for complex problems requires the knowledge of different scientific areas to include different perspectives on the problem (Kirsch, Trux, 1981).

Transactions are realized in an interaction, communication and decision process between two partners, seller and buyer. On a more disaggregated level, a transaction process consists of different phases, the information, negotiation, settlement, and after sales phase (Hausen, 2005). In these phases, both seller and buyer decide upon the continuation of the process.

The conceptual framework for e-commerce due diligence presented in this paper puts the principles of decision making in transactions in the center of all further considerations. It links the requirements from decision making to the transaction phases and considers the four transaction phases as structuring element for the identification of information and communication elements suitable to influence the decisions (see Figure 1. Starting point for conceptual framework1).



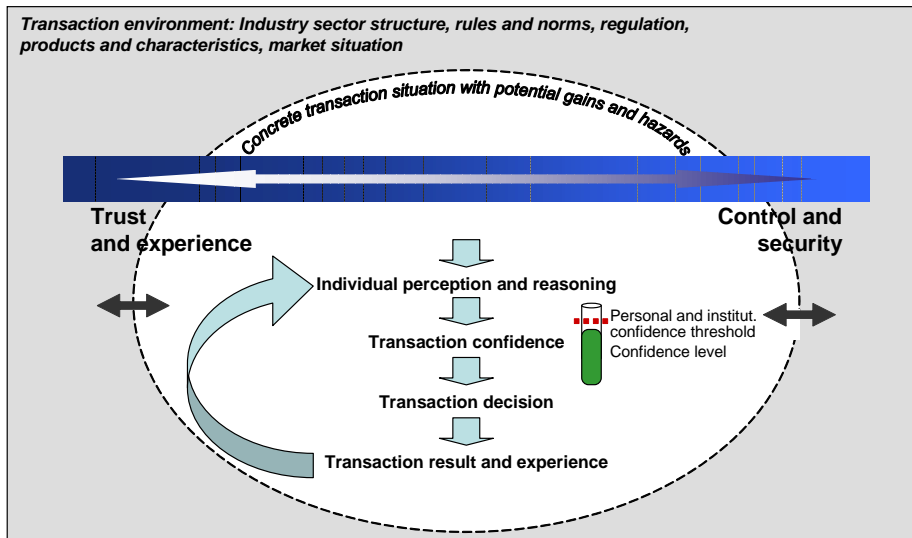
**Figure 1.** Starting point for conceptual framework

### 3.1 *Transaction decision making principles*

Transaction decisions are embedded in the transaction scenario (see Figure 2. Principles of transaction decision making 2, see also Tan, Thoen, 2001):

- the transaction situation with potential gains and advantages as well as risks and uncertainties for the company regarding the outcome and trust and control mechanisms in the transaction itself,
- the decision makers' individual perception and estimation of these gains, advantages, uncertainties, and risks as the perception of the relative performance of a transaction partner is essential in business-to-business transactions (Backhaus, 1990), and
- the transaction environment with external influences, including safeguards and control mechanisms as well as hazards and risks.

An individual would only take a transaction decision if perceived hazards and risks from the transaction are compensated by either expected potential gains from the transaction along with the company's strategy and objectives, an appropriate combination of trust and control mechanisms for the transaction, or a combination of both. The relationship between risks, gain, trust and control in a decision situation such as a transaction is highly complex (see Luhmann, 2000). Trust and control as determinants for transaction behavior have their origin in both the external transaction environment and the concrete transaction situation. Trust and control are inseparably linked, have a mutually reinforcing relation, are to a certain degree interchangeable (Lindgreen, 2003) and inversely proportional and contribute to the transaction decision by reducing the perceived uncertainty and risk (Selnes, 1998; Zak, Knack, 2001; Dyer, 1997). Examples are trust in the transaction partner, long term relationships, company networks, reputation, formal and informal control and security mechanisms such as quality signs, or production contracts (Gulati, Nohria, Zaheer, 2000; Ménard, Klein, 2004; Fearne et al., 2001).



