

Abstract number 011-0903

Attractiveness in Buyer-Supplier Relationships: An Agenda for Empirical Research

M.Sc. (Tech.) Outi Kettunen, VTT Technical Research Centre of Finland, P.O. Box 1000, FI-02044

VTT, Finland, outi.kettunen@vtt.fi, tel. +358407601843

M.Sc. (Tech.) Anna Aminoff, VTT Technical Research Centre of Finland, P.O. Box 1000, FI-

02044 VTT, Finland, anna.aminoff@vtt.fi, tel. +358405917979

M.Sc. (Physics) Ketty Kortelainen, Nokia Siemens Networks, Karaportti 5, 02610 Espoo,

ketty.kortelainen@nsn.com, +358714004000

Professor Kari Tanskanen, Helsinki University of Technology, P.O. Box 5500, FI-02015 TKK,

Finland, kari.tanskanen@hut.fi, tel. +358505508008

POMS 20th Annual Conference

Orlando, Florida U.S.A.

May 1 to May 4, 2009

Abstract

This paper focuses on the role of attractiveness in buyer-supplier relationships. We first present a brief literature review that identifies the stream of literature that has discussed attractiveness. We start from Blau (1964) who treated the concept from the social exchange theory point of view, and then we follow the relationship management literature that deals attractiveness more from the business relationships viewpoint. While the previous research has been purely conceptual, we argue that there is a need for empirical investigation. We present a research agenda that aims to provide empirical evidence on the role of attractiveness in buyer-supplier relationships. The multiple case study involves three companies from different industries in the role of buyers and nine companies in

the role of suppliers. The unit of analysis is a buyer-supplier dyad, which will be examined at all collaborating functions and organizational levels. The study will illustrate the issues described in the literature in real cases and aims to increase understanding how the role of attractiveness differs in different business environments and situations. It also aims to identify means to systematically develop and exploit especially buyer attractiveness. In this paper we present the data collection instrument that is based on the literature review.

Introduction and motivation

The importance of managing suppliers has long been recognized among business academics. There is a vast amount of literature dealing with supplier management both from purchasing and supply chain management viewpoint. One stream of this literature has focused on the attractiveness concept in buyer-supplier relationships (for example Fiocca 1982, Olsen and Ellram 1997, Harris et al 2003, Ellegaard 2003 and 2004, Ellegaard et al 2002, Ellegaard and Ritter 2006, Cordon and Vollmann 2005, Hald and Vollman 2008). The basic argument of this stream of literature is that value is not only transferred from the supplier to the buyer, but is also created in the relationship. Therefore supplier management is not merely about management and control mechanism. Both the buyer and the supplier need to see the relationship as attractive to effectively create and transfer value (Hald et al., 2008).

Also practitioners in leading edge companies have realized the need to be an attractive collaboration partner for the most competitive suppliers. As purchasing has become more strategic and more proactive, buyers have realized that they can not simply select with which suppliers they collaborate. The best suppliers can often select with which customers they want to collaborate. While more and more of companies' innovations take place in the collaborative relationships with the suppliers, getting the preferred customer status in the eyes of the best suppliers is of utmost importance for the buying company. In order to deepen the understanding of the role of

attractiveness in buyer-supplier relationships we have started an empirical study that analyses attractiveness in three industrial companies and in nine buyer-supplier dyads. The study is still at the data gathering phase, so we are not yet able to present results from the empirical study.

Therefore we focus in this paper on the research agenda and literature review. We also present the data collection instrument that is based on the literature review.

Literature review on attractiveness

Attractiveness basically means to cause interest or pleasure and to pull someone towards you by the qualities you have, especially positive and admirable ones (Cambridge Online Dictionaries).

Attractiveness has been a phenomenon of study in the behavioural fields of social psychology, social exchange and organizational behaviour. It is concerned with interdependencies between social actors and focuses on the rewards and costs that individuals gain through interaction with each other. The human factor and the influence between people are often explained as having an important role in attractiveness. Attraction was by Blau defined as “an individual is attracted to another he expects associating with him to be in some way rewarding for himself. Expected value is the core of the construct”, and furthermore “attraction is a construct detailing or bringing the different dimensions of the expected returns from the other together into joint or desire” (Blau, 1964).

One’s attraction is seen by the other side and thus belongs to the “eye of the beholder”. However, a firm can work on its attraction in order to improve (or decrease) its attraction potential. Attraction can be used as the value (mainly rational) and the excitement (mainly irrational) of the other party (Ellegaard and Ritter, 2006). Attraction in business relationships has been described as the factor that creates voluntary commitment, which can mobilize buyer-supplier resources.

