THE NEW PRODUCT SELECTION PROCESS OF RETAIL BUYING COMMITTEES: AN ANALYSIS OF GROUP DECISION-MAKING

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ABSTRACT

THE NEW PRODUCT SELECTION PROCESS OF RETAIL BUYING COMMITTEES: AN ANALYSIS OF GROUP DECISION-MAKING

By

Michael David Hutt

While considerable research has been invested in studies of new product buying behavior among final consumers, little is known about new product selection decisions in a channel context. An important component of the organizational decision-making process, operative in many firms, is group decision-making in the form of a buying committee.

Group decision-making is a central element of models of organizational buying behavior. The purpose of this study is to further the understanding of this process by examining the relationship between the structural properties of the group and key components of the decision-making process. Two group properties are examined: group cohesiveness and group leadership. Underlying the research is the supposition that the type of buying task affects the nature and character of the group decision-making process.

A convenience sample of food buying units, which use a buying committee in reviewing new grocery items, was

selected. The sample included chains, voluntary group wholesalers, and cooperative group wholesalers, located in six metropolitan areas in two midwestern states. The final sample included twenty-two groups consisting of 120 members. The Howard and Sheth new product classification scheme was used as a guide in selecting the three products for the project: (1) a major innovation, (2) a normal innovation, and (3) a minor innovation. A series of hypotheses, grounded in small group theory, are developed at two levels of analysis: group level and individual level. Each hypothesis is tested across the three levels of innovation, using correlation analysis at the group level and Friedman two-way analysis of variance at the individual level.

Does a highly cohesive group of organizational decision-makers approach the new product selection decision differently than a less cohesive group? First, the results confirm the hypothesis that cohesiveness is significantly related to conformity in the application of choice criteria for each buying task. Likewise, the cohesive groups held similar performance goals for the major innovation and tended to engage in more lengthy deliberation in two of three buying tasks. Statistically significant results are lacking when an attempt is made to link cohesiveness to the perceived importance of the group leader in new product selection decisions. The influence of the group leader is

significantly correlated with perceived risk for the major innovation.

At the individual level of analysis, organizational buyers perceive the most risk in the major innovation and the least risk in the minor innovation. Likewise, the relative importance of the group leader in the new product selection decision appears to vary with the buying task: major innovation (ranked first) and minor innovation (ranked third). The results also indicate that the major innovation generates the most product-related discussion.

The Howard and Sheth new product classification scheme appears to offer some insight into the differential buying tasks facing the organizational buyer of consumer goods. Further tests of this classification scheme in the organizational setting are badly needed.

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To Rita

for helping

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CHAPTER I

THE PROBLEM

Nature of the Problem

Substantial numbers of new products fail each year generating a significant waste of economic resources. The desire to better predict consumer acceptance and thus eliminate the waste of unacceptable products and services has provided marketers a strong incentive to conduct new product research. Profiling the new product buyer on certain behavioral or demographic dimensions is an important objective in these studies.[1] While some useful generalizations have emerged from this research tradition, a number of questions of equal operational value to the marketer remain unanswered.

Effective marketing strategy design requires knowledge of buyer behavior at both the consumer and the channel levels. Only limited research has been invested in studying new product buying in a channel context. Operationally, this segment is pivotal in determining the ultimate success

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[1]Thomas S. Robertson, Innovative Behavior and Communication (New York: Holt, Rinehart and Winston, Inc., 1971); see also Everett M. Rogers with F. Floyd Shoemaker, Communication of Innovations, 2d ed. (New York: The Free Press, 1971).

or failure of the new product. Evidence indicates that new product failures seldom are due to unsound products, but result, instead, from basic marketing weaknesses. To illustrate, Buzzell and Nourse found that inadequate market analysis, poor timing, failure to obtain adequate distribution, severe competition, and insufficient marketing efforts were particularly significant in new product failures in the food industry.[2] Angeles uncovered similar results in his probe of 75 major packaged goods new product failures.[3] Thus, consumer and channel factors combine to determine market rejection or acceptance. When a manufacturer develops a new product, an assumption might be made that channel acceptance would follow rather mechanically. A survey indicated that food chains and wholesalers in aggregate accepted less than 25 percent of the new items reviewed. Interestingly, a wide continuum emerged when those firms were clustered by the number of new products accepted annually. Nearly 20 percent of the firms accepted 50 new items or less, while 25 percent provided distribution for from 200 to 500 new products. More than 500 new items were

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[2]Robert D. Buzzell and Robert E. M. Nourse, Product Innovation in Food Processing, 1954-1964 (Boston: Division of Research, Harvard Graduate School of Business, 1967).

[3]Theodore L. Angeles, "Why Do Most New Products Fail?" Advertising Age 40 (March 24, 1969): 85-86.

added by 12 percent of the firms.[4] The wide variation in new product acceptance illustrates the importance of inquiry into the organizational decision-making process.

An important component of this process, operative in many firms, is group decision-making in the form of a buying committee. These committees are used when the judgment of several organizational members seems appropriate to evaluate alternative buying actions.[5] Over 60 percent of the retailers in the food industry currently use a buying committee.[6] Although the structure varies by firm, the buying committee usually consists of four to six buyers who meet regularly to discuss new product offerings. Merchandisers and corporate and division executives are regular committee members in many firms. The philosophy underlying the committee concept is that (1) it applies a wider range of experience to the decision-making process, (2) it allows decisions to be made in a more scientific atmosphere, and (3) it lowers the level of pressure in the buyer-salesman relationship.[7] Salesmen

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[4]"New Directions in the Buyer-Seller Relationship," Chain Store Age, April 1973, p. 54.

[5]Howard L. Gordon, "How Important Is the Chain Store Buying Committee?" Journal of Marketing 25 (January 1961): 56-60.

[6]"New Directions in the Buyer-Seller Relationship," p. 53.

[7]Theodore W. Leed and Gene A. German, Food Merchandising, Principles and Practices (New York: Chain Store Age Books, 1973).

seldom are given the opportunity to make a presentation to the committee, but instead, must rely on buyers to relay key information to the decision-making unit.[8] Clearly, knowledge of the dynamics of the committee process would be instrumental to a marketer seeking channel acceptance for a new product.

Homans contends that informal structuring and the creation of interpersonal bonds occur in all groups after a period of time during which the members have interacted with one another.[9] Likewise, Festinger indicates that the more stable and cohesive the group, the more likely conforming behavior will occur among its members.[10] Thus, a group develops, specific norms evolve, and individuals desiring membership in that group must conform. Influence is transmitted within the group from member to member by word-of-mouth communications. The identity of the source, his relative position in the group, the content of the message and the recipients' perceptions all interact to determine

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[8]Gordon, pp. 56-60; see also R. Weigand, "Why Studying the Purchasing Agent Is Not Enough," Journal of Marketing 32 (January 1968): 41-45.

[9]George Homans, Social Behavior: Its Elementary Forms (New York: Harcourt, Brace & World, 1961), Chapters 3 and 4.

[10]Leon Festinger, "Informal Social Communications," Psychological Review 57 (1950): 271-292.

the extent of the influence. Since a number of organizational buying decisions involve joint deliberation and multiple buying influences, valuable insights may be gained by selecting the group as the unit of analysis.[11] The contribution of group analysis is that both the position of the individual as well as the overall structure of the group can be combined in examining the organizational buying process. Concepts which have potentially high operational value to marketers, such as opinion leadership, can be systematically explored.

To adequately examine new product buying behavior within this framework, careful attention must be given to the divergent nature of the buying tasks facing the organizational buyer of consumer goods. Past classification schemes focus on industrial goods. Robinson and Faris identify three general buying situations in their conceptualization of the industrial buying process:

1. new task--a new problem, requiring considerable information and effort before selecting an alternative;
2. modified re-buy--a recurring need, involving some additional analysis of the buying situation;

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[11] Jagdish N. Sheth, "A Model of Industrial Buyer Behavior," Journal of Marketing 37 (October 1973): 50-56; see also Frederick Webster and Yoram Wind, Organizational Buying Behavior (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972).

3. straight re-buy--a recurring need, handled on a routine basis without consideration of new or unfamiliar alternatives.[12]

The authors estimate that most purchases fall into the straight re-buy category, and further, are characterized by a high degree of loyalty to one or a small group of suppliers. While certain analogs exist, a similar conceptualization is lacking for the consumer goods buying process.

Since all products are not equally innovative, Howard and Sheth developed a classification scheme based on the information requirements of the buyer in purchasing the product. Three types of innovation are identified: major, normal, and minor.[13] First, a major innovation is the case in which a new brand creates a new product class. A major innovation places "the heaviest burden on the buyer's information processing capacities."[14] Second, a normal innovation is the entry of a new brand into an existing product class. Third, a minor innovation is the modification of an existing product (e.g., a new size or

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[12] Patrick J. Robinson and Charles Faris, Industrial Buying and Creative Marketing (Boston: Allyn and Bacon, Inc., 1967), Chapter 2.

[13] John A. Howard and Jagdish N. Sheth, The Theory of Buyer Behavior (New York: John Wiley and Sons, Inc., 1969), pp. 277-330.

[14] Howard and Sheth, p. 280.

package.) The information requirements of the buyer decline with the level of innovation.[15]

In Chapter II, this conceptualization is extended to include the organizational buyer of consumer goods. Clearly, the scale of the innovation alone may affect organizational decision processes within the buying locus of the firm. For example, indirect evidence suggests that an organizational buyer is more likely to seek the advice of others when the risk perceived in the purchase decision is high.[16]

Purpose

Group decision-making is a central component of models of organizational buying behavior.[17] Sheth posits that "the most important aspect of the joint decision-making process . . . is the assimilation of information, deliberation on it, and the consequent conflict which most joint decisions entail."[18] Conflict emerges when the group

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[15] Ibid.

[16] Sheth, "A Model of Industrial Buyer Behavior," pp. 50-56.

[17] Ibid.; see also Webster and Wind, Organizational Buying Behavior, Chapter 1.

[18] Sheth, "Model of Industrial Buyer Behavior," p. 54.

participants have divergent goals and perceptions.[19] The purpose of this study is to further the understanding of the group decision-making process by examining the relationship between the structural properties of the group and key components of the decision-making process. Two group properties are systematically explored: group cohesiveness and group leadership. Underlying this research is the supposition that the type of buying task affects the nature and character of the group decision-making process.

Intuitively, individual members of a highly cohesive group may apply similar choice criteria in reaching a decision to accept or reject a new product offering. Likewise, the extent of group deliberation and the influence of a group leader may shift with the level of risk perceived in the decision and the level of cohesiveness of the group.

By combining a better understanding of the impact of group structure on organizational decision-making and examining this process across three levels of innovation, implications for marketing planning and strategy are developed. Specifically, the industrial goods buy status framework (i.e., new task, modified re-buy, and straight re-buy) is extended to include the organizational buying of consumer goods. Likewise, the dynamics of the group decision-making

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[19] James G. March and H. A. Simon, Organizations (New York: John Wiley and Sons, Inc., 1958), Chapter 5.

process are related to new product development and promotional strategy design.

Research Questions

Valuable insights into organizational buying behavior can be secured by examining the new product selection process of buying committees. Major research emphasis has been given to the new product purchasing behavior of ultimate consumers, but only limited parallel research has centered on intermediate buyers. While buying committees play a strategic role in providing market exposure for a new product, a manufacturer's path to this group of decision-makers is indirect and clouded with uncertainty. The following questions establish the boundaries of this inquiry:

1. How does group structure affect (a) agreement among members of the group on new product choice criteria and performance expectations, and (b) the extent of deliberation in the decision-making process?
2. To what degree and under what conditions is group leadership operative within the buying committee?
3. What effect does the type of innovation have on (a) the level of risk perceived in the buying decision, and (b) the extent of committee deliberations?

Research Objectives

The objective of this study is to examine the research questions outlined above. More precisely, the research objectives are:

1. to determine the degree of association between group cohesiveness and agreement among members of the group on (a) new product choice criteria and (b) product performance expectations;
2. to determine the degree of association between group cohesiveness and the importance of the group leader in the selection decision;
3. to analyze the relationship between group cohesiveness and the extent of deliberation;
4. to examine the influence of group leadership across (a) varying levels of innovation and (b) varying levels of risk perceived in the decision;
5. to examine the relationship between the type of innovation and the level of deliberation in the selection decision.

Limitations of the Study

The limitations of the research are:

1. The study is confined geographically to six metropolitan centers in two states. Likewise, the data

were collected using a nonprobability sample. Consequently, generalizations to the national population of firms cannot be made.

2. The research focuses on three products. Attempts to generalize the findings to other products possessing markedly different characteristics must be undertaken with caution.

3. Numerous definitions of "new product" have been advanced in past research. These divergent conceptualizations indicate that the problem of accurately measuring product newness has not been resolved. A direct comparison of this study to other new product research can be made only where identical definitions are employed.

CHAPTER II

THEORETICAL FRAMEWORK

Overview

Organizational buyer behavior can best be conceptualized as decision-making in which both group and individual variables are important. A conceptual scheme is presented in this chapter which evolves from consideration of the individual organizational buyer to that of a group of decision-makers. Likewise, treatment is given to the concept of perceived risk. The basic theoretical grounding for this investigation is drawn from small group research. A structural view of an organization depicts the small group as the fundamental unit. Thus, small group theory provides an appropriate base to explore the relation between group structure and decision-making.

The Organizational Buyer

Certain analogs drawn from the Howard and Sheth new product taxonomy[1] are particularly valuable in examining the

[1]John A. Howard and Jagdish N. Sheth, The Theory of Buyer Behavior (New York: John Wiley and Sons, Inc., 1969), pp. 277-330.

individual organizational buyer of consumer goods. For a major innovation, the consumer does not have a well-established product class concept or a set of well-formulated choice criteria. Product class is defined as the set of brands that the buyer views as closely substitutable in satisfying his needs.[2] Choice criteria refer to the attributes of the brands in the product class that are important in the buyer's evaluation of a brand.[3] Although the organizational buyer is not evaluating the product for personal consumption, he is faced with the difficult task of estimating how consumers will react to the new item. Since a well-defined product class concept is lacking, he cannot draw upon past experience with similar brands. In an organizational context, choice criteria are operationally defined as the specifications (e.g., promotional backing, terms of sale) that are salient to the buyer in comparing alternative new product offerings. The organizational buyer frequently applies these criteria to a range of brands and product classes. However, the lack of specific product class knowledge, coupled with the inherent problem of projecting consumer demand for a major innovation, may increase the risk he perceives in the selection decision.

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[2]Ibid., p. 417.

[3]Ibid., p. 416.

In reviewing a new brand entering an established product class (normal innovation), the selection decision is somewhat simplified. The organizational buyer has a well-defined product class concept and well-formulated choice criteria. He can draw upon past experience with the product class and compare the new brand with existing brands in reaching a decision. Thus, the decision-maker can readily judge the new product in terms of his existing choice criteria.

The entry of a modified product (minor innovation) may further simplify the review process for the organizational buyer. Again, the buyer has a well-defined product class concept and well-formulated choice criteria. Past experience with the specific brand may generate an even lower level of risk in the decision.

Group Decision-Making

When the individual organizational buyer is linked with other members of the firm to exchange recommendations for new products, the forces of group behavior become operative. A group is defined as "a collection of individuals who have relations to one another that make them interdependent to some significant degree."[4] Since the

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[4]Dorwin Cartwright and Alvin Zander, eds., Group Dynamics: Research and Theory, 3rd ed. (New York: Harper and Row Publishers, 1968), p. 46.

participants in the committee decision process interact frequently and are guided by a similar set of objectives, norms, and expectations, small group theory appears to be particularly appropriate. The Theory of Human Exchange developed by Homans contends that individuals arrange their social relations in such a way as to maximize the total profit of the interaction.[5] Profit constitutes the difference between the rewards and costs of the interaction. To illustrate, if two individuals interact, they may receive companionship (reward), but lose time (cost). The theory dictates that the net profit figure is pivotal in (1) the group selection process and (2) the degree to which the individual adheres to the norms of that group. Applied to group decision-making, two types of organizational rewards are available to the participants: (1) formal organizational rewards allocated by superiors, and (2) social rewards resulting from interactions with other members of the organization.[6] For example, an organizational buyer may carefully weigh the social and organizational costs involved in a definitive endorsement, before

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[5]George Homans, Social Behavior: Its Elementary Forms (New York: Harcourt, Brace and World, 1961), Chapters 3 and 4.

[6]Yoram Wind, "A Reward-Balance Model of Buying Behavior in Organizations," New Essays in Marketing Theory, ed. George Fisk (Boston: Allyn and Bacon, Inc., 1971), pp. 206-217.

the buying committee, of a new item which may subsequently fail. Clearly, the type of innovation may affect the perceptions of both the individual buyer as well as the entire group. A major innovation may complicate the cost-reward trade-off for the individual organizational buyer and increase the level of risk he perceives in endorsing the item. As the level of innovation shifts to normal and then to minor, the calculations may become more and more precise.

