

The BuyGrid Model: Twenty-Five Years Later

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Abstract

Since its publication in 1967, the BuyGrid model has enjoyed considerable success as a framework within which the complexities of organizational buying behavior have been diagnosed and studied. After reviewing the essential features and assumptions of the model, we found that research on the BuyGrid model supports the validity of its basic dimensions: the buying situation, the buying process, and the buying center. However, research also revealed that some of the assumptions of the model were not supported as originally hypothesized, suggesting the need for future research before accepting its generalizability. Subsequently, we consider major changes in the business environment during the past twenty-five years, which may explain why some of the model's assumptions may need to be modified. Finally, we consider changes in marketing implications for the BuyGrid model, along with directions for future research.

Introduction

Academic research and conceptualizations involving organizational buying behavior have grown steadily over the past twenty-five years. This is evident in Figure 1, which shows the trend in the annual number of papers published in six marketing journals. The data for these counts were taken from the "reference appendix" in the comprehensive literature review published by Johnston and Lewin (1996). In subsequent six year periods, beginning in 1971, the average number of publications grew from about four, to seven, to ten per year. (The downward trend in 1992-1993 may be part of a cyclical pattern, possibly related to the cycle time of doctoral dissertations, a primary source of new research in the field.)

Among the various conceptualizations of organizational buying behavior, the BuyGrid model (Robinson, Faris, and Wind 1967) and its essential features have survived almost thirty years of use. The model follows the marketing concept and emphasizes that marketing to organizations requires understanding three important dimensions of buyer behavior: the *buying situation* (whether the purchase status of a particular product or service is a new task, a straight rebuy, or a modified rebuy), the *buying process* (through what phases or process is buying conducted), and the *buying center* (who is involved in the buying process). The continued use of the model and its dimensions seem to be an indication of the model's enduring value. Consider the following:

- The BuyGrid model continues to crop up in popular marketing management texts as a way to clarify and explain organizational buying decision processes (Kotler 1994, Haas 1992);
- The model stimulated considerable academic research and provides a coherent framework to organize research findings (Bunn 1990 and Johnston and Lewin 1996);
- The model has been "one of the most useful analytical tools for both academic and marketing practitioners interested in organizational buying behavior" (Moriarty 1983).

Despite the success of the BuyGrid model, it may be prudent to reconsider it with respect to its original purpose and in the context of a more dynamic business environment.

Based on empirical research, the focus of the model was on "developing and describing a specific classification system of the industrial buying process which appears to be useful from the point of view of the planning and execution of an efficient industrial marketing effort" (Robinson, Faris, and Wind 1967, p. 11). Thus while being *descriptive*, the model was apparently intended to be *normative*. That is, it was meant to be used to imply what managers *should* be doing to plan and execute industrial marketing programs. These implications were presented in Part III of the Robinson, Faris, and Wind (1967) book.

The model was also intended to be *generalizable*. According to the authors it was designed to provide "the frame of reference within which the procurement situations are designed to be general enough to apply to all procurements, yet specific enough to have operational relevance to the individual marketer" (Robinson, Faris, and Wind 1967, p. 13). In effect, the Buy-Grid model was intended to be helpful in characterizing the purchase of industrial services as well as products; equipment and capital purchases as well as materials and components -- all under varying environmental conditions.

Because the model was conceived during the mid-1960's when industrial markets were relatively stable (compared to the mid-1990's), it is logical to question the model's generalizability and normative features. By the mid-1990's, numerous forces in the business-to-business market environment began to emerge that were considerably more dynamic than the mid-1960's. The confluence of important trends, such as globalization, information technology, new business practices, cross-functional integration, and the value of time has created very different conditions for business in the mid-1990's than the mid-1960's. The possible impact of these trends on purchasing practices and behaviors raises four questions about the BuyGrid model:

- What are the basic dimensions and assumptions of the BuyGrid model?
- Is the BuyGrid model valid and generalizable?
- What is the impact of environmental changes on the model?
- Are the normative guidelines of the model still valid?

In the four sections that follow, we consider each of these questions. Subsequently, we suggest issues to consider for future research on the BuyGrid model.

Dimensions and Assumptions of the BuyGrid Model

The BuyGrid model is best known for its three major dimensions; however a more subtle understanding of it can be gained by considering its primary assumptions. The basic model, presented in Figure 2, emerged from the exploratory study of three large industrial firms and Wind's (1966) study of two large electronic firms. With some exceptions, Wind's (1966) independent study largely validated the BuyGrid model. The model has three major dimensions: two explicit dimensions of buying behavior -- *buyclasses* (or the buying situation) and *buyphases* (or the buying process) -- and a third implicit dimension of *buying influences* (or the buying center).

Research undertaken for the BuyGrid model surfaced three types of buying situations: new task, modified rebuy, and straight rebuy. The three buyclasses are assumed dependent on three factors: the newness of the problem to buying influences and decision makers, information requirements of buying influences and decision makers, and consideration of new alternatives by the decision makers. New task, modified rebuy, and straight rebuy situations are predicted to be high, medium, and low on all three factors, respectively.

In turn, each buyclass predicts different buyphases, or at least different activities within each phase. Using a "center of gravity" concept, the BuyGrid model recognizes that the relative importance of each buyphase will vary from purchase situation to purchase situation. Although Wind (1966) found that new task and straight rebuys dominated the buying situations that he studied (so-called modified rebuys were closer to new tasks or repeat purchases), he concurred with the three category classification because it more carefully calibrated the implied continuum.

The eight buyphases are viewed in terms of a decision process of "creeping commitment" in which decision-making "involves a sequence of incremental choices, each of which eliminates certain alternative solutions (or vendors) from further consideration" (Robinson, Faris, and Wind 1967, p. 19). The likelihood that the concept of creeping commitment actually describes the pur-

chasing process was assumed to increase with three factors: (1) the importance of the buying situation to the company, (2) the number of people involved in the decision making process, and (3) the reliance upon buying committees and similar arrangements for diffusing the buying responsibility.

The role of buying influences are perhaps the least obvious in the BuyGrid model. This assumption is depicted as the diagonal line in Figure 1. More specifically, the authors found that more buying influences were involved in the upper left hand corner of the BuyGrid model, decreasing to the lower right. In terms of Wind's (1966) *buying center* concept, this would imply larger buying centers with more influential participants earlier in the buyphases (especially for the new tasks) than later in the buyphases (for modified and straight rebuys). In effect, the authors of the BuyGrid model believed that "it may enable more effective adaptation of the sales effort to fit the critical pattern of buying decisions and to satisfy the needs of individuals whose influence is greatest in different purchase situations" (Robinson, Faris, and Wind, p. 13).

Although the value of the model can be found in its taxonomic simplicity, it contains more sophisticated interpretations and implications when used as a diagnostic tool in specific applications. For example, if one were to approach a potential buying organization for marketing purposes, the BuyGrid model would provide a road map of key questions. "Is this a new buying task for the organization, or are they already purchasing from existing suppliers?" If it is a new task or modified rebuy, "Who in the organization are potentially involved in the buying process and what will be their roles?" "What activities will these individuals follow in deciding which supplier to choose?"

If the purchase is a straight rebuy, then a similar line of questions might be pursued, but with a different goal in mind (e.g., to unseat existing suppliers). Also, somewhat different answers to the questions would be expected in the straight rebuy vs. the new task situation. Consequently, each cell of Figure 1 implies a subset of questions that enable other diagnostics to better understand the relative complexity of an organization's purchasing process. It is no wonder that the model has withstood the test of time.

