The impact of relationships and networks on industrial buying behavior - a tentative model

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Abstract

Relationships and networks are widely recognized as strategically important for both buyers and sellers in industrial markets. Thanks to their inherent values, buyers are advised to work with relationship management and consider their supply strategies. Another stream of research in industrial marketing concerns industrial buying behavior (IBB), which focuses on understanding the structure of the buying process and why buyers behave in a certain way. Although there are clear connections between these areas, research on how they relate and interrelate is limited.

Based on a qualitative interview study that aims to understand further the selection processes of buyers in the subcontractor market, this paper offers a complementary model on industrial buying behavior. The model emphasizes decision-making during different phases of industrial buying and includes the impact of relationships and networks.

In sum, the study shows that relationships and networks can play an important role in the buyers’ way through searching for, evaluating and selecting feasible suppliers. The results indicate that the key to understanding decision making is the perceived need of, and availability of information. In addition to the traditional characteristics product and buy class as predictors of buying behavior, the study also identifies supplier situation and time pressure as relevant to understand the status of information in a specific situation. Depending on these four factors and the concurrent information status, buyers find themselves in a situation where different routes to decision-making are available. The study brings forward relationships and networks as important resources in this process. As decisions are made throughout the buying process, relationships and networks have a continuous impact on the buyer’s behavior.

A model is presented that seeks to illustrate the buyer's continuous selection process, affected by the sum of four explanatory factors and the status of information. Relationships and networks are present as valuable catalysts for choice thanks to their abilities to provide security, familiarity and access to information.

Keywords: buying behavior, decision-making, networks, relationships
Introduction

Relationship theory as a field has developed increasingly since the 1960s. Today, the importance of relationships and networks in B2B marketing is widely accepted and receives great attention (e.g. Ford et al., 2002, Hunt et al., 2006, Håkansson & Snehota, 1995, Naudé & Buttle, 2000, Sheth & Sharma, 1997, Turnbull et al., 1996). The logic of relationships and networks in marketing is explained by their inherent and potential values both buyers and suppliers (for an overview see Lindgreen & Wynstra, 2005).

Oftentimes, literature describes industrial buying as a rather straightforward process where professional buyers focus on product characteristics and strive to make the best possible decisions and choices related to the company's financial results. Next to this description, however, research on buying behavior has repeatedly shown that individual buying is also affected by subjective assessments, individual characteristics, emotions and impressions (e.g. Anderson & Narus, 1999, Clow & Baack, 2002). Further, constructs like environment and firm situation have since long been included as factors that have possible effects on industrial buying behavior (e.g. Robinson et al. 1967, Sheth, 1973, Webster & Wind, 1972). Johnston and Lewin (1996) present the supplier-buyer relationship as one such construct.

In short, industrial buying behavior has proven to involve a range of determinants, implying that it is a phenomenon less easy to capture in a stringent model, limited research has yet looked at how the different constructs in practice affect industrial buying behavior. Considering further the weight of relationship and network theory in industrial marketing and management, it should be of interest to consider the connections between buying behavior and this parameter.

Purpose

The main purpose of this paper is to add perspectives on how relationships and networks relate to industrial buying behavior. It does so by presenting a tentative model for decision-making in industrial buying, including the function of relationships and networks. The model is outlined based on the results from a study on buyer behavior in subcontractor markets. The study includes accounts from both suppliers and buyers. The paper mainly takes a purchasing perspective although the interrelations between suppliers and buyer make the findings equally valid for the seller's perspective.

Theoretical background

Purchasing in industrial markets has traditionally been portrayed as an objective and professional process where decisions are made to benefit financially the buying organization. It has mainly been described as a multi-stage process involving, for example, recognition of a need, search for, qualification and selection of suppliers (e.g. Robinson et al., 1967, Sheth, 1973, Webster & Wind, 1972). This buying process has been researched since the 1960s while interest on buying behavior began in the 1970s (Malaval, 2001). While the process perspective outlines a number of phases for purchasing, the behavioral perspective aims to further explain why buyers act in certain ways during the different stages.