When the buyer presents the new product to the group, the actual level of committee involvement in the decision process may vary with the cohesiveness of the group. Group cohesiveness refers "to the degree to which the members of a group desire to remain in the group."[7] Thus, the members of a highly cohesive group are concerned with their membership and possess a strong motivation to contribute to the group's welfare, to advance its objectives, and to participate in its activities.[8] Likewise, research indicates that the greater a group's cohesiveness, the more power it has to bring about conformity to its norms and to

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[7]Dorwin Cartwright, "The Nature of Group Cohesiveness," Group Dynamics: Research and Theory, eds. Cartwright and Alvin Zander, 3rd ed. (New York: Harper and Row Publishers, 1968), p. 91.

[8]Ibid., p. 104.

gain acceptance of its goals.[9] If the perceived rewards of group membership are high, the choice criteria applied to the new product selection decision by individual committee members may be quite similar. Active group discussion may serve to clarify the salient factors impacting on the decision and contribute to this agreement among individual members. Likewise, the discussion may lead to a clearer understanding of the benefits and consequences impinging on the decision, thereby reducing the level of risk which individual members perceive in the decision.

Homans postulates that members of a group are usually differentiated in terms of rank, a concept referring to a person's position in the group relative to the other members. The group also has a set of expectations regarding the behavior of members, norms which regulate the expected interactions, activities, and sentiments of members.[10] High status membership may be earned through experience, technical competence and similar dimensions. Hollander defines a leader as "a person with characteristics, including especially a given status, which allow him to exercise

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[9]Leon Festinger, "Informal Social Communications," Psychological Review 57 (1950): 271-292; see also L. Berkowitz, "Group Standards, Cohesiveness, and Productivity," Human Relations 7 (1954): 509-519.

[10] Homans, Chapters 3 and 4.

influence in line with the attainment of group goals."[11] In group decision-making, the leader may be particularly visible during the evaluation of a major innovation.

Hollander suggests that the person's status in a group can be thought of as an accumulation of "idiosyncrasy credit" that accrues to him or is lost by him as he interacts with the other group members.[12] Idiosyncrasy credit is made up of the sum of the positive dispositions of the others toward the person. Credits are bestowed on the leader as rewards for meeting the expectations of the other group members, or retrieved if he fails to meet their expectations. In operational terms, the greater his accumulation of credit, the greater latitude he has to innovate and deviate from the group norms. Hollander posits that innovation, in the face of situational demands, is expected of the leader as a feature of his role.[13] Thus, the high status member of a buying committee may play a particularly significant role in the decision to accept or reject a major innovation.

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[11] Edwin P. Hollander, Principles and Methods of Social Psychology, 2nd ed. (New York: Oxford University Press, 1971), p. 590.

[12] Edwin P. Hollander, "Conformity, Status, and Idiosyncrasy Credit," Psychological Review 65, No. 2 (1958): 117-127.

[13] Ibid.; see also Hollander, Principles and Methods of Social Psychology, Chapter 15.

The Concept of Perceived Risk

The concept of perceived risk has been interwoven throughout this theoretical formulation. Kogan and Wallach include two dimensions in their conceptualization of risk: (1) a "chance" component which focuses on probability, and (2) a "danger" component which centers on the severity of the negative consequences.[14] In contrast, Cox proposes that perceived risk is a function of two elements: uncertainty and consequences.[15] The uncertainty may be in regard to the nature, acceptance levels, and importance of buying goals, or in connection with matching goals with purchases. Consequence may relate to two types of goals: performance and psychosocial. Performance goals focus on product performance, while psychosocial goals center on the decision-maker's perception of himself, his perception of how others will view him, and, likewise, on the resources invested (money, time, effort) to attain the goals. When a goal is highly valued and considerable resources have been invested in the quest, failure to achieve the goal will generate

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[14] Nathan Kogan and Michael A. Wallach, Risk Taking, A Study in Cognition and Personality (New York: Holt, Rinehart and Winston, Inc., 1964), pp. 1-20.

[15] Donald F. Cox, ed., Risk Taking and Information Handling in Consumer Behavior (Boston: Division of Research, Graduate School of Business, Harvard University, 1967), pp. 5-6.

serious consequences.[16] Two questions posed by the individual buyer may serve to operationalize the concept in an organizational setting:

1. How certain am I that the new product will meet my performance goals?
2. How will other members of the organization react to my endorsement of the new product?

Summary

The Howard and Sheth new product taxonomy is applied to an organizational buyer of consumer goods. When the individual buyer is linked to a committee, small group theory becomes particularly relevant to the formulation. Emphasis is given to the work of Homans and Hollander. Group cohesiveness and leadership are related to decision-making in an organizational context. Likewise, the concept of perceived risk is introduced.

Further research underlying these concepts constitutes the theme of Chapter III.

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[16] Ibid., p. 7.

CHAPTER III

THE LITERATURE

Rationale

The process of selecting relevant literature is based on the following rationale. First, since the study is undertaken within the food industry, research centering on channel acceptance of new food items is selected for review. Second, literature focusing on group decision-making of direct significance to this investigation is analyzed in the following content areas: group research in a consumer setting, group research in an organizational setting, and group risk-taking. Third, substantial research attention has been devoted to the concepts of "opinion leadership" and "perceived risk." Particular emphasis is given to those studies which take an organizational focus.

Industry Studies

Using a case study approach, Borden traced five new products to a total of 26 supermarkets.[1] The primary

[1]Neil H. Borden, Jr., Acceptance of New Food Products by Supermarkets (Boston: Harvard Graduate School of Business, Division of Research, 1968).

research objective of the study was to record and appraise the relative impact of the various elements in new product propositions on supermarket acceptance and store distribution. A secondary research objective was to analyze the relative importance of criteria used by supermarket management in evaluating new product offerings. One-half of the firms studied used a buying committee.

The findings indicated that the actual elements of the new product propositions (e.g., the details of the consumer and trade marketing programs) were more important to trade decisions than the manner in which they were communicated by salesmen. A rank ordering of proposition elements by their effectiveness was not possible because of the unstructured nature of the new product selection process. Buying criteria were broad, based on experienced judgment, and seldom reduced to writing. Despite the existence of a buying committee, the buyers appeared to be primarily responsible for most new product decisions. In the firms studied, the chief function of the buying committee was to check the decisions of buyers. Similar results were uncovered by Anderson in an earlier study.[2] After an analysis of

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[2]Hayward S. Anderson, "A Study of the Criteria Used by the Merchandising Committees of Three Multi-Unit Supermarket Organizations when Selecting New Grocery Items" (Ph.D. dissertation, Harvard Graduate School of Business Administration, 1961), cited by Neil H. Borden, Jr., Acceptance of New Food Products by Supermarkets, p. 63.

100 decisions in three buying committees, he concluded that both a structured evaluation system and definite criteria for evaluating new items were lacking. However, a more recent (1973) study conducted by Chain Store Age indicates that the selection process is becoming more structured and standardized.[3]

Many firms are now using new item forms which summarize the key characteristics of the marketing program surrounding the new product introduction. Likewise, 61 percent of the firms surveyed have buying committees. The specific function of the committee varies by organization, from an advise and consent role to one of full authority in making the final decision. In many of the firms not using buying committees, the buyer closely resembles a "product manager" and has full authority and responsibility for the commodity lines under his control.

What criteria do buyers use in selecting new products? Listed in order of importance, the research yielded the following criteria: (1) product profitability, (2) usefulness of product, (3) "newness" of item, (4) advertising support, and (5) test market results.[4] Interestingly, when product managers were asked to estimate the

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[3] "New Directions in the Buyer-Seller Relationship," Chain Store Age, April 1973, pp. 35-69.

[4] "How Buyers Foretell New Product Success," Co-ops and Voluntaries, December 1974, pp. 30-32.

criteria they perceive as being important to buyers, the following list emerged: (1) product profitability, (2) gross margin, (3) advertising support, (4) "newness" of item, and (5) test market results. Thus, the product managers in the study overestimated the importance of gross margin and advertising support, while underestimating the importance of both the usefulness and "newness" of the product.

Grashof investigated the product mix decision process in supermarket chains through a study of the literature, contacts with industry, and experiments with a computer simulation.[5] First, the research identified three alternative decision structures for the product mix decision: (1) buyer makes all decisions, (2) buyer screens new items and makes recommendations to the buying committee, and (3) buying committee makes all decisions. Next, the new product decision criteria available to chains was divided into two categories: qualitative and quantitative. The research identified net profit per unit time as the most appropriate quantitative criterion, while "newness" of an item was nominated as the most reasonable qualitative criterion.[6]

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[5]John F. Grashof, "Supermarket Chain Product Mix Decision Criteria: A Simulated Experiment," Journal of Marketing Research 7 (May 1970): 235-242; see also Grashof, "Information Management for Supermarket Chain Product Mix Decisions: A Simulated Experiment" (Ph.D. dissertation, Michigan State University, 1968).

[6]Ibid.

To summarize, evidence indicates that the new product selection process of food chains and other channel members is becoming more structured and standardized. Likewise, while the specific function varies with the organization, buying committees are widely used within the industry. Expanded investigation is needed in the following areas. First, a precise definition of "new product" is needed. In the trade literature, this term includes items ranging from a new size to an entering brand that establishes a new product class. Does the nature of the decision process shift with the type of "new" product? Second, little is known about the structural properties of buying committees. Are certain committee members particularly influential in selection decisions? Both of these questions are addressed in this research project.

Group Decision-Making

The relevant literature in this section is divided into three areas for discussion: (1) Group Research: Consumer Setting, (2) Group Research: Organizational Setting, and (3) Group Risk-Taking.

Group Research: Consumer Setting

The group has been used as a unit of analysis in several consumer research studies. One of the pioneering studies examined the diffusion of a new drug product among

physicians.[7] By marrying sociometric techniques with survey research methods, Coleman and his colleagues explored the role of the social integration of an individual in his decision to adopt a new product. They concluded that, first, the influence of social networks operated among the doctors who were well integrated into the medical community through ties of a professional nature. Next, the influence spread through the friendship network to doctors who were closely tied to the medical community through their friendship relations. By this time, social influence also began to reach the relatively isolated doctors. Six months after the release of the innovation, the network became inoperative as a chain of influence. After this point, adopters were presumably responding to influences outside the social network.

An experimental study by Stafford attempted to identify if and how informal social groups influence the brand preference of their members.[8] A sample was drawn from pre-existing reference groups and each member was given the opportunity to select from four previously unknown

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[7]James Coleman, Elihu Katz and Herbert Menzel, "The Diffusion of an Innovation among Physicians," Marketing Models, ed. R. L. Day (Scranton: International Textbook Company, 1964), pp. 100-117.

[8]James E. Stafford, "Effects of Group Influences on Consumer Brand Preferences," Journal of Marketing Research 31 (February 1966): 68-75.

brands of bread over an eight-week period. The brands were all identical and designated only by the letters "H," "L," "M," or "P." The subjects were unaware of the underlying focus of the investigation. The study concluded that: (1) informal groups definitely influence conformity among the members regarding the brand of bread preferred, (2) cohesiveness appears to have its most important function in providing an agreeable environment in which informal leaders can effectively operate, and (3) the extent and degree of brand loyalty within a group is closely related to the behavior of the informal leader.

Using a similar design, Venkatesan probed the influence of group pressures on purchase decisions.[9] Three suits, identical in every detail, were presented to a sample of business students. The subjects were then asked to choose the best suit. Group influence was measured by comparing control group selections with conformity group choice. In the control groups, the selections of other members were unknown, whereas in the conformity groups, a subject was grouped with confederates who unanimously chose the same suit. In the absence of any group influence, random choice characterized the selection process, but in

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[9]M. Venkatesan, "Experimental Study of Consumer Behavior Conformity and Independence," Journal of Marketing Research 3 (November 1966): 384-387.

the conformity condition, individuals yielded significantly to group pressure by concurring with majority preference.

Group influence and consumer conformity likewise provided the focus in a study by Hansen.[10] Small classes of female business students constituted the groups under study. At the first class meeting, measurements were obtained for brand choice and frequency of use in ten product areas. Eight months later, the original measures were repeated, together with measures of group structure, cohesiveness and conformity. The results indicated that there was very little imitative behavior or group influence. Hansen concluded that the consumer may not react automatically to the impulses he receives from his friends, but may, instead, attempt to manipulate them before he makes his decisions.

Following the same track, Witt explored the influence of informal social groups on member brand choice behavior.[11] A sample of fifty students provided the core for the formation of the groups. Each subject was then

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[10] Flemming Hansen, "Primary Group Influence and Consumer Conformity," Marketing Involvement in Society and the Economy, ed. Philip R. McDonald (Chicago: American Marketing Association, 1969), pp. 300-305.

[11] Robert E. Witt, "Informal Social Group Influence on Consumer Brand Choice," Journal of Marketing Research 6 (November 1969): 473-476; see also Robert E. Witt, "Group Influence on Consumer Brand Choice," Marketing Involvement in Society and the Economy, pp. 306-309; and Robert E. Witt and Grady D. Bruce, "Purchase Decisions and Group Influence," Journal of Marketing Research, 7 (November 1970): 533-535.

asked to select four friends, with whom he spent time socially, to participate in the experiment with him. Measurement was then made in three areas: group cohesiveness, group brand choices and group knowledge of member brand choices. Four products were involved in the study--beer, after-shave lotion, deodorant and cigarettes. The relationships of group cohesiveness and group knowledge to similarity of brand choice varied significantly across products. This provides an indication that product purchase decisions vary in their susceptibility to group influence. In an early study by Bourne, product conspicuousness was identified as the most important determinant of reference group influence.[12]

The innovative behavior of group members provided the scope in a study conducted by Robertson.[13] Neighborhood groups were formed using sociometric techniques. The sample included 20 groups consisting of 85 members. Innovativeness was measured by asking members to report the innovations purchased within three product classes: food, clothing,

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[12] Francis S. Bourne, "Different Kinds of Decisions and Reference-Group Influence," Marketing and the Behavioral Sciences, ed. Perry Bliss (Boston: Allyn and Bacon, Inc., 1963), pp. 247-255.

[13] Thomas S. Robertson, "The Effect of the Informal Group Upon Member Innovation Behavior," Psychological Experiments in Consumer Behavior, ed. S. H. Britt (New York: John Wiley and Sons, Inc., 1970), pp. 210-224.

and appliances. Self-perceived innovativeness measures were also incorporated into the study. Variables correlating most highly with innovativeness were the group norm on innovation and the level of perceived risk. These variables were found to vary by product category. Likewise, it was found that the extent of new product communication alone apparently does not lead to high group innovativeness, nor to similarity in innovative behavior patterns. The author proposed that this may be due to two factors: (1) group agreement may not exist on the topic of new product adoption, and (2) both positive and negative information is transferred in the group setting.

New product adoption patterns were likewise examined by Myers.[14] Groups were formed by a procedure involving the specification of close friends by one respondent and a confirmation of those identified through follow-up interviewing. An index of opinion leadership was developed for each group member. The highest scoring individuals were chosen to be the opinion leader confederates, while the lowest scorers were chosen to be nonopinion leader confederates. Following the identification process, each of the confederates was contacted and asked to serve a new freeze dried food product

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[14] John G. Myers, "Patterns of Interpersonal Influence in the Adoption of New Products," Science, Technology and Marketing, ed. Raymond M. Hass (Chicago: American Marketing Association, 1966), pp. 750-757.

to her family. Further, after trying it, the subject was asked to distribute the samples to other persons in her group. When the opinion leader was the introducer, the majority of the members' attitudes toward the brand shifted in the same direction as that of the introducer. Markedly different results surfaced when the non-leader served as the introducer. In this case, member attitudes appeared to change in the opposite direction.

While important exploratory work has been conducted using the group as a unit of analysis in a consumer setting, certain limitations emerge. First, the artificial conditions infused into many of the designs may have inhibited actual behavior patterns that are operative in a more realistic environment. Second, the research findings are difficult to translate into managerial terms. However, an important contribution of these studies is the identification of a number of relationships worthy of further investigation. Likewise, the research questions posed in these studies take on rich theoretical and managerial significance when applied in an organizational setting.

Group Decision-Making: Organizational Setting

Webster and Wind defined organizational buying as "a decision-making process carried out by individuals in interaction with other people in the context of a formal

organization."[15] A variety of forces influence organizational buying decisions. Webster and Wind classified those variables as individual, social, organizational, and environmental. Each of these classes can be further subdivided into task and non-task variables.[16] To illustrate, a committee meeting called to establish buying goals (social task variables) differs from informal, off-the-job interactions among the same committee members (social non-task variable).

Members of the organization who interact during the buying decision process were defined by Webster and Wind as the "buying center."[17] Several distinct roles in the buying center have been conceptualized: (1) users (exert influence individually or collectively), (2) influencers (indirectly or directly influence buying or usage decisions), (3) buyers (select supplier and arrange terms of purchase), (4) deciders (possess formal or informal power to determine the final selection of suppliers), and (5) gatekeepers (control the flow of information into the

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[15] Frederick E. Webster, Jr., and Yoram Wind, "A General Model for Understanding Organizational Buying Behavior," Journal of Marketing 36 (April 1972): 12-19; see also Frederick E. Webster, Jr., and Yoram Wind, Organizational Buying Behavior (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.

