WHAT DO WE KNOW ABOUT BUSINESS-TO-BUSINESS INTERACTIONS?
- A SYNOPSIS OF EMPIRICAL RESEARCH ON BUYER-SELLER INTERACTIONS

Klaus Backhaus
University of Münster
Germany

Joachim Büschken
University of Münster
Germany

ABSTRACT

The evolution of research on business interactions is recollected and the need for a synopsis of findings is emphasized. A synopsis seems especially important for empirical research concerning buyer-seller interactions because of the multitude of empirical studies conducted in this area. Findings of 55 studies on vertical interactions between buyers and sellers with a focus on relationships across transaction episodes are presented. General conclusions, implications, and directions for future research are discussed.

1 Dr. Klaus Backhaus is Professor of Marketing and director of the Institute for Business-to-Business Marketing at the University of Münster, Germany (klaus.backhaus@wiwi.uni-muenster.de). Dr. Joachim Büschken is Assistant Professor of Marketing at this Institution (joachim.bueschken@wiwi.uni-muenster.de). The authors gratefully acknowledge the support from Alexander Rauch, MBA student at the Business School of the University of Münster and Research Assistant in this project, for the preparation of the material presented here.
1. THE EVOLUTION OF CONCEPTS AND THE NECESSITY OF LOOKING BACK

For more than a decade now the IMP group has influenced conceptual as well as empirical research in industrial marketing and organizational purchasing behavior. Conceptual work of this group has provided us with useful concepts to understand and explain the area of industrial marketing and particular organizational buying processes. It all started with the idea of ongoing *interactions* between a buying and a selling company and has resulted in the well known interaction model of the IMP group (Håkansson 1982). It abandoned the concept of transactions between anonymous partners making autonomous decisions as reaction to external stimuli. This SOR paradigm seems to be suitable only in an environment of pure market governance mechanism without any binding effects and no need for partners to engage in interaction with each other (Williamson 1975 and 1985). Instead, the interaction approach embraces the idea of informational, product, financial, and social exchange episodes between parties. Interaction and exchange episodes are the result of learning from experience concerning past interactions with specific (business) partners (Homans 1972, Dwyer, Schurr, and Oh 1987) and the perceived benefits and costs to be derived from exchange (Thibaut and Kelley 1959).

Inherent in the interaction approach is the observation that parties engage in *relationships* and establish contact *patterns* as a basis to enhance the effectiveness and the efficiency of transactions (Håkansson 1982, Ford 1982). It is not surprising that this model has originally been developed for industrial marketing where negotiations and face-to-face interactions are a prominent empirical phenomenon. What is more surprising is that it took so much time (until the recent years to be specific) to let the idea of interactions and buyer-seller relationships have a wide-spread impact on 'classic' consumer and services marketing - with the exception of the Nordic School of Service.
What Do We Know About Business-to-Business Interactions?
- A Synopsis of Empirical Research on Buyer-Seller Interactions


While the emergence of interactions and relationships as the conceptual domain of research of the IMP group almost 15 years ago is now seen as a general paradigm shift in marketing (e.g. Parvatiyar and Sheth 1994) the notion of industrial *networks* as sets of more than just two connected exchange relations of companies or individuals as in the classic case of dyads was developed (Håkansson 1987, Ford 1990, Axelsson and Easton 1992). As such the idea of networks emphasizes the possibility of related interactions between a multitude of connected parties. Relations between interactions stem from their mutual influence upon an object that is studied (e.g. buying behavior).

From the perspective of a researcher interested in the explanation of buying behavior a network approach is necessary if the addition of other relations than those between the buying and the selling company (on the organizational level) or between two representatives of the two organizations (on the individual level) adds significant explanatory power to the buying decision made. The importance of a network approach is evident if we look at buying centers consisting regularly of more than one person and selling centers with more than one person involved as well. Members of the buying and selling centers are embedded in relationship networks within their organizations. Furthermore, their companies themselves are often embedded in networks of vertical and horizontal relationships with other organizations. Thus, elements of the dyad as the smallest entity of interactions possibly interact with other relevant parties they are connected to. The fact that under such circumstances dyads are only part of the overall picture leads to the conclusion that with a dyadic approach 'the essential element of a network view is lost in this situation since connectedness is assumed away' (Easton 1995, p. 286). As a consequence the network approach 'is, at present, the major research direction in industrial marketing' (Cheung and Turnbull 1995, p. 242).
Conceptual work of the IMP group as well as the data collected by its members has triggered an enormous body of empirical research in the area of industrial marketing. Theoretical as well as empirical work has improved our knowledge of industrial marketing considerably. However, as Halinen (1995) notes with regard to the development of models of dyadic relationships: ‘After twenty years of research contributions the area still seems to be at an early developmental stage. There is a lack of cross-referencing between authors and the models’ (Halinen 1995, p. 552). She adds that ‘plenty of research has already been done in the area of relationships and relationship development, which is often ignored’ (p. 555). Her conclusion is that any solution to this problem ‘calls for broad and intensive reading from researchers’ (p. 555). What Halinen suggests is that especially in fast growing research areas such as business relationships and interactions the need for a regular inventory of knowledge arises. This inventory provides us with an opportunity to reflect what has already been accomplished. By that it not only prevents us from ‘reinventing the wheel’ but offers a stronger focus on what we know and which areas of future research may be fruitful.