The concept of attractiveness in business relationships has also been discussed in several studies.

Heide et al. presented 1992 their study about *norms in marketing relationships*. They showed that

norms play a significant role in structuring economically efficient relationships between independent firms. In the absence of supportive norms, it is not possible for parties, whose specific assets are at risk, to acquire vertical control as per the transaction cost prescription. Instead, those parties lose control because of their dependence. Heide et al. included in their measurement statements about buyer control and buyer-specific assets, and statements concerning norm of flexibility, information exchange and solidarity. The respondents were asked to rate the statements on 7-point scale. An empirical test of the conceptual model in a sample of manufacturer-supplier relationships showed good support for the author's hypothesis.

In 1997 Olsen et al. proposed *a portfolio model for managing supplier relationships* and developed a set of propositions for managing the supplier relationships. They used as a point of departure the models developed by Fiocca and Kraljic. Olsen et al. introduce a three-step approach to analyze the relationships where step 1 is to position the purchases in suggested model where key dimensions are the strategic importance of the purchase and the difficulty of managing the purchase situation. In step 2 the firm analyses the relationships with a model where dimensions are relative supplier attractiveness and the strength of the relationship between the buyer and the supplier. Step 3 concerns developing action plans where the authors give examples and guidelines based analysis in the previous steps.

Walter et al. proposed in 2003 *a concept of direct and indirect functions of supplier relationships and analyzed their impact on relationship quality*. They measured direct and indirect functions, relationship quality and availability of alternative suppliers with altogether 44 items. Direct and indirect functions of a supplier relationship were found to be significant predictors of customer perceived relationship quality, and further, both direct and indirect functions of supplier relationships have a stronger influence on relationship quality when the availability of alternative supplier is relatively high. The paper made an innovative contribution with regard to construct measurement and developed valid measurement scales.

In 2008 Hald et al. draw attention to ways of managing in a relational model as an alternative to managing in a controlling mode. The article is based on social exchange theory. The authors follow Blau and label the force that pushes a buyer and supplier closer together in a dyadic relationship “attraction”. Blau (1964) defines attraction as “the force that induces human beings to establish social associations on their own initiative and to expand the scope of their associations once they have been formed”. The authors propose *a conceptual model of attraction* and first ideas on how to influence attraction. In the conceptual model the attractiveness is divided into three areas: value, trust and dependence, which each are divided into components. These are seen as forces that either pull the partners together or push them apart. The components are viewed as *perceptions* and viewed as both a customer and a supplier. Attraction is constructed as the combined output of complex interaction between expected value, trust and dependence.

Table 1 below draws a summary and presents elements of attractiveness as discussed in the literature both by the above mentioned authors and a few additional authors. The attractiveness has been discussed in levels of individuals and organisations.

Table 1. Elements of attractiveness as discussed in the previous literature.

Hald and Vollman 2008	Perceived expected value Perceived trust Perceived dependence
Fiocca (1982)	1) Market factors 2) Competition 3) Financial and economical 4) Technological factors 5) Sociopolitical factors
Olsen and Ellram (1997)	1) Financial and economical factors 2) Performance factors 3) Technological factors 4) Organizational and cultural factors 5) Strategic factors List is close to selection criteria.
Harris et al (2003)	<ul style="list-style-type: none"> • Economically based • Resource based • Socially based Attraction is created and maintained both between companies and individuals Similarity and familiarity
Ellegaard 2002, 2003, Ellegaard et al 2003	<ul style="list-style-type: none"> • Economically based • Resource based

	<ul style="list-style-type: none"> • Socially based <p>Attraction is viewed as a dynamic element, which is formed by the relationship and its surroundings. The approach states that attractiveness is about recognizing, analysing and understanding each of the strategic suppliers' background, business understanding, culture and thereby adapt customers' attractiveness differentiated towards each supplier, emphasizes the importance of individuals in relation to adjusting, managing and influencing the relationship according to its beliefs, culture, preference and perception. The social attraction is perceived as important.</p>
Ellegaard and Ritter (2006)	Attraction takes place between humans and not physical objects.
Cordon and Vollmann (2005)	Expected value and comfort. A long-term attraction is created through learning and knowledge transfer, which brings the parties closer together

Table 2 below presents approaches close to attractiveness – although discussed with different terminology.