[16] Ibid.

[17] Webster and Wind, "A General Model for Understanding Organizational Buying Behavior," p. 17.

group). Multiple buyers' influence is likewise a central component in a model of industrial buyer behavior advanced by Sheth.[18]

In a broader context, Cyert and March have developed four concepts which describe some of the dynamics of organizational decision-making.[19] The first concept, uncertainty avoidance, posits that organizational members are motivated by a desire to reduce uncertainty. Standard operating procedures, traditional industry norms, and contracts with suppliers evolve to achieve some level of control over the environment. Problemistic search, a second concept, focuses on the organizational decision process. A defined problem triggers the search for information. Currently-known solutions to similar problems are revealed first, before other, less familiar, alternatives are probed. The authors contend that this tendency inhibits innovation in the organization. Search processes likewise reflect the specialization, past experience, and expectations of the searchers, and the unresolved conflicts within the organization. The third concept, organizational learning, recognizes that organizations, like individuals, adapt to

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[18] Jagdish N. Sheth, "A Model of Industrial Buyer Behavior," Journal of Marketing 37 (October 1973): 50-56.

[19] R. Cyert and J. March, A Behavioral Theory of the Firm (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963), Chapter 6.

goals, attention rules, and search rules over time. To illustrate, an organization (1) adjusts goals upward or downward to reflect success or failure in achieving the previous period's performance target; (2) learns to devote particular attention to certain parts of the external environment while ignoring others; and (3) applies search rules that have generated favorable results in the past. The fourth component of the theory, quasi-resolution of conflict, recognizes that latent conflict exists among goals in most organizations, and a number of mechanisms are used to reduce goal conflict. For example, buyers do not always seek the best solution but, instead, often search for one that is acceptable within the constraints of organizational goals. Webster and Wind provided evidence that each of the four theory components are applicable to organizational buying behavior.[20]

Conflict may likewise be operative in buying committees. Leavitt suggested that four types of problems may emerge.[21] First, individual members might not agree on the objectives of the committee, particularly when various departmental viewpoints are represented. Second, a buying committee can easily lose direction if effective leadership

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[20] Webster and Wind, Organizational Buying Behavior, pp. 72-73.

[21] Harold J. Leavitt, Managerial Psychology, 2nd ed. (Chicago: The University of Chicago Press, 1964), pp. 252-267.

is lacking. Third, specific decision-making issues, such as the need for unanimity versus the majority rule, may create problems. A fourth source of difficulty for the buying committee may stem from the personalities of the participants. Argumentativeness, defensiveness and other characteristics of individual members may inhibit committee performance.

After careful examination of literature drawn from small group theory, Filley and House evaluated three areas most vital in committee use: (1) size, (2) leadership, and (3) composition and activity of membership.[22] First, they concluded that from the standpoint of balancing interpersonal needs, there is empirical support for a committee size of five. They cautioned that this number may be modified when more is known about the effects of committee size on productivity. Second, the research reviewed supported the notion that the committee chairman should be task-oriented and directive in his leadership. Likewise, the chairman or another group member must perform a social-leadership role as well. Ideally, the two leadership roles would be combined. Third, the authors concluded that the following proposition has general support in the literature:

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[22] Alan C. Filley and Robert J. House, Managerial Process and Organizational Behavior (Glenview, Ill: Scott, Foresman and Company, 1969), Chapter 14; see also A. C. Filley, "Committee Management: Guidelines from Social Science Research," California Management Review 13, No. 1 (Fall, 1970): 13-21.

"Integrated, cooperative committee membership is more effective in meeting committee goals than nonintegrated, competitive membership." Research suggests that groups whose members share common goals are more contented and productive than groups whose members compete privately or otherwise seek self-centered needs.[23]

A further examination of committee decision-making was made by Van de Ven and Delbecq. In their view, management of the decision-making process within a committee is critical in affecting: (1) the content and distribution of interaction; (2) the affectional overtone of the interaction; and (3) the quality of the decision outcome. They contrasted "nominal" groups, where members work without verbal interaction in generating solution strategies, with "interacting" groups. The authors concluded that the optimum blend of these processes for a problem-solving committee is: (1) the use of nominal group processes in the early phases of committee work (fact finding, idea generation); (2) the use of structured feedback and interaction in the second phase; and (3) the use of nominal group voting for individual independent judgment in the final phase.[24]

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[23] Ibid.

[24] Andrew Van de Ven and Andre L. Delbecq, "Nominal Versus Interacting Group Processes for Committee Decision-Making Effectiveness," Academy of Management Journal 14, No. 21 (June 1971): 203-212.

Group Risk-Taking

Since 1961, substantial research attention has been invested in studies of group influences on individual risk-taking behavior. The studies have followed a procedure in which subjects were asked individually to answer a set of questions in private, then discuss them as a group in order to reach a consensus. Each question posed a choice in which the status quo was an alternative, while the other alternative was an act that might result in a better state of affairs or in an undesirable state. The result, first reported by Stoner, was that the group decisions were more risky on the average than initial individual decisions.[25] This is commonly referred to as the "risky shift" phenomenon. Using the same instrument employed by Stoner, the results have been replicated under varying conditions of group size, age, and nationality.[26] The conclusion that decisions by groups were riskier than decisions by individuals was interpreted as being contrary to a body of research and

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[25] J. A. F. Stoner, "A Comparison of Individual and Group Decisions Involving Risk" (Master's thesis, School of Industrial Management, Massachusetts Institute of Technology, 1961), cited by Dean G. Pruitt, "Choice Shifts in Group Discussion: An Introductory Review," Journal of Personality and Social Psychology 20, No. 3 (1971): 339.

[26] George C. Hoyt and J. A. F. Stoner, "Leadership and Group Decisions Involving Risk," Journal of Experimental Social Psychology 4 (1968): 275-276.

opinion on the effects of groups on individuals. Several competing hypotheses were developed to explain the shift.

The diffusion-of-responsibility theory posits that group experience reduces anxiety about the possible negative consequences of making the risky decision. The sense of shared responsibility for an unsuccessful outcome might allow the group members to be more bold in their decision-making.[27] It is important to note that this theory explains only shifts toward risk, not shifts toward caution. A second explanation is that the most risk-prone individual in the group is also the most influential.[28] While this explanation has been questioned, other versions of leadership theory have evolved.

A third theory, advanced by Brown, includes the possibility of a shift toward caution.[29] Using a study by Nordhay as a base, Brown postulates that the nature of the problem is the key determinant of whether a value on caution or a value on risk is engaged. Thus, "the group decision will be more extreme than the individual decision--

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[27] M. A. Wallach, N. Kogan, and D. J. Bem, "Diffusion of Responsibility and Level of Risk Taking in Groups," Journal of Abnormal and Social Psychology 68 (1964): 263-274.

[28] D. G. Marquis, "Individual Responsibility and Group Decisions Involving Risk," Industrial Management Review 3 (1962): 8-23.

[29] Roger Brown, Social Psychology (New York: The Free Press, 1965), p. 705.

in the direction of the value engaged, whichever that direction may be."[30] Two factors account for the shift. First, the value engaged, risk or caution, influences information flow so that more relevant information will be elicited supporting the value than opposing it. Second, a comparison process is operative in which the individual tries to calculate where other individuals stand on the decision problem. To illustrate, if the value engaged is caution, individuals would guess that others would adopt a less cautious decision than themselves. As group discussion develops, the members selecting higher risk options will come to realize that their position differs from the average and, in turn, will shift to a more cautious selection. The process is reversed when the value engaged is risk.[31]

In an extensive analysis of the risky shift literature, Cartwright raised certain questions about the basic assumptions that have guided the research.[32] First, the research in the area has been almost universally based on the same measure of risk--the choice dilemmas first

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[30] Brown, p. 706.

[31] Ibid.

[32] Dorwin Cartwright, "Risk Taking by Individuals and Groups: An Assessment of Research Employing Choice Dilemmas," Journal of Personality and Social Psychology 20, No. 3 (1971): 375-378.

applied by Stoner. Thus, it is difficult to generalize the results to other settings. In fact, Belovicz and Finch contended that there is no theoretical basis for generalization beyond the dilemmas-of-choice instrument.[33] Second, Cartwright observed that the groups studied have certain "unnatural" properties: no history, future or significant enduring relationships. Would the same results emerge in natural groups with an extended history of joint problem-solving like a buying committee? Little is known about the effects of group properties in the basic findings. Third, uncertainty surrounds the question of conceptualizing the processes of group discussion and group decision. Although great importance has been attached to discussion in the occurrence of shifts in choice, almost nothing is known about its nature.[34] Clearly, these problem areas limit the operational value of this research to organizational buying.

Two studies of the risky shift phenomenon have been conducted in a marketing context. Using consumer products as stimuli, Johnson and Andrews tested the proposition that the amount of risky shift following group discussion would be negatively related to the level of perceived product

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[33] Meyer W. Belovicz and Frederic E. Finch, "A Critical Analysis of the 'Risky Shift' Phenomenon," Organizational Behavior and Human Performance 6 (1971): 150-168.

[34] Cartwright, pp. 375-378.

risk.[35] Perceived product risk was operationally defined as a function of (1) the probability that the product might fail and (2) the severity of the negative consequences given the occurrence of that event. Consumer products which had been scaled for degree of perceived product risk were used as stimuli in the experiment. The study found that group discussion produced a risky shift with three low-perceived-risk products, no shift with three medium-perceived-risk products, and a conservative shift with three high-risk products.

In another study, Woodside focused on the question: How does membership in an informal group affect an individual's risk-taking?[36] Experimental decision-making situations were designed for eight product categories. Each of the hypothetical situations presented two courses of action, one course being riskier but potentially more rewarding than the other. The results indicated that consumers, acting as a group, were more willing to choose riskier product alternatives after group discussion than before such discussion. Likewise, consumers, acting

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[35] Daniel J. Johnson and I. Robert Andrews, "Risky Shift Phenomenon Tested with Consumer Products as Stimuli," Journal of Personality and Social Psychology 20, No. 3 (1971): 382-385.

[36] Arch G. Woodside, "Informal Group Influence on Risk Taking," Journal of Marketing Research 9 (May 1972): 223-225.

individually after group discussion, were more willing to select riskier alternatives than before such discussion. The author suggested that the discussion may be viewed as a risk reduction process or, alternatively, as a neutralizing process. In commenting on this research, Reingen emphasized two points.[37] First, since the groups were created for experimental purposes, the real-world implications of the study were quite limited. Second, the study should have considered the possible impact of degrees of perceived risk on the risky shift. Reingen speculated that the degree of perceived risk would vary widely across the eight buying situations used by Woodside.

To summarize, considerable research has been invested in studies of the "risky shift" phenomenon and a number of alternative explanations have evolved. Unfortunately, the assumptions and procedures injected into past research designs severely limit the application of the results to organizational decision-making. In the present research, risk is explored across three buying situations and systematically linked with two group properties: leadership and cohesiveness.

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[37] Peter H. Reingen, "Comment on Woodside," Journal of Marketing Research 11 (May 1974): 223-224; see also Arch G. Woodside, "Is There a Generalized Risky Shift Phenomenon in Consumer Behavior?" Journal of Marketing Research 11 (May 1974): 225-226.

Perceived Risk

Bauer's classic conceptualization of "consumer behavior as a risk taking phenomenon" stimulated a wealth of research.[38] The concept has recently been applied to organizational buying behavior. McMillan tested the hypothesis that the risks perceived by members of the buying firm toward competing vendors would be instrumental in the vendor selection decision of the buying firm.[39] Scaled measurements were obtained on 21 dimensions of the vendor's offer. These dimensions were drawn from the perceived risk literature (e.g., quality and service). Of the risk content variables studied, only a few were found to vary significantly between the buying and nonbuying firms. Jointly, the significant variables explained only a small portion of the variation existing between the buying and nonbuying firms.

Using an experimental design, Levitt investigated the effect of the company image, and the quality of the sales presentation in obtaining a first product hearing (low risk decision) and obtaining an early adoption (high

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[38] Raymond A. Bauer, "Consumer Behavior as Risk Taking," Proceedings of the 43rd Conference of the American Marketing Association, 1960, pp. 389-398.

[39] J. R. McMillan, "The Role of Perceived Risk in Vendor Selection Decisions" (Ph.D. dissertation, The Ohio State University, Columbus, Ohio, 1972), pp. 144-151.

risk decision).[40] The results indicated that company reputation is a powerful factor in the industrial purchasing process, but its importance varies with the technical competence and sophistication of the customer. Likewise, he concluded that the higher the risk in the purchase decision, the more likely a good sales presentation will trigger a purchase.

In a controlled experiment of industrial buying behavior, Cardoza and Cagley attempted to manipulate risk at two levels by varying (1) the total dollar value of the requisition; (2) the complexity of the purchased commodity; and (3) the visibility and consequences of choosing an unacceptable supplier.[41] A probability sample of 64 purchasing agents participated in the experiment. The research suggested that industrial buyers are responsive to the amount and type of risk in purchase decisions. For example, the results implied that when the purchase of a particular product is perceived as important (high risk), price concessions will not generate sales. The authors

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[40] T. Levitt, "Communications and Industrial Selling," Journal of Marketing 31 (April 1967): 15-21; see also T. Levitt, Industrial Purchasing Behavior: A Study of Communications Effects (Boston: Division of Research, Harvard Graduate School of Business Administration, 1965).

[41] Richard N. Cardoza and James W. Cagley, "Experimental Study of Industrial Buyer Behavior," Journal of Marketing Research 8 (August 1971): 329-334.

contended that these findings extend the concept of risk by indicating that the type of risk also influences buyers' behavior.

Wilson, in an examination of the decision-making styles of industrial buyers, used an expected monetary value model as a standard against which to measure the buyers' decisions.[42] Expected value is calculated by summing the product of each possible outcome for an alternative and its probability of occurrence. Five purchasing problems were given to 132 purchasing agents and managers. Subjects who made choices similar to the model were classified as having "normative" decision styles while those who avoided uncertainty and large negative outcomes were classified as "conservative." A third group that first made normative choices but later shifted to conservative choices were termed "switchers." Wilson concluded that an individual's need for certainty may be a good predictor of his decision-making style. High need for certainty was associated with conservative decision-making and low need with normative decision-making. Also, buyers with a low need for certainty may be able to accept uncertain alternatives without feeling uneasy.

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[42] David T. Wilson, "Industrial Buyers' Decision-Making Styles," Journal of Marketing Research 8 (November 1971): 433-436.

Opinion Leadership

Are opinion leaders an important influence in organizational buying decisions? Several researchers have centered on this question. Webster examined the role of various information sources in the decision-making process of industrial executives.[43] Opinion leadership was explored in an interorganizational context. Personal interviews were conducted with key executives in 58 manufacturing firms. The results indicated that discussion about new products between decision makers in different companies was an infrequent occurrence. Since the salesman was identified as a valuable and highly credible source, the industrial buyers felt little need to use informal channels for information. Similar results were uncovered by Ozanne and Churchill in their study of adopters of a new automatic machine tool.[44] Again, informal sources of communication played a minor role in the decision process. However, conflicting findings have been reported in three studies.

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[43] Frederick E. Webster, Jr., "Informal Communication in Industrial Markets," Journal of Marketing Research 7 (May 1970): 186-189.

[44] Urban B. Ozanne and Gilbert A. Churchill, Jr., "Adoption Research: Information Sources in the Industrial Purchase Decision," Marketing and the New Science of Planning, ed. Robert L. King (Chicago: American Marketing Association, 1968), pp. 352-359.

First, Martilla found that buying influentials often sought information from persons in competing firms.[45] However, informal communication between firms was found to be more situational and varied with the level of innovation and the geographic market structure of the industry. Likewise, word-of-mouth communication was found to be an important element within firms in the industrial adoption process. Opinion leaders were found to be exposed more frequently and in greater depth to impersonal sources of information than other buying influentials within the firm.

Second, in an intriguing study, Czepiel examined the notion "that diffusion in industrial markets can be studied as a social process."[46] The study focused on the diffusion of the continuous casting process in the steel industry. Through sociometric analysis, the author identified a functioning, informal community linking together adopting firms. He cautioned that this finding may be a function of the maturity, as well as the homogeneous nature, of the industry. Also, Czepiel found that opinion leadership, with respect to the innovation, was greater among early adopters than among later adopters.

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[45] John A. Martilla, "Word-of-Mouth Communications in the Industrial Adoption Process," Journal of Marketing Research 8 (May 1971): 173-178.

[46] John A. Czepiel, "Word-of-Mouth Processes in the Diffusion of a Major Technological Innovation," Journal of Marketing Research 11 (May 1974): 172-180.