While Halinen refers to conceptual work on dyadic relationships her conclusions apply to empirical work as well. The need for an inventory of knowledge classifying empirical studies conducted and discussing relationships of their findings increases with the number of studies within a certain area. Vertical business interactions between buyer and seller seem to be such an area. The fundamental type of interactions between buyer and seller is contingent upon context factors and buyer and seller characteristics. Resulting interaction orientations can be placed in the following categories (Campbell 1985, Möller and Wilson 1994):
What Do We Know About Business-to-Business Interactions?
- A Synopsis of Empirical Research on Buyer-Seller Interactions

- market/competition,
- control,
- cooperation.

Business interactions are analyzed from different theoretical perspectives depending on the object under study (Möller and Wilson 1994). This paper focuses on non-channel oriented empirical research because of the multitude of studies in this area without a synopsis being available. For this category we have found 55 empirical studies conducted from the 60ies until the present days published in English or German. Because of the absence of an inventory on this extensive research there is a clear need to summarize their findings which is the purpose of this paper. Although most of these studies do not employ a network approach their findings may serve as a guide for network oriented research. One may also bear in mind that influence of other relationships external to the dyad may be rather small under certain circumstances thus questioning the use of the network approach.

The diversity of research purposes of the studies underlines the need for a classification scheme for categorization. Empirical work on the basis of the IMP model is confronted with the problem that operationalization of the whole model is a virtually impossible task. This is due to the fact that the IMP model is descriptive in nature and one of its first objectives is to encompass the factors influencing interactions between two companies. Researchers must select among the various factors to come to a model that can be confronted with empirical data. Consequently, the empirical studies we have found in the area of vertical interaction in industrial markets apply only to certain aspects of interaction behavior and must be classified into different categories to understand their purpose and contributions. Time orientation may serve as a first criterion for classification (Shapiro and Bonoma 1984, Campbell 1985, Kern 1990):
- studies of transaction episodes (short term oriented) within relationships. Episode oriented studies may be categorized according to the factors influencing process or outcome of episodes:
  - influence of individuals,
  - influence of organizational factors,
  - context specific and environmental factors,
- studies on the influence of relationships on transaction episodes (short term oriented but addressing long term influences),
- studies of relationships across transaction episodes over time (long term oriented, longitudinal). Studies, using the relationship between supplier and customer as reference framework for follow-up transaction, may be divided into two categories:
  - structure and quality of relationship,
  - development and change of relationship.

This classification will guide us in the analysis of the findings the studies provide. We will not discuss the validity of measures employed for operationalization of variables or the representativity of the sample used. We assume that findings are comparable which is especially necessary with industry specific studies and such employing different methods for data gathering (observation, interviewing, case method etc.). These assumptions are necessary to derive some general conclusions. General conclusions, however, are contingent upon the validity of these assumptions. Since interactions are to a large degree determined by longer term relationships between the interacting partners if such exist (Gummesson 1995, Parvatiyar and Sheth 1994, Grönroos 1996) we will only briefly discuss findings concerning transactions episodes and instead concentrate studies on vertical relationships.

According to this classification scheme we will discuss results of studies on interactions within transaction episodes (part 2),
influence of relationships on transaction episodes (part 3), and results on relationships across transaction episodes over time (part 4). A discussion of the implications concludes this paper (part 5).

2. INTERACTION AND TRANSACTION EPISODES

Personal impacts

The results of the personal interaction studies (see table 1) generally support the hypothesis that transactions between supplier and buyer can be interpreted as social exchange processes. The behavior of buyer and seller is the result of interpersonal interactions, and cannot be explained by looking at either transaction party in an isolated way like the SOR-paradigm does. Sympathy, closeness, or trust are hypothetical constructs that are influenced by mutual perception processes. If the negotiating partners perceive mutual similarity their will for problem solving and cooperative behavior increases and the danger of conflict is lowered.
<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evans (1963)</td>
<td>Study on the sale of life insurance, comprising 68 agents and 350 customers in the USA</td>
<td>Customers willing to complete a purchase are not different from those not prepared to purchase regarding their biographic and objective features. In successful dyads, buyer and seller are more similar with regard to age, income, political beliefs, height, and even smoking habits than in unsuccessful dyads (matching rule).</td>
</tr>
<tr>
<td>Willet/ Pennington (1966)</td>
<td>Systematic observation of sale transactions of durable consumer goods in the USA</td>
<td>Successful transactions encompass numerous propositions, statements, and questions from the salesman’s perspective, many attempts of problem solving and assessment from both sides and more positive than negative social acts.</td>
</tr>
<tr>
<td>Schoch (1969)</td>
<td>Survey of the sale of cash-registers in Germany involving 194 successful and 152 unsuccessful transactions</td>
<td>Similarities between buyer and seller with regard to their origin, personal and physical attributes combined with their mutual role expectations are positively related to sales success. There is no link between sales probability and isolated distinctive features of the involved individuals.</td>
</tr>
<tr>
<td>Mathews / Wilson/ Monoky (1972)</td>
<td>Experimental study of negotiation behavior, involving 300 students in the USA</td>
<td>In dyads, perceived similarity increases the number of cooperative responses and decreases conflict choices. Vice versa for perceived dissimilarity.</td>
</tr>
</tbody>
</table>
### What Do We Know About Business-to-Business Interactions?

