CHAPTER - III

INDUSTRIAL BUYER BEHAVIOUR - AN OUTLINE

This chapter is aimed to provide a detailed theoretical input as regards industrial buyer behaviour, focussing almost all aspects associated. It is hoped that on acquaintance of the theoritical frame work would help to have better understanding of the practice followed in the textile industry which is presented in the subsequent chapters.

In contrast to consumer purchasing, organisational purchasing is much more complex. Multiple forces both internal and external to the firm exert various pressures on the ultimate decision, as buyers move from problem or need recognition to their final purchase decision. Thus, the effectiveness of industrial marketing strategy hinges on how well the industrial marketer understands the different types of buying situations that organisational buyers face, how they proceed through the purchasing decision process, and how that process is influenced by the various needs and expectations of those who are involved in the purchasing decision. Thus an outline of industrial buyer behaviour is discussed below in the following lines:

i. Nature of industrial buying

ii. Interpersonal dynamics of buying bahaviour.

i. Nature of Industrial buying

Industrial buying adds extensions and entirely new dimensions to the traditionally studied consumer buying process. In making decisions, purchase
managers must co-ordinate with numerous people with diverse organisational responsibilities who apply different criteria to purchasing decisions. Developing effective marketing strategy to reach organisation buyers rests on the industrial marketer's understanding of the nature of industrial buying.

Effective industrial marketing strategy must begin with an understanding of industrial buying behaviour. This entails knowledge of different types of buying situations that organisation encounters, the process that organisational buyers go through in reaching purchase decision, how those decisions are affected by different members of the firm and the criteria they apply in purchase decision.

**Industrial buying activities**

Industrial buying activities centre on the level of experience and information that firms have in purchasing certain products and services. In making a routine purchase, buyers have little need for information because of their past experience with the purchasing situation. When a purchasing situation is entirely new, information needs may be extensive due to the firm's lack of experience with the product, service, or suppliers. Buying activity also consists of various phases of decision making. Depending on the type of buying situation, whether it is routine or new, these phases will vary in their degree of importance. Effective industrial marketing strategy, then, requires that marketers focus their attention on the type of buying, situation a firm is facing, where it is in its decision-making process, and what criteria various influencers will emphasize in the purchasing decision.
The buygrid model

Organisation buying behaviour can be divided into the various phases and these phases are analysed under different buying situations. This enables the marketer to identify critical decision phases, the information needs of purchasing organisations, and the various criteria buyers consider when making purchase decisions. A conceptional model, referred to as the Buygrid, is quite useful in analysing the purchasing decision process over various buying situations.

The Buygrid incorporates three types of buying situations - 1) the "new tasks," 2) the "straight rebuy," and 3) the "modified rebuy" - as well as eight phases in the buying decision process. Thus, it provides a frame of reference for dividing the overall decision-making process into distinct segments that are useful for recognizing critical decisions and specific information requirements.

Buying situations

Buyers have various levels of experience and information to use in purchasing products and services. The same purchase in two different organisations may elicit markedly different purchasing strategies if the buying situation is different (e.g., a straight rebuy in one and a new task in the other). Therefore, marketing strategy must begin with identifying the type of buying situation the purchasing firm is facing.

New task

In the new task buying situation, the problem or need is considerably different from past experiences. Problem recognition may be triggered by
internal or external factors. For instance, the firm's decision to add a new product line may necessitate the purchase of new equipment, parts, or materials. A change in customer requirements may necessitate the purchase of new machinery to meet the changed need. Since both situations are new, decision makers lack the experience and product knowledge to make comparisons of alternative products and suppliers. In the new task purchasing situation, decision makers and influencers enter into extensive problem-solving activity. They must obtain a variety of information to explore alternative solutions adequately before a purchase can be made.

**Modified rebuy**

Organisational decision makers enter into a modified rebuy situation when they feel that significant benefits such as quality improvements or cost reductions may be derived from re-evaluating alternatives. Although well-defined criteria may be employed in the purchase decision, there may be uncertainty about which supplier can best fill specific needs. In such instances, buyers will seek additional information. Re-evaluation of supply alternatives may be triggered by internal and/or external forces. The modified rebuy situation, however, occurs most often when the firm is displeased with the performance of present suppliers.

**Straight rebuy**

The most common buying situation in industrial purchasing is the straight rebuy. When purchases are continuing or recurring, little or no information is required; routine response is the normal buying pattern. Organisational buyers usually have well-developed choice criteria that have been used and refined over time. One purchasing agent, for example, states
that so long as delivery is prompt, quality is consistent, and price is reasonably competitive, he will not change suppliers. As long as choice criteria are met, alternative solutions are seldom evaluated\textsuperscript{1}.