**Figure 2.** Principles of transaction decision making

In a given transaction situation, an individual perceives potential risks and hazards, gains as well as trust and control mechanisms. It is important to note that this perception is socially constructed, that psychological elements guide responses to risks, and that available information influences an individual's perception, decision, and behavior (see Lobb, 2005; Verbeke, 2005). As a consequence, the individual's perception of information communicating trust signals and control mechanisms is the key to the transaction decision. To influence the decisions and transaction behavior, the existence and communication of trust and control is necessary. In case perception and reasoning leads to confidence in the transaction, it is going to be realized and the transaction decision is taken (see also Tan, Thoen, 2001). Results and experiences from the transaction influence the next transaction decision by creating a generalized expectancy, experience is then an alternative to information (Selnes, 1998, Lorenz, 1999). Repeated transactions leading to business networks are also social networks of personal relationships between business partners influencing their decisions due to trust and social control from "social embeddedness" in a society's values and moral ideas (Granovetter, 1985; Etzioni, 1988).

### 3.2 *Transaction process phases*

The e-commerce due diligence should support the appropriate design of the transaction process according to the information and communication requirements coming from the decision making principles. To contribute to the solution of the complex problem of identifying appropriate information content for the transaction phases and to provide the optimal way of communication during the transaction phases, including the demands from different transaction scenarios, contributing scientific research areas were identified (see table 1).

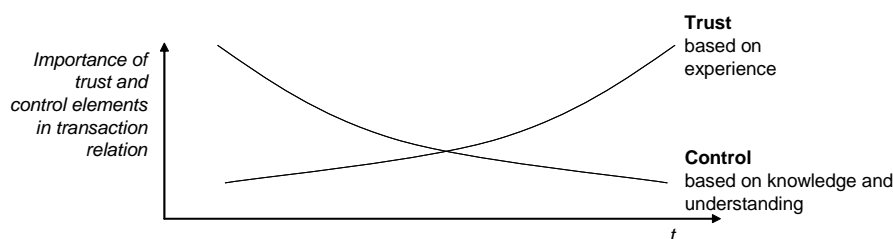
It is important to note that the information and negotiation phases take place before the actual transaction and lead to the decision for the transaction, that the settlement phase involves the actual exchange of goods and money, and that the after-sales phase occurs after the transaction has been carried out involving services and activities in case the buyer is not satisfied with the product. For the development of the e-commerce due diligence it is of fundamental importance

to identify appropriate information and communication elements for each of these phases to create trust and signal control in these transaction phases to influence the transaction decision.

**Table 1.** Research areas contributing to the development of the e-commerce due diligence

Transaction process phases	Informa- tion phase	Negotia- tion phase	Settlement phase	After sales phase
Research areas				
Decision theory	x	x		
Negotiation theory with negotiation support systems		x		
Supply chain management / logistics	(x)		x	x
B2B marketing	x	x	(x)	x
Social psychology	x	x		
Transaction cost theory	x			
Information economics	x			
Socio economics	x	x		x
Information and communication systems	x	x	x	x
Trust theory	x	x	x	x
Due diligence	x	x		

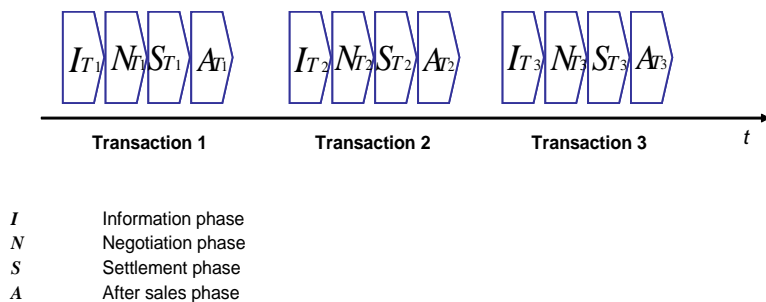
Although it is difficult to identify clear principles of cause and effect in the emergence of trust and confidence in transactions (Loose, Sydow, 1994), it is known that positive personal experience is a strong determinant for the emergence of trust and that it strongly influences decisions (Luhmann, 2000). However, the use of personal experience for trust generation and for influencing e-commerce transactions with a new partner is difficult as the decision maker receives rewards in form of a positive transaction experience only after the transaction has taken place. The relevance of information for creating trust or communicating control shifts with the length of a transaction relationship provided that it is positive. The fact that gains are expected to be realized in the future and that they are uncertain at the time of the decision makes personal experience unsuitable when it comes to the purposeful communication of appropriate information to *ex ante* compensate perceived risks. Figure 3. Shifting importance of trust and control in transaction relation<sup>3</sup> shows the dynamically changing relative importance and the inverse proportionality of trust and control elements in the course of a longer transaction relationship.