- **A Synopsis of Empirical Research on Buyer-Seller Interactions**

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodside/ Davenport (1974)</td>
<td>Experimental study on the sale of innovations in the USA</td>
<td>The greater the perceived expertise and similarity of the salesman with the buyer, the greater the likelihood of purchase. For an extensive problem solving stage, perceived expertise of the salesman creates a greater likelihood of purchase than perceived similarity.</td>
</tr>
<tr>
<td>Busch/ Wilson (1976)</td>
<td>Experimental study on the sale of life insurance in the USA (187 interactions)</td>
<td>A salesman in a high expert power relationship is more effective in producing the intended behavioral changes in the customer. A salesman in a high referent power relationship with a customer is perceived as more trustworthy and is more effective in producing the intended behavioral changes in a customer.</td>
</tr>
<tr>
<td>Riordan/ Oliver/ Donnely</td>
<td>Survey of 213 customers of a medium-sized American life insurance company</td>
<td>Between agents and purchasing customers (sold prospects) there is a greater attitudinal similarity than between agents and reluctant customers (unsold prospects). Dyadic variables are of high importance in the determination of the sales outcome.</td>
</tr>
<tr>
<td>Kutschker/ Kirsch (1978)</td>
<td>Survey of 192 suppliers and 116 buyers of industrial goods in Germany</td>
<td>Findings indicate links between demographic and personal attributes of individual representatives and their attitudes towards negotiation process and issues. There are links between features of the organization and the attitudes of their members towards negotiation and issues.</td>
</tr>
<tr>
<td>Clopton (1984)</td>
<td>Negotiation experiment with 64 organizational buyers (USA)</td>
<td>Savings obtained by the buyer were lower when the seller followed a competitive pattern of offers. Seller information and the type of internal monitoring both affect buyer's negotiation behavior.</td>
</tr>
<tr>
<td>Study</td>
<td>Features of study</td>
<td>Findings</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Campbell/Graham/Jolibert/Meissner (1988)</td>
<td>Experimental negotiation study involving 138 business people from the USA, 48 from France and 44 from both Germany and the UK</td>
<td>Similarity between buyer and seller stimulates the perceived attractiveness of the party to deal and the willingness of problem-solving; this leads to increased satisfaction of the buyer. &lt;br&gt; Seller's profit appears to depend on buyer's reciprocating a cooperative approach to negotiations.</td>
</tr>
<tr>
<td>Dion/Banting (1988)</td>
<td>Survey of 302 purchasing agents in large American companies</td>
<td>Integrative bargaining approaches are more successful than competitive approaches. &lt;br&gt; Buyers favor sellers they expect to be open and honest. Awareness of the needs of the vendor's organization is positively linked to performance. &lt;br&gt; Successful buyers are certain of the expectations of their organizations.</td>
</tr>
<tr>
<td>Dion/Easterling/Miller (1995)</td>
<td>Survey of 59 purchasing agents and 124 salespersons in the USA</td>
<td>Buyers and sellers often have similar personality types ('MBTI-types'); however, personality types have no significant influence on the interaction. Perceived similarity is linked to trust and sales performance.</td>
</tr>
</tbody>
</table>

Table 1: Empirical findings concerning the influence of individuals on transactions

Cooperative and problem solving oriented behavior on the other hand is a prerequisite for increasing the chance of coming to an agreement. This has been proven in various studies. But we have also learned that expert knowledge (power) and social power have an impact on the negotiation results in the dyad.

Basically, studies looking at interaction processes in business-to-business marketing from a personal perspective have supported core hypotheses from social interaction theory, namely matching principles. In addition to that they have initiated a paradigm shift from SOR to interaction perspectives.
But the results cannot be used to completely explain complex transaction processes. That is why the viewpoint from which interaction processes are analyzed has changed dramatically to more complex approaches. Actually, personal interaction studies have moved to background, and if there are any empirical findings they mainly address highly specific instead of basic questions (e.g. the impact of sex on interaction behavior, Dion, Easterling, and Miller 1995, Palmer and Hodgson 1996).