Third, in a similar investigation, Schiffman and Gaccione attempted to profile opinion leaders in the nursing home industry using generalizations drawn from studies of the household-consumer market.[47] Institutional opinion leaders were found to have significantly greater interpersonal interaction with administrative personnel of other nursing homes, and to be more likely to seek the advice of others, than nonleaders. In contrast to the findings of household-consumer studies, the results did not indicate a significant difference between opinion leaders and nonleaders regarding the extent of their exposure to marketer-dominated information sources (e.g., advertising, salesmen). The authors recommended that in future research it may be advisable to trace the impact of opinion leadership both within and between organizations using specific new products or services as points of reference.

Past research indicates that opinion leaders may be an important force in a range of organizational buying decisions. Is this form of influence operative in retail buying committees? Does the influence of the group leader vary with the nature of the buying task? Using three new products as stimuli, these questions are explored.

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[47] Leon G. Schiffman and Vincent Gaccione, "Opinion Leaders in Institutional Markets," Journal of Marketing 38 (April 1974): 49-53.

Summary

Although our knowledge of organizational buying behavior is in an infant stage of development, important conceptualizations of the process have evolved in the past decade. The "behavioral theory of the firm," developed by Cyert and March, strongly contributed to the development of models of organizational buying behavior by marketing scholars. Since organizational buying decisions are influenced by several individuals in the firm, group decision-making is a central component of these models.

The group has been adopted as the unit of analysis in several marketing studies. The main focus of this body of research has been on the influence of the informal group on the decision-making processes of ultimate consumers. Similar group probes have rarely been made in an organizational context. While group risk taking behavior has been extensively examined by social psychologists, the assumptions and artificial conditions that surrounded the research tend to limit the application of the findings to organizational buyers.

A further conclusion that can be drawn from surveying the literature is that little attention has been given to the organizational buyer of consumer goods. Industrial decision-makers have dominated the samples in

this research. Given the strategic importance of the organizational buyer of consumer goods to our marketing system, parallel research emphasis may be justified.

CHAPTER IV

THE RESEARCH DESIGN

Overview

The research design might be described as a series of advance decisions that, taken together, comprise a model for the conduct of the investigation. As discussed earlier, the objective of this research study is to further the understanding of organizational buying behavior by examining the relationship between the structural properties of the group and key components of the decision-making process. The research design provides a vehicle for organizing and implementing the research in order to accomplish these objectives.

The general topic has been introduced and the important literature relevant to the research has been described. In this chapter, a design is developed for conducting the research.

Hypotheses

Consistent with the objective of analyzing group problem-solving for a range of buying tasks, hypotheses were developed at two levels of analysis: (1) group and

(2) individual. Hypotheses were then erected within each category and developed into formal statements suitable for testing. In the specific hypotheses that follow, Ha refers to the research hypothesis, while Ho indicates the null hypothesis or the statement of no difference. With the exception of the first hypothesis (where both Ha and Ho are shown), the research hypothesis is presented and the corresponding null hypothesis is assumed to be self-evident or understood. Along with operational definitions, a brief rationale is given to clarify each set of propositions.

Group Level

1. Ha = Group cohesiveness is positively related to conformity among members of the group in the application of choice criteria to new product selection decisions.

   Ho = The two variables are unrelated in the population.

2. Ha = Group cohesiveness is positively related to
   a. the similarity of new product performance expectations.
   b. the importance of the group leader in the new product selection decision.
   c. the extent of deliberation in the evaluation of new products.

3. Ha = The degree of influence of the group leader is positively related to the level of risk perceived by the group in the product selection decision.

The set of propositions centers on the first research question. Cohesiveness refers to the attraction a group has for its members. Major propositions tested by small group theorists posit that cohesion is directly related to agreement on norms, agreement on goals, and the extent of stable or democratic leadership.[1] If the perceived rewards of group membership are high, the choice criteria and product performance expectations applied to the buying situations may be quite similar. Likewise, a highly cohesive group may be more likely to exchange product information and filter somewhat ambiguous buying decisions through group norms. As Stafford's research suggests, a further function of cohesiveness may be "in providing an agreeable environment in which informal leaders could effectively operate."[2] Choice criteria refer to the specifications (e.g., test market results,

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[1]Clovis R. Shepherd, Small Groups, Some Sociological Perspectives (San Francisco: Chandler Publishing Company, 1964).

[2]James E. Stafford, "Effects of Group Influences on Consumer Brand Preferences," Journal of Marketing Research, 31 (February 1966): 68-75.

promotional backing) used by organizational buyers in comparing alternative new product offerings. Performance expectations refer to the anticipated degree of success of the new product under actual market conditions. Perceived risk refers to the magnitude of adverse consequences felt by the decision-maker if he makes a wrong choice, and the uncertainty under which he must decide.[3] As the level of perceived risk increases, the group leader may become more visible.

Individual Level

4. Ha = Group leadership is significantly more operative in the evaluation of major innovations than normal or minor innovations.
5. Ha = The level of risk perceived in the new product selection decision is significantly greater for
   a. a major innovation compared to a normal and a minor innovation.
   b. a normal innovation compared to a minor innovation.

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[3]Raymond A. Bauer, "Consumer Behavior as Risk Taking," Proceedings of the 43rd Conference of the American Marketing Association, 1960, pp. 389-398; see also Donald F. Cox, ed., Risk Taking and Information Handling in Consumer Behavior (Boston: Division of Research, Harvard Graduate School of Business Administration, 1967).

6. Ha = The extent of deliberation in the new product selection decision is significantly greater for
   a. a major innovation compared to a normal and a minor innovation.
   b. a normal innovation compared to a minor innovation.

These hypotheses issue from the second and third research questions. Group leadership is "the degree to which an individual is able to influence other individuals' attitudes or overt behavior in a desired way with relative frequency."[4] A leadership role may be earned through technical competence, conformity to group norms, and similar dimensions. His judgment and expertise may be particularly important to group members in the evaluation of "high risk" items.

Since an organizational buyer does not have a well-defined product class concept for a major innovation, a high level of risk may surround the selection decision. Similarly, past experience with the product class may greatly simplify the decision process, as in the case of a minor innovation.

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[4]Everett M. Rogers with F. Floyd Shoemaker, Communication of Innovations, 2nd ed. (New York: The Free Press, 1971).

The Sample

A nonprobability sample of 22 food buying units, which use a buying committee in reviewing new grocery items, was selected. The sample included chains, voluntary group wholesalers and cooperative group wholesalers, located in six metropolitan areas in two midwestern states. A procedure to encourage participation in the project was used. This consisted of an advance letter requesting cooperation and follow-up telephone calls to arrange appointments with the individual members of the committees. The letter is included as Appendix A. For appropriate control, a serious effort was made to interview all committee members within the firm on the same day. In the majority of the firms, this was possible. The final sample included 22 groups consisting of 120 members. Committee size ranged from four to nine members.

The New Product Selection Process

Background

The problems involved in precisely defining the term "new product" have been well-documented.[5] More than 45 operational definitions have been advanced in the

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[5]Thomas S. Robertson, Innovative Behavior and Communication (New York: Holt, Rinehart and Winston, Inc., 1971), pp. 4-8.

literature.[6] These definitions can generally be clustered into two categories. The first group treats the term innovation in a broad sense, without attempting to discriminate possible variations in relative magnitude. To illustrate, the anthropologist, H. G. Barnett, defined an innovation as "any thought, behavior, or thing that is new because it is qualitatively different from existing forms."[7] In contrast, both Wasson and Rogers defined the term with a perceptual emphasis: an innovation is anything perceived to be new by the potential user.[8] Knight, in developing a model of the innovation process within the firm, described an innovation as the adoption of a change which is new to an organization and to the relevant environment.[9] Finally, consumer researchers have operationally defined innovation

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[6]James F. Engel, David Kollat and Roger Blackwell, Consumer Behavior, 2nd ed. (New York: Holt, Rinehart and Winston, 1973), p. 581.

[7]Homer G. Barnett, Innovation: The Basis of Cultural Change (New York: McGraw Hill Book Company, Inc., 1953).

[8]Chester R. Wasson, "What Is New About New Products?" Journal of Marketing 25 (July 1960): 52-56; see also Everett M. Rogers with Floyd Shoemaker, Communication of Innovations, 2nd ed. (New York: The Free Press, 1971), p. 19.

[9]Kenneth E. Knight, "A Descriptive Model of the Intra-Firm Innovation Process," Journal of Business 40 (October 1967): 478.

as any form of a product that has recently become available in a market.[10]

A second group of authors have attempted to develop a classification system. To illustrate, Alderson proposed that a genuinely new product has features or attributes which satisfy the user's needs in a manner significantly different from an old product. In Aldersonian terms, the acquisition of a genuinely new product gives the consumer a new assortment, whereas if the product is only artificially new, a new assortment is not created.[11] Three categories of innovation based on consumer reactions were delineated by Lazer and Bell: (1) adaptive innovations, involving minor alteration of an existing product; (2) functional innovations, offering obvious advantages; and (3) fundamental innovations, incorporating original concepts which perform new functions for the consumer.[12]

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[10] Ronald E. Frank, William F. Massy and Donald G. Morrison, "The Determinants of Innovative Behavior with Respect to a Branded Frequently Purchased Food Product," Reflections on Progress in Marketing, ed. L. George Smith (Chicago: American Marketing Association, 1965), pp. 312-323; see also John B. Stewart, "Functional Features in New Product Strategy," Harvard Business Review, March-April 1959, pp. 65-78.

[11] Wroe Alderson, Marketing Behavior and Executive Action (Homewood, Ill.: Richard D. Irwin, Inc., 1957), pp. 267-276.

[12] William Lazer and William E. Bell, "The Concept and Process of Innovation," Managerial Marketing, Policies, Strategies and Decisions, eds. E. J. Kelley and William Lazer (Homewood, Ill.: Richard D. Irwin, Inc., 1973), p. 181.

Similarly, Robertson proposed three types of innovation: (1) continuous (least disrupting, involving only alterations to products); (2) dynamically continuous (more disruptive, including new products like the electric toothbrush); and (3) discontinuous innovation (most disruptive, always resulting in new behavior patterns, as did television).[13] Another classification scheme proposed that they be categorized as major innovation (first brand in the product class); normal innovation (a product introduced into a developed product class); and minor innovation (a modification of an existing product).[14] Because of its precision, clarity, and consistency with actual market conditions, the latter taxonomy was adopted for use in this study. As discussed in Chapter II, the scale of the innovation alone may affect organizational decision processes within the buying locus of the firm.

Product Selection

The Howard and Sheth new product classification scheme was used as a guide in selecting the products for the study.[15] Because of the exploratory nature of the

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[13] Thomas S. Robertson, "The Process of Innovation and the Diffusion of Innovation," Journal of Marketing 31 (January 1967): 14-19.

[14] John A. Howard and Jagdish N. Sheth, The Theory of Buyer Behavior (New York: John Wiley and Sons, Inc., 1969), pp. 277-230.

[15] Ibid.

project, three retail food buyers and two supermarket managers were consulted in the selection process. Approximately 35 new products were screened for possible inclusion in the study. The following three products were selected: (1) a gourmet beverage (major); (2) a cooking spray (normal); and (3) a wholewheat pancake mix (minor). The products are consistent with the underlying classification scheme and likewise satisfy the important requirement of being recent introductions in each of the market areas under study.

Questionnaire

A structured questionnaire encompassing a series of questions on the decision-making process and group structure was utilized. Specifically, the questions centered on the circumstances that surrounded the purchase--performance expectations, the importance of various choice criteria, the extent of product discussion, the perceived "newness," and the level of risk perceived in the selection decision for each of the new products. Two elements of perceived risk were explored: uncertainty and consequences.[16] A

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[16] Donald F. Cox, ed., Risk Taking and Information Handling in Consumer Behavior (Boston: Division of Research, Harvard Graduate School of Business Administration, 1967); see also Raymond A. Bauer, "Consumer Behavior as Risk Taking," Proceedings of the 43rd Conference of the American Marketing Association, 1960, pp. 389-398.

seven-point bipolar adjective scale was used in the probes listed above. The choice criteria, displayed in Figure 1, were drawn from trade literature and further refined after a pretest of the questionnaire. Respondents were asked to rank the seven choice criteria for each of the three products. Additionally, a seven-point scale was employed to assess the general importance of the criteria in new product selection decisions. The structured questionnaire was utilized in a personal interview with each member of the buying committee in the sampled firms. The personal interview lasted approximately 30 minutes. The questionnaire is included as Appendix B.

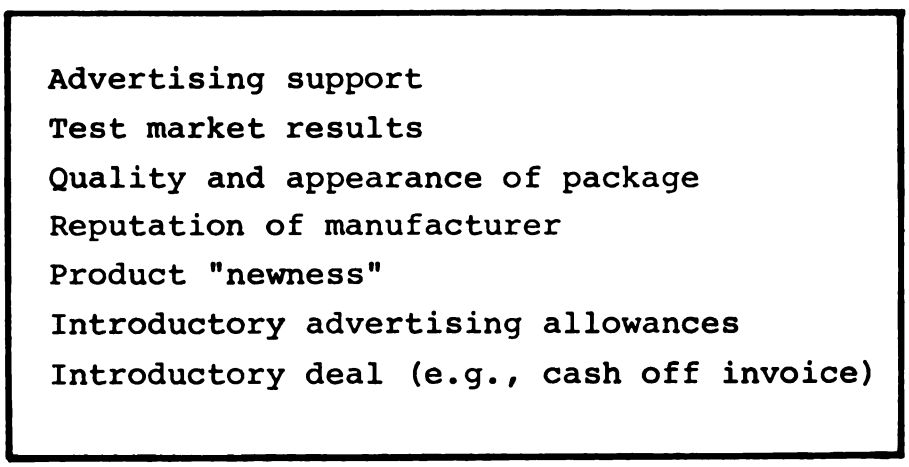

Figure 1. Choice Criteria Under Study.

Measurement of Group Cohesiveness

In past research, the measurement of cohesiveness has been largely approached in terms of the attraction of the group to its members.[17] After reviewing the major approaches, Cartwright concludes that "a standard all-purpose procedure for measuring group cohesiveness does not yet exist."[18] A sociometric technique was adopted for use in this study. Operationally, this method involved asking respondents to identify individuals with whom they would like to work in further developing new product selection policies. The number of mutual choices in a group serves as the basis in computing a cohesion index.[19]

Lindzey and Byrne discuss six of the most important requirements of the sociometric test originally advocated by Moreno:

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[17] Edwin P. Hollander, Principles and Methods of Social Psychology, 2nd ed. (New York: Oxford University Press, 1971), p. 495.

[18] Dorwin Cartwright and Alvin Zander, eds., Group Dynamics: Research and Theory, 3rd ed. (New York: Harper and Row Publishers, 1968), p. 95.

[19] Fred N. Kerlinger, Foundations of Behavioral Research, 2nd ed. (New York: Holt, Rinehart and Winston, 1973), pp. 556-561; see also C. H. Proctor and C. P. Loomis, "Analysis of Sociometric Data," Research Methods in Social Relations: With Especial Reference to Prejudice, eds. M. Jahoda, M. Deutsch, and S. Cook, Part 2 (New York: Dryden Publishing Company, 1951), pp. 561-585.

> (1) The limits of the group should be indicated to the subjects; (2) the subjects should be permitted an unlimited number of choices or rejections; (3) the subjects should be asked to indicate the individuals they choose or reject in terms of specific criteria; (4) results of the sociometric questions should be used to restructure the group; (5) the subjects should be permitted to make their choices and rejections privately, without other members of the group being able to identify the responses; (6) the questions used should be gauged to the level of understanding of the members of the group.[20]

The authors note that these requirements "identify the sociometric measure in a more or less pure form, . . ." and all are seldom met in most studies.[21] The most frequent modification is the specification of the number of choices the individual is required to make.[22] The value of using an unspecified number of choices must be balanced against such factors as "subjects' time required, rapport, statistical analysis of the data, and demands of a specific research design. . . ."[23] For these reasons, respondents were limited to two choices in this study. A second

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[20] Gardner Lindzey and Donn Byrne, "Measurement of Social Choice and Interpersonal Attractiveness," Handbook of Social Psychology, eds. G. Lindzey and E. Aronson (Reading, Mass.: Addison-Wesley Publishing Company, Inc., 1968), p. 455.

[21] Ibid.

[22] M. Fishbein, "Prediction of Interpersonal Preferences and Group Member Satisfaction from Estimated Attitudes," Journal of Personality and Social Psychology 1 (1965): 633-667.

[23] Lindzey and Byrne, p. 456.

requirement seldom met in using the sociometric technique is the promise of restructuring the group. In this project, as in most, it was impossible to introduce such a change. The remaining requirements were satisfied. Table 1 is used to illustrate the cohesiveness measure.

Table 1. Sociometric Choice Matrix: Five-Member Buying Committee, Two Choice Questions[a]

		B				
		1	2	3	4	5
	1		X			X
	2	X		X		
A	3	X	X			
	4	X				X
	5	X			X	

[a]The table can be read by rows (e.g., 1 chooses 2 and 5) and by columns (e.g., 1 is chosen by 2, 3, 4, and 5).