Table 2. Approaches close to attractiveness in literature.

Christensen and Malz (2002) "Interesting customer"	To be an interesting customer, customer should analyze, which unique preferences suppliers have, for example when transferring knowledge, and to train suppliers in areas, which they evaluate as compensating to lower economical attraction. The customer tries to adjust itself by focusing on indirect value creation to the supplier in order to achieve greater commitment and thereby obtain own objectives.
Steele and Court (1996) Procurement marketing	<p>Prospect of ongoing profitable business.</p> <p>The certainty of prompt payment.</p> <p>The prestige that can derive from being known as a supplier to a "blue chip" organization.</p> <p>The use of simple and straight-forward procurement systems.</p> <p>The perception that there is a genuine opportunity to grow because of the association.</p> <p>The perception that the supplier is dealing with a buying organisation which is straight forward and open minded and which will not resort.</p>

Method and the research instrument

The research is conducted as a multiple in-depth case study. Unit of analysis is buyer – supplier dyad. In each three focal case company from two to four dyads are studied. Research instrument for data collection has been designed for the purposes of collecting basic data for attractiveness. The main data collection method is interviews at all collaborating functions and organizational levels

both at customer and supplier companies. From four to six interviews are performed at each buyer and two at the supplier concerning each relationship. This makes a total of approximately 60 interviews. Also a web questionnaire will be conducted to a larger group of respondents in the focal case companies. The focus of data collection is in the elements of attractiveness and their role and importance in different relationships. The companies and the relationships were selected to have views on different types of relationships and on relationships in different lifecycle stages.

The research questions are:

- What are the elements of attractiveness as a customer and as a supplier, especially related to SR process (process, practices, communication), in different circumstances?
- How are the elements viewed by different parties inside the company and on the other hand by the customer vs. the supplier?
- What are the means to influence the elements and attractiveness as a whole?
- How can the attractiveness be utilized, and how can the buyers get the suppliers involved in development and innovation?
- How to become and sustain as an attractive business partner in mature business environment?

Based on the research questions and the previous research done in this field, an interview chart was created. The conceptual model of Hald et al. (2008) was used as a starting point for the interview chart. The conceptual model of Hald is described in Figure 1.