Validity and Generalizability of the BuyGrid Model

Perhaps not surprisingly, research on the BuyGrid model has developed in a piecemeal fashion over the years. For example studies will often focus on the buying phases or buying influences, holding the buying class constant (e.g., for new task buying situations). Or studies will be based on one or two case studies, not a larger sample. Part of the reason for this is that the resource requirements to conduct large sample studies are extensive, and often prohibitive. Further, the inherent complexity in organizational buying behavior adds to the difficulty of collecting appropriately reliable and valid data (Anderson, Chu, and Weitz 1987). The result is few comprehensive studies of organizational buying in general, not to mention those on the BuyGrid model. For example, of the 165 publications over 25 years on organizational buying behavior reported by Johnston and Lewin (1996), only about one-fourth were empirical; the remaining were primarily conceptualizations.

Although there are few comprehensive large scale tests, research on the BuyGrid model and aspects of it, generally support its three basic dimensions. Few empirical studies on organizational buying behavior fail to cite the BuyGrid model or to explain findings in the context of the buying situation, the buying process, or multiple influences in the buying process. It is fair to conclude that the three major dimensions of the model are valid in that they capture important aspects of organizational buying behavior. Nevertheless, a number of findings may challenge some of the model's underlying assumptions, and hence its generalizability. These findings are briefly considered below.

Research on Buying Situations

Over the past 25 years, research on buying situations revealed few studies in which all three buyclasses were identified. In some cases, researchers found it expedient to use only new task and straight rebuys for comparison (e.g., Anderson, Chu, and Weitz 1987). In other cases research focused only on new tasks (e.g., Laczniak 1979), and still others intentionally combined new task and modified rebuy situations (e.g., Doyle, Woodside, and Michell, 1979). Bunn

(1993) offers the most compelling study of buying situations with an empirically derived taxonomy of six types of buying decisions based on four underlying factors that are considerably different than those employed in the original BuyGrid model. Nevertheless, as recognized by the author, the six categories (casual, routine low priority, simple modified rebuy, judgmental new task, complex modified rebuy, and strategic new task) can be reduced to the basic three buyclasses in the BuyGrid model, thus confirming their validity.

The value of the Bunn (1993) study lies in the confirmation that the buyclasses are really part of a continuum from straight rebuy to new task (or very simple to very complex). This continuum depends on the factors used to define the taxonomy (in Bunn's study) or possibly upon other factors involved in describing purchase situations. For example, in a script-theoretic analysis of industrial buying behavior, Leigh and Rethans (1984) found few differences in descriptions of the buying processes between new task and modified rebuy situations. The major difference involved how new vendors were identified. Some buyers first contacted their existing supplier then others, while other buyers contacted multiple vendors with little consideration given to their existing supplier.

In other cases, industry life cycle may define buying situations. For example, Clark and McLeary (1995) found that organizational buying of meeting and convention services from hotel chains by associations was predominantly straight rebuy and "modified" rebuy. Modifications involved choosing different locations for meetings from year-to-year. New tasks would only occur when a new association formed and had to plan its first meeting. Thus, stage of industry growth may influence the buying situation. However, Clark and McLeary (1995) did report that once a hotel chain was selected for meetings, the modified rebuy typically involved changing attributes of the meeting (location, facilities, etc.), not necessarily suppliers.

Another explanation for why there may be a variety of buying situations between new task and straight rebuy could be that as the speed of change in markets varies, so too do the buying situations. For example, in markets with very rapid change, each buying situation may be viewed as a new task to maintain competitive advantage, or at least to reduce uncertainty. In

their study of computer work station repurchases (a modified rebuy situation) Heide and Weiss (1995) found that while consideration set size (number of potential new vendors considered) was relatively closed, high amounts of information were required to reduce perceived uncertainty -- a characteristic of new task, not modified rebuy situations. Thus the effects of increased uncertainty due to the business environment may cause modified rebuys to be treated like new task situations, at least insofar as information requirements.

These findings and possible explanations suggest that the buyclass part of the BuyGrid model is more a conceptual or transitional step between a new task and a straight rebuy. This may mean that the modified rebuy (or the other categories defined by Bunn, 1993) is more of a strategic issue than a clearly delineated buying situation. Consider the case in which Procter & Gamble is the incumbent supplier for WalMart on several lines of products. As the incumbent, P&G will work very hard to prevent a challenger from turning a straight rebuy situation into a new task for the buying organization. This may include the implementation of electronic ordering, just-in-time delivery, and other services that enhance the benefits of a straight rebuy relationship. However, with increasing competitiveness, more large retailers, like WalMart, perform regularly scheduled reviews of shelf assortments, thereby creating problems for incumbent suppliers and opportunities for challenging suppliers.

The original BuyGrid model also assumed that buyers in new task situations would consider more alternative suppliers than those in straight rebuy situations. However a persistent finding indicates that this assumption may be questionable. For example, in a study of 14 British industrial manufacturers, Doyle, Woodside, and Michell (1979) compared new task and modified rebuys with straight rebuys on seven variables defining the buying process. Although they found support for the model on most of these variables, one difference involved fewer alternatives considered than expected in new task situations. They also found that less postpurchase evaluation efforts were undertaken in new task situations than in straight rebuys.

In a study of sales managers views of organizational buyers, Anderson, Chu, and Weitz (1987) found that the buyclass dimensions of newness of the problem and information needs

were related and represented the buyclass construct well across a variety of industries. However, contrary to theory, they found that the consideration of new alternatives was not related to the other two dimensions and did not represent the buyclass construct well. More specifically, they found that some new task buyers did not seriously consider a range of alternatives, while some straight rebuy buyers did.

One of the major reasons for the consideration of fewer alternative suppliers in the new task (and modified rebuy) situation than normally hypothesized may be due to *source loyalty* (Wind 1970 and Bubbs and van Rest 1973). Source loyalty suggests that there may be benefits to developing longer term relationships with fewer suppliers in complex new task buying situations. For example, the emergence of "just-in-time" exchange relationships (Frazier, Spekman, and O'Neal 1988) to reduce waste from production and delivery systems and to pursue quality improvements through joint efforts between the manufacturer and supplier characterizes the buying situation in many industries. This practice, which is part of total quality management (TQM) processes, severely reduces the number of alternatives under consideration -- a practice that was not prevalent when the original BuyGrid model was formulated. In addition to reducing costs to facilitate competitiveness, a successful and productive relationship can reduce uncertainty.

Pressures to compete and fast-moving business markets also require the ability to move swiftly and efficiently. Heide and Weiss (1995) found that high vendor switching costs (in time and dollars) may keep the number of alternative suppliers considered as a relatively closed set (although recent practices reveal that aggressive suppliers are willing to underwrite any switching costs). Heide and Weiss (1995) also found that a closed consideration set was driven by the perception of rapid technological change. That is, uncertainty in the environment (through rapid technology change in their study) increased the amount of information collected, but restricted the tendency to switch vendors.

These findings clearly raise issues about one of the key assumptions in buyclass theory -- the number of alternative suppliers considered. It is plausible that conditions of market uncertainty brought about by increased competition, rapid technological change and other factors may

account for this finding. When market conditions are uncertain, the number of alternative suppliers may be constrained for efficiency (reduced waste and transaction costs) and effectiveness (source loyalty and long term relationship development). It is also possible that this may vary by industry. For example, retail buyers that purchase ready-made products have different relationships with suppliers than manufacturers who rely on quality production processes.