**Figure 3.** Shifting importance of trust and control in transaction relation

Figure 4. Dynamically changing transaction phases in repeated transactions<sup>4</sup> refers to the shifting need for trust or control in a transaction relation in a first or one-shot transaction (transaction 1) and in repeated transactions (transactions 2 and 3) on the disaggregated level of

transaction phases. It shows an example situation with three transactions with their transaction phases. The first buy of a complex product such as food from a new partner entails a high level of perceived risk, positive transaction experiences lower the perceived risk in future, repeated transactions (see Selnes, 1998; Anderson, Weitz, 1989). In order to influence the transaction perception and decision of the first time transaction between new partners, a different combination of trust and control elements in the transaction phases  $I_{T_1}$ ,  $N_{T_1}$ ,  $S_{T_1}$ , and  $A_{T_1}$  is required than in following, repeated transactions.



**Figure 4.** Dynamically changing transaction phases in repeated transactions

The dynamically changing requirements regarding information and communication of trust and control in repeated transactions is again interlinked with the dynamically changing situation of potential risks and gains. E.g., repeated transactions can lead to a more intense cooperation between companies. The creation of a company network is a path dependent process (Gulati et al., 2000) bringing along the risk of opportunity costs regarding the possibility of finding other, superior business partners (see Selnes, 1998).

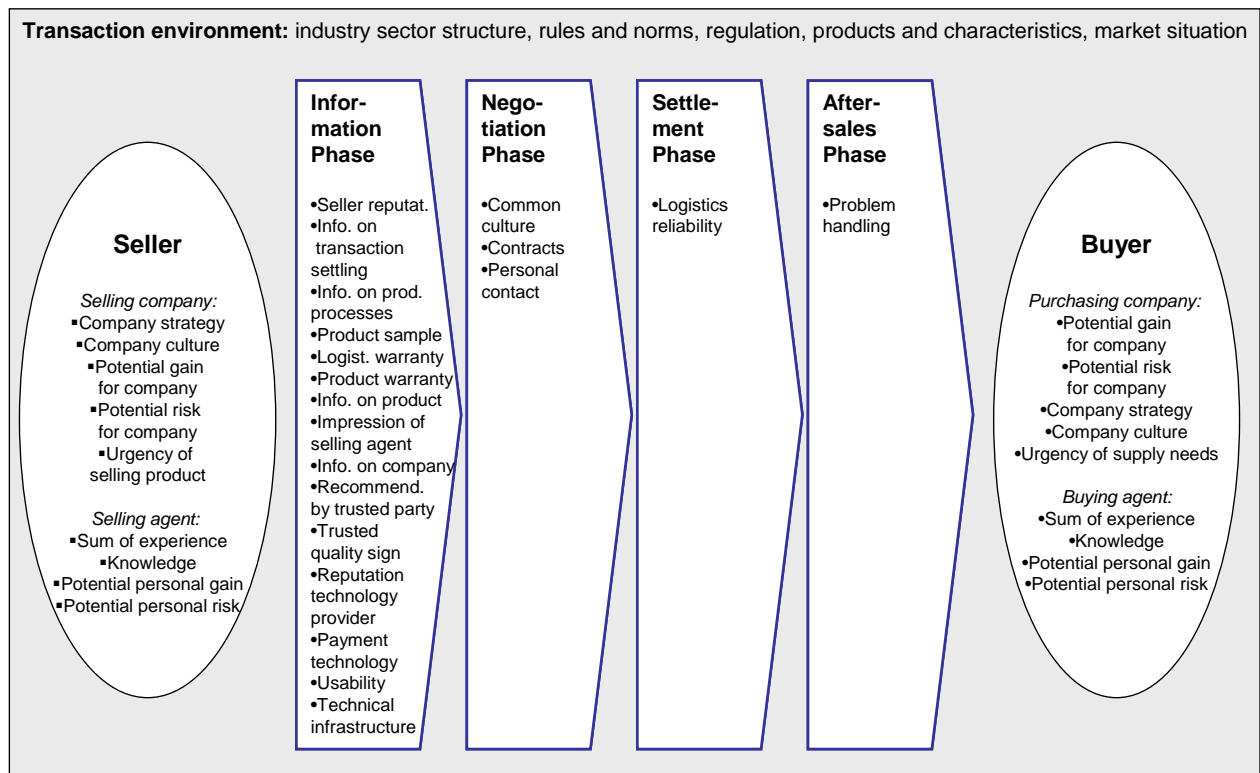
#### 4 Operationalization of the e-commerce due diligence