**Phases in the purchasing decision process**

By tracing the sequence of activities that occur in the organisational buying process, it is not difficult to uncover the critical decision phases and evolving information requirements of buying situations.

The consumer purchasing decision process is, usually described as a series of mental stages that include problem recognition, information search, information evaluation, purchase decision making, and postpurchase behaviour. The industrial purchasing decision process, on the other hand, accents physical, observable stages, as opposed to mental stages, because several people are usually involved in various ways in each phase, Phase 3, for example, is the description of the characteristics and quantity of the needed item; the original developers of the Buygrid model wrote: "since this description becomes the basis for action by people inside and outside of the buying organisation, it must be detailed and precise to facilitate later phases in the buying process\textsuperscript{2}.


\textsuperscript{2} Robinson, Feris and Wind, Industrial buying and creative marketing, p.3.
Phase 1. Recognition of a problem

The purchasing decision process is triggered by the recognition of a problem, need, or potential opportunity. Such recognition may originate within the buying organisation, especially when products become outmoded, equipment breaks down, or existing materials are unsatisfactory in quality or availability. It may also originate outside the buying organisation with a marketer who recognizes and reveals opportunities for potential performance improvement. The marketer who initiates or becomes involved in the buying process at this phase, particularly in a new task situation, will have a distinct advantage in influencing the final decision and, thus, a greater probability of being selected as a supplier. Since research has shown that new product ideas frequently originate with customers, early involvement in the new task/problem recognition phase also offers the marketer a differential advantage over competitive suppliers.

Phase 2. Determination of the characteristics and quantity of needed item

Once a problem has surfaced, organisational members must determine specifically how the situation may be resolved; that is, the problem and solution alternatives must be narrowed and precisely analysed. Thus, the firm will be able to get details regarding the performance specifications need to be met, the application requirements, types of goods and services that may be considered and quantity requirements.

In the case of technical products, either the user department or engineering will usually prepare performance specifications. For nontechnical items, the user department might determine that products
Currently on the market could solve the problem. The narrowing of the problem and alternatives is, thus, a task internal to the user department. While influencers from outside the department may be used as additional sources of information, critical decisions and information needs at this phase lie chiefly within the user department.

**Phase 3. Description of the characteristics and quantity of the needed item**

This is often a critical phase of the marketer. It is during this phase that those influencers who prepare or affect specifications enter the purchasing process. During this phase, buying influencers may change from department heads to engineers and manufacturing personnel. It is at this phase, too, that buying influencers begin to look outside the firm for supplier and product information and for assistance in developing product specifications.

Many suppliers do not become aware that a buying situation is in progress until the firm begins its outside search for information. Because of the opportunity to develop a close working relationship with organisational influencers prior to other competitors coming on the scene, a definite advantage accrues to the marketer who triggered the need, or who is aware of the need at this point of time.

**Phase 4. Search for an qualification of potential sources**

Once solutions have been identified and precisely described, a buying organisation begins to search for alternative sources of supply. This leads to the qualification of suppliers. However, qualifications sought will vary with the
type of buying organisation, the specific buying situation, and the buying influencers involved. The important end result of this phase is that decision makers have determined which suppliers will be considered as potential vendors.

**Phase 5. Acquisition and analysis of proposals**

When qualified suppliers have been identified, requests for specific proposals will be made. Phases 4 and 5 may occur simultaneously in a straight rebuy—buyers may merely check a catalog or contact suppliers to obtain up-to-date information about prices and deliveries. However, in more complex situations, phases 4 and 5 are separate and distinct. Many months may be spent in exchanging proposals and counterproposals. In such purchase situations, the need for information is extensive, and a great deal of time is given to analyse proposals and comparing products, services, and costs. Thus phase 5 emerges as a distinct component of the purchasing process.

**Phase 6. Evaluation of proposals and selection of suppliers**

Various proposals of competing suppliers are weighed and analysed. If a firm is facing a make-or-buy decision, proposals are compared to the cost of producing the needed item within the buying firm. If the buying firm decides it can produce the needed item more economically, the buying process terminates. If the firm is not facing a make-or-buy decision, one or more offers from competing suppliers are accepted. Further negotiations may continue with selected suppliers on terms, prices, deliveries, or other aspects of suppliers’ proposals.
Phase 7. Selection of an order routine

Order routines are established by forwarding purchase orders to the vendors and status reports to the using department and by determining the levels of inventory that will be needed over various time periods. While this phase begins with the placement of an order, the purchase process is not actually completed until the ordered item is delivered and accepted for use. The user department, where the need originated, does not view its problems solved until the specified product has been received and is available for use. The effectiveness of suppliers in handling this phase is, therefore, critical.