The sociometric choice matrix (Table 1) yields two measures.[24] First, a measure of the cohesiveness of the group is:

$$Co = \frac{\text{Sum of Mutual Choices}}{d\ n/2}$$

[24] Kerlinger, pp. 556-561.

where d = the number of choices each individual is permitted and n = the number of individuals in the group. For Table 1,

$$Co = \frac{4}{(2 \times 5)/2} = \frac{4}{5} = .80,$$

a substantial degree of cohesiveness. Second, the matrix can be used in developing a choice status index for each individual.

$$CS = \frac{\text{Sum of Choices (each group member)}}{n - 1}$$

For Table 1, the choice status for member #1 is

$$1 = \frac{4}{5 - 1} = 1.00.$$

Clearly, member #1 may well be the group leader. This can be verified by applying the group leadership measure which follows.

Measurement of Group Leadership

Similarly, a sociometric method was used in measuring group leadership. Operationally, this approach consisted of questioning respondents regarding individuals from whom they sought advice about new product buying decisions. Additionally, the respondent was asked to scale the degree of importance the selected individual had in each of the buying situations. Rogers contends that the sociometric technique is the most valid measure

of opinion leadership and is particularly appropriate when all members of a social system are interviewed.[25]

Statistical Techniques

Aside from classification and tabulation for ease of interpretation, the principal statistical techniques employed in this research project are the Spearman rank correlation coefficient and the Friedman two-way analysis of variance.

The Spearman rank correlation coefficient is a measure of association which requires that both variables be measured in at least ordinal scales so that the individuals or objects under investigation may be ranked in two ordered series.[26] In this chapter, a series of hypotheses were advanced stating that two variables were associated to a significant degree. The Spearman correlation coefficient can be used to determine the degree of association between the two variables, while a test of significance of that coefficient determines whether the association exists in the population from which the sample was drawn. The Spearman correlation coefficient is used in testing

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[25] Everett Rogers with Shoemaker, Communication of Innovations, pp. 215-216.

[26] Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, 1956), pp. 202-213.

the first three hypotheses. Additionally, since the first proposition examines the conformity among group members in the application of choice criteria, the Kendall coefficient of concordance W is used in developing a measure of consensus for each of the groups. W measures the extent of association among several (K) sets of rankings (e.g., the number of group members) of (N) entities (e.g., the number of choice criteria ranked). The coefficient of concordance expresses the average agreement, on a scale from .00 to 1.00, between the ranks.[27]

The remaining propositions are examined using the Friedman two-way analysis of variance test.[28] The Friedman test is useful when each subject answers questions on a variety of products or product attributes.[29] In subjecting the same set of respondents to K conditions, K matched samples are generated. The statistic can be used in testing the null hypothesis that K matched samples have been drawn from the same population.

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[27] Siegel, pp. 229-238.

[28] Ibid.

[29] Peter McClure, "Analyzing Consumer Image Data Using the Friedman Two-Way Analysis of Variance by Ranks," Journal of Marketing Research 8 (August 1971): 370-371.

CHAPTER V

RESULTS OF THE RESEARCH

Overview

The objective of the research design was the examination of the new product selection process of organizational buyers at two levels of analysis: group level and individual level. This categorization becomes the organizing framework for this chapter.

At the group level of analysis, two group properties (cohesiveness and leadership) are investigated and related to several key components of the decision-making process. First, cohesiveness is related to (a) the degree of conformity among group members in the application of choice criteria to new product buying tasks; (b) the degree of similarity of new product performance expectations; and (c) the extent of deliberation in the decision-making process. Second, the relationship between group leadership and perceived risk is explored.

At the individual level, the following variables are analyzed: (1) the importance of the group leader; (2) the level of risk perceived in the products; and (3) the extent of deliberation in the decision-making process.

Spearman rank correlation analysis is employed in testing propositions at the group level, while the Friedman test is the principal technique used in analyzing hypotheses at the individual level of analysis. All of the variables in this chapter are explored across three levels of innovation.

Group Level of Analysis

Several propositions were drawn from small group theory and applied to organizational decision-making. The results of this portion of the research focus on two structural properties of a group: (1) cohesiveness and (2) leadership.

Cohesiveness

Small group theorists posit that the members of a highly cohesive group, in contrast to one with a low level of cohesiveness, are more concerned with their membership and are, therefore, more strongly motivated to advance the group's objectives, and to contribute to its activities.[1] Does a highly cohesive group of organizational decision-makers approach the new product selection decision differently than a less cohesive group? This question establishes the theme for this section of the research.

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[1]Dorwin Cartwright and Alvin Zander, eds., Group Dynamics: Research and Theory, 3rd ed. (New York: Harper and Row, Publishers, 1968), p. 104.

Cohesiveness of the retail buying committees.--Respondents were asked to select two individuals with whom they would like to work in further developing new product selection policies. Using this data, a choice matrix was constructed for each committee and a corresponding cohesion index was calculated. (The choice matrices are included as Appendix C.) Table 2 illustrates the fact that the committees in the sample range in size from four to nine members. Likewise, the majority of the groups consist of five (50 percent) or six (36 percent) members. Filley concluded that, from the standpoint of equilibrating interpersonal needs, there is empirical support for a committee size of five.[2] Interestingly, the range in the cohesion index, for five-member groups in the sample, is from .20 (a low level of cohesiveness) to .60 (a relatively high level of cohesiveness). In Table 3, a distribution of the cohesion scores is provided.

Cohesiveness and the perceived value of group decision-making.--To provide an indirect test of the validity of the cohesiveness measure, respondents were queried concerning the value of group versus individual

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[2]Alan C. Filley and Robert J. House, Managerial Process and Organizational Behavior (Glenville, Ill.: Scott, Foresman and Company, 1969), Chapter 4; see also Alan C. Filley, "Committee Management: Guidelines from Social Science Research," California Management Review 13, No. 1 (Fall 1970): 13-21.

Table 2. Cohesiveness and Size of Retail Buying Committees

Group Number	Group Size	Cohesion Index
1	6	.33
2	5	.20
3	6	.67
4	5	.40
5	5	.60
6	5	.40
7	5	.20
8	6	.83
9	5	.40
10	6	.67
11	6	.67
12	5	.40
13	5	.60
14	6	.67
15	4	.25
16	9	.44
17	6	.67
18	5	.60
19	5	.60
20	6	.83
21	4	.50
22	5	.20
n = 22	n = 120	
Group Level	Individual Level	

Table 3. Group Cohesiveness: Selected Characteristics of the Sample

Cohesion Index	Number	Percent	Mean
Above .75	2	9.1	
.50-.74	10	45.5	
.25-.49	7	31.8	
Below .25	3	13.6	
Total	22	100.0	.506

decision-making in new product selection decisions. Cartwright contends that "as cohesiveness increases there is an increase in a group's capacity to retain members and in the degree of participation by members in group activities."[3] Thus, the members of highly cohesive groups would assign a higher value to group decision-making than members of less cohesive groups. The results of a test of this proposition are presented in Table 4. Using a seven-point scale for each respondent, the mean value of group decision-making was calculated for each committee. The means ranged from 4.0 to 7.0 (highest possible value). Cohesiveness is found to be significantly correlated

[3]Cartwright and Zander, p. 104.

Table 4. The Relationship of Cohesiveness to the Perceived Value of Group Decision-Making[a]

Rank Order of Groups from Highest to Lowest in Cohesiveness	Value of Group Decision-Making--Group Mean	Rank of Groups--Perceived Value of Group Decision-Making
1.5	5.67	9.5
1.5	6.17	7.0
5.0	5.00	17.5
5.0	5.50	11.5
5.0	5.67	9.5
5.0	6.33	6.0
5.0	7.00	1.0
9.5	6.60	3.5
9.5	6.60	3.5
9.5	6.80	2.0
9.5	5.20	15.0
12.0	5.50	11.5
13.0	4.88	19.0
15.5	5.40	13.0
15.5	5.20	15.0
15.5	5.20	15.0
15.5	6.40	5.0
18.0	4.00	22.0
19.0	5.75	8.0
21.0	5.00	17.5
21.0	4.60	21.0
21.0	4.80	20.0

[a] $r_s = .55$, significant at the .01 level.

with the perceived value of group decision-making ($r_s = .55$, $p < .01$).[4]

Cohesiveness and the application of choice criteria.--As discussed in the theoretical formulation of this project (Chapter II), research indicates that the greater a group's cohesiveness, the greater its power to bring about conformity to its norms and to gain acceptance of its goals.[5] In an organizational context, does this influence lead to conformity in the application of choice criteria to new buying tasks? Choice criteria are operationally defined as the specifications used by organizational buyers in comparing alternative new product offerings. They "are the buyer's mental rules, which he utilizes to evaluate brands as goal objects."[6] After a review of the trade literature and a pretest of the research instrument, the following seven choice criteria were selected for use in this study: (1) reputation of the manufacturer, (2) test market results, (3) quality and

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[4]A correction for tied observations (e.g., cohesiveness scores) is employed in this case and in similar situations that follow in this chapter. See Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, 1956), pp. 206-210.

[5]Leon Festinger, "Informal Social Communications," Psychological Review 57 (1950): 271-292; see also L. Berkowitz, "Group Standards, Cohesiveness and Productivity," Human Relations 7 (1954): 509-519.

[6]John A. Howard and Jagdish N. Sheth, The Theory of Buyer Behavior (New York: John Wiley and Sons, Inc., 1969), p. 34.

appearance of package, (4) product newness, (5) the deal (e.g., cash off invoice), (6) advertising support, and (7) introductory/promotional allowances. The respondents were asked to apply these seven factors to each of the three levels of innovation. A coefficient of concordance W was calculated for each group across the three levels of innovation.[7] As noted earlier, W expresses the average agreement among several sets of rankings on a scale from .00 to 1.00. In Table 5, note that the mean level of concordance (.60) is stable across the three levels of innovation. Likewise, only minor shifts toward agreement are noticeable as the level of innovation shifts from major to normal and from normal to minor. The individual concordance coefficients are presented in Table 6. Again, only slight variability is noticeable across the three buying tasks. The results support the first hypothesis that cohesiveness is significantly related to conformity in the application of choice criteria for each level of innovation: (a) major ($r_s = .55$, $p < .01$ level); (b) normal ($r_s = .46$, $p < .05$ level); and (c) minor ($r_s = .43$, $p < .05$ level). At this point, a significant fact should be observed: the intra-group consistency in the concordance scores resulted primarily from the individual members' application of the same rankings to the choice criteria

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[7]See Siegel, pp. 229-239.

Table 5. Conformity in the Application of Choice Criteria: Selected Characteristics of the Sample

Concordance Index	Level of Innovation					
	Major		Normal		Minor	
	Number	Percent	Number	Percent	Number	Percent
Above .75	7	31.8	7	31.8	6	27.3
.50-.74	7	31.8	8	36.4	10	45.4
.25-.49	8	36.4	7	31.8	6	27.3
Below .25	0	0.0	0	0.0	0	0.0
Total	22	100.0	22	100.0	22	100.0
Mean	.596		.601		.596	

in each buying task. Cyert and March contend that organizational members apply decision rules that have generated favorable results in the past.[8] Clearly, such behavior may be operative in retail buying committees.

Cohesiveness and new product performance expectations.--A major proposition, tested by small group theorists, contends that cohesion is directly related to agreement on norms and agreement on goals.[9] Does

[8]R. Cyert and J. March, A Behavioral Theory of the Firm (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963), Chapter 6.

[9]Clovis R. Shepherd, Small Groups, Some Sociological Perspectives (San Francisco: Chandler Publishing Company, 1964).

Table 6. The Relationship of Cohesiveness to Conformity in the Application of Choice Criteria

Rank Order of Groups From Highest to Lowest in Cohesiveness	Coefficient of Concordance (W) Level of Innovation		
	Major	Normal	Minor
1.5	.83	.77	.77
1.5	.88	.76	.76
5.0	.87	.87	.86
5.0	.87	.83	.87
5.0	.72	.71	.63
5.0	.68	.63	.63
5.0	.80	.80	.80
9.5	.47	.60	.60
9.5	.50	.50	.51
9.5	.53	.53	.53
9.5	.54	.55	.47
12.0	.29	.29	.29
13.0	.37	.37	.40
15.5	.63	.63	.63
15.5	.34	.34	.34
15.5	.36	.49	.49
15.5	.51	.51	.51
18.0	.83	.83	.63
19.0	.34	.46	.46
21.0	.83	.83	.79
21.0	.46	.46	.61
21.0	.46	.46	.55
	$r_s = .55$[a]	$r_s = .46$[b]	$r_s = .43$[b]

[a]Significant at or beyond .01 level.

[b]Significant at or beyond .05 level.

group cohesion contribute to well-defined product performance goals in retail buying committees? To address this question, organizational buyers were asked to rate their sales performance expectations for each product. The standard deviation for this variable was calculated for each group. The results are illustrated in Table 7. Interestingly, cohesiveness is positively related to the similarity of new product performance expectations only for the major innovation ($r_s = .53$, $p < .01$). In fact, a somewhat negative (although nonsignificant) relationship exists between the two variables at the minor innovation level. The major innovation may have infused some ambiguity into the decision-making process; thus, more extensive deliberation was generated. Well-defined performance expectations may have resulted.

Cohesiveness and the extent of deliberation.--In an attempt to probe the extent of deliberation for each buying task, the organizational buyers were posed with this question: "To what extent was the product discussed within the committee before a decision was reached?" A card, presented to the respondents, contained the following seven-point scale:

not at all _____ _____ _____ _____ _____ _____ _____ extensively

Table 7. The Relationship of Cohesiveness to the Similarity of New Product Performance Expectations

Rank Order of Groups From Highest to Lowest in Cohesiveness	Standard Deviation of Performance Expectations: Intra Group		
	Level of Innovation		
	Major	Normal	Minor
1.5	.75	.55	.89
1.5	1.90	.45	.63
5.0	1.03	1.05	.63
5.0	1.03	1.26	1.64
5.0	.75	1.03	2.16
5.0	.82	1.10	1.38
5.0	.98	2.07	2.34
9.5	1.30	1.79	1.22
9.5	1.14	2.10	.45
9.5	.84	1.14	.84
9.5	2.40	1.95	.71
12.0	2.63	.50	.57
13.0	1.05	1.39	.87
15.5	2.07	1.10	.45
15.5	1.64	1.10	1.14
15.5	1.58	.84	.55
15.5	.84	.89	.71
18.0	1.87	.75	.84
19.0	2.06	2.47	.50
21.0	1.82	.89	.45
21.0	1.82	1.00	2.61
21.0	2.17	1.76	1.41
	$r_s = .53$[a]	$r_s = .03$	$r_s = -.22$

[a]Significant at or beyond .01 level.

The following hypothesis was advanced: cohesive groups will engage in more lengthy deliberation in reviewing new products. The data appearing in Table 8 indicate that the extent of this relationship varies with the three innovation levels. Cohesiveness is positively associated with extensive deliberation for the (a) major innovation ($r_s = .43$, $p < .05$) and (b) normal innovation ($r_s = .56$, $p < .01$). An inverse relationship exists between the two variables for the minor innovation ($r_s = -.21$). Thus, the type of buying task appears to influence the decision-making approach followed by cohesive groups.

Cohesiveness and the nature of discussion.--A question was designed and administered in an attempt to secure insight into the nature of product-related discussion. Respondents were asked to describe the nature of product-related discussion using the following seven-point scale:

strong views heatedly discussed ____ ____ ____ ____ ____ ____ ____ discussion characterized by general agreement

Evidence indicates that members of a more cohesive group appear to more readily accept the group's goals, decisions and tasks.[10] Thus, it was believed that general agreement would characterize the product-related discussion

[10] Cartwright and Zander, p. 104.

Table 8. The Relationship of Cohesiveness to the Extent of Deliberation in New Product Selection Decisions

Rank Order of Groups from Highest to Lowest in Cohesiveness	Extent of Deliberation: Group Mean		
	Level of Innovation		
	Major	Normal	Minor
1.5	6.50	4.50	5.50
1.5	6.00	5.33	2.17
5.0	6.33	4.50	3.83
5.0	5.83	6.16	2.67
5.0	6.00	4.17	2.17
5.0	5.83	4.00	2.50
5.0	5.83	5.67	3.50
9.5	6.00	4.60	4.00
9.5	6.60	4.60	1.80
9.5	5.60	3.60	2.80
9.5	5.00	3.80	4.80
12.0	3.00	3.75	4.50
13.0	5.00	4.33	2.56
15.5	6.40	4.80	4.00
15.5	3.60	3.20	3.40
15.5	5.40	3.60	2.80
15.5	4.40	4.00	3.60
18.0	4.83	3.83	4.00
19.0	3.75	2.25	5.75
21.0	4.80	3.40	4.00
21.0	5.40	4.40	3.20
21.0	6.60	4.00	2.20
n = 22	$r_s = .43$[a]	$r_s = .56$[b]	$r_s = -.21$

[a]Significant at or beyond .05 level.