The e-commerce due diligence has the objective to design the information and communication during the transaction process to create trust and confidence and to enable electronic transactions with new partners. To operationalize the e-commerce due diligence, trust and control signals to be communicated during the transaction process course in electronic transactions with a new partner in food networks (see Figure 5. Determinants for transaction decisions and trust and control elements in the transaction process phases and its environment<sup>5</sup>) were derived from a literature review on trust and control elements in traditional and electronic transactions (Fritz et al., 2005) and a focus group discussion with experts in business-to-business transactions in the agrifood sector and ICT support potentials (Canavari et al., 2005).

Factors determining the buyer's and seller's perception and decision behavior in the transaction include the potential gain and risk for their companies, the companies' strategies, and cultures. The urgency of the buyer's supply needs or the seller's urgency of vending the product as well as their personal gains, risks, experiences and knowledge levels are additional influencing factors on the transaction situation. Influencing factors from the transaction environment are the structure of the industry sector and possible differences in market power, formal regulation, informal "rules of the game", norms specific to the sector, the product and its characteris-



tics as well as the current market situation of supply and demand. During the actual transaction and its phases, intense information exchange, communication and interaction takes place. This is important as frequent communication is a determinant stimulating the generation of trust. It is important to note that for different scenarios in food networks, the relative importance of certain trust signals or control elements changes (see Seidel, 2005). The provision of information and support of communication and interaction between the parties needs to be matched with options from ICT and multimedia tools.



**Figure 5.** Determinants for transaction decisions and trust and control elements in the transaction process phases and its environment

## 5 Empirical results and future research

First empirical results regarding the validity of the e-commerce due diligence were received in experiments analyzing the suitability of multimedia elements for generating transaction trust in electronic transaction environments as well as the effect from multimedia trust elements on transaction efficiency. The suitability of multimedia transaction elements for trust generation was tested in an experimental long term study for an agrifood transaction scenario where experience from past transactions is important. Different degrees of relationships between participants were realized in the electronic transaction environment to test whether multimedia trust elements raised the transaction confidence level sufficiently to make individuals engage in electronically supported transactions: anonymous, reputation, videoconference and personally known. Results show the suitability of reputation and videoconference as trust generating elements. The experimental comparison between different levels of communication support (text, audio, multimedia) in an agrifood transaction scenario and therefore trust generation showed that transactions with multimedia support were most efficient (Hausen et al., 2006).

Challenges for future research regard the further development of rules supporting the identification of an appropriate combination of trust and control elements for first time transactions in different scenarios of food networks. This includes the identification of appropriate multimedia trust and control communication as well as “real world” trust and control elements where necessary. This combination would lead to “blended commerce” building on electronic and traditional ways of communicating trust signal and control mechanisms in a transaction. The challenges lie in the derivation of appropriate multimedia elements for trust and control in agrifood transactions, the exploitation of information and communication technology and multimedia potentials to offer innovative ways to communicate trust and control, and the assessment of the interchangeability potential of trust and control elements in agrifood transactions.

## **6 Conclusions**

Business networks are situations where companies in principle act in relatively stable relationships to exchange complex products along their production chain and where the product quality is difficult to analyze and needs explanations. However, dynamic changes in the supply or demand situation repeatedly force companies to start new relations to open new supply sources and to find new markets for their products. This is particularly true for the situation in food networks. E-commerce with its potentials for market transparency and transaction efficiency opens a wide range of opportunities to start new business relations. Transactions with new partners in general involve various uncertainties and risks, though. This is particularly true for complex products such as, e.g., food products. E-commerce is often considered as anonymous, which even enhances the perception of risks and uncertainties as opposed to the traditional way of starting new relations where managers often rely on their personal impression of a potential business partner.