Phase 8. Performance feedback and evaluation

The final phase in the purchasing process consists of a formal or informal review and feedback regarding product performance, as well as vendor performance. This phase involved a determination by the user department as to whether the purchased item solved the original problem. Otherwise suppliers that were screened earlier may be given further consideration. Feedback that is critical of the chosen vendor or product can cause the various members of the decision-making unit to re-examine their positions. Research indicates that when this occurs, views regarding previously rejected alternatives become more favourable.

Marketing implications

The direction of marketing strategy is greatly affected by both the purchasing situation and decision phase of customer firms. Progressively greater amounts of information will be needed by organisational buyers as
the purchase situation changes from a straight rebuy to a modified rebuy to a new task situation. Information needs, as well as individual involvement in the purchase decision, will also be affected by the phase of the purchasing process. Anderson, Chu and Weitz, for example, have found that when organisational buyers are facing a new task, they will be (1) uncertain about their needs and the appropriateness of the possible solutions; (2) more concerned about finding a good solution than getting a low price or assured supply; (3) more willing to entertain proposals from "out" suppliers and less willing to favour "in" suppliers; (4) more influenced by technical personnel; and (5) less influenced by purchasing agents. Thus, marketing strategy depends on both the purchasing situation and the decision-making process.

The most important phases affecting marketing strategy, particularly for a new task or modified rebuy situation, are phases 1 through phases 5. The astute marketer should be aware that not all organisational members may view the buying situation from the same perspective. That is, a purchasing agent might view a given buying situation, as a new buy and an engineer might view it as a straight rebuy. Such a situation could easily occur where an engineer, for instance, had been routinely involved with a product (or supplier) while employed with a different organisation within the same industry. The following are the 5 phases which affect marketing strategy.

**Phase 1. Problem Recognition**

In the new task situation, marketing opportunities depend upon anticipating, recognizing and understanding customer problems to provide the right information and assistance at the right time. This is difficult because problem recognition is largely internal to the buying firm. Thus, marketers
need to use appropriate advertising media, as well as creative sales people, to alert prospective customers to potential problems and to convince them of their problem-solving capabilities.

Because a straight rebuy situation is rather routine, the "in" supplier (a current supplier to the organisation) should maintain a close relationship with users and purchasing personnel. To prevent or minimize shifts to a modified rebuy, consistent quality and service standards must be provided. Research has shown that customers, dissatisfied with present supplier, often react by changing suppliers without first attempting to correct the situation with the existing source.

"Out" suppliers (not a current supplier to the organisation) need to develop systematic sources of information to detect and respond quickly to any developing trends that might lead to a modified rebuy. When out suppliers attempt to modify a straight rebuy, they face a major task. Buying influencers must be convinced that a reexamination of alternative solutions is appropriate. This requires the customer to expend to time, personnel and money. The out supplier's ability to bring about a modified rebuy will depend greatly upon that firm's reputation for being creative, objective and dependable.

**Phase 2. Determining Solution Characteristics**

Marketing opportunities at this phase consist of providing information, technical assistance, and suggested direction while the customer is in the process of narrowing solutions. In the new task or modified rebuy situation, the major marketing task for both the in and the out supplier is that of
gaining acceptance for participation in the problem-solving process. Being able to do this depends, to a significant degree, on the marketer's reputation. "In" suppliers should have previously established their reputations for providing capable technical assistance to the purchasing firm through prior marketing efforts or actual performance. "Out" suppliers need to stress their general capability, reliability and problem-solving skills and address any special information requirements.

The marketing task in a straight rebuy situation requires that in suppliers maintain information flow to discourage departure from established routines that might lead to a modified rebuy.

**Phase 3. Characteristics/Quantity of Needed Item**

In the new task or modified rebuy situation, decision makers are primarily interested in the total offerings that competing suppliers can provide, particularly those related to products and support services. Marketing opportunities at this phase, therefore, depend primarily upon providing detailed product, production and service information. It is at this phase that a marketer has the best opportunity to influence the preparation of specifications that favour his or her organisation's products or services. For the straight rebuy situation, marketing strategy is essentially the same as in phase 2.

During the first three phases, it is particularly important for the marketer to "find the decision marker". The normal buyer-seller interaction point is in the purchasing department. This is where sellers should concentrate their efforts to develop strong personal relationships.
Unfortunately, the purchasing department usually has minimum involvement in these early stages with a new task situation. In fact, the buyer is often "the last to know" that major changes are being considered. Middle and upper management, engineering, manufacturing and research and development are the likely spots to find the decider and major influencers in the problem recognition and solution-choice phases.

