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# **Behavioral Approaches to Industrial Marketing**

**Extant and Emerging Research**

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# 1 Introduction

Industrial marketing has traditionally been an area of extensive research. In 1977, Sheth (p. 17) commented:

*"Contrary to popular belief, there is a vast amount of research and knowledge about organizational-industrial buyer behavior [...] Actually, there are more journals specializing in industrial buying behavior than in consumer behavior."*

The genesis of the research in this area has been industrial buying behavior where two models were developed around the same time. Sheth (1973) developed a model for industrial buyer behavior and Webster and Wind (1972) developed a general model for organizational buying behavior. These models were robust and form the foundation of industrial buying behavior research (Webster, 1995). These models predominantly discuss the role of the organization, roles of participants, and purchasing situations in the industrial buying process.

A very important area of research emerged next. This area examined the role of the boundary spanners; in other words, industrial marketing salespeople. Specifically, research developed in the area of personal selling and sales management. This area has been a fertile research area, with researchers examining methods to enhance the productivity of salespeople. Research has concentrated on situational and personal factors which influence salespeople and sales managers. The research in this area was predominantly done in the 1980s and is the foundation of the present work in this area. Books by Comer and Dubinsky (1984) and Ford, Churchill, and Walker (1985) are excellent references that detail the models and research in this area.

Based on the fertile research in the areas of industrial buying behaviors and salespeople, an additional area of research emerged towards the late 1980s and early 1990s, as research began to highlight the importance of developing relationships for effective marketing, especially in the business-to-business context. Sheth's creation of a Center of Relationship Marketing at Emory University brought the issue of relationship management into the mainstream. Scholarly opinion seemed to converge on the fact of a paradigm shift in thinking from a transaction-based marketing perspective to a relationship-based marketing perspective. Such a shift in thinking found an echo in industry as well, with relationship marketing becoming a critical strategic tool for sustaining competitive advantage. General Motors, Xerox, Black and Decker and Neiman Marcus were among the companies that looked to their suppliers to help them achieve a stronger competitive position (Ganesan, 1994). In industrial marketing, this area was addressed by proponents of national or key account management programs.

Several studies strengthened the case for relationship marketing: Morgan and Hunt (1994) provided a foundation for the relationship marketing theory with the commitment-trust theory of relationship marketing. Research by Dwyer, Schurr and Oh

(1987), Bucklin and Sengupta (1993), Ganesan (1994) and Kalwani and Narayandas (1995) delineated the processes involved in formulating relationships and identified major antecedents and consequences of relationship marketing. Recent research has sought to reexamine relationship marketing (Fournier/Dobscha/Mick, 1998; Weiss/Kurland 1997; Henke, 1995; Michell/Cataquet/Hague, 1992). The reason for the reexamination is that the balance between giving and getting in a good relationship seems to have been ignored in favor of getting. Reinartz and Kumar (2000) also report on data that challenges some of the fundamental assumptions of relationship marketing.

The focus of this paper is industrial marketing from a behavioral approach. Therefore, we focus on one of the models that was the genesis of research in this area – the Model of Industrial Buying Behavior (Sheth, 1973). We will provide extant research in the area of industrial marketing – behavioral approach. After discussing the literature in this area, the paper seeks to highlight research areas that are emerging in the area of industrial marketing and need additional research attention.

## 2 The Sheth Model of Industrial Buying Behavior

The Sheth model was an extension of the Howard-Sheth model of buyer behavior, adapted to the special behavioral processes of the industrial buyer. The Sheth model has a psychological and behavioral emphasis, focusing on the mental states and decision processes of individual participants in the buying process. Among the key concepts in this model, summarized graphically in figure 2-1, are buyers' expectations, perceptions, role orientations, life styles, and perceived risk. Organizational variables are summarized in three constructs: orientation, size and degree of centralization.