[b]Significant at or beyond .01 level.

of cohesive groups. The data, illustrated in Table 9, indicate that the two variables are significantly related for the major innovation ($r_s = .39$, $p < .05$). However, a statistically significant result was lacking for the remaining innovation categories. Interestingly, the extent of agreement increased in nearly all of the groups as the level of innovation shifted from major to normal and from normal to minor.

Group Leadership

In the theoretical framework, the role of the group leader was conceptualized as shifting with the nature of the buying task. Likewise, Stafford found that "cohesiveness appeared to have its most important function in providing an agreeable environment in which informal leaders could effectively operate."[11] Do group leaders play a more important role in new product selection decisions in highly cohesive groups? Are leaders more influential when individual group members perceive a high level of risk in the selection decision? These questions provide the theme for this portion of the research.

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[11] James E. Stafford, "Effects of Group Influence on Consumer Brand Preferences," Journal of Marketing Research 31 (February 1966): 68-75.

Table 9. The Relationship of Cohesiveness to the Nature of Product-Related Discussion

Rank Order of Groups from Highest to Lowest in Cohesiveness	Nature of Product-Related Discussion: Group Mean[a]		
	Level of Innovation		
	Major	Normal	Minor
1.5	6.33	6.33	6.00
1.5	5.67	6.50	6.00
5.0	6.17	6.67	6.83
5.0	5.33	6.33	6.67
5.0	3.50	5.50	6.50
5.0	5.17	5.83	6.33
9.5	6.33	6.16	6.17
9.5	6.00	6.20	6.20
9.5	6.60	5.00	6.60
9.5	6.20	6.00	6.60
12.0	5.40	6.20	6.00
13.0	7.00	6.75	5.50
15.5	4.11	6.44	6.67
15.5	2.60	5.80	6.60
15.5	6.40	6.60	6.80
15.5	4.00	5.20	6.40
15.5	6.00	6.20	6.20
18.0	3.50	4.83	6.67
19.0	5.50	6.50	7.00
21.0	4.80	6.40	6.00
21.0	3.00	5.80	6.20
21.0	2.00	5.80	6.20
n = 22	$r_s = .39$[b]	$r_s = .19$	$r_s = -.14$

[a]Higher values indicate discussion characterized by agreement.

[b]Significant at or beyond .05 level.

Identification of group leaders.--Each organizational buyer was questioned regarding the individuals from whom they sought advice about new product buying decisions. Using this measure, a group leader was identified in sixteen of the buying committees. From Table 10, one can observe that the majority of the leaders enjoyed a high status score. Likewise, note that seven (43.7 percent) of the designated leaders did not hold the highest organizational rank on the committee. Clearly, group leaders cannot be selected solely by analyzing an organizational chart.

Cohesiveness and the perceived importance of the group leader.--When a group leader was identified by a respondent, follow-up questions were posed concerning the selected individual's importance in each of the buying decisions. Since the central purpose of the measure was to ascertain the leader's actual influence on other committee members, the leader's self-ranking score was excluded from the analysis. In Table 11, notice that the posited relationship between cohesiveness and the perceived value of the group leader is not supported.

Group leader influence and the level of perceived risk.--Two components of perceived risk were systematically explored in this project: uncertainty and consequences. It was hypothesized that the importance of the group leader

Table 10. The Choice Status and Relative Organizational Rank of Identified Group Leaders

Groups with Identified Leader	Choice Status Index of Leader	Leader Holds Highest Organizational Rank on Committee	
		Yes	No
(#)			
2	.75		X
3	.80		X
5	1.00		X
7	.75	X	
8	.60	X	
9	1.00		X
11	.60	X	
12	.75	X	
13	1.00	X	
14	.80	X	
17	.80	X	
18	1.00	X	
19	.75		X
20	.40		X
21	1.00	X	
22	.75	—	X
Total		9	7

Table 11. A Comparison of Cohesiveness to the Perceived Importance of the Group Leader in New Product Selection Decisions

Cohesion Index of Groups with Identified Leaders	Importance of Leader: Group Mean		
	Level of Innovation		
	Major	Normal	Minor
.83	6.80	7.00	6.80
.83	4.20	2.40	2.40
.67	6.00	4.40	2.20
.67	5.40	3.20	3.40
.67	4.40	3.00	5.00
.67	4.60	4.20	3.80
.60	3.50	4.25	2.25
.60	4.75	2.50	1.75
.60	6.50	7.00	6.00
.60	5.25	1.50	3.25
.50	4.33	4.33	3.67
.40	6.25	4.75	3.75
.40	5.25	5.25	4.00
.20	6.00	4.75	3.25
.20	4.25	4.75	3.25
.20	4.50	3.00	1.75
n = 16	$r_s = .07$	$r_s = -.24$	$r_s = .23$

would be positively related to the level of risk perceived in the new product selection decision.

The data appearing in Table 12 indicate that for the major innovation, the influence of the group leader is significantly correlated with both components of perceived risk: uncertainty ($r_s = .48$, $p < .05$) and consequences ($r_s = .59$, $p < .05$). Thus, the high status member of a buying committee becomes more important when the individual group members perceive a substantial level of risk in the selection decision. This lends support to Hollander's proposition that innovation in the face of situational demands is expected of the group leader as a feature of his role.[12]

The results for the normal innovation are presented in Table 13. For this buying task, a positive association exists only for the consequences component of the perceived risk model ($r_s = .60$, $p < .01$). As indicated in Table 14, statistically significant results are lacking for both perceived risk components in the case of the minor level of innovation. However, the data in Tables 12, 13, and 14 do indicate that the level of risk perceived in the selection decision declines with the scale of the innovation.

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[12] Edwin P. Hollander, "Conformity, Status and Idiosyncrasy Credit," Psychological Review 65, No. 2 (1958): 117-127; see also E. Hollander, Principles and Methods of Social Psychology, 2nd ed. (New York: Oxford University Press, 1971), Chapter 15.

Table 12. A Comparison of Group Leader Influence to the Level of Risk Perceived in a Major Innovation

Perceived Importance of Leader: Groups Ranked from Highest to Lowest	Perceived Risk Component: Group Mean	
	Uncertainty	Consequences
1.0	6.50	6.00
2.0	6.00	5.20
3.0	4.20	5.00
4.5	6.20	5.20
4.5	5.33	5.00
6.0	5.00	4.67
7.5	5.00	4.40
7.5	5.80	5.00
9.0	4.00	3.00
10.0	5.67	6.33
11.0	4.00	3.80
12.0	4.00	3.67
13.0	4.00	4.25
14.0	5.20	4.80
15.0	4.50	4.83
16.0	5.60	4.20
n = 16	$r_s = .48^a$	$r_s = .59^a$

[a]Significant at or beyond .05 level.

Table 13. A Comparison of Group Leader Influence to the Level of Risk Perceived in a Normal Innovation

Perceived Importance of Leader: Groups Ranked from Highest to Lowest	Perceived Risk Component: Group Mean	
	Uncertainty	Consequences
1.5	3.83	4.37
1.5	2.60	5.40
3.0	3.80	3.00
5.0	4.20	3.20
5.0	3.60	4.00
5.0	2.60	4.40
7.0	2.16	4.00
8.0	5.00	3.25
9.0	3.20	3.60
10.0	4.20	4.00
11.0	3.50	3.30
12.5	3.17	3.00
12.5	3.00	3.40
14.0	2.20	1.60
15.0	3.50	3.33
16.0	3.40	2.40
n = 16	$r_s = .20$	$r_s = .60^a$

[a]Significant at or beyond .01 level.

Table 14. A Comparison of Group Leader Influence to the Level of Risk Perceived in a Minor Innovation

Perceived Importance of Leader: Groups Ranked from Highest to Lowest	Perceived Risk Component: Group Mean	
	Uncertainty	Consequences
1.0	2.67	2.67
2.0	2.20	4.00
3.0	2.67	2.00
4.0	2.40	1.80
5.0	2.33	2.17
6.0	1.40	1.40
7.0	1.75	1.75
8.0	1.33	4.33
10.0	1.60	1.60
10.0	3.00	1.60
10.0	2.80	2.60
12.0	2.17	1.83
13.0	2.40	2.60
14.0	2.50	2.50
15.5	1.40	2.20
15.5	3.40	2.20
n = 16	$r_s = -.02$	$r_s = .04$

The concepts of group leadership and perceived risk are further explored at the individual level.

Individual Level of Analysis

Further insights into the new product selection process can be secured by exploring organizational buyer behavior at the individual level of analysis. This final examination of the total sample may reinforce findings noted in previous sections, while clarifying the managerial implications that issue from the research.

In this portion of the research, the following variables are treated in sequence: (1) perceived product newness, (2) perceived risk, (3) group leadership, (4) extent of deliberation, and (5) choice criteria. This section unfolds with a tabular presentation (Table 15) of the total sample, with means and standard deviations of the key variables that were examined earlier at the group level of analysis. Recall that several differences emerged as the buying task (major, normal, minor) changed. These differences reappear in Table 15.

Results for Selected Variables: Individual Level of Analysis

The perceived newness of three levels of innovation.--The organizational buyers were asked to position the three levels of innovation on the seven-point scale shown

Table 15. Means and Standard Deviations of Key Variables: Individual Level of Analysis

Variable	Mean	Standard Deviation
Perceived Risk		
Uncertainty		
Major innovation	4.93	1.78
Normal innovation	3.50	1.86
Minor innovation	2.19	1.50
Consequences		
Major innovation	4.56	1.71
Normal innovation	4.13	1.80
Minor innovation	2.30	1.63
Product-Related Discussion		
Nature[a]		
Major innovation	5.12	1.37
Normal innovation	5.98	0.97
Minor innovation	6.37	0.69
Extent		
Major innovation	5.40	1.22
Normal innovation	4.27	1.10
Minor innovation	3.35	1.25
Group Leader		
Importance		
Major innovation	5.15	2.23
Normal innovation	4.13	2.30
Minor innovation	3.57	2.36

[a]Higher values indicate discussion characterized by general agreement.

in Table 16. The purpose of the measure was to test the underlying rationale that was used in selecting the products for the study. For the major innovation, 70 percent of the respondents selected the two extreme positions on the "completely new" end of the continuum. The clustering for the normal innovation occurred at the opposite end of the scale ("nothing new"). The frequencies for the minor innovation are distributed between these positions. Response "5" was the modal cell for this innovation level. When the scaled positions are converted to ranks, the following results emerge: major innovation (first--newest), minor innovation (second), and normal innovation (third). Applying the Friedman test, the results are significant at the .001 level ($n = 120$). These results lend support to the underlying new product classification scheme: (a) major innovation (first brand in the product class), (b) normal innovation (a product introduced into a developed product class), and (c) minor innovation (a modification of an existing product).[13] Clearly, effective product differentiation may alter the level of newness perceived by the organizational buyer.

Perceived risk.--Do organizational buyers perceive more risk in major innovations than normal or minor innovations? An affirmative response was hypothesized. In Table 17, observe that this proposition is supported at

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[13] Howard and Sheth, pp. 277-330.

Table 16. The Perceived Newness of Three Levels of Innovation

Level of Innovation	Scale: Product Newness							
	Nothing New 1	2	3	4	5	6	Completely New 7	Total
Major innovation								
Number	2	3	7	11	25	31	41	120
Percent	1.7	2.5	5.8	9.2	20.8	25.8	34.2	100.0
Mean = 5.59 Standard deviation = 1.45								
Normal innovation								
Number	39	22	28	15	11	3	2	120
Percent	32.5	18.3	23.3	12.5	9.2	2.5	1.7	100.0
Mean = 2.61 Standard deviation = 1.53								
Minor innovation								
Number	6	12	16	21	28	20	17	120
Percent	5.0	10.0	13.3	17.5	33.3	16.7	14.2	100.0
Mean = 4.51 Standard deviation = 1.71								

Table 17. Friedman Two-Way Analysis of Variance: Results for Variables at the Individual Level of Analysis

Characteristic	Ranking by Level of Innovation			Level of Significance	Base
	Major	Normal	Minor		
Product newness	1	3	2	.001	120
Perceived risk					
Uncertainty	1	2	3	.001	120
Consequences	1	2	3	.001	120
Importance of group leader	1	2	3	.001	69
Extent of product-related discussion	1	2	3	.001	120

a high level of statistical significance. For both components of the perceived risk model, organizational buyers perceive the most risk (ranked first) in the major innovation and the least risk (ranked third) in the minor innovation. Clearly, a manufacturer introducing a new product to the channel should consider the differential impact stimulated by the level of innovation alone. The informational needs of the buyer may be much greater for the major innovation.[14]

[14] Ibid.

Importance of the group leader.--Are group leaders more operative in the review of major innovations than normal or minor innovations? It was hypothesized that the influence of the group leader would fluctuate with the nature of the buying task. By converting the scaled importance scores to ranks and applying the Friedman test, the hypothesis is accepted at the .001 level of significance. In Table 17, notice that the group leader was most important in the evaluation of the major innovation and least important in the case of the minor innovation. While the leadership style of the high status member may remain constant, his perceived importance to the other committee members varies with the buying task. Contact with an individual organizational buyer may be adequate in stimulating channel acceptance for a normal or minor innovation. For a major innovation, however, careful attention should be given to the differential ranks of committee members.

Extent of product-related discussion.--Do major innovations generate more discussion, during the alternative-evaluation stage of the decision-making process, than the other innovation categories? Howard and Sheth contend that the informational requirements of the buyer are much greater for major innovations.[15] Observe that this contention is strongly supported in Table 17. Of the three levels of

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[15] Ibid.

innovation, the major category generated the most product-related discussion. In designing an informational package for the channel, the manufacturer should recognize the apparent high information needs generated by a major innovation. The lack of specific product class knowledge, coupled with the inherent problem of projecting consumer demand, appears to increase the amount of deliberation given to the selection decision.

A Concluding Note

Several propositions were tested at the individual level of analysis. The results are summarized in Table 17. Specific data referring to these and other key variables treated in this chapter are included as Appendix E. Hypotheses tested at the group level of analysis are summarized in Table 18. A thorough summary of the results is provided in Chapter VI.

Table 18. Summary of Results: Rank Correlations for Group Analysis

Hypothesis	Level of Innovation		
	Major	Normal	Minor
Co to conformity--choice criteria	.55[a]	.46[b]	.43[b]
Co to similarity--performance expectations	.53[a]	.03	-.22
Co to extent of deliberation	.43[b]	.56[a]	-.21
Co to nature of discussion	.39[b]	.19	-.14
Co to importance of group leader (n = 16)	.07	-.24	.23
Group leader influence to risk (n = 16)			
Uncertainty	.48[b]	.20	-.02
Consequences	.59[b]	.60[a]	.04

[a] r_s significant at or beyond .01 level.

[b] r_s significant at or beyond .05 level.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Overview

Organizational buyer behavior can best be conceptualized as decision-making in which both group and individual variables are important. A conceptual base was developed in the first two chapters which linked the individual organizational buyer to a group of decision-makers: the retail buying committee. Two group properties were emphasized in this formulation: cohesiveness and leadership. The next three chapters contained a review of the relevant literature, a description of the research design, and a report of the results of the research. Consistent with the underlying rationale for this inquiry, these results were presented and will be summarized under two major headings: (1) group level of analysis and (2) individual level of analysis.

Summary

While considerable research has been invested in studies of new product buying behavior among final consumers, little is known about the new product selection

decisions in a channel context. Operationally, this segment can be pivotal in determining the ultimate success or failure of a new product. Thus, effective marketing strategy design requires knowledge of buyer behavior at both the consumer and the channel levels.

An important component of the organizational decision-making process, operative in many firms, is group decision-making in the form of a buying committee. A committee may be assembled for a single decision (e.g., a computer purchase) or meet on a regular basis to make many decisions (e.g., new product selection by food chains). Since a number of organizational buying decisions involve joint deliberation and multiple buying influences, valuable insights may be gained by selecting the group as the unit of analysis. The contribution of group analysis is that both the position of the individual, as well as the overall structure of the group, can be combined in examining the organizational buying process.

To adequately examine new product buying behavior in a channel context, careful attention must be given to the divergent nature of the buying tasks facing organizational buyers. The available classification schemes focus exclusively on industrial goods.[1] Clearly, a framework is

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[1]Patrick J. Robinson and Charles Faris, Industrial Buying and Creative Marketing (Boston: Allyn and Bacon, Inc., 1967), Chapter 2.

needed for analyzing the buying tasks of the organizational buyer of consumer goods.