**Phase 4. Searching for and Qualifying Suppliers**

In the new task or modified rebuy situation, out suppliers must demonstrate ability to perform the job. For this purpose, technical experts may visit plant facilities, examine equipment and talk with technical personnel. Buyers may evaluate the suppliers' managerial capabilities, general business reputation and financial responsibility. The marketing task for the out supplier in a modified rebuy situation is to convince the potential customer firm that superior value, such as better quality control, faster deliveries, or significant cost savings, are possible. The primary task in a straight rebuy situation for the in supplier is to maintain performance and communication flow so that the customer will not consider alternative suppliers.

**Phase 5. Acquiring and Analysing Proposals**

Marketing strategy in the new task or modified rebuy situation should be directed at understanding the specific details of the customer's problems and providing technical assistance. This may include co-operative involvement in cost studies, product testing and evaluation. During this phase it is also critical for the supplier (particularly in new task situation) to
determine the relative important of the various specification details to the customer.

With this understanding, the supplier is in a much better position to emphasize those factors of greatest importance to the customer and avoid designing product characteristics that increase cost without increasing the customer's value perception. This understanding also allows the supplier to know which specifications are open to value-enhancing revisions. In the straight rebuy, suppliers should make timely proposals and quotations upon request. The goal, as in the previous phases, is to maintain quality service to prevent or forestall a shift to modified rebuy.

**Buying Center and Buying Influencers**

To be successful, marketing communication strategy must address the significant variation in information needs of those individuals involved in the purchasing decision as it progresses through its many phases. A major task, then, facing the industrial marketer is identifying those individuals who are in any way involved in the purchasing decision process, that is, the decision-making unit.

A decision-making unit may consist of only one person, but it is normally a group of individuals. It is those who share a common goal or goals which the decision will hopefully help them to achieve, and who share the risks arising from the decision. It is not unusual to encounter groups consisting of fifteen to twenty individuals, and some have been known to involve more than 50 people. In industrial marketing, these decision makers are referred to as the buying centre.
Identifying buying centre members

The buying centre is an informal, cross-departmental decision unit in which the primary objective is the acquisition, impartation, and processing of relevant purchasing-related information. Generally, people within an organisation become involved in the buying centre for one of two reasons - they should have formal responsibility, though this is not always discernible, or they have importance as a source of information. The emphasis of this discussion regarding buying centres is, then, upon functional areas, that is, various organisational groups that exert influence on the purchasing decision.

Marketing

When a purchasing decision has an effect on the marketability of a firm's product, such as altering the product's materials, packaging, or price, marketing people become active influencers in the purchase decision process. The perspective of marketing in the purchasing process is depends on enhancing salability. The purchase of parts and materials tends to influence the salability of final products.

Manufacturing

When new products or models are being developed, manufacturing plays a significant role. Manufacturing is responsible for determining the feasibility and economic considerations of producing end products. Thus, engineering decisions on specifications, parts, and materials are confirmed in this department, and equipment needs, costs, and impacts on current production are given careful consideration. Continuous feedback to the
purchasing department on the performance of suppliers also makes manufacturing a key influencer in the selection and retention of suppliers and the allocation of quantities among suppliers.

**Research and development**

Research and development departments are involved in the initial development of products and processes and set broad specifications for component and materials criteria, minimum end-product performance standards, and occasionally, manufacturing techniques. Because these departments have a number of projects in various stages, they are important to marketers for two major reasons. First, the earlier the marketer becomes involved in the development process, the greater the chance of incorporating a product into the final design. Second, by understanding the direction in which customers or prospective customers are moving, marketers are better able to plan the direction of their own business.

**General management**

Top management becomes involved in purchasing decisions when the firm is faced with unfamiliar situations not related to day-to-day activities, or when purchasing decisions are likely to have major consequences on the firm's operations. Such major acquisitions are also likely to be decided at the top with little information requested from lower levels. When top management is directly involved in a purchase, it is also likely to be actively involved in establishing guidelines and criteria for future purchases of similar products.
Purchasing

Purchasing is not the most central figure in the purchasing process.\(^1\) In fact, research consistently indicates that purchasing’s dominant sphere of influence falls within phases 4, 5, and 6 of the purchasing decision process - when specifications of products be purchased have been established and suppliers qualified.

Because purchasing agents are specialists who have negotiation expertise, knowledge of buying products, and close working relationships with individual suppliers, they are the dominant decision makers and influencers in repetitive buying situations. They also exercise a high level of influence over selected types of purchases when uncertain environmental conditions are present, as when the probability of interrupted supply or shortages is high.