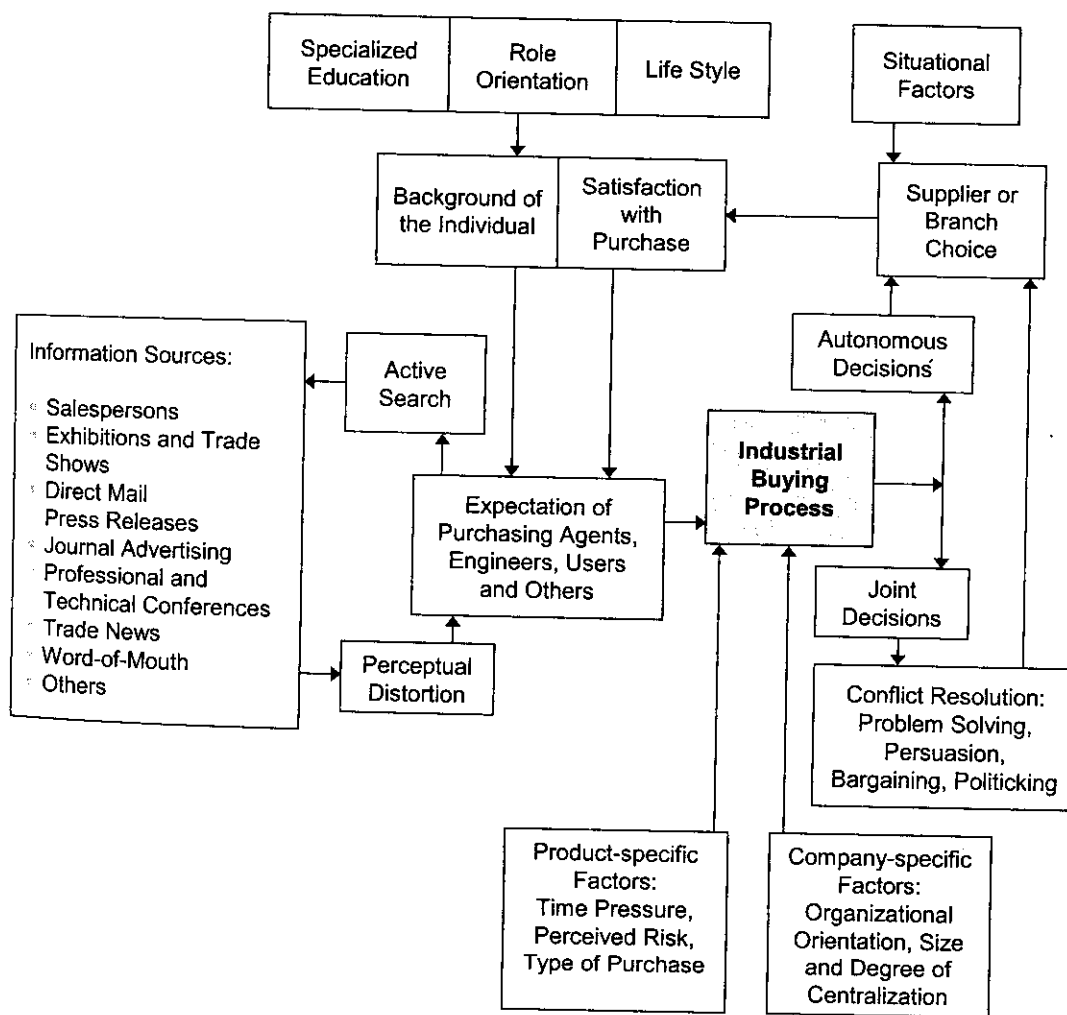
The Sheth model shows that differences among buyers' expectations are caused by:

1. the background of the individuals,
2. their information sources,
3. active search,
4. perceptual distortion,
5. satisfaction with past purchases.

There has been a considerable amount of significant research conducted in this area since the Sheth model. Recently, Sheth (1996) provided a description of recent/current research, which he divided into categories of decision-making processes, information search, buy class framework, and buyer-seller interaction models. A brief description

of the key research in extending the model in the domains of decision-making process, information search, buy class framework, and buyer-seller interaction models follows.

Fig. 2-1: Sheth Model of Industrial Buying



## 2.1 Decision-Making Process

- Dempsey (1978): This study reports the results of a study dealing with the vendor selection process. Based on the results of the study, the author identifies five evaluative criteria (vendor stability, basic economic criteria, geographic affinity, attendant services and assurance mechanisms) and four categories (seller-dominated

external information, buyer-oriented external information, salespeople and buyer-oriented internal information).