To reduce risk and uncertainties in transactions with a new partner, many different kinds of information need to be communicated between seller and buyer to create trust and confidence in the transaction process and to lead to decisions for the transaction. In e-commerce environments being based on information and communication technology, the support and provision of new potentials of information and communication is inherent. Due diligence is a mechanism known in company mergers and acquisitions and refers to the reduction of risks and uncertainties from the transaction through the provision of information about the company, its organization, or its market (Berens et al., 2005). This paper has discussed the development of a due diligence for electronic transactions with new partners in business networks with complex goods. The due diligence is meant as a means to reduce perceived risks and uncertainties for the businesses and create trust and confidence in the transaction with appropriate information. The conceptual framework for the due diligence is based on the principles of transaction decision making and the four phases of a transaction process. The operationalization of the framework assigns trust signals and control elements to the four process phases to be communicated during the process.

## References

- Akerlof, G. (1970). The market for "lemons": Qualitative uncertainty and the market mechanism. *Quarterly Journal of Economics* 84: 488-500
- Anderson, E. and Weitz, B. (1989). Determinants of continuity in conventional industrial channel dyads. *Marketing Science* 8: 310-323
- Backhaus, K. (1990). *Investitionsgütermarketing*. 2nd ed., Vahlen, München
- Bakos, Y. (1998). The emerging role of electronic marketplaces on the internet. *Communications of the ACM* 41 (8): 35-42
- Barney, J.B. and Hansen H. (1995). Trustworthiness as a source of competitive advantage. *Strategic Management Journal* 15: 175-190
- Berens, W., Brauner, H.U., Strauch, J. (eds.) (2005). *Due Diligence bei Unternehmensakquisitionen*. 4th ed., Stuttgart, Schäffer-Poeschel
- Canavari, M., Fritz, M., Hausen, T., Rivaroli, S., Schiefer, G. (2005). Trust building in agri-food markets with computer-mediated business relationships. *Proceedings of the EFITA/WCCA Joint Conference 2005, July 25-28, 2005, Vila Real, Portugal*: 421-429
- Dyer, J.H. (1997). Effective interfirm collaboration: How firms minimize transaction costs and maximize transaction value. *Strategic Management Journal* 18 (7): 535-556
- Dyer, J.H. and Chu, W. (2000). The Determinants of Trust in Supplier-Automaker Relationships in the U.S., Japan and Korea. *Journal of International Business Studies* 31 (2): 259-285
- Etzioni, A. (2003). Toward a new socio-economic paradigm. *Socio-economic Review* 1 (1): 105-118
- Fearne, A., Ilnornibrook, S. and Dedman, S. (2001). The management of the perceived risk in the food supply chain: A comparative study of retailer-led beef quality assurance schemes in Germany and Italy. *International Food and Agribusiness Management Review* 4 (1): 19-36
- Fritz, M., Hausen, T. and Schiefer, G. (2004). Developments and development directions of electronic trade platforms in US and European agri-food markets. *International Food and Agribusiness Review* 7 (1): 1-20
- Fritz, M., Hausen, T., Canavari, M. (2006). Trust and e-commerce in the agrifood industry: Configuration of a trust environment for e-commerce activities. In: Theuvsen, L., Spiller, A., Peupert, M., Jahn, G. (eds.). *Quality Management in Food Chains*. Wageningen (in print)
- Fynes, B., de Búrca, S. and Ennis, E. (2001). A Contingency model of quality management and business-to-business relationships. *Journal on Chain and Network Science* 1 (2): 111-122
- Galizzi, G., Venturini, L. (eds.) (1999). *Vertical relationships and coordination in the food system*. Physica-Verlag, Heidelberg
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91 (3): 481-510
- Gulati, R., Nohria, N., Zaheer, A. (2000). Strategic Networks. *Strategic Management Journal* 21: 203-215
- Hausen, T. (2005). *Elektronischer Handel. Einbettung in Geschäftsbeziehungen*. Deutscher Universitätsverlag - Gabler, Wiesbaden