In summary, the dimension of a buying situation or buyclass is a valid and important dimension of understanding organizational buying behavior. However, the possibility that the number of buyclasses identified may vary by the underlying factors used to define them suggests the need for future research to identify the most relevant set of factors to use in developing such a taxonomy. In the meantime, it may be more prudent to view buying situations as a continuum from new task to straight rebuy (with various types of modifications possible in-between), and develop marketing strategy implications accordingly.

Research on Phases in the Buying Process

Although the BuyGrid model proposed eight buyphases to cover the three major buying situations (see Figure 2), an examination of various studies shows that the number of buyphases can vary considerably as shown in the Figure 3. The studies presented are not inclusive of all research conducted on phases in the buying processes; they were selected to show the variation in buyphases (in this case from 4 to 12).

A content analysis of these buying processes reveals at the core a five phase process, which includes: (1) definition of need and specifications, (2) information search for alternatives, (3) evaluation of alternatives, (4) purchase decision, and (5) postpurchase activity. Clearly, the phases are overlapping and to a large extent interactive. For example, information search activities may influence a redefinition of the need, which includes the setting of specifications. Similarly, the evaluation phase may reveal new information requirements, which can in turn redefine the need.

Part of the variation in the number of phases exhibited in Figure 3 may be due to the type of product studied. For example, Ferguson (1979) tested the BuyGrid model in a service context (public warehouse services) and found that it did not fit well in the case of modified and straight rebuy situations (he did not test new tasks). He concluded that seven phases captured the essence of the service process he observed. Part of the variation in the Figure 3 could also be due to the method with which the buyphases were selected (e.g., empirically determined or testing a published model).

The variation in buyphases found in these studies certainly do not invalidate the BuyGrid model, however they raise questions about the generalizability of the specific eight buyphases. Although the BuyGrid concept of the "center of gravity" recognizes variability in the importance of the eight phases, it does not necessarily mean that fewer than eight stages are acceptable to define the process. That is, in using the model, one ought to expect to consider all eight phases, albeit with different stages varying in importance at different times. In any case, future research is needed on the generalizability of the eight buyphases in the BuyGrid model, as well as on the underlying assumptions about the factors that drive the "creeping commitment" dynamic in the model and the "center of gravity" concept.

Research on Buying Influences

The BuyGrid model hypothesizes that buying influences will vary according to the buy-classes and buyphases (as shown in the diagonal of Figure 1). An alternative view of the impact of buying influences is presented by Wind (1978), who adds roles in the buying center as a third dimension. In his study of STI services Wind found that R&D managers had primary influence over need and product aspects of the purchase, controllers had primary influence over budgetary issues, and the purchasing manager for supplier relations. This is a similar pattern found in other studies of purchase influence (Pingry 1974, Bellizzi 1979, Doyle, Woodside, and Michell 1979, and Thomas 1989).

Because the earlier stages of new task buying situations tend to require more information in defining needs and setting specifications, it is logical for more organizational members (scientists, engineers, R&D personnel, manufacturing personnel, etc.) to be more involved in the earlier phases of product development than latter ones. As specification decisions are set, involvement of these people lessens and the purchasing function takes over. Thus, the BuyGrid influence hypothesis appears to hold for the buyphases. Nevertheless, changes in buying patterns brought about through increasingly popular cross-functional integration efforts in organizations (such as cross-functional teams in new product development) may extend the length of time the buying center has influence throughout the process (this will be considered later as an important topic for future research).

The hypothesis that influence may vary with the buyclasses may not be well supported. For example, Jackson, Keith, and Burdick (1984) report that the relative influence of buying center participants (as perceived by purchasing agents) did not vary with buyclasses, although they did by product type and by decision. This is consistent with findings by Brand (1972) and Belizzi and McVey (1978). McCabe (1987) offers perceived environmental uncertainty as a possible explanation for the equivalent findings on the influence hypothesis for buyclasses. Consistent with an earlier study by Cardozo (1980), he found that increased environmental uncertainty led to a centralization of decision making in the hands of a few top managers to expedite the process. In effect, uncertainty motivated lower level managers to look to higher level managers to assume the risk of these decisions. This may explain the practice of some firms to implement mandatory year-to-year price reductions and product improvements (such as the policy implemented by General Motors' head of purchasing during the 1980's). Thus it is reasonable to believe that whatever the buyclass, higher levels of environmental uncertainty (more prevalent in the 1990's than the 1960's) may cause any purchase decision (even straight rebuys) to be more closely scrutinized.

In summary, research on the BuyGrid model finds consistent support for its basic underlying dimensions -- the buying situation, the multiphase buying process, and multiple buying in-

fluences. This supports the validity of the model and suggests that these dimensions are necessary to consider in understanding organizational buying behavior. However, the research also suggests that the operationalization and articulation of the specific buyphases and buyclasses in the model may have been characteristic of more stable conditions in the business environment during the time of the model's development. That buyclasses may be characterized as a continuum between new tasks and straight rebuys, that the number of alternative suppliers considered may be fewer than hypothesized, and that the number of specific decision phases may vary by product, industry, or other factors, lead us to conclude that the model may not be as generalizable as initially intended. As suggested, this may be due to a very different set of conditions in the business environment during the 1990's than the 1960's when the model was formulated.

The Impact of Environmental Changes

Although the BuyGrid model recognized the influence of environmental forces on buying situations, the view appeared to be that buyclasses, buyphases, and buying influences would continue to operate as hypothesized, with variations in environmental forces influencing the outcome of each buying situation, not necessarily specific assumptions of the BuyGrid structure. Nevertheless, as noted above, it is quite possible that the impact of certain environmental forces can be so pervasive and enduring that they may challenge the basic assumptions that support the BuyGrid model, or at least cause them to be reconsidered. A few of the more salient trends between the mid-1960's and the mid-1990's are briefly summarized in the following sections.

Globalization

In the mid-1960's fewer industries were as globalized as the mid-1990's, and therefore experienced less competition from foreign firms. For example, suppliers to the auto industry had not yet experienced the intensity of Japanese competition, which drastically changed product development cycle time, and therefore purchasing processes. Further, the Cold War was at its peak during the mid-1960's, which fueled a large and stable military-industrial complex in the U.S. and Soviet Union with well-established organizational buying processes; however in the Post-

31. Bylinsky, Gene (1996), "Fast-Selling Software that Hurries Products to Market," Fortune, April 29, 1996, 150C+. ¹³

Cold War era, many of the same firms had to look for commercial opportunities outside of government buying, adding to the instability of industrial markets during the mid-1990's. Further, the impact of the transformed Soviet Union into independent countries, and other political consequences of a post-Cold War period, created new market opportunities and new competitors.

Information Technology

The rapid emergence of information technology in the past 25 years provided increasing opportunities for firms to directly link buying and selling functions globally. For example, a major supplier of hospital products placed modem-linked computers in buyer hospitals to facilitate ease of ordering. Further, global telecommunication technology facilitated the emergence of "virtual corporations," which dispersed manufacturing functions to many parts of the world, thereby altering organizational buying patterns. Even promotional opportunities will change through information technology. For example, in 1996 AT&T announced the acceptance of industrial advertising on its AT&T Business Network on the World Wide Web. *In addition,*

Another example of the influence of information technology is the emergence of electronic commerce for industrial buyers. For example, ~~Product Data Manager~~ ^{software} provides an on-line, real-time repository of engineering parts information to facilitate speedy approvals, standardization, and total cost evaluations. *Also,* in 1995 Thomas Publishing (publisher of the 100 year old Thomas Register) launched a new on-line corporate purchasing network to facilitate organizational purchasing. The network, dubbed CONNECTSUS, enables firms to electronically review several thousand maintenance, repair, and operations products in relatively short periods of time (minutes and hours vs. days and weeks). Users can create customized programs that enable them to automatically compare products on several criteria, negotiate prices, enter orders, and make electronic purchases with security standards. The potential cost savings to buyers in time are tremendous, although it creates the problem of increased likelihood of automated straight rebuy situations for the "out" suppliers.