In addition to the notion of a stepwise process, complementary constructs are identified to explain industrial buying behavior. Johnston and Lewin (1996) describe thirteen constructs including the purchase, buying centre, individual's, supplier's and informational characteristics, environmental and organizational influences, decision rules and role stress (within the buying firm), buyer-seller relationships and communication networks. While these all represent distinct subjects in research and literature, the constructs characterizing the purchase, group, organization and individual have received most attention related to industrial buying in particular (Johnston & Lewin, 1996). Two variables that are often used to discuss buying behavior are the type of product and buy class.

The number of product categories outlined in industrial marketing range from two to seven (e.g. Clow & Baack, 2002, Gross et al., 1993, Xideas & Moschuris, 1998). Xideas and Moschuris (1998) propose that the most commonly used categorization in the business world is one that separates product groups due to their requiring different managerial action. Based on these categories researchers have tried to identify
particular buying behavior, the general idea being that a product which is complex or considered important to a buyer obtains a different purchase attention/strategy than that which is of little importance or is standardized (Axelsson, 1996).

Robinson et al. (1967) outlined the buy class framework including the new task, straight rebuy and modified rebuy situations. It suggests that buying behavior will vary according to the parameters newness of problem, information need and consideration of new alternatives. In essence, it suggests that the phases of the buying will be considered and managed differently depending on which buy class is considered (Malaval, 2001). While the buy class framework has been criticized for being simple it has also maintained the status of a recurring key reference in literature on industrial buying (e.g. Anderson et al., 1987, Axelsson, 1996, Brand, 1972, Clow & Baack, 2002). Part of the critique concerns the fact that this theory focuses on familiarity with a product as opposed to what product is considered, hence largely disregarding the possible difference in evaluation depending on purchase (Anderson et al., 1987). Further, several studies have concluded that the consideration set for new task and modified rebuys is not as simple as the model suggests since it is affected by the risk and uncertainty perceived by buyers (Anderson et al., 1987). The results, for example, imply that buyers display loyalty to “in-suppliers” as a means of lowering risk (Puto et al., 1985). Anderson et al. (1987) suggest a modified model where buy class is determined simply by “task newness and information needs” In line with these perspectives, Johnston and Lewin (1996, p. 6), find that additional characteristics of the purchasing situation have been identified as important to understand buying behavior. For example, more recent models have added the purchase’s risk/uncertainty, complexity, time pressure and importance, as predicting factors.

The focus on relationship marketing and network theory can be explained by the belief in different types of values that various ties can bring to those involved. Such values can be either direct or indirect in kind (Walter et al., 2001) and represent a means to effective, predictable business exchange and product development (Lindgreen & Wynstra, 2005). A great part of research and literature on relationships and networks takes a long-term perspective on the importance of and need to manage relationships, implying that the effects are not instantaneous but develop over time. Further, a strategic approach to managing relationships dominates, suggesting that investments in relationships has to take into account the strategic importance of the purchased product (Ford et al., 2002, Gadde & Snehota, 2000). Van Weele (2002), for example, describes how buyers should determine their supply strategies according to the supply and financial risks related to each product and supplier relationship. In short, as relationships are investments you need to make sure you spend resources on the right ones. From this viewpoint the importance of assessing the inherent value of each relationship related to buying is only logical.

While the strategic value of close relationships and the function of markets as networks are accepted, these do not offer an explanation for every decision in industrial markets. Thus, a more comprehensive framework is needed to understand fully industrial buying. Likewise, bearing the strong focus on relationships and networks in B2B marketing in mind, it is interesting to further explore what impact existing connections have on buyer behavior and decision-making. While Tanner (1999) suggests that there is a need to integrate the classic ideas of industrial buying with relationship theory few studies are available that takes such an approach (e.g. Johnston & Lewin, 1996). In addition, few efforts have been placed on explaining the decision-making process behind industrial buying, i.e. choice behavior (Kauffman, 1996).

In light of the above theory, one might ask how industrial buyers move from one phase of buying to another and how, if so, the different constructs outlined as explanatory for buying behavior are involved in this process? That is, do relationships and networks affect the search, evaluation and selection of suppliers in general and does that affect the assumed professionalism of industrial buying?