Since all new products are not equally "innovative," Howard and Sheth have proposed a classification scheme based on the informational needs of the buyer.[2] Three levels of innovation are identified: major, normal, and minor. Certain analogs drawn from this framework are particularly valuable in examining the individual organizational buyer of consumer goods. A major innovation (first brand in a product class) places a heavy burden on the buyer's capacity to process information. Since a well-defined product class concept is lacking, the organizational buyer cannot draw upon past experience with similar brands. For a normal innovation (a product introduced into a developed product class), the selection decision is somewhat simplified. The organizational buyer can draw upon past experience with the product class and compare the new brand with existing brands in reaching a decision. Thus, the decision-maker can readily judge the new brand in terms of his existing choice criteria. The entry of a minor innovation (a modification of an existing product) may further simplify the review process for the organizational buyer. Thus, the information

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[2]John A. Howard and Jagdish N. Sheth, The Theory of Buyer Behavior (New York: John Wiley and Sons, Inc., 1969), pp. 277-330.

requirements of the buyer decline with the level of innovation.[3]

Group decision-making is a central component of models of organizational buying behavior.[4] The purpose of this study is to further the understanding of this process by examining the relationship between the structural properties of the group and key components of the decision-making process. Two group properties are examined: group cohesiveness and group leadership. Underlying the research is the supposition that the type of buying task affects the nature and character of the group decision-making process.

A convenience sample of food buying units, which use a buying committee in reviewing new grocery items, was selected. The sample included chains, voluntary group wholesalers, and cooperative group wholesalers, located in six metropolitan areas in two midwestern states. The final sample included 22 groups consisting of 120 members. The Howard and Sheth new product classification scheme was used as a guide in selecting the three products for the project. A series of hypotheses, grounded in small group

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[3]Ibid., p. 280.

[4]Jagdish N. Sheth, "A Model of Industrial Buyer Behavior," Journal of Marketing 37 (October 1973): 50-56; see also Frederick Webster and Yoram Wind, Organizational Buying Behavior (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), Chapter 1.

theory, were developed at two levels of analysis: (1) group level and (2) individual level.

Group Level of Analysis

Cohesiveness.--Does a highly cohesive group of organizational decision-makers approach the new product selection decision differently than a less cohesive group? Several measures were developed to address this question.

Cohesiveness and the application of choice criteria.--Respondents were asked to apply seven selected choice criteria to each of the buying tasks. A coefficient of concordance, W, was calculated for each group across the three levels of innovation. The results confirm the hypothesis that cohesiveness is significantly related to conformity in the application of choice criteria for each buying task. The results are significant at the .01 level for the major innovation and at the .05 level for both the normal and minor innovation selection decisions.

Cohesiveness and new product performance expectations.--Data were gathered to test the proposition that cohesiveness is positively associated with the similarity of new product performance expectations. Interestingly, the hypothesized relationship emerges only for the major innovation.

Cohesiveness and the extent of deliberation.--Do cohesive groups tend to engage in more lengthy deliberation? The relationship appears to vary with the buying task. Cohesiveness is positively associated with extensive deliberation for the (a) major innovation (significant at the .05 level) and (b) normal innovation (significant at the .01 level). Although nonsignificant, an inverse relationship exists between the two variables for the minor innovation.

Cohesiveness and the nature of discussion.--Inquiry into the nature of product-related discussion yields significant results only for the major innovation category. For this buying task, cohesiveness is positively associated with discussion characterized by general agreement. The extent of agreement increases in nearly all of the groups as the level of innovation declines.

Cohesiveness and the perceived importance of the group leader.--The following hypothesis was tested: group cohesiveness is positively related to the importance of the group leader in new product selection decisions. For each innovation level, the posited relationship is not supported.

Group leader influence and perceived risk.--For a major innovation the influence of the group leader is significantly correlated with both components of the perceived risk model: uncertainty and consequences.

When the buying task shifts to a normal innovation, a positive association exists only for the consequences component of perceived risk. Statistically significant results are lacking for both risk components in the minor innovation category.

Individual Level of Analysis

Are the three levels of innovation perceived differently by the organizational buyers? The Friedman test was employed in examining four variables: (1) product newness, (2) perceived risk, (3) the importance of the group leader, and (4) the extent of product-related discussion.

First, organizational buyers rank the innovations in this sequence: (a) major innovation (newest), (b) minor innovation (second), and (c) normal innovation (third). The results lend support to the underlying new product classification scheme used in the study. Second, the respondents perceive the most risk in the major innovation and the least risk in the minor innovation. The results are statistically significant for both components of the perceived risk model. Third, the relative importance of the group leader, in the new product selection decision, appears to vary with the buying task: major innovation (ranked first) and minor innovation (ranked third). Fourth, the major innovation generates the most product-related discussion. The results are significant at the .001 level.

Conclusions

In his model of organizational buying behavior, Sheth contends that "the most important aspect of the joint decision-making process . . . is the assimilation of information, deliberation on it, and the consequent conflict which most joint decisions entail."[5] Conflict emerges when the participants in the decision-making process have different goals and perceptions.[6] The results of this research suggest that the members of highly cohesive buying committees appear to have similar goals and perceptions concerning new product offerings. A high degree of conformity exists among committee members in the application of choice criteria to all three levels of innovation. Likewise, similarity characterizes the product performance expectations of group members for the major innovation in the cohesive committees. Thus, these committees likely operate at low levels of conflict. The well-defined choice criteria and goals may result from lengthy deliberation. These results do not indicate that cohesive groups arrive at optimal new product selection decisions, but merely, that they have similar perceptions and goals. Interestingly, a

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[5]Sheth, "Model of Industrial Buyer Behavior," p. 54.

[6]James G. March and H. A. Simon, Organizations (New York: John Wiley and Sons, Inc., 1958), Chapter 5.

single promotional message injected into a cohesive committee would be adequate; whereas, in a less cohesive group, multiple messages or contacts may be necessary to stimulate a desired response.

A manufacturer, introducing a new product to the channel, should also consider the differential impact stimulated by the level of innovation alone. In designing a promotional campaign for the channel, the manufacturer should recognize the apparent high information needs generated by a major innovation. The lack of specific product class knowledge, coupled with the inherent risk perceived in accurately projecting consumer demand, appears to increase the amount of deliberation given to the selection decision. Likewise, organizational buyers tend to perceive higher levels of risk in these buying tasks and, therefore, appear more likely to seek the advice of a group leader.

Recommendations for Future Research

Numerous definitions of "new product" have been advanced in past research. These divergent conceptualizations indicate that the problem of accurately measuring product newness has not been resolved. The Howard and Sheth new product classification scheme appears to offer some insight into the differential buying tasks facing the organizational buyer of consumer goods. Since the research

focuses on only three products, attempts to generalize the findings to other products possessing markedly different characteristics must be undertaken with caution. Further tests of this classification scheme in the organizational setting are greatly needed. Likewise, in this study, only preliminary attention has been given to the concepts of cohesiveness and group leadership in the organizational setting. Further exploration of these variables would be desirable.

APPENDICES

MICHIGAN STATE UNIVERSITY

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
DEPARTMENT OF MARKETING AND
TRANSPORTATION ADMINISTRATION

EAST LANSING • MICHIGAN • 48824

APPENDIX A

INTRODUCTORY LETTER TO BUYER

Dear Mr. _____:

To complete the requirements for the Ph.D. program in Marketing at Michigan State University, I am conducting a study of the new product selection process in the food industry. Your buying experience and expertise could be quite valuable to my research. I would appreciate the opportunity to meet with you and other buyers within your firm. Realizing the heavy demands on a buyer's time, I will limit the interview to twenty to thirty minutes, and will call well in advance to schedule a time convenient to you.

Thank you in advance.

Sincerely,

Michael D. Hutt

APPENDIX B

QUESTIONNAIRE

Interview Planning Guide

Name of Firm	Address
_____	_____
_____	_____

Date Introductory Letter Sent: _____

Number of Members on Buying Committee: _____

MEMBERSHIP

Name	Title	Date/Time of Appointment
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Name _____ Title _____

Firm _____ Date of Interview _____

1. What is the central function of the buying committee in your firm?

2. In reviewing new products, does your firm use a new item form? (If yes, request a copy.)

   _____ yes _____ no

3. Do all the members of the committee have an equal vote in new product selection decisions?

   _____ yes _____ no

4. If no to #3, which member has a greater impact on decisions?

Name	Title
_____	_____
_____	_____

   Comments:

5. Is there a particular individual in the firm from whom you seek advice in making new product decisions?

   _____ yes _____Name _____Title

   _____ no

To gain a better understanding of the new product evaluation process in your firm, I would like to focus on three new products that were recently reviewed by your firm. I have a few questions about each.

The first new item is _____ (major innovation)

6. To what extent was this product discussed within the committee before a decision was reached? (Present card #1 to respondent.)

not at all ____ ____ ____ ____ ____ ____ ____ extensively

7. How would you describe the nature of that discussion? (Card #1)

strong views heatedly discussed ____ ____ ____ ____ ____ ____ ____ discussion characterized by general agreement

8. When you were reviewing this product, how certain were you that it would perform up to your expectations? (Card #1)

extremely certain ____ ____ ____ ____ ____ ____ ____ extremely uncertain

9. Likewise, how would you describe the amount of risk you felt in the decision to accept or reject this product? (Card #1)

extremely risk free ____ ____ ____ ____ ____ ____ ____ extremely risky

10. How would you rate the sales performance expectations that you had for this product during the evaluation process? (Card #1)

extremely low ____ ____ ____ ____ ____ ____ ____ extremely high

11. For this product, was one member's opinion particularly important in the selection decision?

____ yes _____ Name

____

12. If yes to #11, how important? (Card #1)

extremely unimportant ____ ____ ____ ____ ____ ____ ____ extremely important

13. Several factors influence new product selection decisions. In reviewing _____ (major innovation), how important were these factors to you? (Present Card #2.) Please rank them 1 through 7, with 1 being the most important and 7 the least important.

____ Advertising Support	____ Introductory Deal
____ Test Market Results	____ Intro/Advertising Allowance
____ Reputation of Manufacturer	____ Quality and Appearance of Package
____ Product Newness	

14. Was the product accepted or rejected?

____ accepted ____ rejected

15. What factors strongly influenced this decision?

The second product offering that I would like to discuss with you is _____ (normal innovation).

16. To what extent was this product discussed within the committee before a decision was reached? (Present Card #3.)

not at all ____ ____ ____ ____ ____ ____ ____ extensively

17. How would you describe the nature of that discussion? (Card #3)

strong views heatedly discussed ____ ____ ____ ____ ____ ____ ____ discussion characterized by general agreement

18. When you were reviewing this product, how certain were you that it would perform up to your expectations? (Card #3)

extremely certain ____ ____ ____ ____ ____ ____ ____ extremely uncertain

19. Similarly, how would you describe the amount of risk that you felt in the decision to accept or reject this project? (Card #3)

extremely risk-free ____ ____ ____ ____ ____ ____ ____ extremely risky

20. How would you rate the sales performance expectations that you had for this product during the evaluation process? (Card #3)

extremely low ____ ____ ____ ____ ____ ____ ____ extremely high

21. For this product, was one member's opinion particularly important in the selection decision?

_____ yes _____ Name

_____ no

22. If yes to #21, how important? (Card #3)

extremely unimportant ____ ____ ____ ____ ____ ____ ____ extremely important

23. In reviewing _____ (normal innovation), how important were these factors to you? (Present card #4.) Please rank them 1 through 7, with 1 being the most important and 7 the least important.

____ Advertising Support

____ Test Market Results

____ Reputation of Manufacturer

____ Product Newness

____ Introductory Deal

____ Intro/Advertising Allowances

____ Quality and Appearance of Package

24. Was the product accepted or rejected?

____ accepted ____ rejected

25. What factors strongly influenced this decision?

_____ (minor innovation) is the third new product that I would like to discuss with you.

26. To what extent was this product discussed within the committee before a decision was reached? (Present card #5.)

not at all ____ ____ ____ ____ ____ ____ ____ extensively

27. How would you describe the nature of that discussion? (Card #5)

strong views heatedly discussed ____ ____ ____ ____ ____ ____ ____ discussion characterized by general agreement

28. When you were reviewing this product, how certain were you that it would perform up to your expectations? (Card #5)

extremely certain ____ ____ ____ ____ ____ ____ ____ extremely uncertain

29. Likewise, how would you describe the amount of risk that you felt in the decision to accept or reject this product? (Card #5)

extremely risk-free ____ ____ ____ ____ ____ ____ ____ extremely risky

30. How would you rate the sales performance expectations that you had for this product during the evaluation process? (Card #5)

extremely low ____ ____ ____ ____ ____ ____ ____ extremely high

31. For this product, was one member's opinion particularly important in the selection decision?

____ yes _____ Name

____ no

32. If yes to #31, how important? (Card #5)

extremely unimportant ____ ____ ____ ____ ____ ____ ____ extremely important

33. For _____ (minor innovation), how important were these factors to you? (Present card #6.) Please rank them 1 through 7, with 1 being the most important and 7 the least important.

____ Advertising Support
____ Test Market Results
____ Reputation of Manufacturer
____ Product Newness
____ Introductory Deal
____ Intro/Advertising Allowance
____ Quality and Appearance of Package

34. Was the product accepted or rejected?

____ accepted ____ rejected

35. What factors strongly influenced this decision?

36. Listed on card #7 are several factors that might influence new product selection decisions. Please indicate the relative importance of each factor when compared to other factors on the list. Read the list first, then go back and rate each factor.

____ Advertising Support
____ Test Market Results
____ Reputation of Manufacturer
____ "Newness" of Item
____ Deal Offered (e.g., cash off invoice)
____ Intro/Advertising Allowance
____ Quality and Appearance of Package

37. With whom would you like to work on a special project geared to further developing new product selection policies within the firm? (Choose two individuals.)

_____

_____

38. Please evaluate this statement:

Group evaluation of new products results in better decisions than individual evaluation.

strongly agree ____ ____ ____ ____ ____ ____ ____ strongly disagree

39. Many products are in fact totally "new" while others are merely modifications of products already available on the market. In summary, how would you evaluate the newness of these products in relation to one another?

_____ (major)

nothing new ____ ____ ____ ____ ____ ____ ____ completely new

_____ (normal)

nothing new ____ ____ ____ ____ ____ ____ ____ completely new

_____ (minor)

nothing new ____ ____ ____ ____ ____ ____ ____ completely new

APPENDIX C

SOCIOMETRIC CHOICE MATRICES: COHESIVENESS

Group 1[a]

	1	2	3	4	5	6
1			X		X	
2	X			X		
3		X				X
4		X	X			
5	X			X		
6		X			X	

[a]Co = .33.

Group 2[a]

	1	2	3	4	5
1		X			X
2			X	X	
3	X			X	
4	X				X
5	X	X			

[a]Co = .20.

Group 3[a]

	1	2	3	4	5	6
1		X		X		
2	X				X	
3		X				X
4	X				X	
5	X	X				
6	X		X			

[a]Co = .67.

Group 4[a]

	1	2	3	4	5
1		X	X		
2			X		X
3	X				X
4	X	X			
5	X		X		

[a]Co = .40.

Group 5[a]

	1	2	3	4	5
1			X		X
2			X		X
3	X			X	
4		X	X		
5		X	X		

[a]Co = .60.

Group 6[a]

	1	2	3	4	5
1		X			X
2	X			X	
3	X			X	
4	X				X
5	X		X		

[a]Co = .40.

Group 7[a]

	1	2	3	4	5
1		X		X	
2	X				X
3	X	X			
4		X			X
5	X		X		

[a]Co = .20.

Group 8[a]

	1	2	3	4	5	6
1			X		X	
2			X	X		
3	X	X				
4		X				X
5	X			X		
6	X			X		

[a]Co = .83.

Group 9[a]

	1	2	3	4	5
1		X			X
2	X		X		
3	X			X	
4	X	X			
5	X		X		

[a]Co = .40.

Group 10[a]

	1	2	3	4	5	6
1					X	X
2	X				X	
3					X	X
4	X		X			
5	X	X				
6	X		X			

[a]Co = .67.

Group 11[a]

	1	2	3	4	5	6
1			X			X
2	X					X
3	X				X	
4		X			X	
5			X	X		
6	X			X		

[a]Co = .67.

Group 12[a]

	1	2	3	4	5
1			X		X
2	X			X	
3	X	X			
4			X		X
5	X	X			

[a]Co = .40.

Group 13[a]

	1	2	3	4	5
1		X	X		
2	X				X
3	X				X
4	X	X			
5	X		X		

[a]Co = .60.

Group 14[a]

	1	2	3	4	5	6
1		X			X	
2	X		X			
3	X	X				
4		X			X	
5	X			X		
6	X		X			

[a]Co = .67.

Group 15[a]

	1	2	3	4
1		X		X
2[b]	X			
3	X	X		
4		X	X	

[a]Co = .25

[b]One choice exterior to the group.

Group 16[a]

	1	2	3	4	5	6	7	8	9
1		X						X	
2				X					X
3	X							X	
4			X			X			
5	X						X		
6			X	X					
7					X				X
8	X			X					
9	X						X		

[a]Co = .44.

Group 17[a]

	1	2	3	4	5	6
1			X			X
2	X				X	
3	X			X		
4	X					X
5		X				X
6	X				X	

[a]Co = .67.

Group 18[a]

	1	2	3	4	5
1				X	X
2	X		X		
3	X			X	
4	X		X		
5	X	X			

[a]Co = .60.

Group 19[a]

	1	2	3	4	5
1		X		X	
2	X				X
3	X				X
4	X				X
5	X	X			

[a]Co = .60.