~~The company~~ software, called "product data management" is being used by companies to link designers, engineers, and manufacturers into a seamless electronic web (Bylinsky 1996). Although it provides a major boost to faster product development, it also provides an ~~on-line repository of engineering parts information to facilitate purchasing activities.~~

In addition to information technology, increasingly rapid changes in many other basic technologies has altered buying processes, especially the traditional influence patterns in organizations. For example, the development of the silicon chip led to an influx of powerful personal computers, which in turn led to client-server computing (which de-emphasized mainframe computing), thereby disrupting the purchasing processes of numerous organizations. The "glass house" of mainframe computers in the organization and its personnel found their information (and purchasing) power temporarily decentralized and diluted to distant desk tops.

New Business Practices

A number of new business practices have emerged during the past 25 years that have had considerable influence on purchasing processes. For example, the emphasis on total quality management (TQM), and its corollary activities (just-in-time inventory management, benchmarking, etc.) directly influenced manufacturer-supplier relationships. One key principle of TQM calls for a close working relationship with a single supplier, almost a partnership. The impact of reducing the number of sources substantially altered the landscape of organizational buying behavior in many industries, such as automobiles. In some cases this led buyers to provide support to selected suppliers. For example, a major consumer products manufacturing firm has a "supplier development program" that qualifies vendors based on their operations and works with underachievers to improve their processes in order to qualify.

The rapid growth of business consulting into the 1990's, and the "business-fad-of-the-month" led, rightly or wrongly, to altered organizational structures. For example, the "reengineering" of organizations led to massive downsizing changes during the 1990's, with less security for organizational employees, smaller purchasing functions, and potentially confused roles in purchasing activities. The use of "out-sourcing" of pieces of the production process leads to economies, however it also creates a multi-layered buying center for the previously original suppliers. Now there is a buying center in the organization that selects the out-sourced suppliers, and also one in the out-source supplier organizations, who buy from original suppliers.

Cross-Functional Integration

Perhaps few changes in the past 25 years have had as profound an impact as the movement toward the integration of various organizational functions to improve organizational performance at all levels. It began with recognizing the importance of consensus and teamwork that was characteristic of successful Japanese manufacturing processes, but quickly spread to all aspects of business as basic processes were redesigned to deal with complex problems. For example, managers began to discover that certain downstream problems in sequential business processes could be removed by building a team that included key members from each critical stage of the process. By letting this cross-functional team manage the process from the outset, downstream problems could be anticipated, thereby saving time and money while improving the outcome of the process. Design for manufacturability (assembly, disassembly, etc.) illustrates a process area in which cross-functional integration between design and manufacturing has had considerable impact (Dean and Susman 1989).

It should be clear that the impact of cross-functional integration on purchasing can be significant because it will more likely be part of a team-driven process involving product or service development than a separate organizational function. For example, in the late 1980's, when Apple Computer Corp. set a goal of assembling, testing, packaging, and shipping a computer in less than 36 hours from receiving raw materials, it had to revise its traditional purchasing process (Semich 1989). Importantly, purchasing was made part of the strategic planning process. Among the many other changes, an important one included building and strengthening relationships with the engineering department, as well as manufacturing, in order to gain early involvement in the design and manufacturing process. In effect, purchasing was not only linked to the overall business strategy team, but was also part of the design and manufacturing team.

Importance of Time

In an increasingly competitive world, the resource of time became a valuable strategic opportunity (Stalk and Hout 1990). "Reducing cycle time" became the rallying cry among firms

that depended on new product development for competitive advantage. However, bringing about the integration of a supplier into the product's development cycle can be more difficult than integrating a firm's internal operations (Slade 1993). The more complex the product or process, the more difficult the integration. This usually requires the development of very close working relationships (sometimes joint ventures and partnerships, especially with proprietary technology), which frequently result in putting a member of the supplier organization on the new product development team.

The concept of the *lead user* represents another dimension of time with respect to new product development (Urban and von Hippel 1988). In this view, product development time is compressed by incorporating lead users into the design process. These lead users provide preferences and solutions to problems that might otherwise take months to uncover with non-lead users. The outcome is improved productivity through the market research process. Lead users are those who face market needs months or years before most organizations in the market, and who will benefit considerably from the innovation. In their case study application to PC-CAD systems, Urban and von Hippel (1988) found support for the benefits of using lead users.

In summary, confronted with the kinds of changes in the business environment between the 1960's and 1990's in just the five forces briefly illustrated above, it is no surprise that specific aspects of the basic BuyGrid model are not as generalizable as originally anticipated. The combined effects of increased global competition, information technology, new business practices, cross-functional integration, and the value of time has created very different conditions for organizational buying. For example:

- The increased value of time and changing business practices may reduce the number of alternative suppliers that can be considered.
- Cross-functional integration and new business practices may alter (and hide) the influence of purchasing executives as their role becomes integrated into the product development process.

- Information technology makes it possible to develop close-knit relationships between buyers and suppliers that make it more difficult than previously to unseat incumbent suppliers in straight rebuy situations.
- Information technology and the value of time may significantly automate and accelerate the actual procurement process (as in the case of Thomas Publishing and CONNECTSUS and standard MRPII ordering systems), thereby reducing some of the human involvement between buyers and sellers and changing the traditional purchase process.

Clearly these types of environmental changes raise questions about certain assumptions initially made for the BuyGrid model, however they do not invalidate the underlying dimensions of the model nor alleviate the need to understand them in a different context. In particular, they will need to be understood for improved marketing decision-making.

Normative Guidelines from the BuyGrid Model

The major implication of the BuyGrid model was to develop creative strategies for industrial markets. Robinson, Faris, and Wind (1967) compared the marketing strategies of the three buyclasses on four major strategy variables. Of course this can be expanded to include a wider set of marketing decisions variables. However, findings from research in the past 25 years and a very different business environment, perhaps one with greater uncertainty, raise the question of whether marketing decisions from the BuyGrid model are still valid.

In general, the logic of how the BuyGrid model might be used in practice still holds, however there are two major differences in how marketing strategy may be formulated with respect to the original model. The first involves a different view of modified rebuy situations, and the second involves a changed role for market research.

In the original model, modified rebuys were viewed as a separate buyclass (or market segment) with specified marketing actions. However, research findings and the changing environment discussed above suggest that new task and straight rebuy situations may be the dominant market positions among buyers. From a marketing decision perspective industrial market-

ing managers faced with conditions of rapid change and the uncertainty it brings may want to consider: (1) how to maintain incumbency as a supplier (making sure the next purchase is a straight rebuy) or (2) how to challenge an incumbent (by instigating the next purchase and turning it into a new task, or at least a modified rebuy situation)? Figure 4 provides an illustrative summary of *incumbent* vs. *challenger* strategies.

The incumbent's basic business strategy is to keep the next purchase as close to a straight rebuy as possible, while the challenger seeks to find the levers that will unseat the incumbent. Every influencer in the buying process and other key stakeholders (e.g., distributors) must be monitored carefully for their changing needs or for eruptions of conflict within the organization (Ryan and Holbrook 1982) which can disrupt purchasing patterns. This may entail conducting ongoing and highly interactive market research to monitor buying center participant needs within and across organizations to modify any aspects of products and services as needed. Segment or market niche opportunities may be identified, which then require a marketing program to satisfy. The incumbent must address these segment needs or is at risk to a challenger.