Study and Method

The model outlined in this paper is based on a qualitative interview study including respondents from three subcontractors and six of their customers. Such a dual approach has been requested and also grown in importance (Wilson, 1996). In total 23 persons were interviewed using semi-structured non-standardized
interviews. The respondents were asked to give verbal accounts describing how buying is conducted in the considered market. All respondents were in different ways involved in either sales (subcontractor side) or purchasing (buyer side). Although based on individual perceptions, the descriptions are considered strong indicators of the firm's buying behavior. This is based on the notion that all organization behavior is determined by individuals and their decisions. All interviews were transcribed and a qualitative analysis was made to categorize the material into themes. A pattern evolved which made it possible to structure the material according to different buying phases and identify what factors guide the buyers' decisions in different situations. The remains of this paper focus on condensing these results into a model that further explains this decision-making, including effects of existing contacts (relationships and networks).

Results

The study confirms the notion of industrial buying as a process with several phases. Further, it corroborates that buyers behave and go through the purchasing process differently depending on the type of products purchased. Mainly, the difference lies in the perceived need of information, affecting the types and sources of information used to make decisions. Likewise, the results confirm that the buy class can affect buyer behavior when a difference is made between straight and modified rebuy and new buy. The latter is different since there is no experience from purchasing a certain product or service. Consequently a consideration set must be identified. Even though this might be found within the buyer's existing supplier portfolio it makes a difference in the buying behavior when it comes to the search phase of buying.

Regardless of buy class, if possible, the buyers search for suitable suppliers begins within the existing subcontractor portfolio. These are actors with whom the buyer can have varying types of relationships. Either they are used in an on-going contract or have been used previously. This means that if buyers currently use or have subcontractors in their portfolio that can manage the required product, they primarily turn to these. Buyers hence appear to favor suppliers that they have had direct experience with and who have been previously assessed as qualified. Likewise, in the process of selecting untested suppliers, the buyers appear to rather continue with the familiar ones (e.g. recognizing names or symbols) as opposed to completely unfamiliar supplier. In sum, these findings can be interpreted as indications of the industrial buyers' search to minimize uncertainty and risk, as well as their need (due to limited resources) to act according to a bounded rationality. While having the opportunity to choose among an endless number of suppliers in each situation and decision process, the study clearly illustrates how industrial buyers, if possible, act in the boundaries of well-known and “effortless” patterns.

Furthermore, the study implies that the buyers use their relationships and networks to find new suppliers also in situations when there is need for a new type of product and no currently registered suppliers have the right competencies and abilities. In this new task situation the results indicate that current contacts are particularly important during the search phases. Firstly, buyers turn to current suppliers in related areas to identify the new potential ones. The logic being that these suppliers most likely have an overview of the industry. Secondly, buyers turn to various actors in their network to find suitable and potential suppliers. Examples of such actors mentioned are the providers of machinery and materials, competitors, and fellow buyers. By relying on existing networks and using known parties as mediators for search the buyers use a minimum of time and efforts to identify possible new subcontractors.

The results also show that existing relationships and networks can affect the buyer's decision making during qualification and evaluation phases. The studied buyers explain how part of qualifying a potential supplier can be to explore the supplier's earlier performance with fellow purchasers. In this case the buyer's image of the mediator can be crucial for the potential supplier's chances to remain of interest. The weight of the recommendations varies with the buyer's trust in and relationship with the mediator.

In total, the results imply that existing relationships and networks are primarily in effect during the phases search and qualification & evaluation where their main function is to improve efficiency. While these findings relates to the decision process the study also corroborates a focus on deliberate relationship management. This strategic perspective emerges during the phase of supplier selection. Here there is a difference, though, depending on supplier situation. For selection within a shortlist of suppliers where
there is some type of existing relationship, the buyers to greater extent appear to make decisions based on “hard facts” like firm features and price. In the supplier situation which concerns finding a new supplier, though, the buyers put more emphasis on relationship management and the prospects of development. Here, with regards to a long-term perspective, the respondents even acknowledge the importance of good relations at a personal level since that is considered crucial for the success of developing successful partnerships. That is, although depending on the product purchased, the potential values of creating a functioning relationship can outplay straightforward dimensions like price, quality and delivery.