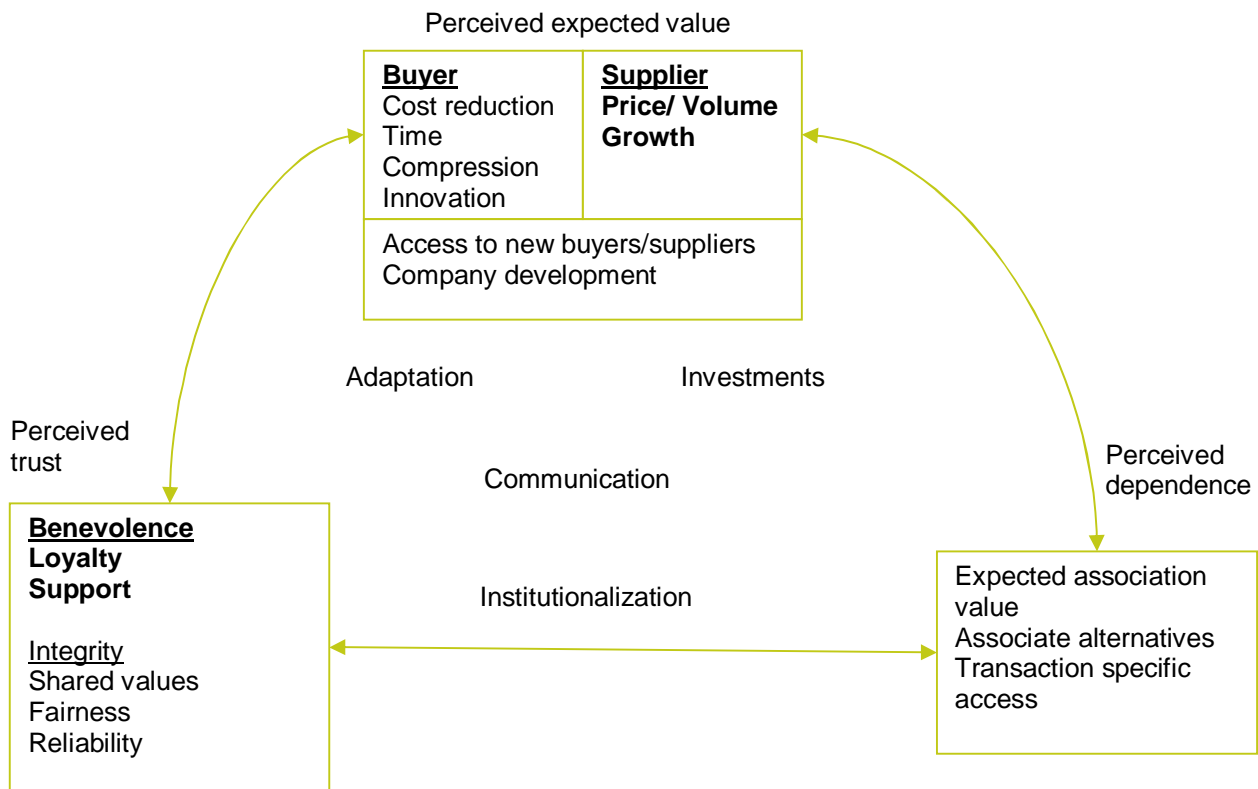


Figure 1. A conceptual model of attraction in buyer-supplier relationship. Ref: Hald K.S et al. Towards an understanding of attraction in buyer-supplier relationships

The three components of attraction, value, trust and dependence were divided into several statements based on research of Hald, and modified based on e.g. Walter (2003) and Olsen (1997). It is important to notice, that the statements measure each interviewee's view about the *perceived* value, trust and dependence.

Components of *value* include according to Hald et al. cost reduction, innovation, access to new supply chain partners and competence development from the customer viewpoint. From the supplier viewpoint the components include price, growth access to new partners and company development. We added in our interview chart statements concerning also time compression, R&D, information flow and quality. The statements in our research instrument are presented in Table 3.

Table 3. Statements of perceived expected value in the interview chart.

	Perceived expected value	1 = strongly disagree 5 = strongly agree	Importance 1 = no importance 5 = very important
Price reduction	Products are good value for money		
	Competitive purchasing prices		
Operative cost	The supplier's activities have reduced the supply chain process costs		
	The supplier's operations are efficient concerning the supply chain		
Time Compression	The time-to-market (in product development) meets our needs		
	The lead time of the supplier meets our needs		
	Supplier reacts flexibly to needs for capacity modifications		
	Supplier reacts flexibly to needs for lead time changes		
	Supplier reacts flexibly to needs for product variations		
Innovation	Our company receives ideas for product development from the supplier		
	The supplier is willing to pass innovative ideas to the customer (e.g. new SC models..)		
	Supplier's ability to develop new products or improve existing products is good		
	Supplier is able to develop our manufacturing or SC processes		
R&D	The supplier is capable and willing to update its technological competence according to our needs		
	The supplier is capable of engaging in (technical) development projects		
Information flow	Supplier gives us information about procurement market		
	Supplier gives us information about relevant third parties (e.g. technology companies, consultants etc)		
	Supplier gives us information about developments in the customer's market		
	Exchange of information in this relationship takes place frequently and informally, and not only according to a prespecified agreement		
Access to new SC partners	The relationship to the supplier gives us access to new supply chain partners e.g. by intermediation or reference		
Company development	We learn new competencies from the supplier		
	We learn a lot when working together with the supplier		
Quality	Supplier's delivery reliability is good		
	Supplier's products meet our quality requirements (e.g. functionality and reliability)		

Hald et al. see that in dyadic relationships, *trust* has a moderating influence on value perceptions of attraction. Trust is highly subjective and influenced by daily activities and thus changes rapidly.

Hald sees ability, benevolence and integrity as the components of trust, of which ability is already included in the value perception. We added to our model also social support, customer commitment and solidarity as statements of trust. The statements of perceived trust can be seen in Table 4.

Table 4. Statements of perceived trust in the interview chart.