An incumbent's positioning might focus on reinforcing the strong corporate and/or brand identity that secured the business in the first place, while the challenger might position on the basis of any identified vulnerabilities identified in studying the market. The incumbent product should be continually improved to "capture" satisfied buying influencers, mollify dissatisfied influencers, and reduce the cost position to build flexibility into pricing should a challenger enter the scene. Challengers should seek to develop new products that address incumbent vulnerabilities or design entirely new products to leapfrog technology trends. Alternatively, challengers might offer significant value, including lower prices, to motivate the purchasing agent to build the financial case for a change of suppliers.

Clearly, new product development provides a special case of new task purchasing for both incumbents and challengers. Among other things noted, the past 25 years has witnessed the increasing role of cross-functional teams to facilitate new product development (NPD). On one hand NPD teams are a critical part of the development process, but on the other hand they can

also be buying centers, since many NPD teams strongly influence the purchase of equipment, materials, components, and other aspects of the new product (Puri and Sashi 1994). Thus, training the sales force to sniff out new product development projects and getting on the buyer's team early in the process may produce an important competitive advantage. For example, suppliers that provide on-site engineering, prototypes, or pre-production samples may help a buyer cut lead times and thereby provide themselves a competitive advantage.

More directly, bringing new product opportunities directly to the attention of key influencers may trigger a development process resulting in a new task buying situation. In effect, with the increasing emphasis on new products in highly competitive and dynamic business environments, there will be increased opportunities for challengers to unseat incumbents, and for incumbents to build strong relationships with their suppliers.

Clearly, maintaining incumbency or challenging the incumbent requires critical communication skills. When used, sales force personnel must be trained with a broader set of "managerial" understandings and research skills to look for opportunities within the buyer's domain (including channel members and other stakeholders). Pleas for relationship marketing (Evans and Laskin 1994) and an exchange-based views of "team" selling are compatible with a view of the BuyGrid model to deal with the higher levels of business market uncertainty. This may require a different kind of marketing research function than heretofore experienced in most industrial markets.

Thus the second major difference between the original model implications and the business environment of the 1990's involves the changing role of market research. With a greater importance placed on developing close relationships with current suppliers, "interacting" with the buyer in an ongoing relationship may replace the traditional proactive process of collecting data through more traditional market research methods (Wind and Thomas 1990). In an interactive relationship, information about each others' needs and capabilities exchange "minds" rapidly. There is often little time for a sales force to return the information for analysis; a team of experts

with on-site analytical capability may be required to collect and analyze data "on the fly" among potential buyers.

Portable computers linked to corporate offices and/or expert data bases may be the only opportunity to communicate with other sources, if time permits. The importance of building a mutual data base between buyer and seller becomes the central activity of this new type of market research; this data base is also the glue in the relationship. Although this scenario may only seem to play out for large customers or key accounts, recall that on-line electronic commerce capabilities will perform a similar function for smaller buyers. They will be able to access a virtual "industrial shopping mall," and have access to software designed to expedite their buying process. Smart selling organizations ought to be able collect data from these requests (as interactive market research) and provide products and services on demand.

By way of summary, because of changing environmental forces, we recommend that selling organizations get into the new task buying process as early as possible. Organizations will tend to restrict their set of considered suppliers because of time and resource constraints, as well as environmental uncertainties. As noted, this may mean better tracking ever-increasing new product development efforts, which are the source of many new task buying situations.

When selling organizations do get involved early, recognize that there will be numerous people involved in the buying center. Because of this we recommend finding an ally in the buying center to become a "champion" for your firm. The goal is to put this person on your "selling team." Not only will this person sell for your firm, but he or she can provide valuable buying center and buying process information for you as well. Similarly, someone from the selling organization should be deemed a "champion" (possibly the key account sales executive) and attempt to get placed on the buying center.

Given the complexity of a new task purchase and numerous people involved in the buying center, it is important to understand how to create value for the entire buying center, not just for the specific product and users. This may entail an expanded view of the product to include ancillary services (automated billing, usage reports, cost and profit reports, etc.) and relationship

building. The latter may involve listening carefully to a variety of needs and providing seemingly unrelated service and advice where possible. For example, a particularly influential design engineer may be having a problem on a particular project unrelated to the supplier's traditional product line. If the supplier has experience with this problem, offering it as a value-added service may build a long-term relationship with this key member of the buying center.

Finally, once a relationship in a new task situation has been established, move as quickly as possible to make it a straight rebuy. Utilize state-of-the-art information technology to the extent possible to cement the relationship and build an ongoing electronic dialog with occasional personal contact and data collection to insure that the product is being used properly and users are satisfied. Although this type of interactive marketing is nascent, it signals the impact of a more dynamic environment on purchasing processes in the BuyGrid model, and also suggests new directions for research.

A Research Agenda for the BuyGrid Model

Our review of the BuyGrid model suggests a number of issues that require additional research. Some of these issues are relevant for any research on organizational buying behavior, but others are directly pertinent to the BuyGrid model.

Building a BuyGrid Data Base

The BuyGrid model provides a logical conceptual framework for building a data base that characterizes markets of organizations. The major features of such a data base ought to include a buying center perspective. That is, information should be gathered on a regular basis that describes the various members of the buying center, their organizational positions, their role in purchasing, and numerous other characteristics germane to better understanding their task and non-task needs. Thus information can be analyzed at the individual level, the buying center level, and the organizational level to understand market structure.

As noted in the previous section, the increased dynamic of the business environment may limit opportunities for traditional market research, in favor of collecting data from interactive re-

relationships with key accounts, and perhaps on-line from smaller accounts. Unfortunately, though they may be practical, we know little about the design and use of such data bases. How will information on them be validated (if at all)? When and how will the data be analyzed -- if ever? How will users interact with such data bases? How will marketing decisions be made from such data bases? Future research on these and other questions will be required to make best use of information from such seemingly valuable data bases.

Understanding the Impact of Information Technology

Related to building BuyGrid data bases are questions about the impact of information technology on organizational buying. Although innovative uses of technology to "capture" buyers with direct computer links has been successful, the increasing adoption of EDI (electronic data interchange) standards may reduce the opportunity for exclusivity between suppliers and buyers. That is, a buyer can readily switch to a new supplier as long as both are EDI compatible. Clearly, as electronic commerce and its various manifestations becomes a reality, how will buying situations and marketing decisions change? For example, if the Thomas Publication's CON-NECTSUS service becomes ubiquitous, will this be the only way to communicate with potential buyers, or will more traditional marketing tools be valid as well? Once a relationship is established will straight rebuy situations dominate, even with EDI compatibility, or will traditional competitive buying patterns return? In terms of market research, it would seem that greater opportunities for assessing direct response will be available over electronic networks. However, will industrial buyers be willing to share data with suppliers or third party reporting agencies? That is, a selling firm may know they lose a sale, but will they know to which competitor(s) they lost? Will market share data be available to major competitors?

Another dimension of information technology is the impact of interactive video. Will the availability of economical two-way televised conference meetings increase buyer-seller interaction? Will it increase out-sourcing among buying organizations when they realize they can work with co-located partners in other regions or countries? What impact will interactive video have

on the sales process, on new product development efforts, or on market research opportunities (e.g., interactive focus groups with buying teams from multiple plant locations)?