The findings also suggest that the aim and process of search, evaluation and selection is more or less thorough depending on the strategic and financial importance of the considered product or service. However, the respondents’ accounts also show that the information and decision patterns used depend on the situation of available contacts, relationships and networks. For example, in purchasing a component that induces both supply and financial risks, buyers generally go through a buying process with the aim of feeling secure in terms of high quality, delivery assurance and a functioning long-term relationship. However, the ways to reach this feeling can vary. In total, the study supports earlier findings (e.g. Kelly & Coaker, 1976) that the choice criteria for selection needs to take into consideration the uniqueness of each buyer and situation.

**Tentative model**

Based on these results a tentative model is outlined to further explain the decision-making process industrial buyers go through after recognizing a need and turning to find an appropriate supplier to fill this. According to the results of the current study, the model brings forward existing contacts, i.e. relationships and networks, as highly relevant for explaining the buyer’s progress through decision-making. Further, the model emphasizes the difficulties of predicting buying behavior based on an individual explanatory factor, thus, pointing at the intrinsic interrelationships between them.

As noted in previous research and also in the current study, the stages of buying outlined in theory are seldom completely separated, but are part of an iterative process. Similarly, the models of buying use different concepts to refer to similar stages. Nevertheless, when considering one buyer’s process to choose one supplier for delivering a certain product (goods, services or a mix of both). In this process, activities resembling search, evaluation or qualification, and selection can all be recognized in the buyer’s progress to deciding which supplier should provide what is demanded. For each phase the buyer needs to make decisions in order to come closer to the final selection of a supplier (for a particular product, service or contract).

Each activity or stage of the buying process can be seen as a new situation in terms of being one of many selections towards a final decision. In the very beginning of search, the options are oftentimes innumerable since all suppliers are still in theory an option. A selection process has to be carried out, narrowing down the frame of selection, often called the creation of a shortlist or consideration set. Also evaluation or qualification can be viewed as such a selection process, aimed at identifying whether buyers meet the required standards and demands. Finally, during selection the buyer needs to decide whether to accept or not accept a certain supplier. Thus, one might claim that in order to proceed in the buying process, buyers must continuously make decisions and selections. A model on decision-making thus might be seen as a circular occurrence that repeats at every point of selection (i.e. in theory for each phase of the buying process).

In contrast to Sheth’s (1973) theoretical model on the buying process, the results indicate that information is not a factor equal to product characteristics (e.g. time pressure, buy class, product type) and firm characteristics (e.g. size, technology, centralization) in terms of determining buying behavior. Instead, the latter two appears to set the boundaries for what information is needed and obtainable, i.e. information can be seen as a function of product and firm characteristics. Nevertheless, the three can be interpreted as representing situation characteristics, forming the outset of decision making for the buyer.
In terms of purchase situation, the current study partly verifies the effects of commonly mentioned explanatory factors type of product and buy class. It also offers another two situation characteristics which appear to have an impact on the industrial buyer's search, evaluation and selection. These are the supplier situation and the time available for a decision. The time aspect has previously been highlighted by Robinson et al. (1967) and Sheth (1973) as one factor explaining product specific factors. Time might, however, be better described as an independent factor related to a certain situation rather than the product. The current study implies that buying behavior can differ greatly depending on time, regardless of other product characteristics. The supplier situation represents the buyer’s current relationships with a certain type of supplier. The buyer can either have or not have existing ties to suppliers that can offer the required product or service. The results show that this is a main factor for determining how a buyer continues through the phases of purchasing. Depending on the other situation characteristics, phases of search and evaluation can either be greatly emphasized or even skipped depending on the supplier situation.

Based on these four basic situation characteristics, buyers can identify the situation’s status of information, i.e. what information is necessary and accessible in order to make an acceptable decision and continue the process. Based on this the customers can further decide on how to continue, how and what information is obtained and used.

Price, quality and availability, or delivery, are common factors for explaining the logic of decisions in industrial buying behavior. Also in the current study these three factors were common as the respondents were asked directly to explain why a buyer chooses a certain supplier. However, as previous research has shown and the current paper aims to further portray, the buyer’s situation and, thus, decision making is too complex for this to cover the full explanation of selecting a supplier. Due to the inevitable limitations of time and, consequently, information that buyers always experience they are forced to continuously adapt and rationalize their decision making according to the situation characteristics. Consequently, the significance of existing relationships and networks like any other factor can differ. In short, buyers need to find an acceptable foundation for the decisions they make and, depending on the complexity of and available sources for the requested information, the ways to reach decisions will vary. We here make sense of these by referring to six catalysts for choice as they are found in the study to represent means of decision-making during the different phases of buying.