Identifying Key Buying Influencers

Because members of buying centres change as an organisation moves through the purchasing process, the task of identifying key buying influencers becomes quite complex. Further, research indicates that key influencers are most often located outside the purchasing department. For example, in buying centers for highly technical products, purchasing agents, engineers, scientists, production, and quality control personnel are usually

included in the buying centre; the engineers and scientists, however, have the greatest level of influence.

Key buying influencers are those persons who are capable of swaying other influencers, either knowingly or unknowingly. For instance, a buying center involved in the purchase of capital equipment may consist of fifteen buying influencers, yet there or four of these influencers are able to influence the others because of their authority, knowledge, information, or gatekeeper status. The ability to identify key buying influencers and sell them on product attributes is vital to good marketing strategy.

Objectives in Organisational buying

Before vendors can respond effectively to customer information needs, they must understand the various criteria that customers use in evaluating potential suppliers. Different groups of individuals will view the supplier's offering from their unique perspectives. While industrial buying tends to reflect organisational goals, organisation members are influenced by both task and non-task objectives.

Task-oriented objectives involve pragmatic considerations such as price, quality, service, and return on investment. Nontask objectives center on personal factors such as the desire for job security, recognition, promotion, and salary increases. When suppliers' offerings are similar in such factors as product attributes, price, and delivery, buyers have little basis for task-oriented choices. Since they can effectively satisfy organisational goals through several suppliers, buyers often tend to be more influenced by personal factors, or nontask objectives. However, when pronounced
differences exist in product/service factors, industrial buyers are more accountable for their choices and tend to place more emphasis on economic factors.¹

The problem facing the industrial marketer is to define the buying goals of organisational buyers. This task is difficult. Generalisations of organisational buying objectives across industrial buying decisions cannot be made. In fact, research indicates that buying center members often employ different criteria in evaluating suppliers. Purchasing agents, for example, may value price and delivery factors; the importance placed on such criteria varies with the type of purchase being considered. The challenge, then, is to examine the purchasing decision from the buying firm's point of view, determine the roles of buying centre members, and ascertain the task and nontask objectives that motivate key buying influencers.

**Task-Oriented Objectives**

Organisations that are in business to make a profit and predominantly oriented to purchase at the lowest possible price while avoiding compromises on such factors as technical service, product quality, and certainty of delivery. Nonprofit organisations, however, are concerned with budgetary constraints, and buying at the lowest possible price may be necessary to operate within predetermined budgets. Therefore, economic task objectives that achieve the organisational goals are of significant consideration to the marketer.

Price

Buyers are concerned with the "evaluated price" of a product. Customers do not buy products; they buy value (satisfaction). Therefore, in evaluating price, buyers consider a variety of factors that generate or minimise costs, such as amount of scrap or waste which will result from the use of the material. The cost of processing the material and power that the machine will consume and return on investment are important factors which influence purchasing capital equipment.

Price, however, cannot be considered in isolation. A supplier who has a reputation for high-quality products and dependable delivery may be awarded a contract even though this prices are higher.

Services

Multiple services are required by industrial buyers to achieve organisational goals. Such services include technical assistance, availability of spare parts, repair capability, and training information. Technical contributions of suppliers are highly valued wherever equipment, materials, or parts are in use. Many firms tend to favour suppliers with reputations for being technical leaders in their fields. The availability of replacement parts is often vital to manufacturers who prefer to make their own repairs. Complex manufacturing and office equipment requires user training to ensure maximum productivity. The marketer who can offer sound technical advice, adequate training, and a ready supply of replacement parts very often has a differential advantage over less capable competitors.
Quality

Organisational customers search for quality levels that are consistent with specifications and the intended use of the product. They are reluctant to pay for extra quality and are unwilling to compromise specifications for a reduced price. The crucial factor is uniformity or consistency in product quality that will guarantee uniformity in end products, reduce costly inspections and testing of incoming shipments, and ensure a smooth blending with the production process. When consistency or uniformity requirements are not met, serious problems are created for the buying firm. Marketers can determine the degree of consistency and uniformity need by, and the tolerance levels acceptable to, a customer firm only through close communications and co-ordination with that firm.

Assurance of Supply

Interruptions in the flow of parts and materials can cause a shutdown of the production process, resulting in costly delays and lost sales. Physical distribution services rank second to product quality in influencing the purchasing decision.\(^1\) To guard against interruptions in supply, which can be caused by a number of factors (e.g., strikes, accidents, fires, or natural catastrophes), purchasing agents are reluctant to rely on a single source of supply. Instead, they often choose to spread their buying over two or more suppliers whenever possible. When buyers split their purchases between suppliers, one of them, the preferred supplier, often gets the lion’s share of

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the order quantities. The marketer should understand the policies that customers follow in seeking continuity of supply and develop marketing strategy around them.