- Hausen, T., Fritz, M., Schiefer, G. (2006). Potential of electronic trading in complex supply Chains: An experimental study. *International Journal of Production Economics* (in print)
- Hofstede, G.J., Pedersen, P. and Hofstede, G. (2002). *Exploring culture: Exercises, stories and synthetic cultures*. Intercultural Press, Yarmouth
- Kirsch, W., Trux, W. (1981). Strategische Frühaufklärung im Lichte einer multiparadigmatischen Forschungsperspektive. In: Müller, G., *Strategische Frühaufklärung*, PhD dissertation, Munich
- Koenig, C., Van Wijk, G. (1991). Interfirm Alliances: The Role of Trust. In: Thépot, J., Thiéart, R.-A. (eds.), *Microeconomic contributions to strategic management*. North-Holland, Amsterdam
- Lancaster, K. (1971). *Consumer demand: A new approach*. Columbia University Press, New York
- Loose, A., Sydow, J. (1994). Vertrauen und Ökonomie in Netzwerkbeziehungen – Strukturationstheoretische Betrachtungen. In: Sydow, J., Windeler, A. (Eds.). *Management interorganisationaler Beziehungen. Vertrauen, Kontrolle und Informationstechnik*. Westdeutscher Verlag, Opladen: 160-193
- Lindgreen, A. (2003). Trust as a valuable strategic variable in the food industry. Different types of trust and their implementation. *British Food Journal* 105 (6): 310-327
- Lobb, A. (2005). Consumer trust, risk and food safety: A review. *Food Economics* 2 (1): 3-12
- Lorenz, E. (1999). Trust, contract and economic cooperation. *Cambridge Journal of Economics* 23: 301-315
- Luhmann, N. (2000). *Vertrauen. Ein Mechanismus der Reduktion sozialer Komplexität*. 4th ed., Lucius & Lucius, Stuttgart
- Malone, T.W., Yates, J. and Benjamin, R.I. (1987). Electronic markets and electronic hierarchies. *Communications of the ACM* 30 (6): 484-497
- McCorriston, S. (2002). Why should imperfect competition matter to agricultural economists? *European Review of Agricultural Economics* 20 (1): 1-17
- Ménard, C., Klein, P.G. (2004). Organizational issues in the agrifood sector: Toward a comparative approach. *American Journal of Agricultural Economics* 83 (3): 750-755
- Nelson, P. (1970). Information and Consumer Behavior. *Journal of Political Economy* 78 (2): 311-329
- O'Reilly, S., Haines, M., Arfini, F. (2003). Food SME networks: Process and governance – The chase of Parma ham. *Journal on Chain and Network Science* 3 (1): 21-32
- Seidel, S. (2005). *Vertrauensbeziehungen in traditionellen und elektronischen Handelsbeziehungen der Agrar- und Ernährungswirtschaft*. Diploma Thesis, Department of Agricultural and Food Economics, University of Bonn
- Selnes, F. (1998). Antecedents and consequences of trust and satisfaction in buyer-seller relationships. *European Journal of Marketing* 32 (3/4): 305-322
- Tan, Y.-H. and Thoen, W. (2001). Toward a Generic Model of Trust for Electronic Commerce. *International Journal of Electronic Commerce* 5 (2): 61-74
- Verbeke, W. (2005). Agriculture and the food industry in the information age. *European Review of Agricultural Economics* 32 (3): 347-368
- Williamson, O.E. (1985). *The economic institutions of capitalism. Firms, markets, relational contracting*. The Free Press, New York

- Wilson, P.N. and Kennedy, A.M. (1999). Trustworthiness as an Economic Asset. *International Food and Agribusiness Management Review* 2 (2): 179-193
- Zak, P.J., Knack, S. (2001). Trust and Growth. *The Economic Journal* 111 (April): 295-321
- Zylbersztajn, D. (1996). Governance structures and agribusiness coordination: A transaction cost economics based approach. *Research in Domestic and International Agribusiness Management* 12: 245-310