Organizational Impacts

The personal perspective was supplemented by integrating organizational variables into the analyses: It goes without saying that personal negotiation behavior is influenced by its organizational context, like company size or degree of centralization. For example relative companies size influences the size of buying and selling centers and thus influences time and structure of interaction behavior as well as relative power positions in the interaction dyad (see table 2). Production flexibility and the partners' country of origin are other relevant organizational determinants in interaction processes.
<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kutschker/Kirsch</td>
<td>Survey of 192 suppliers and 116 buyers of industrial goods in Germany</td>
<td>The organizations involved in the interaction process influence the bargaining behavior of their representatives.</td>
</tr>
<tr>
<td>(1978)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gemünden</td>
<td>Analysis of 195 transaction processes involving first-time purchases of EDP-equipment in Germany</td>
<td>Promoters by expertise increase the rationality and stability of the decision-making process and also the likelihood of a settlement.</td>
</tr>
<tr>
<td>(1981)</td>
<td></td>
<td>Promoters by power increase the intensity of the negotiations, the harmony of the relationship and the rationality of the decision made, and the likelihood of a settlement.</td>
</tr>
<tr>
<td>Campbell</td>
<td>Survey of 167 relationships in the European packaging industry</td>
<td>The relative size of the interacting companies is a source of either equity or inequity in relationships. Therefore, the relative size of a company may favor competitive, cooperative, or even command buying.</td>
</tr>
<tr>
<td>(1985)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parkinson</td>
<td>Survey of transaction processes in the electronics industry in the UK and Germany</td>
<td>The bigger the size of the companies involved and the higher the supplier’s degree of formalization of customer service, the higher is the degree of interaction. Intensive interactions between buyer and seller increase the likelihood of the purchase.</td>
</tr>
<tr>
<td>(1985)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Features of study</td>
<td>Findings</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ford/Hardwick (1986)</td>
<td>Survey of 35 industrial companies in the UK</td>
<td>Variations in the areas of the buyer's responsibilities will be associated with differences in his dependence and commitment. The more commercial responsibility a buyer has, the less is his perceived dependence on the seller and the less he is going to show commitment and loyalty. The stronger the buyer's product service responsibility is, the less will be his dependence, but the more likely is he to show commitment and interest in a long-term relationship.</td>
</tr>
<tr>
<td>Koch (1987)</td>
<td>Survey of 22 successful and 10 unsuccessful negotiations on electronics equipment in Germany</td>
<td>The more similar buying and selling center regarding hierarchies, decision-making structures, expectations and attitudes towards the issue of negotiations are, the more likely is the settlement.</td>
</tr>
<tr>
<td>Kapitza (1988)</td>
<td>Survey of the sale of industrial machine tools in Germany, involving 20206 companies</td>
<td>The likelihood of an agreement between buyer and seller increases when a selling center instead of a single salesman is involved. Also, promoters by power improve the probability of the purchase.</td>
</tr>
<tr>
<td>Ronchetto/Hutt/Reingen (1989)</td>
<td>Analysis of a manufacturer of electronic systems embedded in a 171-member organizational network in the USA</td>
<td>An organizational actor's influence is derived from formal and network structures. The greater the centrality of the position of an individual and the shorter the distance from the dominant reference groups within the buying system, the greater the influence.</td>
</tr>
<tr>
<td>Study</td>
<td>Features of study</td>
<td>Findings</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Kern (1990)</td>
<td>Survey of 16454 interaction processes in the German market for industrial machine tools.</td>
<td>The bigger the size of the company, the bigger is the size of the buying center. The bigger the size of the buying center, the more time negotiations require. Negotiations involving selling centers accelerate the transaction process, which improves the likelihood of a settlement. The number of promoters by expertise is bigger within lower hierarchy levels. Promoters by expertise slow negotiations down. Promoters by power push negotiations ahead. In total, the influence of the involved promoter-structure is trifling.</td>
</tr>
<tr>
<td>Hallén/Johansson/Seyed-Mohamed (1995)</td>
<td>Analysis of 237 industrial relationships between suppliers from Germany, Sweden and the UK and their European customers</td>
<td>The rigidity of the customer’s production technology strongly influences adaptations and social exchange between buyer and seller: there is a reinforcing effect between technical and social ties with production systems of high or medium flexibility but not with production systems which are extremely rigid.</td>
</tr>
</tbody>
</table>
Table 2: Empirical findings concerning the influence of organizations on transactions

Especially studies from Germany have analyzed the impact of promotoral role structures on process and outcome of interactions (promotors are persons that influence decision processes based on either hierarchical position or expert knowledge: Witte 1973). Although the influence of power and expert promotors can be traced, promotoral influence is at the same time moderated by situational factors.

Situational and Environmental Impacts

Moderating situational factors have been analyzed with respect to various situational constructs, e.g. order value, newness, complexity, risk (for a discussion of importance see e.g. Anderson, Chu, and Weitz 1987). The results show that situational factors modify results in a way that even with completely different goods situational clusters show comparable outcomes for interaction process results (see table 3). This makes clear, why contingency approaches including a variety of situational factors have become the favorites, when trying to explain interaction processes from a behavioral perspective.
<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kratz (1975)</td>
<td>Analysis of six transaction processes between customers and suppliers of complex industrial systems in Germany</td>
<td>With more complex industrial goods, customers rate technical criteria more important than economic criteria.</td>
</tr>
<tr>
<td>Dempsey (1978)</td>
<td>Survey of 379 purchasing managers from the American electronics industry</td>
<td>With a rising degree of technological innovation of a product to be purchased technical capabilities and customer service provided by the supplier are rated more important than economic considerations by the customer.</td>
</tr>
<tr>
<td>Kutschker/Kirsch (1978)</td>
<td>Survey of 192 suppliers and 116 buyers of industrial goods in Germany</td>
<td>The more complex the situation of decision-making is, the more representatives of both organizations are involved. Intensiveness and time needed for negotiations rises.</td>
</tr>
<tr>
<td>Håkansson/Wootz (1979)</td>
<td>Experimental study comprising 43 industrial buyers from Swedish companies</td>
<td>The higher the risk involved with uncertainty about necessary specifications, chances of suppliers offering lower-priced products are lower.</td>
</tr>
<tr>
<td>Gemünden (1981)</td>
<td>Analysis of 195 transaction processes involving first-time purchases of EDP-equipment in Germany</td>
<td>Depending on the degree of innovation, different interaction strategies (delegation or collaboration) are efficient. Searching for alternative offers increases the rationality of the decision-making process and also the harmony of the relationship between the organizations.</td>
</tr>
</tbody>
</table>
### What Do We Know About Business-to-Business Interactions?