**Reciprocity**

Giving consideration to selecting suppliers because of their value as customers is known as "reciprocity." The objective of reciprocity is, in theory at least, for the buyer and seller to reach an agreement on an exchange of business that is mutually beneficial and has become an important part of the trade relations responsibility of purchasing and materials management. Large-volume purchasing and the need for specialty suppliers leads to close relationships at the executive level that foster awareness of mutual dependence for achieving increased profits.

**Nontask Objectives**

People join organisations to accomplish personal objectives such as greater status, promotions, salary increases, increased job security, and social interaction. In the sphere of industrial marketing, it has been found that major factors that influence the purchasing decision are social considerations, such as friendship, reputation, and mutually beneficial interactions.

Organisations work best when people accomplish personal and organisational objectives simultaneously. A buyer can take pride, a personal objective, in making a correct buying decision that also accomplishes an organisational objective. In this instance, a single action accomplishes two
different objectives. To avoid an incomplete picture of organisational buying, vendors need to keep both sets of objectives in mind.

ii. Interpersonal Dynamics of Industrial buying behaviour

Organisational buying behaviour is ultimately influenced by forces within the organisation as well as environmental forces. The status and operating procedures of purchasing, the degree of involvement and interaction of various groups and group members, and their different perceptions, have a significant impact on purchasing decisions. Knowledge of these forces is an essential ingredient in the development of effective industrial marketing strategy. Effective and responsive industrial marketing strategy depends on the industrial marketer's knowledge of how organisational buying behaviour is affected by forces within the organisation. Seldom does an organisational buyer make a decision in isolation. Purchasing decisions are influenced by organisational group and individual forces, as well as forces within the external environment.

The position of purchasing and its status within the organisation has a significant influence on industrial buying behaviour. Purchases are also affected by a complex set of decisions made by the several individuals in buying centers - individuals with different levels of information and expertise and different backgrounds, who interest at different stages of the purchasing decision process. For marketing strategy to be successful, the industrial marketer must have a clear understanding of how organisational groups interact, the amount of influence the various group members may possess, and how this influence varies throughout the purchasing decision process.
Purchasing's Influence on Buyer Behaviour

International material shortages, skyrocketing costs of materials and energy, fluctuating nationalistic moods, conflicting social goals, profit squeezes, and greater government regulation of business during the mid-1970s brought about a recognition of the importance of the purchasing function. Contributing to this recognition and the growing status of purchasing is the realisation of efficient and effective purchasing, through the use of material requirements planning and just-in-time inventory control systems, is a key factor in maintaining profits and alleviating cash flow problems. The average industrial firm spends approximately 60% of its sales on materials, services, and capital equipment. Purchasing is now being viewed as "asset-management through asset-utilisation and inventory control". Today, purchase managers regularly attend meetings with other major functional department of the firm.

Material Requirements Planning (MRP)

One major change in the purchasing function is the use of material requirements planning. Under MRP, a firm estimates its future sales schedules production accordingly, and then orders parts and materials to coordinate with production schedules so that inventories will not become too large or too small. MRP is conceptually simple, but in practice it can require diverse considerations. An input part may be used at more than one stage in a production process that takes place over a period of time. Thus, multiple deliveries may be necessary to minimise inventory costs and existing inventories continuously monitored to accommodate for inaccuracies in sales forecasts and subsequent production.
To utilise MRP, a growing number of firms are combining the functions of purchasing, transportation, inventory control, receiving, and, in some instances, production control under one functional area referred to as materials management. To keep track of orders and the various supply sources available, many organisations have also begun using computers, some of which are directly linked to suppliers. Since irregular deliveries and defective parts furnished by suppliers can require numerous adjustments in a producer's MRP scheduling, these computerised systems are used to find and eliminate weak suppliers.

**Just-in-Time Purchasing (JIT)**

Just-in-time is an inventory control system which enables a manufacturer to maintain minimum inventory levels by relying on only one supplier to deliver frequent shipments just in time for assembly into final products. One objective of JIT is to develop long-term, one-supplier relationships to reduce the risk of interrupted material flows. An advantage of such a relationship is the resultant improved quality of items supplied, referred to as "zero-defect quality levels". The use of JIT necessitates that the supplier to deliver the ordered product at the precise time in the precise quality. It also requires the integration of the buyer-seller's materials management, engineering, purchasing, production, and marketing systems to promote the efficient flow of parts and materials. Under JIT, then, cost factors are less dominant and material specifications are more flexible. This does not imply a lack of concern for costs or quality.
Centralised Purchasing

In addition to MRP and JIT, there is a growing tendency toward centralisation of purchasing. Important differences in buying behaviour occur between centralised and decentralised purchasing functions. When purchasing is centralised, purchasing specialists concentrate their attention on selected items, developing extensive knowledge of supply and demand conditions. Thus, they are more familiar with cost factors that affect the supplying industry and understand well how vendors within the industry operate. This specialised knowledge, when combined with the volume buying that centralised purchasing controls, increases the firm’s buying strength and its supplier options.

