**BBA FIFTH SEMESTER**

**Purchase and Materials Management**

**Purchasing: it’s Meaning, Definition, Importance and Objectives**

**Meaning and Definition:**

Purchasing is the first phase of Materials Management. Purchasing means procurement of goods and services from some external agencies. The object of purchase department is to arrange the supply of materials, spare parts and services or semi-finished goods, required by the organisation to produce the desired product, from some agency or source outside the organisation.

The purchased items should be of specified quality in desired quantity available at the prescribed time at a competitive price. In the words of Alford and Beatty, ”Purchasing is the procuring of materials, supplies, machines, tools and services required for equipment, maintenance, and operation of a manufacturing plant”.

According to Walters, purchasing function means ‘the procurement by purchase of the proper materials, machinery, equipment and supplies for stores used in the manufacture of a product adopted to marketing in the proper quality and quantity at the proper time and at the lowest price, consistent with quality desired.”

Thus, purchasing is an operation of market exploration to procure goods and services of desired quality, quantity at lowest price and at the desired time. Supplier who can provide standard items at the competitive price are selected.

Purchasing in an enterprise has now become a specialised function. It was experienced that by giving the purchase responsibility to a specialist, the firm can obtain greater economies in purchasing. Moreover purchasing involves more than 50% of capital expenditure budgeted by the firm.

According to Westing, Fine and Zenz “Purchasing is a managerial activity that goes beyond the simple act of buying. It includes research and development for the proper selection of materials and sources, follow-up to ensure timely delivery; inspection to ensure both quantity and quality; to control traffic, receiving, storekeeping and accounting operations related to purchases.” The modern thinking is that Purchasing is a strategic managerial function and any negligence will ultimately result into decrease in profits.

**Importance of Purchasing:**

1. Purchasing function provides materials to the factory without which wheels of machines cannot move.

2. A one percent saving in materials cost is equivalent to a 10 percent increase in turnover. Efficient buying can achieve this.

3. Purchasing manager is the custodian of his firm’s is purse as he spends more than 50 per cent of his company’s earnings on purchases.

4. Increasing proportion of one’s requirements are now bought instead of being made as was the practice in the earlier days. Buying, therefore, assumes significance.

5. Purchasing can contribute to import substitution and save foreign exchange.

6. Purchasing is the main factor in timely execution of industrial projects.

7. Materials management organisations that exist now have evolved out or purchasing departments.

8. Other factors like:

(i) Post-war shortages,

(ii) Cyclical swings of surpluses and shortages and the fast rising materials costs,

(iii) heavy competition, and

(iv) Growing worldwide markets have contributed to the importance of purchasing.

**Objectives of Purchasing:**

The purchasing objective is sometimes understood as buying materials of the right quality, in the right quantity, at the right time, at the right price, and from the right source. This is a broad generalisation, indicating the scope of purchasing function, which involves policy decisions and analysis of various alternative possibilities prior to their act of purchase.

**The specific objectives of purchasing are:**

1. To pay reasonably low prices for the best values obtainable, negotiating and executing all company commitments.

2. To keep inventories as low as is consistent with maintaining production.

3. To develop satisfactory sources of supply and maintain good relations with them.

4. To secure good vendor performance including prompt deliveries and acceptable quality.

5. To locate new materials or products as required.

6. To develop good procedures, together with adequate controls and purchasing policy.

7. To implement such programmes as value analysis, cost analysis, and make-or-buy to reduce cost of purchases.

8. To secure high caliber personnel and allow each to develop to his maximum ability.

9. To maintain as economical a department as is possible, commensurate with good performance.

10. To keep top management informed of material development which could affect company profit or performance.

11. To achieve a high degree of co-operation and co-ordination with other departments in the organisation.

# Organizational Structure of the Purchasing Department

Organizational structures are refined based upon need.

Organizational structure refers to the hierarchy of decision-making power within a department. Built like a pyramid, the employee at the top has the most decision-making responsibility. While each job is considered vital to the department, everyone answers to the person above him. Each business refines its organizational chart based upon particular needs. The structure of one purchasing department won't necessarily look like another, although there are positions that appear within most hierarchies.

## Director

The department director may be given any number of titles, including "procurement manager," "director of procurement" or "lead buyer." This individual is ultimately responsible for the purchasing department, it's day-to-day operations and how efficiently it operates.

## Deputy Director

The deputy director is second in control. While companies may have different titles for this position, the deputy director essentially takes cues from the director, helping operate the daily activities of the department.

## Senior Buyers

In a manufacturing business, a senior buyer must know which materials are needed and in what quantity they should be purchased. The purchasing department must maintain a balance between the amount of material coming in and what will be used in the manufacturing process, so corporate funds don't get bogged down by materials sitting unused on shelves. In consumer-driven businesses, the senior buyer must be able to predict what consumers will want to buy. Mistakes in that regard can cost the business money and damage its reputation. Senior buyers report to the deputy director.

## Assistant Buyers

Assistant buyers answer to senior buyers but have their own responsibility for staying abreast of current inventory and trends. Assistant buyers also focus on evaluating suppliers -- finding the most reliable supply source at the greatest cost savings to the company.

## Support Staff

Purchasing departments often work closely together in a team approach -- with each member of the team handling specific tasks -- but come together as a whole to make important decisions. Administrative assistants and clerks are part of that team. They are often multi-talented employees in that they are capable of handling any number of tasks at once in order to help the department work as a cohesive unit. It's not unusual for administrators or clerks to move into a buyer's position once they have become familiar with the department.