Group 20[a]

	1	2	3	4	5	6
1				X		X
2			X	X		
3		X			X	
4		X				X
5			X			X
6	X			X		

[a]Co = .83.

Group 21[a]

	1	2	3	4
1		X		X
2	X		X	
3	X	X		
4		X	X	

[a]Co = .50.

Group 22[a]

	1	2	3	4	5
1				X	X
2	X		X		
3	X			X	
4		X	X		
5		X	X		

[a]Co = .20.

APPENDIX D

COMMON COMPONENTS OF NEW PRODUCT FORMS

New Item

Item and Brand	Pack
Manufacturer	Size
	Cost
Date Available	Case--Weight, Size

Guarantees

Of Sale	Price Protection Policy
Of Item	Interval--Order to Delivery

Liability Insurance:
By _____
Dollar Amount _____

Marine Insurance:
By _____
Dollar Amount _____

Allowances

Display Allowance	Promotional
Advertising Allowance	Quantity
Introductory Offer	Cash
Extended Payment Terms	

Producer's Advertising

	Dates	Displays	Sales Aids
Papers	_____	Floor	Circulars
TV	_____	Shelf	Signs
Radio	_____	Basket	Banners
Magazines	_____	Other	
Demonstrations	_____		
Coupons	_____		

Major Retailers Stocking

Name of Retailer	Actual Retail Price	Fair Trade yes/no	Suggested Retail Price

Shipping Information

How	Point of Origin	Minimum/Maximum	Terms

APPENDIX E

FREQUENCY DISTRIBUTIONS FOR SELECTED VARIABLES: INDIVIDUAL LEVEL OF ANALYSIS

Table A1. Perceived Risk Across Three Levels of Innovation: Uncertainty Component

Level of Innovation	Scale: Uncertainty							
	Extremely Certain 1	2	3	4	5	6	Extremely Uncertain 7	Total
Major Innovation								
Number	13	6	9	14	24	23	31	120
Percent	10.8	5.0	7.5	11.7	20.0	19.2	25.8	100.0
Mean = 4.93								
Normal Innovation								
Number	27	10	24	19	24	7	9	120
Percent	22.5	8.3	20.0	15.9	20.0	5.8	7.5	100.0
Mean = 3.50								
Minor Innovation								
Number	55	25	23	4	7	4	2	120
Percent	45.9	20.9	19.2	3.3	5.8	3.3	1.6	100.0
Mean = 2.19								

Table A2. Perceived Risk Across Three Levels of Innovation: Consequences Component

Level of Innovation	Scale: Consequences							
	Extremely Risk-Free 1	2	3	4	5	6	Extremely Risky 7	Total
Major Innovation								
Number	8	11	11	19	34	21	16	120
Percent	6.7	9.2	9.2	15.8	28.3	17.5	13.3	100.0
Mean = 4.56								
Normal Innovation								
Number	24	11	32	21	15	7	10	120
Percent	20.0	9.2	26.7	17.5	12.5	5.8	8.3	100.0
Mean = 4.13								
Minor Innovation								
Number	57	21	15	13	8	2	4	120
Percent	47.5	17.5	12.5	10.8	6.7	1.7	3.3	100.0
Mean = 2.30								

Table A3. The Importance of Group Leadership Across Three Levels of Innovation

Level of Innovation	Scale: Importance of Leader								
	Extremely Unimportant 1	2	3	4	5	6	Extremely Important 7	(NR)[a]	Total
Major Innovation									
Number	3	1	0	4	10	24	20	(7)	69
Percent	4.3	1.5	0.0	5.8	14.5	34.8	29.0	(10.1)	100.0
Mean = 5.15									
Normal Innovation									
Number	15	8	2	5	14	10	14	(1)	69
Percent	21.7	11.6	2.9	7.2	20.3	14.5	20.3	(1.5)	100.0
Mean = 4.13									
Minor Innovation									
Number	26	2	5	10	8	5	13		69
Percent	37.7	2.9	7.2	14.5	11.6	7.2	18.9		100.0
Mean = 3.57									

[a](NR) refers to no response given.

Table A4. The Extent of Deliberation for Three New Product Selection Decisions

Level of Innovation	Scale: Extent of Deliberation							Total
	Not At All 1	2	3	4	5	6	Extensively 7	
Major Innovation								
Number	0	1	10	17	28	40	24	120
Percent	0.0	0.8	8.3	14.2	23.3	33.4	20.0	100.0
Mean = 5.40								
Normal Innovation								
Number	1	3	24	45	33	10	4	120
Percent	0.8	2.5	20.0	37.5	27.5	8.3	3.4	100.0
Mean = 4.27								
Minor Innovation								
Number	9	21	35	33	19	2	1	120
Percent	7.5	17.5	29.2	27.5	15.8	1.7	0.8	100.0
Mean = 3.35								

Table A5. The Importance of Selected Choice Criteria in the Evaluation of New Products

	Scale: Importance of Choice Criteria							
Choice Criteria	Very Unimportant 1	2	3	4	5	6	Very Important 7	Total
Advertising Support								
Number	0	4	3	17	19	38	39	120
Percent	0.0	3.3	2.5	14.2	15.8	31.7	32.5	100.0
Test Market Results								
Number	22	11	14	23	35	9	6	120
Percent	18.3	9.1	11.7	19.2	29.2	7.5	5.0	100.0
Reputation of Manufacturer								
Number	0	2	3	13	25	36	41	120
Percent	0.0	1.7	2.5	10.8	20.8	30.0	34.2	100.0
Newness								
Number	2	7	10	29	32	19	21	120
Percent	1.7	5.8	8.3	24.2	26.7	15.8	17.5	100.0
Deals								
Number	11	17	30	27	7	14	14	120
Percent	9.1	14.2	25.0	22.5	5.8	11.7	11.7	100.0
Advertising Allowance								
Number	37	40	28	6	4	3	2	120
Percent	30.9	33.3	23.3	5.0	3.3	2.5	1.7	100.0
Quality and Appearance of Package								
Number	45	37	29	6	1	1	1	120
Percent	37.5	30.9	24.2	5.0	0.8	0.8	0.8	100.0

BIBLIOGRAPHY

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Books

Alderson, Wroe. Marketing Behavior and Executive Action. Homewood, Ill.: Richard D. Irwin, Inc., 1957.

Barnett, Homer G. Innovation: The Basis of Cultural Change. New York: McGraw-Hill Book Company, Inc., 1953.

Bliss, Perry, ed. Marketing and the Behavioral Sciences. Boston: Allyn and Bacon, Inc., 1963.

Borden, Neil H., Jr. Acceptance of New Food Products by Supermarkets. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1968.

Britt, S. H., ed. Psychological Experiments in Consumer Behavior. New York: John Wiley and Sons, Inc., 1970.

Brown, Roger. Social Psychology. New York: The Free Press, 1965.

Buzzell, Robert D., and Robert E. M. Nourse. Product Innovation in Food Processing, 1954-1964. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1967.

Cartwright, Dorwin, and Alvin Zander, eds. Group Dynamics: Research and Theory. 3rd ed. New York: Harper and Row Publishers, 1968.

Cox, Donald F., ed. Risk Taking and Information Handling in Consumer Behavior. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1967.

Cyert, R., and J. March. A Behavioral Theory of the Firm. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963.

Day, R. L., ed. Marketing Models. Scranton: International Textbook Company, 1964.

Engel, James F., David Kollat and Roger Blackwell. Consumer Behavior. 2nd ed. New York: Holt, Rinehart and Winston, Inc., 1973.

Filley, Alan C., and Robert J. House. Managerial Process and Organizational Behavior. Glenview, Ill.: Scott, Foresman and Company, 1969.

Fisk, George, ed. New Essays in Marketing Theory. Boston: Allyn and Bacon, Inc., 1971.

Hass, Raymond M., ed. Science, Technology and Marketing. Chicago: American Marketing Association, 1966.

Hollander, Edwin P. Principles and Methods of Social Psychology. 2nd ed. New York: Oxford University Press, 1971.

Homans, George. Social Behavior: Its Elementary Forms. New York: Harcourt, Brace and World, 1961.

Howard, John A., and Jagdish N. Sheth. The Theory of Buyer Behavior. New York: John Wiley and Sons, Inc., 1969.

Jahoda, M., M. Deutsch and S. Cook, eds. Research Methods in Social Relations: With Especial Reference to Prejudice. Part 2. New York: Dryden Publishing Company, 1951.

Kelley, E. J., and William Lazer, eds. Managerial Marketing, Policies, Strategies and Decisions. Homewood, Ill.: Richard D. Irwin, Inc., 1973.

Kerlinger, Fred N. Foundations of Behavioral Research. 2nd ed. New York: Holt, Rinehart and Winston, Inc., 1973.

King, Robert L., ed. Marketing and the New Science of Planning. Chicago: American Marketing Association, 1968.

Kogan, Nathan, and Michael A. Wallach. Risk Taking, A Study in Cognition and Personality. New York: Holt, Rinehart and Winston, Inc., 1964.

Leavitt, Harold J. Managerial Psychology. 2nd ed. Chicago: The University of Chicago Press, 1964.

Leed, Theodore W., and Gene A. German. Food Merchandising, Principles and Practices. New York: Chain Store Age Books, 1973.

Levitt, T. Industrial Purchasing Behavior: A Study of Communications Effects. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1965.

Lindzey, Gardner and E. Aronson, eds. Handbook of Social Psychology. Reading, Mass.: Addison-Wesley Publishing Company, Inc., 1968.

March, James G., and H. A. Simon. Organizations. New York: John Wiley and Sons, Inc., 1958.

McDonald, Philip R., ed. Marketing Involvement in Society and the Economy. Chicago: American Marketing Association, 1969.

Proceedings of the 43rd Conference of the American Marketing Association. Chicago: American Marketing Association, 1960.

Robertson, Thomas S. Innovative Behavior and Communication. New York: Holt, Rinehart and Winston, Inc., 1971.

Robinson, Patrick J., and Charles Faris. Industrial Buying and Creative Marketing. Boston: Allyn and Bacon, Inc., 1967.

Rogers, Everett M., with F. Floyd Shoemaker. Communication of Innovations. 2nd ed. New York: The Free Press, 1971.

Shepherd, Clovis R. Small Groups, Some Sociological Perspectives. San Francisco: Chandler Publishing Company, 1964.

Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.

Smith, L. George, ed. Reflections on Progress in Marketing. Chicago: American Marketing Association, 1965.

Webster, Frederick, and Yoram Wind. Organizational Buying Behavior. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.

Periodicals

Angeles, Theodore L. "Why Do Most New Products Fail?" Advertising Age 40 (March 24, 1969): 85-86.

Belovicz, Meyer W., and Frederic E. Finch. "A Critical Analysis of the 'Risky Shift' Phenomenon." Organizational Behavior and Human Performance 6 (1971): 150-168.

Berkowitz, L. "Group Standards, Cohesiveness, and Productivity." Human Relations 7 (1954): 509-519.

Cardoza, Richard N., and James W. Cagley. "Experimental Study of Industrial Buyer Behavior." Journal of Marketing Research 8 (August 1971): 329-334.

Cartwright, Dorwin. "Risk Taking by Individuals and Groups: An Assessment of Research Employing Choice Dilemmas." Journal of Personality and Social Psychology 20, No. 3 (1971): 375-378.

Czepiel, John A. "Word-of-Mouth Processes in the Diffusion of a Major Technological Innovation." Journal of Marketing Research 11 (May 1974): 172-180.

Festinger, Leon. "Informal Social Communications." Psychological Review 57 (1950): 271-292.

Filley, Alan C. "Committee Management: Guidelines from Social Science Research." California Management Review 13, No. 1 (Fall 1970): 13-21.

Fishbein, M. "Prediction of Interpersonal Preferences and Group Member Satisfaction from Estimated Attitudes." Journal of Personality and Social Psychology 1 (1965): 663-667.

Gordon, Howard L. "How Important Is the Chain Store Buying Committee?" Journal of Marketing 25 (January 1961): 56-60.

Grashof, John F. "Supermarket Chain Product Mix Decision Criteria: A Simulated Experiment." Journal of Marketing Research 7 (May 1970): 235-242.

Hollander, Edwin P. "Conformity, Status and Idiosyncrasy Credit." Psychological Review 65, No. 2 (1958): 117-127.

"How Buyers Foretell New Product Success." Co-ops and Voluntaries, December 1974, pp. 30-32.

Hoyt, George C., and J. A. F. Stoner. "Leadership and Group Decisions Involving Risk." Journal of Experimental Social Psychology 4 (1968): 275-276.

Johnson, Daniel J., and I. Robert Andrews. "Risky Shift Phenomenon Tested with Consumer Products as Stimuli." Journal of Personality and Social Psychology 20, No. 3 (1971): 382-385.

Knight, Kenneth E. "A Descriptive Model of the Intra-Firm Innovation Process." Journal of Business 40 (October 1967): 478.

Levitt, T. "Communications and Industrial Selling." Journal of Marketing 31 (April 1967): 15-21.

Marquis, D. G. "Individual Responsibility and Group Decisions Involving Risk." Industrial Management Review 3 (1962): 8-23.

Martilla, John A. "Word-of-Mouth Communications in the Industrial Adoption Process." Journal of Marketing Research 8 (May 1971): 173-178.

McClure, Peter. "Analyzing Consumer Image Data Using the Friedman Two-Way Analysis of Variance by Ranks." Journal of Marketing Research 8 (August 1971): 370-371.

"New Directions in the Buyer-Seller Relationship." Chain Store Age, April 1973, p. 54.

Pruitt, Dean G. "Choice Shifts in Group Discussion: An Introductory Review." Journal of Personality and Social Psychology 20, No. 3 (1971): 339.

Reingen, Peter H. "Comment on Woodside." Journal of Marketing Research 11 (May 1974): 223-224.

Robertson, Thomas S. "The Process of Innovation and the Diffusion of Innovation." Journal of Marketing 31 (January 1967): 14-19.

Schiffman, Leon G., and Vincent Gaccione. "Opinion Leaders in Institutional Markets." Journal of Marketing 38 (April 1974): 49-53.

Sheth, Jagdish N. "A Model of Industrial Buyer Behavior." Journal of Marketing 37 (October 1973): 50-56.

Stafford, James E. "Effects of Group Influences on Consumer Brand Preferences." Journal of Marketing Research 31 (February 1966): 68-75.

Stewart, John B. "Functional Features in New Product Strategy." Harvard Business Review, March-April 1959, pp. 65-78.

Van de Ven, Andrew, and Andre L. Delbecq. "Nominal Versus Interacting Group Processes for Committee Decision-Making Effectiveness." Academy of Management Journal 14, No. 21 (June 1971): 203-212.

Venkatesan, M. "Experimental Study of Consumer Behavior Conformity and Independence." Journal of Marketing Research 3 (November 1966): 384-387.

Wallach, M. A., N. Kogan and D. J. Bem. "Diffusion of Responsibility and Level of Risk Taking in Groups." Journal of Abnormal and Social Psychology 68 (1964): 263-274.

Wasson, Chester R. "What Is New About New Products?" Journal of Marketing 25 (July 1960): 52-56.

Webster, Frederick E., Jr. "Informal Communication in Industrial Markets." Journal of Marketing Research 7 (May 1970): 186-189.

Webster, Frederick E., and Yoram Wind. "A General Model for Understanding Organizational Buying Behavior." Journal of Marketing 36 (April 1972): 12-19.

Weigand, R. "Why Studying the Purchasing Agent Is Not Enough." Journal of Marketing 32 (January 1968): 41-45.

Wilson, David T. "Industrial Buyers' Decision-Making Styles." Journal of Marketing Research 8 (November 1971): 433-436.

Witt, Robert E., and Grady D. Bruce. "Purchase Decisions and Group Influence." Journal of Marketing Research 7 (November 1969): 473-476.

Witt, Robert E. "Informal Social Group Influence on Consumer Brand Choice." Journal of Marketing Research 6 (November 1969): 473-476.

Woodside, Arch G. "Informal Group Influence on Risk Taking." Journal of Marketing Research 9 (May 1972): 223-225.

Woodside, Arch G. "Is There a Generalized Risky Shift Phenomenon in Consumer Behavior?" Journal of Marketing Research 11 (May 1974): 225-226.

Unpublished Sources

Anderson, Hayward S. "A Study of the Criteria Used by the Merchandising Committees of Three Multi-Unit Supermarket Organizations When Selecting New Grocery Items." Ph.D. dissertation, Harvard Graduate School of Business Administration, 1961.

Grashof, John F. "Information Management for Supermarket Chain Product Mix Decisions: A Simulated Experiment." Ph.D. dissertation, Michigan State University, 1968.

McMillan, J. R. "The Role of Perceived Risk in Vendor Selection Decisions." Ph.D. dissertation, The Ohio State University, Columbus, Ohio, 1972.

Stoner, J. A. F. "A Comparison of Individual and Group Decisions Involving Risk." Master's thesis, School of Industrial Management, Massachusetts Institute of Technology, 1961.