**A Synopsis of Empirical Research on Buyer-Seller Interactions**

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campbell (1985)</td>
<td>Survey of 167 relationships in the European packaging industry</td>
<td>The technical change rate of the industry, switching costs, and exchange frequency can lead to strong ties and commitment between buyer and seller. Therefore, these conditions suggest different buying strategies.</td>
</tr>
<tr>
<td>Kraus (1986)</td>
<td>Survey of 120 decision-making processes in the German market for compression equipment</td>
<td>With a growing complexity and risk of an investment, problem-solving and searching for alternative offers become more important in the course of the interaction process.</td>
</tr>
<tr>
<td>Spekman/Strauss (1986)</td>
<td>Survey of 249 industrial companies in the USA</td>
<td>With transactions involving specific investments, high importance and high perceived risk, customers are more interested in long-term relationships with their suppliers and feel vulnerable. The higher the perceived strategic vulnerability, the more transaction costs are considered to be important.</td>
</tr>
<tr>
<td>Koch (1987)</td>
<td>Survey of 22 successful and 19 unsuccessful negotiations on electronics equipment in Germany</td>
<td>Successful negotiations take place in a favorable interaction atmosphere. Recurrent transaction processes make it easier for the supplier to assess the needs of the buyer. With more complex investments, suppliers having already established a relationship with the buyer are in an advantageous position to be selected.</td>
</tr>
<tr>
<td>Kapitza (1988)</td>
<td>Survey of the market for industrial machine tools in Germany, comprising 20206 companies</td>
<td>The chances of purchase are higher in case the buyer can choose among many alternative offers. This is not valid for direct influence exercised by competitors on the negotiation process.</td>
</tr>
</tbody>
</table>
Table 3: Empirical findings concerning the influence of buying situation and environment on transactions

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>McQuiston (1989)</td>
<td>Survey of 92 customers of a large manufacturer of industrial goods in the USA</td>
<td>Novelty and importance of the purchase is related positively to the amount of communication within the decision making-unit. The amount of communication offered by the members of the decision-making unit is related positively to their perceived influence.</td>
</tr>
<tr>
<td>Kern (1990)</td>
<td>Survey of 16454 interaction processes in the German market for industrial machine tools</td>
<td>Favorable economic conditions intensify competition among suppliers and shorten successful negotiations. Strong competition among suppliers leads to more contacts between buyer and supplier while not lengthening the duration of the interaction process. High financial value of the product increases the influence of competitors on the interaction process, but it has no significant effect on the duration and intensity of negotiations.</td>
</tr>
<tr>
<td>Bunn (1993)</td>
<td>Survey of 826 industrial buyers from different American companies</td>
<td>Depending on four situational characteristics (purchase importance, task uncertainty, extensiveness of choice, perceived buyer power) buying decisions can be classified into six types, ranging from casual purchase to strategic new task.</td>
</tr>
</tbody>
</table>

3. TRANSACTION EPISODES AND RELATIONSHIPS

The importance of existing relationships between buyer and supplier for process and outcome of transaction episodes have been addressed in various studies that were primarily concerned with personal, organizational, and situational influence factors (e.g. Campbell 1985, Hallén, Johanson, and Seyed-Mohamed 1993, Spekman and Strauss 1986). But there are only a few -mainly German - studies, that were specifically
designed to analyze the influence of existing relationships on transaction episodes. Koch (1987) has concluded that in complex negotiation situations customers tend to select suppliers that already have satisfying long lasting relationship with the customer. This result is supported by an extensive study by Kapitza (1988) even for lower complex transaction situations. Basically this is also supported by Kern (1990) especially for relationships with large customers.

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ford (1984)</td>
<td>Survey of 169 industrial buyers from companies from the UK, France, Germany, Italy and Sweden</td>
<td>There is a strong relationship between buyers' assessment of the technical and commercial skills of their suppliers and the extent of commitment to them, the perceived distance and the level of conflict. The expectations about the supplier's skills therefore influence the likelihood of a settlement.</td>
</tr>
<tr>
<td>Gemünden (1985)</td>
<td>Analysis of 195 transaction processes involving first-time purchases of EDP-equipment in Germany</td>
<td>Both escalation and smoothing over of inter-organizational conflicts lead to inefficient solutions for the parties involved. The seller reaches a maximum efficiency at a quite lower level of conflict handling intensity, whereas the buyer reaches a maximum efficiency at a higher level of conflict handling intensity.</td>
</tr>
<tr>
<td>Kapitza (1988)</td>
<td>Survey of the market for industrial machine tools in Germany, comprising 20206 companies</td>
<td>Frequent and regular negotiations and personal contacts beyond the negotiation process improve the likelihood of a settlement. Business relationships already existing enhance the chances of a supplier to be selected.</td>
</tr>
<tr>
<td>Kern (1990)</td>
<td>Survey of 16454 interaction processes in the German market</td>
<td>Personal contacts have a stronger positive influence on the intensity of negotiations than telephone contacts. Close business relationships improve the</td>
</tr>
</tbody>
</table>
### Study Features of study Findings

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>for industrial machine tools.</td>
<td>likelihood of the purchase only slightly; they do not shorten the interaction episode, because they cause more frequent negotiations. The larger the size of the company to deal with, the more importance is attached to the relationship with this company.</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Empirical findings concerning the influence of the interorganizational relationship on transactions

### 4. INTERACTION AND RELATIONSHIPS

Recently, research interest in business-to-business marketing has moved its perspective from analyzing single transaction episodes to lasting relationships between companies. Except of a few early studies in the middle of the eighties empirical studies now are centering on the existence, development, and termination of lasting organizational relationships. So, the core interest has moved from single transactions to analyzing series of interrelated transactions, because we have learned that single transactions are regularly imbedded in a transaction overlapping relationship: 'Its pure form, never achieved in life, occurs when there is nothing else between the parties, never has been, and never will be' (Macneil 1980, p. 60). So, we are back to the early ideas of the IMP-group but now with a better chance for faster diffusion of the interaction paradigm.