Although we criticize its full explanatory power: The logic of price, quality and delivery appear valuable to explain certain decisions and selections. To reflect the impact of a company’s size, machinery, skilled personnel, offered products and geographical location we might refer to: The concreteness of firm features. A reason for using these practical aspects as a base for decision-making is that the buyer has no wish to waste time on suppliers with no apparent potential to fulfill the required contract. These firm features can also include statistics on quality of manufactured goods, delivery precision and financial track record. These are well connected with the firm and its accomplishments in terms of measurable results.

To reflect the impact of a buyer’s documented experiences with a supplier we might refer to: The reassurance of experiences. These cover the ease of process, flexibility, delivery capacity and quality of products. For a new supplier these features are in essence unknown. The logic of letting previous experience guide decisions is that buyers are reassured by the behavior a subcontractor has previously exposed. To reflect that buyers’ can turn to actors they know for information and help we refer to: The ease of current contacts. The logic behind this is quite straightforward since approaching currently known actors is more comfortable and also limits the buyer’s search costs.

To reflect the buyers’ tendency to prefer suppliers who they are to some extent familiar with we can refer to: The security of recognition as one basis for decision-making. The logic behind this is less clear but might be that buyers perceive suppliers who are recognized (e.g. from advertisements, trade fairs or conversations/reputation) as more established actors in the market. In a selection among untired suppliers such preferences can be logical ahead of suppliers that are completely unrecognized. To reflect the impact buyers’ perceptions of suppliers can have on decision-making we refer to: The indication of associations. The logic of this is that buyers assess a concrete firm feature and associate it with a feature that is important for making a decision. For example a buyer might associate a plant’s orderliness with
quality of products and deliveries, or certificates, like ISO 9000 & 14000, with a certain attitude, potential and product quality.

The results imply that buyers, depending on the individual situation characteristics will use one or several of these catalysts to make a decision. Due to the numerous ways of combining a situation, however, a general pattern is harder to come by. In sum, this mix of catalysts support the fact that industrial buyers are human, affected by firm values and objectives as well as individual social and personal factors when making decision (e.g. Anderson & Narus, 1999, Clow & Baack, 2002).

Figure 1: Decision-making as part of industrial buying behavior - tentative model

The model pictured above aims to illustrate how the industrial buyer's behavior cannot be explained by one construct or one factor in isolation. Rather, the overall assessment of a situation, combined with the resources available within the firm, decides how decisions are made and what factors are “allowed” to affect this process.

Discussion

If buyers in general choose subcontractors that they have used before, i.e. suppliers in their portfolio, existing relationships play an important role already in the primary stages of selecting or matching a supplier to a certain need. The model also suggests that the determinants of behavior are not isolated. Finally, the model implies that relationships and networks can be seen as affecting the decision-making at different levels of the buying process, thus, affecting buying behavior continuously.

A salient feature in the basic buy grid framework (Robinson et al., 1967) is the buyer’s difference in consideration set depending on the buy class. For new task purchases the original model portrays that consideration of new alternatives is highly important and that buyers like to consider many options. For modified rebuy this consideration is only portrayed as being of moderate importance (for straight rebuy
there is, per definition, no such consideration). However, the current study implies that buyers display partly the same decision-making behavior regardless of buy class. The reason for this seems to be the power of or values inherent in existing contacts. Furthermore, Robinson et al.’s (1967) discussion on buying behavior connects much to the perceived risk in a purchase situation, relating in essence risk to the type of product and buy class. Johnston and Lewin (1996), however, suggest that the supplier situation (whether a buyer has existing relationships with potential sellers or not) might affect the risk perceived in a purchase. Since risk has been recognized as a predictor of purchasing behavior they argue this can be an important issue to consider. The current study corroborates this idea, implying that the buyer’s process of locating and deciding on a feasible supplier (through search, evaluation and selection activities) can be quite different depending on the status of supplier contacts. That is, by combining the general buy class framework with the value of existing relationships and networks, in terms of risk reduction and time management, a further nuanced and complex picture of purchasing emerges.