	Perceived trust	1 = strongly disagree 5 = strongly agree	Importance 1 = no importance 5 = very important
Benevolence	When making important decisions, supplier is concerned about our welfare		
	We can openly discuss about the problems in the relationship with the supplier		
	When we have an important requirement, we can depend on supplier's support		
	We can count on supplier's promises made to us		
	The supplier is always honest to us		
	We believe the supplier would behave opportunistic if he just had a chance		
	We get assistance from the supplier when we ask it		
	The supplier is willing to invest time and other resources into the relationship with us		
	The supplier puts the long-term cooperation with us before his short-term profit		
Integrity	Supplier has a reliable reputation		
	Brand of the supplier is good		
	We can rely on the supplier handling critical information of our company confidentially		
	We are convinced that the supplier performs its task professionally		
	Supplier's values are similar to us		
	Developments benefit equally the customer and the		
	Supplier states realistic demands to the customer		
	The supplier is easy and comfortable to work with		
Supplier behaves consistent across the organisation			
Social support	The work with these partners is socially satisfying (a source of e.g. power, motivation and creativity)		
Customer commitment	We focus on long-term goals in this relationship		
	We are willing to invest time and other resources into the relationship with this supplier		
	We put the long-term cooperation with this supplier before our short-term profit		
Solidarity (Heide et al.)	The relationship is loyal: e.g. problems are treated as joint rather than individual responsibilities and parties are committed to improvements that benefit the relationship as a whole		

Perceived *dependence*, according to Hald, has a moderating influence on perceived expected value.

It can either weaken or strengthen the actor's overall perceptions of attraction. Relationship

dependence has been defined as the degree to which a buyer or a supplier needs to maintain the relationship with a supplier or a buyer in order to achieve desired goals. We measure the perceived dependence with statements concerning transaction specific assets, human specific assets, associate alternatives and expected association value. The statements in our interview chart are presented in Table 5.

Table 5. Statements of perceived dependence.

	Perceived dependence	1 = strongly disagree 5 = strongly agree	Importance 1 = no importance 5 = very important
Transaction specific assets	It would be a long and difficult process to change the supplier		
(Human) specific assets	Supplier has invested to new technology based on the customer's requirement		
	Supplier has invested to new competencies based on the customer's requirement		
	The customer has invested to new technology based on supplier's suggestions		
	The customer has invested to new competencies based on supplier's requirement		
Associate alternatives	The suppliers products are unique		
Expected association value	The products we buy from the supplier are critical to the customer's success		
	It is critical that the products are specifically from this supplier		
	We expand our business with this supplier in the future		

The interviewees are asked to rate a) the state of each statement on scale 1 = strongly disagree, 5 = strongly agree, and b) the importance of each statement on scale 1 = no importance, 5 = very important. The statements were also converted into the form "attractiveness of the customer". The customers are asked to rate the statements concerning the "attractiveness of the supplier" and also their perception about how they think the supplier sees their attractiveness as a customer. The suppliers are asked to rate the statements concerning the "attractiveness of the customer" and also their perception about how they think the customer sees their attractiveness as a supplier. The interviewees are also encouraged to give comments concerning the statements whenever they feel the need to it. The comments have turned out to be very valuable for the research.

The interviewees are also asked an opinion on five statements about control in the relationship on a scale 1 to 7 (1 = entirely decided by the supplier, 7 = entirely decided by the customer). The purpose of the statements is to have a view about who has the control concerning different matters in the relationship. The statements concerning the control in the relationship are presented in Table 6.

Table 6. Items concerning the control in the relationship in the interview chart.

Other			
<p>Note the different scale. Here you are asked to estimate the control over the below mentioned matters on scale 1 - 7: 1 = entirely decided by the supplier, 7 = entirely decided by your company. Then please evaluate the importance on the same scale as before.</p>		1 = entirely decided by the supplier 7 = entirely decided by your company	Importance 1 = no importance 5 = very important
Buyer control (Heide et al.)	Supplier's production processes and manufacturing technology		
	Ongoing design and engineering changes		
	Supplier's level of inventory (raw material, semifinished and finished components)		
	Selection of supplier's sub-suppliers		
	Supplier's quality control procedures		

In addition to the statements, some more general questions are asked. These include the following:

- information about the interviewee: position, responsibilities, work experience and relationship history with the specific supplier or customer
- main objectives of developing the relationships and the most important development projects concerning the specific supplier or customer
- general questions about attractiveness:
 - characteristics that make the supplier and the customer attractive
 - importance of the aspect of attractiveness in general and in the specific relationship
 - the improvement ideas for concerning both parties to be more attractive.

Also some necessary facts are asked about the specific relationships in order to compare certain findings with certain facts and to have a deeper insight to the factors affecting attractiveness. These facts include e.g. basic information about the purchases, performance of the supplier, relationship history, relationship specific assets, alternatives and importance of the customer to the supplier and vice versa.

The interviewees are chosen by each company and represent purchasing, development and technology areas of the company including strategic, tactical and operational levels.