- Vyas and Woodside (1984): The authors develop an inductive model of supplier choice processes. Their descriptive, composite model incorporates subroutines of events, interactions, and decisions learned from studying entire industrial buying processes of 18 products.
- Anderson and Chambers (1985): Describes a new model of organizational buying process based on the assumption that organizational buying behavior is essentially a form of work behavior. The model emphasizes the role of reward measurement systems in motivating purchasing process participants. A second sub-model is concerned with the process of group interaction and consensus formation.
- Banting et al. (1991): This paper reports the results of a two-nation study (Hungary and Canada) of the industrial buying process. The authors find similarities as well as differences in purchasing patterns between the two nations.
- Rangan et al. (1992): This paper offers a framework for buyer behavior-oriented micro-segmentation of industrial customers. Four segments of national accounts of a large industrial company are identified: transaction buyers, programmed buyers, relationship buyers, and bargain hunters.
- Dholakia et al. (1993): The authors report an empirical investigation on the length of time firms take in making major purchase decisions and examine its antecedents. Findings suggest that firm size, buy-class, decision-making unit (DMU) size, information sources, and size of consideration set all significantly affect decision-making time.
- Bunn (1994): The author applies a combination of literature and field-based approaches to develop four constructs that underlie buyer behavior: procedural control, proactive focusing, use of analysis techniques, and search for information. Measurement scales for these constructs are created and evaluated through a survey of purchasing professionals.
- Schmittlein and Peterson (1994): Their model applies customer base analysis in which past purchase behavior of customers is observed in order to understand the current and likely future purchase patterns. Results indicate that customer base analysis can be both effective in predicting purchase patterns and in generating insights into how key customer groups differ.
- Brown (1995): The author tests a conceptual model of the relationships among buyer's perspectives of and attitudes toward a vendor company's marketing mix, and the moderating effects of insupplier/outsupplier status of the seller. Results indicate significant moderating effects of insupplier/outsupplier status, and generally validate predictions made on the basis of attitude theory.

Buying center influence of members of buying center:

- Silk and Kalwari (1982) report findings bearing on the reliability of measures used in industrial market surveys to identify the structure of buying groups. They find a lack of consensus about purchase influence between pairs of informants from the same organization. They also find that ratings appear to differentiate among roles but not among stages in the decision process.
- Thomas (1982) studied the nature of interpersonal influence on the individual's decision in organizational buying. Findings suggest that social and organizational bases of influence of personal sources explain changes in a decision-maker's product evaluations.
- Jackson et al. (1984) carried out work to identify the relative influence of participants and how it changes across purchase of different products, buy classes, and procurement decisions. Findings indicate that the relative influence of the buying center members is constant in different buy classes, but changes across product types and decision types.
- Thomas (1984) studied internal relationships among key participants in the buying center. Findings indicate relative importance of selected bases of power, and their relative importance by organizational position.
- Berkowitz (1986) addresses the identification of the main influencers in new product adoption. Findings indicate that end users and technical staff are interested in product sampling; that price was an important consideration among end users and technical staff; and that the purchasing department exercised the final authority for ordering.
- Lynn (1987) analyzes the structure of the buying center for a professional service and found that CPA buying centers are similar in size and in the number of levels of corporate hierarchy and functional areas to other industrial services.
- Kohli and Zaltman (1988) developed a multi-item scale to tap influence, and the process through which influences are manifested in buying centers.
- Martin et al. (1988) compare the expectations of buying center role groups for transportation mode selection and find meaningful differences between role groups. Findings support the suggestion that role members in a buying center have different perceptions of suppliers.
- Kohli (1989) identifies factors that affect an individual's influence in the buying center. The study found that expert power has the greatest influence, followed by reinforcement power of the individual.
- McQuiston (1989) focuses on those people who participate in organizational purchases and decisions, and the factors which affect the interpersonal influence be-

tween participants during the session. This author proposes a structural equation model that suggests the purchase situation attributes of novelty, complexity, and importance are causal determinants of participation and influence in industrial purchase decisions.

- Ronchetto et al. (1989) introduce the organizational buying system concept as an organizational framework for exploring the patterned, repeated interactions that characterize ongoing purchasing processes. Findings indicate that organizational actors derive influence from the position they occupy within the buying system. Individual influence is derived from properties of the formal and informal structure.

Buying center-structure:

- Choffray and Lilien (1980) present a methodology for segmenting industrial markets on the basis of functional involvement in phases of the purchasing decision process. Implementation of the methodology in a real life situation involving industrial cooling systems led to the identification of four segments of organizations.
- Woodside and Sherrell (1980) report a study on purchase of industrial equipment in the paper manufacturing industry. Five decision stages and five overlapping buying centers were found.
- Johnston and Bonoma (1981) developed a method for the quantifiable dimensions of a buying center. They defined and operationalized five interactive dimensions of the buying center: vertical and lateral involvement, extensiveness, connectedness, and purchasing manager centrality.
- Moriarty and Bateson (1982) tested the methodologies of surveying all members of a DMU. They found that there was a greater response rate to the use of "snowballing by telephone" technique as distinct from single stage and exhaustive snowballing.