In effect, because of the increased amounts of potentially available shared information will we see dramatic changes in buying processes? If so what will they be? Will we see an entirely different buying situation in which the first question asked is whether or not the buyer is a partner rather than whether they are in a straight rebuy or new task buying situation? In either case, we know little about the purchasing dynamic and the impact of increased information technology on it.

Global BuyGrids

With emerging markets in Eastern Europe, Russia, China, the Middle East, Latin America, and other parts of the world, imbalances in wages, income, labor skills, and other factors will continue to influence the development of a global economy. As the opportunities for global buying and selling dramatically increase, so too will problems. In particular, managing the purchasing function will become increasingly global. New methods and procedures may be adopted by potential buyers that will impact the operationalization of the BuyGrid.

For example, consider global logistics and the problem of managing a supply chain with components manufactured in multiple locations, sub-assemblies in other locations, and final assembly in yet other locations. The potential buyer is faced with the problem of deciding what will be the optimal combinations of global suppliers, delivery systems, inventory methods, and so on, to produce the best quality product at the lowest cost? Further, how should products be designed or redesigned to capitalize on global purchasing opportunities? In order to compete as a potential supplier, it may not be enough to know simple specifications and wait for the opportunity to bid or respond to an RFP (even though that is what the buyer may only offer). Instead, a broader picture of the buyer's design and delivery "optimization" problem may be necessary, and this may require getting closer to the buying center earlier in the buying process to better understand the global dynamics of the buyer's global system of purchasing and logistics.

Also, the problem of global vs. local buying becomes very difficult for large geographically dispersed organizations. Very often, remote plants may circumvent central purchasing programs and buy locally. This suggests the need for research to better understand the motives and rationale for global vs. local buying. For example, consider the possible purchasing combinations from just the following aspects of buying:

- Product type: (commodity, engineered part or component, supplies)
- Setting specifications (globally, locally)
- Qualifying vendors (globally, locally)
- Negotiating purchase contracts (globally, locally)

Which of the 24 possible purchasing strategies should be followed and what organizational, cultural, regulatory, or other behavioral issues might be involved that might explain their likelihood of being adopted in local plants?

Making the BuyGrid Work for the Customer

Given the relatively complex and dynamic environment faced by business organizations, one might suspect that they are coping with defining their organizational buying processes for competitive advantage. In particular, if a firm is downsizing and undergoing business process reengineering, it will almost certainly be revising its purchasing function. An important relationship-building role for an aggressive supplier then, might be to assist a potential buyer in structuring their purchasing process -- perhaps along the lines of the BuyGrid model.

The impact of changing business processes within organizations has provided an opportunity for third-party consultants to develop corporate procurement management services. For example, in 1994, Price Waterhouse and Analytics, Inc. formed a strategic alliance to offer procurement management services (including software) in response to increasing demands from the business community. Few business organizations have treated procurement with the necessary professionalism that will give them an advantage in highly competitive markets. As stated most succinctly in the *PR Newswire Financial News*, dated August 11, 1994:

Large companies are aggressively trying to achieve greater leverage over purchasing to obtain bottom line benefits that can amount to tens of millions of dollars annually. But few have the necessary information or infrastructure to achieve that goal. Following the 1980's hey-day of corporate restructuring, large staff functions have become a thing of the past even as systems are increasingly antiquated. . . . At the same time, the process of procurement has become inordinately complex. Supplier growth is unchecked; supplier capabilities are underutilized; even when companies try to develop supplier networks, these networks can deteriorate without the proper policies, procedures and organizations in place.

Such services are not difficult to sell because they can often be easily justified with substantial cost savings to potential buyers. What therefore remains as an important topic for future research is the impact these third-party procurement services will have on buyer-seller relations. Will suppliers find that they are trying to satisfy some third-party software algorithm rather than build a relationship with a potential buyer? Will the BuyGrid model become irrelevant, or will it be so formalized that it will cease to be of value in understanding buyer behavior? If suppliers don't help potential buyers structure their buying processes, third-party providers certainly will.

The Sales Force and Integrated Marketing Communications

Despite the emergence of a variety of electronic commerce possibilities, advertising on the World Wide Web, and other forms of communication, personal selling remains a highly effective way for a firm to understand buyer needs and communicate marketing programs. This is especially true for new task buying situations and for highly complex products and services. However, the traditional view of the sales person communicating with the purchasing agent may be an outmoded view of the sales process.

Given the more dynamic market conditions considered above, more in-depth understanding of potential buyers, especially key accounts, is required. This will often mean developing a "selling team" to meet with the "buying center" with multiple communication links between organizations. The sales person's role changes from selling to coordinating a sales team. The sales person becomes a member of a functionally integrated organizational team that works with the buying center throughout the various phases of the buying process for a particular product or service. Notably, for large organizations, multiple buying centers may have to be managed. This

view of the sales person is more akin to the account representative in an ad agency/client relationship than the traditional buyer/seller relationship. In addition to communication, the selling team can also perform the data collection function to build a BuyGrid data base.

The concept of the selling team must therefore be integrated in at least four major ways: functionally within the selling organization, with the buying organization, with data collection activities and decision support efforts, and with other marketing communications. The latter is critically important in more complex and rapidly changing business environments. As noted, buying center participants can be co-located throughout the world; thus hidden influencers in the buying process abound. Identifying and communicating with these influencers requires a more fundamentally integrated marketing communications effort than simple selling provides. Advertising, electronic mail, electronic commerce opportunities, trade shows, direct mail, promotions, and other forms of communication are essential to create an impact in today's noisy and uncertain business environment.

Unfortunately, little is known about the impact of integrated marketing communication efforts on organizational buying processes. How are such efforts perceived by members of the buying center? Are they cost effective? What is the right mix of media to create the desired impact? How effective are such efforts in turning a straight rebuy into a new task situation for a firm? How do you coordinate such an effort on a global basis? These questions are similar to those one would encounter in studying traditional consumer marketing communication effectiveness, however the complexity of the buying center and high stakes in the purchase outcome are often quite different, and may require guidelines from research to better understand.

Impact of Highly Interactive Relationships

As business environments have become more uncertain and the need for more rapid market response is necessary, a variety of highly interactive relationships between and among firms have emerged. Consider joint ventures, acquisitions, or other forms of merging that are often implemented to gain access to opportunities more quickly than if pursued alone; to reduce the

risk associated with a large development program; or to insure the development of industry standards. What are the impacts of joint ventures and acquisitions on corporate purchase processes? In particular, how are such processes joined (if at all), and what happens to purchase influence patterns in the new organization? Does a new interactive relationship imply a whole set of new task purchase opportunities for challenging suppliers?