Some early observations from the empirical study

The analysis phase is at the moment ongoing and is based on data only from the buyer point of view. Some very preliminary observations can be made:

- attractiveness is seen very important in a business relationship for example for the following reasons:
 - both parties invest into the relationship if they find the other party attractive
 - mutual attraction is a basis for a long term relationship
 - if there is mutual attraction, the parties give an extra effort to each other (e.g. work harder for availability of the products) which can not necessarily be obtained by paying higher prices
- attractiveness is a sum of both organizational matters and personal relationships of the individuals in both organizations
- “soft values” e.g. honesty, taking the welfare of the other party into account, social support and solidarity are seen important and as means to finally achieve monetary goals

- although the interviewees have seen almost all statements very important, some especially important aspects have risen above others:
 - flexibility of the supplier
 - communication at appropriate frequency, extent and levels – in some cases also the presence of the top management is important
 - commitment and willingness to invest time and resources into the relationship
 - open discussion about problems, confidence about the support and keeping the promises
 - social satisfaction about working with the partners
 - current and potential volume
 - global presence (when needed)
 - supply chain capability
 - product and delivery quality.

Discussion and conclusions

With the help of the literature review, important research needs in the issue of attractiveness have been identified, and the research has been directed to cover a slice of this gap. This study aims to give answers to questions about what are the elements of attractiveness in different circumstances, how the elements are viewed by different parties inside the company and on the other hand by the customer vs. the supplier, and what are the means to influence the elements and attractiveness as a whole. There are some novelty features in this study:

- both customer and supplier views are studied
- in order to get a reliable view and viewpoints from strategic, tactical and operational levels as well as from persons from purchasing, development and technology, several interviews and web questionnaires are performed in each company
- the statements in the interview chart form a kind of an analysis frame, which can later on be refined into a tool for sourcing management.

The case companies in the study each come from different industry, vary in size and are in different business situations. This on the other hand enriches the study and gives a broad view about the attractiveness in different situations; on the other hand it narrows down the results from each industry and situation.

Later on in this study the data will be analysed further, and based on the analysis, conclusions about means for improving attractiveness will be made.

References

- [1] Blau, Peter M. (1964), Exchange and power in social life, New York: John Wiley & Sons
- [2] Christiansen P.E. and Malz A (2002). Becoming an interesting customer: Procurement strategies for buyers without leverage, International Journal of Logistics, Research and Applications, Vol 5. No. 2 pp. 177-195
- [3] Cordon, C. and T.E. Vollmann (2005), "Who is the fairest of them all?", CPO Agenda.
- [4] Ellegaard, C., Johansen, J. and Drejer, A. (2003), Managing industrial buyer-supplier relations – the case of attractiveness, Integrated Manufacturing Systems, Vol. 14, No 4, pp. 346-357.

- [5] Ellegaard C., Ritter T. (2006). Customer attraction and its Purchasing potential. Working paper submission for the 22 nd IMP conference in Milan, Italy.
- [6] Ellegaard, C. (2002). The dynamics of managing supply at the dyadic relation and network level. 7th International Symposium on Logistics and the 2nd International Symposium on Operations Strategy in Melbourne, Australia, July.
- [7] Ellegaard C (2003). Management of complex industrial supplier relations – a case of a customer attractiveness. PhD Dissertation, Aalborg university
- [8] Fiocca, R. (1982), "Account portfolio analysis for strategy development", *Industrial Marketing Management*, vol. 11, pp. 53-62.
- [9] Hald, K.S., Cordon, C. and Vollmann, T.E. (2008), Towards and understanding of attraction in buyer-supplier relationships, *Industrial Marketing Management*, 2008
- [10] Harris, L.C., O'Malley, L. and Patterson, M. (2003), *Professional interaction: Exploring the concept of attraction*, Sage Publications, London.
- [11] Heide, J.B. & John, G. (1992) "Do Norms Matter in Marketing Relationships?", *Journal of Marketing*, April, pp. 32-44.
- [12] Olsen, R. and Ellram, L. (1997), A Portfolio Approach to Supplier Relationships, *Industrial Marketing Management*, Vol. 26, No. 2, pp. 101-113.
- [13] Steele, P. and Court, B. (1996), *Profitable Purchasing Strategies. A Manager's Guide for Improving Organizational Competitiveness Through the Skills of Purchasing*, McGraw-Hill Book Company Europe. Maidenhead. 235 p.
- [14] Walter, A., Muller, T.A., Helfert, G., Ritter, T. (2003) "Functions of industrial supplier relationships and their impact on relationship quality", *Industrial Marketing Management*, 32, pp. 159-169.