Further, while information requirements are emphasized in Robinson et al.’s (1967) buying decision grid (Anderson et al., 1987), the current model points out that information is not only required but must also be available and possible to obtain within reasonable resources. This basic idea and the fact that information through existing relationships and networks in essence are free of charge offers further explanation for the continuous impact of relationships and networks on industrial buying.

Relationship and network theory in general appear to suggest that the development of relationships and networks should be a managed process where strategic and future aspects of the organization’s development are considered. The current results, however, adds another angle to this perspective. The relationships and networks indeed favor the buying firms but the development of contacts is not necessarily guided by an extensive consideration for strategic development. Rather, the gains are instantaneous and concern effective use of time as well as reducing the perception of risk. The appearing pattern that buyers rather use existing suppliers can, for example, be connected to Håkanson and Snehota’s (1995) discussion on institutionalisation of relationships. This suggests that certain ties are valuable thanks to the stability they offer and the accepted and functioning routines in the exchange between two parties. That is, the model implies that relationships and networks in business buying relates to a tactical behaviour as well as an elaborate and strategic one.

The study does not, however, contradict the notion of win-win situation and possible strategic gains in developing close relationships and monitoring ones network. Neither does it oppose the logic of developing relationships as an outcome of a “relationship strategy” which focuses on the most profitable and strategically important relationships. Rather, it simply points at how firms do not only choose to develop certain relationships and networks further due to an outspoken strategy where assessments of the strengths and importance of ties are made. Instead, in terms of buying behaviour, the relationships and networks are partly used as tactical assets. One might say that in the operational situations characterised by limited time and information, the buyers (as well as the involved sellers) reap the fruits of the continuous relationship building.

The respondents’ accounts show that the relationships can serve two different logics for choice. The buyer either decides on a certain supplier thanks to a decision to develop that specific relationship for strategic reasons, for example investing in the supplier for mutual benefits in the long run. This can be compared to Turnbull et al.’s (1996, p. 51) references to a firm’s relationship management skills when explaining the success of supplier-customer relationships. In the other situation the buyer approaches or selects a supplier thanks to existing previous contacts. That is, not specifically with a strategic incentive and plans to develop the relationship in a particular way. The model hence offers a perspective to relationships and networks that implies its more tactical role. The “ease of current contacts” and the “reassurance of previous experiences” are an important help in making decisions under situations of limited information and time, forcing buyers to act according to “limited rationality”. By looking at relationship development through industrial buying behavior it is, hence, possible to see another angle of development than that focused on in relationship marketing literature.
Conclusion

This paper offers complementary findings on decision-making processes that add to our understanding of a complex buying process. Buying behavior can be described as a multiphase process where buyers continuously deal with selection. In light of this, understanding decision-making is crucial for understanding buyer behavior and the need and availability of information are essential issues. Depending on the situation, buyers require different types of information to feel comfortable in their decision-making. In addition, each situation offers varying access and opportunity to acquire information, forcing buyers to rationalize decision-making, by means of various catalysts for choice. Hence, buyers act differently in terms of decision making and ways through the phases of buying depending on the situation. Models on industrial buying therefore need to address the situation characteristics and the function of information.

Throughout the buying process, relationships and networks hold values in several ways, affecting the buyers’ decision making and progress through the phases of buying. First, they offer well-known settings that provide security. Second, they represent shortcuts to a greater knowledge and information base than that within the single buyer or buying firm. Consequently, regardless of the product, buy class, supplier situation and time status, relationships and networks are regularly exploited in different ways to support decision-making and push forward the buyer’s search, evaluation and selection. This paper does not challenge or disagree with the ideas on relationships and networks as strategic assets but portrays another, more tactical angle of relationships and networks, emphasizing their inherent importance for understanding industrial buying behavior.

The above also have implications for suppliers. Apart from the importance of maintaining good relationships with current customers it emphasizes that reputation and network positions, in the industry where a supplier is active as well as in related markets, can be highly important for a supplier’s chances of being considered (c.f. the ideas of direct and indirect relationship functions, Walter et al., 2001).

Finally, the scope of this paper is limited in terms of respondent quantity and variation of products considered. To confirm or alter the outlined model for decision making, continued research is needed that considers various product categories in a more structured manner.

Reference List