Operationalization of variables is a significant problem with relationship related research because of the limited observability of the constructs and variables usually employed (e.g. trust, binding, and satisfaction: Crosby, Evans, and Cowley 1990, Morgan and Hunt 1994). Kern (1990) operationalizes relationship quality by the use of economic variables such as 'customer specific sales volume' or 'number of customer orders'. However, a deeper analysis into the nature of the relationship is prohibited by this approach since these variables do not
provide us with information on the reasons for engaging in ongoing relationships. Reasons could be a high degree of satisfaction with past transactions as well as technological or contractual dependency on a supplier.

**Structure and quality of relationships (static perspective)**

Empirical studies on the structure and quality of relationships can be divided into at least two categories depending on their research perspective and theoretical framework:

- direction specific studies analyzing relationships either from supplier or customer perspective (upstream or downstream perspective)
- employing
  - behavioral or
  - transaction cost perspectives

Results presented by Gemünden and Heydebreck (1995) suggest that an upstream or downstream perspective makes a difference concerning the relationship between innovation success and collaboration with partners. They find that innovation success depends more on collaboration with customers than suppliers. Engaging in tight relationships with customers improves success significantly. This is not the case with suppliers. The basic issue this study raises is the question of relationship selectivity. It provides us with empirical evidence that from economic perspective (tight) relationships are favorable only under certain circumstances. Hence, to define these circumstances theoretically and empirically with a broader empirical analysis into the validity of relationship selectivity seems to be an interesting area for future research.

Empirical studies of relationships from behavioral perspective often focus on relationship satisfaction (Leuthesser and Kohli 1995). Satisfaction and the tendency to engage in long term relationships are dependent on each other. On the one hand satisfaction enhances preferences to engage in long term
relationships. On the other hand long term relationships improves satisfaction with relationships because they tend to stabilize production processes and prices and facilitate planning (Han, Wilson, and Dant 1993). Often this leads to a reduced number of suppliers with the share a remaining suppliers rising (Leuthesser and Kohli 1995). Long term interorganizational relationships can also lead to a mutual adaptation to characteristics of partner organizations (Hallén, Johanson, and Seyed-Mohamed 1993). Brennan and Turnbull (1995) show that in many cases adaptation is not a mutual but a one-sided empirical phenomenon resulting from unbalanced power distribution within the relationship.

Similar empirical results come from transaction cost perspective (Spekman and Strauss 1986). The construct of asset specificity has found considerable interest in this area. Studies (Heide and John 1990, Heide 1994, Pilling, Crosby, and Jackson 1994) suggest that long term relationships result from relationship specific investments. Asset specificity enhances expectations for longer business relationships and let the customer engage in more rigorous control of supplier performance. However, rising costs of insurance against opportunistic behavior in case of asset specific investments decrease the attractivity of long term relationships. This raises the issue of relationship management and the importance of coordination designs (e.g. relational contracts) (Heide and Stump 1995). Thus, transaction cost theory suggests that coordination designs successfully insuring against uncertainty concerning partner behavior improve relationship quality. Success of single transaction episodes, however, seems to be either not or negatively influenced by the existence of coordination mechanism in case of lower levels of uncertainty (Noordevier, John, and Nevin 1990).
<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heide/John (1990)</td>
<td>Study comprising 155 business relationships between an American manufacturing company and different suppliers</td>
<td>Expectations of continuing relationships, increased verification efforts by the buyer and both buyer's and supplier's specific investments increase the extent of joint action in the relationship. Supplier's specific investments increase the expectations of continuity relationships. Specific investments made by the buyer and performance ambiguity, (difficulty of measuring ex post the exchange partner's compliance with the expected output), increase the level of verification efforts.</td>
</tr>
<tr>
<td>Noordevier/John/Nevin (1990)</td>
<td>Survey of 140 business relationships between purchasers and suppliers in the USA</td>
<td>Increasing relationship governance in an industrial buyer-seller relationship when the level of uncertainty is relatively high improves buyer purchasing performance. Such changes have no effect on transaction performance under conditions of relatively low levels of uncertainty.</td>
</tr>
<tr>
<td>Han/Wilson/Dant (1993)</td>
<td>Study comprising 41 industrial buyers and 44 sellers in American industrial companies</td>
<td>Most industrial companies seek to use fewer suppliers. For buyers, close and stable relationships between buyer and seller lead to improved performance, reduced purchasing costs, and increased technical cooperation. Suppliers seek closer ties with their customers in order to achieve price and production stability and plan their capacity optimally. Both suppliers and buyers believe that mutual trust and satisfactory role performance are the essential factors to characterize a good relationship.</td>
</tr>
<tr>
<td>Study</td>
<td>Features of study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Evans (1994)</td>
<td>Survey of 276 medical and chemical labs in the USA</td>
<td>There is a strong desire by customers to be a part of a strong partnership involving effective empowering of employees. Many representatives of buying organizations wish to establish closer relationships with the representatives of the supplier. Respondents from smaller companies are less pleased with their relationship to the supplier.</td>
</tr>
<tr>
<td>Heide (1994)</td>
<td>Study comprising 155 business relationships between an American manufacturing company and different suppliers</td>
<td>Symmetric and high dependence will lead to bilateral governance in the form of flexible adjustment processes. Unilateral dependence by an individual party will decrease bilateral governance in the form of flexible adjustment processes. In the absence of symmetric dependence an individual party will have little or no incentive to show flexibility because there are no guarantees that such efforts will be rewarded.</td>
</tr>
<tr>
<td>Pilling/ Crosby/ Jackson (1994)</td>
<td>Survey of 20 American aerospace, electronics and defense contracting firms</td>
<td>High asset specificity leads to higher transaction costs for buyer and supplier. Under uncertain market conditions, the costs of developing and maintaining a relationship at a high level of frequency are higher. Transaction costs determine the importance of both the current exchange episode and the entire relationship, the choice of short-term vs. long-term contracts, the degree of information exchanged, and the sharing of benefits and burdens. The installation of operating controls will increase as the costs of maintaining a relationship and the costs of monitoring activities increase.</td>
</tr>
<tr>
<td>Study</td>
<td>Features of study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gemünden/Heydebreck (1995)</td>
<td>Survey of 321 German high-tech firms (stemming from the areas biotechnology, EDP, medical equipment, microelectronics and sensor industry)</td>
<td>Collaboration with suppliers shows no significant impact on technical process innovation success. Collaboration with customers, however, improves the technical process innovation success. Large companies show a higher technical process innovation success; innovation success is strongest in the field of bio-technology.</td>
</tr>
<tr>
<td>Heide/Stump (1995)</td>
<td>Survey of 155 purchasing managers of American OEM-firms and 60 representatives of their suppliers</td>
<td>For relatively high levels of supplier-specific assets made by the customer relationship continuity has a positive effect on performance. Supplier-specific assets decrease relationship performance if firms do not create safeguarding and adaptation mechanisms. Under conditions of high volume unpredictability, relationship continuity has a positive effect on relationship performance. Volume unpredictability decreases relationship performance if firms do not create safeguarding and adaptation mechanisms. Relationship continuity has a positive effect on performance for high levels of uncertainty and specific assets.</td>
</tr>
</tbody>
</table>
Leutheuser/Kohli (1995)  
Survey of 454 purchasing managers of American industrial companies  
The greater the supplier’s efforts to understand a buyer’s needs and requirements, the more information the supplier provides, and the greater his self disclosing behavior, the greater is the buyer’s satisfaction with the supplier.
Frequent interactions are instrumental in building buyer satisfaction, especially when relationship age and product importance is relatively low.
Offering quality is positively related to buyer satisfaction.
Buyer satisfaction is positively related to the supplier share of business.