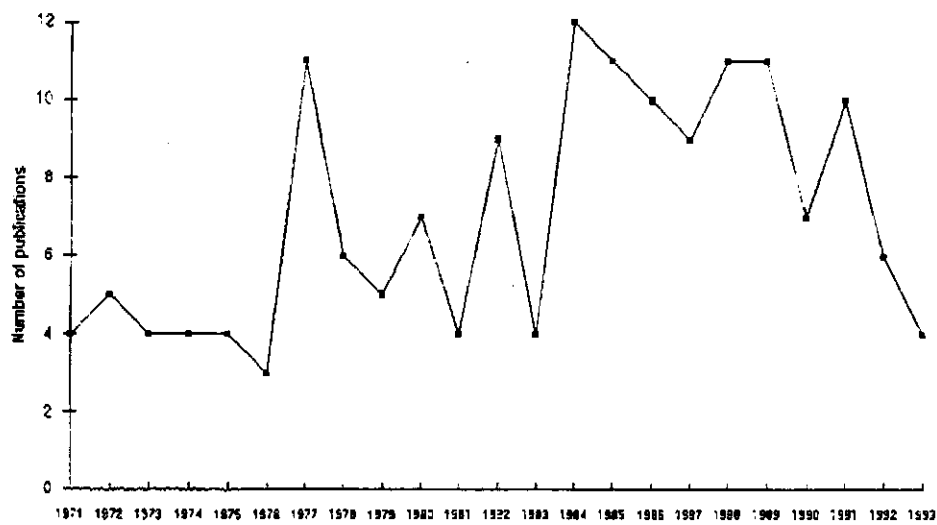
As noted above, because of more dynamic business conditions, suppliers and buyers will often develop close working relationships, some which involve formal or informal partnering. However, little is known about how such relationships work and what their impact on buying processes are. For example, what are the criteria that a supplier might use to implement a "supplier development program?" How should supplier performance be tracked to better understand how, when, and with which suppliers should such programs be developed? Although one might expect suppliers to embrace such programs, the balance of costs and benefits may not be as clear as one might expect. What are the criteria and decision process a supplier should use before entering such an arrangement?

Conclusions

Organizational buying behavior is an inherently complex process. The BuyGrid model provides a very useful framework, albeit at a high level of abstraction, to begin to diagnose and manage this process for competitive advantage. Twenty-five years of research and experience with the model suggest that its underlying dimensions are valid, however its generalizability under a variety of market situations is not yet completely understood. Thus the model plays the primary role of organizing the first systematic step in understanding a potential buyers behavior, but more specific inquiries that are situational will be required. Nevertheless, we expect its continued use as a diagnostic tool, and hope that future research takes into consideration the impact of complex and dynamic conditions in the business environment to further test its assumptions and establish its future value.

Figure 1

**Publications on Organizational Buying Behavior:
Six Journals from 1971-1993**



Source: Dated based on counts from Johnston and Lewin (1996).

Figure 2
The BuyGrid Model

BUYPHASES	BUY CLASSES		
	New Task	Modified Rebuy	Straight Rebuy
1. Anticipation or recognition of a general problem (need) and general solution	High on buying influences		
2. Determination of characteristics and quantity of needed item			
3. Description of characteristics and quantity of needed item			
4. Search for and qualification of potential sources			
5. Acquisition and analysis of proposals			
6. Evaluation of proposals and selection of supplier(s)			
7. Selection of an order routine			
8. Performance feedback and evaluation			Low on buying influences

Source: Based on Robinson, Faris and Wind (1967)

Figure 3
Variations in Buyphases

Define Need	Purchase initiation	Identify need and criteria	Establish the need	Initiating the purchase	Identify problem (need) and general solution	Identify problem (need) and general solution	Need recognition	Identify need
				Determining the type of equipment to be purchased	Determine characteristics and quantity of needed item	Determine characteristics and quantity of needed item		Establish specifications
				Drawing up detailed specifications	Describe characteristics & quantity of needed item	Describe characteristics & quantity of needed item		
Information search	Survey of alternatives	Contacts suppliers	Search for and identify suppliers	Evaluating sources of suppliers	Search and qualify potential sources	Search and qualify potential sources	Information search	Search for alternatives
						Acquire proposals	Criteria setting	Establish contact
							Determination of available funds	Set purchase and usage criteria
Evaluate alternatives	Supplier shortlisting	Evaluates alternatives	Evaluate potential suppliers	Selecting Specific suppliers	Acquire & analyze proposals	Analyze information and proposals	Evaluation of products	Evaluate alternatives
					Evaluate proposals & select supplier(s)	Evaluate proposals & select supplier(s)		Determine budget availability
								Evaluate specific alternatives
		Negotiates with suppliers	Negotiate	Determining the amounts of expenditure			Negotiations with manufacturers	Negotiate
Decision	Award contract	Decision	Complete purchase	Final authorization for purchase	Select order routine	Select order routine	Selection of manufacturers	Buy
Post-purchase activities			Evaluate purchase in facilitating organizational goals		Feedback & evaluation	Feedback & evaluation	Application for HSA approval	Use
							Establishment of usage procedures	Post-purchase evaluation
							Post installation evaluation	

Based on Wind and Thomas (1980)

Figure 4

Marketing Strategy Variables and the BuyGrid Model

Marketing Strategy Variables	Market Position	
	Incumbent	Challenger
1. Business strategy decisions	Keep purchase as a straight rebuy, especially among key customers (large and leading edge accounts)	Find levers to make purchase a new task or modified rebuy -- especially among leading edge firms
2. Segmentation decisions	Segment within the organization (across organizations) to find unmet needs	Segment within the organization (across organizations) to find vulnerabilities -- esp. leading edge
3. Positioning decisions	Reinforce corporate and brand identity on current strengths to key buying center participants	Position corporation or brand as capable on vulnerabilities
4. New product decisions	Tweak product features, add services to "capture" satisfied buying influences and mollify others	Design new product to meet needs identified in vulnerabilities
5. Pricing decisions	Be prepared to cut price to ward off challenger -- or add significant value in other ways	Offer significant value to overcome transaction costs -- e.g., lower price for standard components
6. Channel decisions	Find value-added opportunities within channels -- maintain and build channel relations	Find value-added opportunities within channels -- build relations with channel members
7. Advertising decisions	Emphasize corporate and brand image -- especially to end users where possible (e.g., Intel Inside)	Focused advertising on disgruntled key influencers -- e.g., emphasize special expertise
8. Sales force decisions	Hand-holding sales efforts; vigilance to competitive offers	Aggressive team selling effort, especially among disgruntled buying influences

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COMMENTS RE: "BUYGRID MODEL : 25 YEARS LATER"

*Largely
Academic
Audience*

*But a good
starting
point.*

1. It's not obvious to me who the target audience is. I think that sales and purchasing professionals would find the article a tad cumbersome because of the extensive academic referencing and would not recognize much "new news".

2. Overall, I think the model is appropriately descriptive at a high level of aggregation, but far too general to be useful at a practical / action level. The buying process has become much more segmented. I agree with p.5 : "inherent complexity"

3. Obviously, there are several other ways to segment the buying processes, e.g.

- ◇ Item type ... e.g. commodities
- ◇ Item complexity ... e.g. engineered parts vs. supplies
- ◇ Item value ... e.g. low value supply items
- ◇ Where used ... by product, by geography
- ◇ Rate of obsolescence
- ◇ Supplier population ... Fortune 500 or "locals", certifiable suppliers

4. Probably the major discriminating classification for purchased products at B&D is by commodity type establishes the locus of organizational control and the process for qualifying a product for purchase.

- global*
- ◇ Commodities : items like plastic, metals, nicad batteries and electric cordsets that are used in many products, often on a global basis ... purchase contracts are negotiated globally (to accrue volume purchasing leverage), but sometimes implemented locally.
 - ◇ Engineered parts and components : items that are more specification-oriented by product or geography ... these are always qualified centrally, but may be purchased locally
 - ◇ Supplies : bulk purchased materials (e.g. screws) that conform to specifications but are relatively generic ... these are often bought locally

5. I think there is a "modified rebuy" ... it's when an item is "reopened" for consideration.

But is it then really a new task?