Centralised purchasers also tend to place different priorities on selected buying criteria. In comparison to local units where the emphasis is more on short-term cost efficiency and profit considerations, centralised units place more emphasis on long-term supply availability and supplier relationships. Further, influencers outside the purchasing unit appear to have more influence on purchasing decisions at the local level.

Buyer Technology

The advent of computers has significantly improved the function of purchasing. Typical computer applications in purchasing include calculating economic order quantities, determining optimal lead times, tracking critical delivery schedules, and monitoring supplier performance indices. In fact, computers have been the primary factor in the implementation of MRP. While many significant advancements in computer applications of purchasing decisions remain for the future, computer systems are already
employed in highly repetitive buying due to their ability to handle such tasks faster, cheaper, and more accurately than buyers. Although totally computerised handling of new task buying situations is unlikely in the near future, computerised data analysis allows purchasing managers more time to evaluate and negotiate with potential suppliers.

**Role of Members of buying center**

The industrial purchase decision is an outcome of the interactions that take place between the various members of the buying centre. Except for very small firms and more routine purchases, rarely will one person be responsible for the purchasing decision. Multiple buying influencers and group forces play critical roles in organisational buying. Industrial marketers must not only see who participates in the decision process, they must also understand the involvement and interaction of organisational members. The leadership pattern, and the formal and informal network of communications among the center’s members are also important.

**Members in Decision making**

While methods of reaching buying decisions differ widely, even within the same firm, there appear to be underlying patterns of organisational structure and behaviour that establish similarities for analysing organisational decision making. Whereas recent evidence indicates that when supplier loyalty is high, modified or straight rebuy purchasing decisions are frequently made by individuals with the firm. Studies have shown that the number of organisational member involved in a buying decision depends on the characteristics of the firm, the type of purchasing situation, the perceived
importance of the product and the available resources for handling the purchase.

**Psychological factors influencing individual decision making**

Knowledge of the similarities and differences in the psychological worlds of individuals involved in the buying centre and how their behaviour can affect the purchase decision is critical in directing the firm's communication strategy. It is not unusual to find purchasing, engineering, manufacturing, and marketing personnel involved both individually and jointly at various phases in the purchasing decision process, particularly in a modified or new task purchasing situation. Due to the differences in their psychological make-ups, expectations regarding the potential of alternative suppliers to satisfy a number of different purchasing criteria will substantially differ in any given purchasing task. Two significant factors, appear to account for these differences; role orientation and information exposure.

**Differences in role Orientation**

Because of their different areas of functional responsibility, each individual has a different perception of his or her role in the decision process. Thus, they tend to view the importance of the various buying criteria differently. Purchasing agents, for instance, look for price advantage and economy in shipping; engineers look for quality and pretesting. Due to the fact that organisations typically reward individuals for achieving their respective departmental goals, they will also have experienced different levels of satisfaction with past suppliers. Purchasing agents, for example, are rewarded for economic achievement and engineers for product performance.
The result is that the respective objectives and reward criteria of individuals may conflict when applied to a supplier choice decision.

**Differences in Information Exposure**

Expectations and, thus, objectives are further influenced by the type and source of information exposure. Purchasing agents, because of their position within the organisation, are not only exposed to greater amounts of commercial sources of information, but are normally delegated the task of actively searching for information. Personnel in engineering and production, however, typically have a disproportionately smaller amount of information. The information obtained is often gathered primarily through trade reports, professional meetings, and word of mouth. Individual educational pursuits and life-styles, are also subject to the individual's cognitive process of selective distortion and retention. The tendency to systematically select, change, and retain information so as to conform to prior knowledge, expectations, or needs. Therefore, given the different goals and values of these individuals, the same information will be interpreted differently, leading to further differences in expectations and objectives.

**Perceived Risk in the Vendor Selection Process**

Industrial purchasing decisions often involve an element of functional risk, such as uncertainty with respect to product or supplier performance, or psychological risk, such as negative reactions from other organisational members. The greater the uncertainty in a buying situation and the greater the adverse consequences associated with making the wrong choice, the greater will be the perceived risk in the purchasing decision.
When uncertainty exists in any given purchasing decision, research indicates that decision makers tend to reduce the level of risk by remaining loyal to existing suppliers who represent a known entity. They also tend to adopt apt strategies in an attempt to minimize or avoid the perceived risk. In attempting to reduce uncertainty, buyers may adopt decision-making strategies such as, using performance measures, using expected value analysis, and choosing between certainty and risk. In developing marketing strategy, however, both in and out suppliers should be aware of buyers' decision strategies in reducing uncertainty and how they affect supplier choice. Industrial sales people should, for instance, emphasize guarantees when applicable or the expected value considerations of their offer.