Environmental influences on organizational buying behavior:

- Grønhaug (1976) developed a taxonomy for classifying organizations and comparing their behavior in buying situations, based on the organizations that were product dependent and product independent, and found purchasing activities to be more structured in product dependent than in product independent organizations. The study also found that search behavior, buying motives, and goals pursued were different in the two types of organizations.
- Spekman and Stern (1979) present a conceptual and methodological framework for examining OBB from a multi-person level of analysis. They view structure as a central variable, for it shapes the nature and degree of interpersonal interaction within the buying group, and is also a primary determinant of the buying group's information acquisition and processing capabilities.

## 2.2 Information Search

- Webster (1970) found little support for word-of-mouth communication in industrial markets and suggests a key role for manufacturers' salespersons.
- Martilla (1971) establishes the importance of word-of-mouth communication within firms and found that the opinion leaders had greater exposure to impersonal information.
- Moriarty and Spekman (1984) conducted empirical investigation of the sources of information sought by decision participants and discovered the importance of non-personal information.
- Deshpandé and Zaltman (1987) studied the use of marketing information in industrial firms.
- Bunn and Clopton (1993) developed the taxonomy of industrial customers' information source use. They conclude that purchase situations are significantly related to choice of an information source mix.
- Weiss and Heide (1993) studied the nature of the search behavior in high technology markets. They conclude that search behavior is determined in part by certain inherent characteristics of markets and in part by buyer's specific situation.

### Organizational climate and role perceptions:

- Qualls and Puto (1989) explore the benefits of using organizational climate as one of the factors affecting decision-framing processes of industrial buyers. Experimental findings indicate that the buyer's general orientation towards risk affects the frame and, subsequently, the buyers' choice. However, there were mixed results with regard to the organizational climate factors affecting decision frame and subsequent choice.
- Robertson and Wind (1982) conducted an empirical study that focused on organizational climate to explain industrial buying behavior.
- Spekman (1981) presents organizational type as a potentially important company specific characteristic that affects the organizational buying process. Differences in the importance associated with purchasing related factors exist among purchasing managers from commercial, not-for-profit, and governmental organizations.
- Thomas (1982) conducted an empirical study on the role perceptions of the members of a buying center.
- Michaels et al. (1987): Research perspectives from role theory are examined with a large sample of purchasing professionals. The results suggest that an awareness of

the nature and influence of role stress in the buying context could be valuable to marketing professionals.

- Henthorne et al. (1993) examined the role played by informal members of the buying center and their impact on the type and level of risk perceived by the organizational buyer. Results indicated that informal influence has a significant effect on perceived risk experienced by the organizational buyer.

Conflict resolution:

- Ryan and Holbrook (1982) propose a construct, decision-specific conflict, in an attempt to integrate purchasing conflict, exchange transactions, and micro-segmentation. Using 17 purchasing decisions faced by automobile fleet administrators, nomological validity was supported by an inverted U-shaped relationship between conflict and responsibility weighted by time.
- Barclay (1991) formulated a model of organizational characteristics that affects buying-related interdepartmental conflict and found that organizational characteristics such as barriers to communication, the reward system, and the ambiguity of departmental responsibilities explain a substantial portion of the variance in the manifestations of buying-related conflict.

## 2.3 Buy-Class Framework

- Bellizzi and McVey (1983), based on research conducted in the commercial construction industry, test the effects of product type and purchase experience on industrial buyer behavior (to test the validity of the buy - grid model). The findings indicate that product type is a meaningful variable which is related to industrial buyer behavior. However, the purchase experience variable or buy-class variable is not significantly related to buyer behavior.
- Leigh and Rethans (1984) apply cognitive script theory to the analysis of industrial purchase behavior in a computer terminal purchase. Industrial buyers' scripts for the overall new purchase process, an initial sales call, a follow-up negotiation meeting, and a modified rebuy situation are established and validated.
- Patton et al.'s (1986) research premise is that in certain types of industrial purchase decisions (vendor selection in modified rebuy situations), the presence of certain mediating variables may indicate that the individual purchasing agent rather than a buying group may make the vendor selection decision. Major findings are that individual decisions seem to predominate in modified rebuy decisions, that loyalty to existing suppliers seems to have an effect on the extent of individual decision making, and that the extent of joint decision making appears to be related to the size of the firm.