COMMENTS RE: "BUYGRID MODEL : 25 YEARS LATER"

- ✓ 6. Most major retailers perform regularly scheduled reviews of their shelf assortments ("basics") ... creating an open season for new listings and replacements
- ✓ 7. Don't underestimate the frequency that items are rebid or reconsidered, i.e. don't overestimate "creeping commitment" :
 - ◇ Lopez Effect (below)
 - ◇ Retailer annual basics' reviews
 - ◇ Value engineering processes
- ✓ 8. Don't ignore the "Lopez effect"
 - ◇ Mandatory year-to-year price reductions and productivity improvements
 - ◇ Frequent re-opening of supply arrangements for competitive review *i.e. new task.*
- ✓ 9. Supplier rationalization has been a priority at most companies, i.e. trying to reduce the number of authorized suppliers.
 - ◇ Previously, it was easier to be "qualified" as a supplier since companies were most interested in playing multiple suppliers against each other for price concessions.
 - ◇ Still, companies are reluctant to have exclusive purchasing arrangements, in part because supply discontinuities can cripple a JIT scheme.
- ✓ 10. Logistics management is becoming a critical (mandatory) evaluative criteria. As a result, suppliers must often
 - ◇ Complement their sales people with dedicated logistics personnel who insure a continuous supply of JIT items
 - ◇ Store inventory close to use locations (factories) or provide consignment inventories that aren't billed until used
- ✓ 11. Re: high supplier switching costs ... many (most) suppliers are ready and willing to subsidize the costs of changing over
- ✓ 12. I agree that more people are getting involved in the buying process, especially at the frontend ... but you may be underestimating how long the "group" has influence, e.g. multifunctional review of engineering changes.

COMMENTS RE: "BUYGRID MODEL : 25 YEARS LATER"

- ✓ 13. More companies are becoming savvy re: total cost versus price, e.g. life cycle costs, quality, etc.
- ✓ 14. Consider the impact of ISO2000 and other vendor certification programs ... an important variant of branding
- ◇ B&D has a thorough "Supplier Development Program" that qualifies vendors based on their operations (mini-Baldrige sort of reviews) and works with underachievers to shore up processes to qualify
- Call Home Rev* { 15. Product Data Manager may be the most significant advance in information technology that is relevant to purchasing. Provides an on-line, real time repository of engineering / parts info to facilitate speedy approvals, increased standardization and total cost evaluations. (Note : there was a recent article in Fortune describing the functionality).
- ✓ 16. Suppliers (non-incumbents) are increasingly required to buy their way into accounts through slotting allowances, "buy back" of competitive inventory or other conversion payments.
- ✓ 17. EDI standards have made the electronic interface between customers and suppliers fairly routine. So, it's more difficult to lock an account ala American Hospital Supply's program.
- ✓ 18. MRP II systems handle much of the rebuying task without human intervention.
- ✓ { 19. More companies have installed monitoring processes to track supplier performance re: ontime delivery, quality, etc. Performance slips can motivate a reopening of supply arrangements.
- ✓ 20. Client server technology hasn't necessarily decentralized purchasing. To the contrary, data bases are usually maintained / controlled centrally.
- ✓ 21. Volume purchasing incentives are often provided to motivate purchases across a product line ... the depth of discounts is rarely limited to the pure economics of scale
- ✓ 22. Globalization / worldwide purchasing adds massive complexity and some threats / opportunities. Information systems are now able to capture and report global usage, facilitating consolidated purchasing.
- ✓ 23. Still, remote locations (e.g. plant sites) circumvent central purchasing programs and buy locally.

COMMENTS RE: "BUYGRID MODEL : 25 YEARS LATER"

7. [24. Most retailer buying organizations formally split the purchasing process between head buyers or merchandise managers who select products for listing and "rebuyers" who handle the logistics and inventory management.
- ✓ 25. There are numerous computer models that provide inventory management / analysis and automatically reorder products according to predefined decision rules.
- ✓ 26. Engineering changes that are implemented after a product has already been released into production looks a lot like a new item decision, including an approval process and multifunctional involvement.
- ✓ 27. Neither I nor any of the B&D purchasing people I spoke to have heard of CONNECTUS ... be sure to validate it before referencing it OK.
- ✓ 28. I don't think I'd use Apple as an example of efficient processes, given their recent performance history. Ford is generally considered the best of the best. *but no date*
- ✓ 29. I disagree re: "Large buyers find that they cannot use their purchasing leverage effectively" *in the quote.*
- ✓ 30. Suppliers are increasingly being included on product design teams.
- ✓ 31. Suppliers will often provide prototypes or pre-production samples to help cut development lead times
- ✓ 32. Companies are continually trying to shift investment and costs back to suppliers, so activities like on-site engineering support is becoming an expected offering
- ✓ [33. You could probably do a lot more on the nature of supplier / buyer partnerships and alliances *New research section.*
- ✓ [34. Potentially interesting area for research might be :
 ◇ Supplier development programs : qualifying, tracking and enhancing the performance of suppliers
 ◇ The pendulum that swings between partnerships and Lopez-style arm's length relationship
 ◇ More rigorous treatment of the challenger / incumbent prescriptions
35. I may have a contact or 2 for you if you decide to dive into the area deeper

	<u>PRE-1991</u>	<u>1991 - 1994</u>	<u>EMERGING</u>
OBJECTIVE	SUPPLY CONTINUITY	NEW PRODUCTS, COMPONENT QUALITY LEAD TIME REDUCTION	COST REDUCTION
RATIONALE	ERRATIC PRODUCTION PLANNING	STABILIZE BASE	REAP THE BENEFITS
	OVERPOPULATED/LOW QUALITY SUPPLY BASE	SUPPORT BUSINESS STRATEGIES	MAJOR POTENTIAL PROFITS SOURCE
SUPPLIER STRATEGY	LOCAL RELATIONSHIPS	"FUSION"	ADVANTAGEOUS RELATIONSHIPS
IMAGE	CLERICAL/SUPPORT ROLE	EMERGENCE AS PEER AMONG PROFESSIONS	INTEGRAL PART OF MANAGEMENT PROCESS & CONTRIBUTOR TO BUSINESS PROFITS

PURCHASING EVOLUTION

- IN 1991, COMMODITIES PURCHASING IN TOWSON MERGED WITH SITE PURCHASING ORGANIZATIONS IN THE THREE USPT LOCATIONS AND ASHEBORO WITH RESPONSIBILITY FOR 100% OF THE USPT/ASHEBORO ANNUAL PURCHASES

BEFORE

- SEPARATE BUYING ORGANIZATIONS BY FOCUS FACTORY OR SITE
- BUYING PERSONNEL WITH STRONG IDENTITY TO SITE WITH MINIMAL FORMAL PURCHASING TRAINING
- HIGHLY FRAGMENTED, PLANT SPECIFIC SUPPLY BASE WITH INCONSISTENT PERFORMANCE
- EMPHASIS ON FIRE FIGHTING AND MATERIAL EXPEDITING

AFTER

- CONSOLIDATED MULTI-PLANT COMMODITY BUYERS LOCATED IN TOWSON OR SITES
- PURCHASING OR TECHNICAL PROFESSIONALS WITH STRONG EDUCATION AND/OR PURCHASING EXPERIENCE
- RATIONALIZED SUPPLY BASE WITH CONSISTENT QUALITY DISCIPLINES
- CONCENTRATED EFFORT ON QUALITY, RELIABILITY AND LEAD TIME REDUCTIONS

POST 1991 PURCHASING ORGANIZATION DEVELOPMENT

1994 - 1996 STRATEGIC PLAN
KEY ELEMENTS & GOALS