**Conflict and Resolution in Joint Decision Making**

Whenever two or more individuals have to reach an agreement over issues such as product specifications, information credibility, vendor capabilities, multiple sourcing, contract terms, or order routines, the potential for conflict exists. The potential for conflict emanates from differences in expectations regarding suppliers, differences in the evaluative criteria employed, differences in buying objectives, and differences in decision-making styles of the individuals involved. Whether conflict is good or bad depends upon the type of conflict that emerges and how it is resolved. Conflict that supports the goals of the organisation and improves the firm's performance rather than hinders it is good. What is important from the marketer’s perspective is how conflict is resolved. When conflict is resolved through co-operation and the search for a mutually beneficial solution, joint decision making tends to be rational. However, when conflict is resolved
through bargaining of politicking, joint decision making tends to be based on irrational criteria.

**Purchase Committee**

A more formalized buying center, the purchase committee, is used extensively in the resellers' market and by many industrial organisations, particularly when purchasing is centralised. In the resellers' market, organisations such as food chain retailers form purchase committees that meet on a regular basis to decide on new product purchases. In the industrial market, institutions such as universities and hospitals often appoint temporary purchase committees to make joint decisions regarding which products can best satisfy organisational needs. And, in the commercial market, representatives from engineering, production, and accounting often establish formal purchase committees to review and approve major purchases. Committee buying is also prevalent in the government market.

In the typical purchase committee, one or two individuals set the direction while 'rubber stamp' decision makers go along. Determining who these direction setters are and understanding their motives is the key in selling to buying committees. Committee buying generally involves a lengthy selling process during which the vendor meets much more frequently with individuals on the purchase committee than with the entire committee. While the salesperson must provide product-related information to all accessible committee members, the real selling effort needs to be targeted to those one or two individuals who are most influential on the committee. Identifying those individuals and determining the structure of the decision-making unit depends on an analysis of the seller's past experience with the buying firm.
with respect to product purchases, technical expertise of committee members, individual personalities and objectives, and organisational structure.

**Supplier Choice and Evaluation**

Regardless of the diversity of expectations and objectives, buyers seek to find the best possible source of supply for their respective needs. In repetitive purchasing situations, such as a straight or modified rebuy, where buyers are familiar with current suppliers and the purchase involves a standardised product, it may be a simple matter of choosing a supplier from the list of sources already identified and evaluated. A supplier may even be recommended for selection on the basis of reciprocity considerations.

In a new task situation, or when the purchase involves a substantial expenditure or the quality of the needed product is critical, the selection may involve an extensive search to find the one qualified supplier. When no current source of supply exists, it may even require that the firm work with many suppliers to develop the needed product. The development of a new source can take months, even years. In some cases, the buying organisation may have to help a supplier develop the necessary level of needed performance by providing financing for equipment, by assisting in developing job scheduling and quality control techniques, or by participating in the development of bid preparations and cost accounting procedures.

**Supplier Choice and Qualifying Process**

The buyers choice and qualify suppliers depends upon the type of buying situation and the importance of the purchase in terms of complexity
and moneys value. When the procurement need is complex or involves a substantial expenditure, it is common practice for personnel from purchasing, quality control, engineering, and production to evaluate the supplier's facilities and production capacity to ensure, to evaluate product quality via product samples and to approve technical competency and manufacturing efficiency. They may even evaluate the supplying firm's position in the industry, its progressiveness, its interest in the firm's order, and its co-operative attitude.

Qualifying factors, however, may limit buyers' choice of suppliers. For instance, with the increasing cost of transportation, buyers may limit their choice to local suppliers, or in the case of dependency on uninterrupted shipments, the suppliers' capacity and capability may become a deciding factor in supplier choice. The point is that the buying organisation's objective in carefully evaluating and qualifying potential vendors is to locate those suppliers that have the capacity to produce the needed item in the required quality and quantity. They are also capable of fulfilling delivery and other service needs and are price competitive and can be relied upon as a continuous source of supply.

Evaluating Supplier Performance

Qualification of suppliers does not end with the purchase. The real test of a supplier is the ability to perform effectively and consistently over time. This is the deciding factor as to whether the supplier will continue as the "in" supplier or be replaced. Buyers use both objective and subjective evaluations to rate suppliers' performance. Supplier evaluation, however, generally involves four basic considerations, viz., quality, service, delivery, and price.