Table 5: Empirical findings concerning causes of structure and quality of interorganizational relationships

Development and change of relationships (dynamic perspective)

The study of the development and change of relationships introduces time as an additional variable. Theoretical and empirical research on relationship development is quite diverse. Development and change is either viewed as product of a life cycle or as an evolutionary development without definite stages (Van de Ven 1992). The life cycle approach is characterized by the assumption that business relationships develop in certain consecutive stages similar to the product life cycle. A life cycle implies that the stage of relationship is determined to a large degree by age. In contrast to that an evolutionary approach views the development of relationships as the evolution of relationship designs not following a specific path over time. Methodology of empirical studies varies with regard to data collection methods. Mostly business relationships
of different age are studied in a 'cross development approach'. Information concerning different stages of relationships stem from different cases.

Another approach is to analyze past events within in a relationship and its evolution (case history) or observing development in real time. The latter is more promising because it is not dependent upon the comparability of evolutionary processes.

On the basis of interviews with managers Guillet de Monthoux (1975) develops a relationship stage approach comparing the development of business relationships to that of love affairs. The resulting four phases of relationships are characterized by differences in exchange intensity, exchange complexity, formalization of exchange and interdependency. According to the author within the first phase of a business relationship ('romance') the exchange of information (e.g. on product innovation) is of foremost importance. In the second phase ('affair') the importance of risk and uncertainty management increases. With 'marriage' barriers to relationship exits are erected. The third phase is characterized by the risk of 'divorce' with the possible result being the termination of the relationship. Other stage concepts were developed by Ford (1982) and Palmer and Bejou (1994).

Rosson (1986) challenges the usefulness of the life cycle concept. He differentiates between experience, uncertainty, and the partners stake in the relationship as variables to define stages of relationships irrespective of their age. According to this concept relationships can be 'new', 'growing', 'troubled', 'static' and 'inert'. In every stage a relationship is vulnerable with regard to termination. Results of this study are interesting because they were derived from an observation of relationship development in real time.

Stability and change of relationships were analyzed by Janson, Pedersen, and Torvatn (1995). On the basis of a sample of Scandinavian companies is it derived that stability is the dominating characteristic of business relationships. On average
buyer-seller relationships last for 17 years. The study also shows that dyadic interorganizational relationships are influenced by relationships with other companies external to this dyad (as suggested by Anderson, Håkansson, and Johanson 1994). Thus the change of relationships can not be attributed to the dyad alone. Halinen, Havila, and Salmi (1995) come to similar conclusions when they stress the possibility of connected and disconnected changes within the organizational dyad. According to them disconnected changes result from relationships external to the dyad which might influence in turn further relationships within a network of relations (domino effect).

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guillet de Mont-houx (1975)</td>
<td>Study based on interviews with seven marketing directors in the UK</td>
<td>The development of interorganizational relationships can be compared with the progress of a love affair:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 1: Romance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 2: Affair, Marriage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 3: Divorce?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 4: New Romance, Affair, Marriage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The phases are characterized by differences regarding volume, complexity, and formalization of the exchange and differences regarding interdependence.</td>
</tr>
</tbody>
</table>
## What Do We Know About Business-to-Business Interactions?
- A Synopsis of Empirical Research on Buyer-Seller Interactions

<table>
<thead>
<tr>
<th>Study</th>
<th>Features of study</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Ford (1982)         | Survey of 237 industrial relationships between manufacturing companies from Germany, Sweden and the UK and their European customers | Depending on the variables experience, uncertainty, distance, commitment, and adaptations, the development of buyer-seller relationships can be divided into five stages:  
  - the prerelationship stage  
  - the early stage  
  - the development stage  
  - the long-term stage  
  - the final stage |
| Rosson (1986)       | Analysis of 21 industrial relationships between suppliers from the UK and international customers over a period of seven years | Industrial relationships can be positioned in five different states of development almost irrespective of their age, depending on experience, uncertainty and stake. These states are characterized by differences regarding commitment, conflict and adaptation:  
  - the new relationship  
  - the growing relationship  
  - the troubled relationship  
  - the static relationship  
  - the inert relationship |
| Palmer/Bejou (1994) | Sample of 280 customers of investment service companies in the USA                | Buyer-seller relationships progress through some form of life cycle. Each stage of the cycle is associated with different perceptions of the elements considered important in the sustenance of the development:  
  Stage 1 (initiation): sales orientation  
  Stage 2 (1-2 years): ethical judgments  
  Stage 3 (2-3 years): empathy  
  Stage 4 (3 or more years): high empathy |
Study | Features of study | Findings
--- | --- | ---
Halinen/Havila/Salmi (1995) | Analysis of the relationship between two Swedish manufacturing companies and their French customers | Changes in dyadic industrial relationships can originate from the dyad itself (disconnected change in the network) or from a change of the network in which the dyad is embedded into (connected change). In both cases, critical events can be observed.

Janson/Pedersen/Torvatn (1995) | Survey of 426 industrial relationships between 44 manufacturing companies from Norway and Sweden | The average duration of industrial relationships is 17 years.
About 60 percent of all relationships involve weekly deliveries, about 70 percent involve weekly contacts.
32 percent of the customer relationships are affected by the next firm in the chain, 23 percent of the supplier relationships are affected by the relationship between the supplier and sub-supplier.

Table 6: Empirical findings concerning development and change of interorganizational relationships

5. CONCLUSIONS

An important observation to be made from this synopsis is that 'non network' interaction research is not obsolete. There are still interesting questions waiting to be answered. The influence of underlying relationships and networks on buyer-seller dyads is only one issue here. Considering the evolution of approaches to empirical research on interaction we see that studies exploring into relationship related issues have replaced the transaction episode view. This shift of framework reflects the importance of relationships in practice but should also be challenged. It seems rather obvious to assume that relationships may develop under certain circumstances but may (or should) not develop under other circumstances (Iacobucci 1994).
Promoters of relationship oriented interaction research should discuss these circumstances and the resulting area to which their findings are applicable.

Taking a closer look at the studies analyzed for the purpose of this paper reveals an interesting result. Regardless of their theoretical framework studies employing a behavioral approach result in a stable set of constructs relevant to interactions between business partners (see fig. 1).

Analyzing discrete (single) transaction episodes either with or without regard to the history of the dyad as well as analyzing relationships as product of consecutive episodes results in the identification of constructs such as conflict, power, sympathy, or trust relevant to the dyad. These constructs underline the interpretation of dyads as social interaction systems. This result is encouraging because it is derived from different perspectives. And one might suspect that an analysis from network perspective driven by a behavioral framework is not going to change the importance of viewing the buyer-seller dyad or network as a social system.

However, this result is discouraging at the same time. It does not really matter where we start, as long as we focus on social elements of interaction we confirm our view. One might conclude that the behavioral approach has already carried us as far as it could. It seems that additional insights can not be expected from that framework. This is especially true for the management of dyads or relationships. It may be for that reason that new institutional economics is now providing additional theoretical input. The most striking difference between the results derived from behavioral perspective and transaction cost theory is that this framework offers some recommendations on the management of interactions. Being sometimes short on management use has always been a major problem with results derived from behavioral perspective. What can also be observed with the use of transaction cost theory is an increasing effort to abandon ad hoc hypotheses in favor of well developed theoretical frameworks. They provide us with more explanatory
power and, hence, potential for enhancing our knowledge on interaction.

Fig. 1: Evolution of interaction research

The most important deficit in interaction research is the lack of empirical work on the development of relationships over time. However, the work published in this area suggests that a ‘trap’ may lurk right around the next corner that looks quite familiar. There are now some attempts to define different stages of relationships with the number of stages (of course) varying. This may remind us of the discussion of product life cycle concepts and some related problems:
What Do We Know About Business-to-Business Interactions?
- A Synopsis of Empirical Research on Buyer-Seller Interactions

- how many stages exist?
- how can we tell in which stage a product is in?
- can we project future developments on the basis of the life cycle concept? etc.

It is obvious that answers to these question concerning business relationships are not available yet. But history suggests that life cycle concepts offer not much more than description. Other theoretical frameworks to explain the development of relationships may be necessary (e.g. Backhaus, Adolphs, and Büschken, 1996).
REFERENCES


What Do We Know About Business-to-Business Interactions?
A Synopsis of Empirical Research on Buyer-Seller Interactions


What Do We Know About Business-to-Business Interactions?
- A Synopsis of Empirical Research on Buyer-Seller Interactions