### RELATIONSHIP OF PURCHASING TO OTHER SCHOOL FUNCTIONS

The purchasing procedure does not take place as an isolated administrative function. The individual responsible for purchasing must always keep in mind all functions of the school system and, in larger schools, must work closely with all offices and departments of the system.

To operate efficiently, the purchasing agent must be given proper authority and cooperation in his relationships with the educational and non-teaching staff. The following are suggested as helping to define this relationship.

* Requests for the purchasing agent should make prices and/or repair service, except in rare instances. In any case, the purchasing agent through the issuance of a purchase order should make the final commitment.
* Communications with suppliers should be handled by purchasing personnel salespersons should be discouraged from visiting classrooms, schools, or departments for the purpose of selling their products. For information on special or technical items, a school or department should request the visit of sales personnel through the purchasing department.
* The purchasing agent should be in a position to seek advice from colleagues in matters of common interest. The purchasing agent should not be expected to be an expert in all matters. Where desirable on technical matters, the purchasing agent will coordinate meetings with staff members and supplier For example, other employees, such as the director of music or the director of physical education, should be consulted on matters associated with such departments.

The relationship of purchasing to other school functions is outlined below:

A. To Educational Services.

* Designation of certain items is the responsibility of the instructional and supervisory staff, and there should be agreement on a standard of quality. Example: the purchasing agent procures textbooks after adoption of texts by the board of education.
* Educational personnel should be relieved of the details of procurement of supplies and equipment, including contacting sales personnel.

B. To Finance Department.

* For budget preparation the purchasing department may:
	+ Provide computerized standard supply lists.
	+ Provide purchasing calendar, market information and estimated prices.
* For budget control, cooperation is essential before purchases are made and funds encumbered.
	+ The right time to purchase, from a market standpoint, may be built into the purchasing calendar to insure budget cycle provides the available school funds.
	+ The finance department should be alerted concerning extraordinarily large commitments.
	+ Allocation of funds is necessary prior to purchasing. Sufficient unencum­bered balances must be available or adequate transfers of funds arranged.
	+ Correct coding of purchases is necessary in order to charge each item to the proper account.

C. To Accounting or Auditing Division. Prior to payment, the responsible official should check the following:

* The receiver and the purchasing official have properly approved packing slip or duplicate copy of invoice. Any adjustments for breakage and shortage are shown.
* Invoice has been compared with purchase order and any back orders and action to betaken noted
* Available discounts are shown and taken, i.e., quantity or cash discounts.
* Recommended accounting classification is indicated.

D. To Building or Maintenance Department

* Prior approval of this department should be obtained for equipment requiring utility service or attachment to buildings. Approval with reference to the safety factor of equipment to be procured should also be cleared with this unit. Some of the important considerations to check are:
	+ Potential danger to user. (Electrical equipment may be dangerous unless properly shielded.)
	+ Fire hazard. (Underwriters approval is desirable on much equipment.)
	+ Danger of splinters from wood and from sharp edges on metal.

E. To District's Legal Advisor.

* Purchasing within scope of statutes and regulations may require legal counsel.
* Approval of contract and other forms should be required.
* Advice in connection with acceptance of bids may be necessary.
* The matter of proper security (certified check, performance, payment and bid bonds) may be cleared with legal advisor.
* Decision as to when informalities on formal bids may be waived is a matter for legal counsel.
* Advice of counsel may be desirable prior to the purchasing official's recommendation to the board of education for rejection of the low bidder and/or an award of contract.
* The approval of the form of any contract should rest with the legal department.
* Interpretation of the following laws and regulations affecting purchasing may be necessary:
	+ Advertising law--General Municipal Law, Section 103.
	+ Commissioner's Regulations governing transportation.
	+ Department of Transportation Regulations governing transportation.
	+ Minimum wage law (on public works contracts).
	+ Child labor law.
	+ School bus purchase (Education Law, Sections 3602 and 3623; Local Finance Law, Sections 32.00 and 33.00).
	+ Local school district policy.
* School districts as governmental subdivisions are tax exempt. Taxes included on a vendor's invoice should be deducted before payment.
* The right to reject all bids for valid cause is reserved to the board of education. Also reserved is the right to reject, for cause, any bid in whole or in part, to waive technical defects, qualifications, irregularities, and omissions if in its judgment the best interests of the district will be served. Also reserved is the right to reject bids and to purchase items on State Contract or County or adjoining county Contract, if such items can be obtained on the same terms, conditions, specifications, and at a lower price. (County Contracts, General Municipal Law, Section 103, subdivision 3, and State Contracts, General Municipal Law, Section 104.)

### PURCHASING PROCEDURES

Purchasing should be carried out under principles of sound business management and must be within the scope of federal and State laws, local ordinances, board of education policy, and State Education Department decisions and regulations, as well as regulations of the State Comptroller.

It is the responsibility of the purchasing official of a school district to have the required supplies and equipment on hand when needed, in the necessary quantity and of a quality best suited for the project. Sources of supply, price, delivery, stores management, and salvage are also generally involved in the purchasing function. A number of these aspects of purchasing are considered in this chapter.

A. Quality of Product. Circumstances and use are determining factors in quality selection. In some instances an inexpensive article is adequate. There are many other situations when only the best grade is acceptable and proves most economical in the long run. Thus, the purchasing official, with knowledge of markets and materials, has an important part to play in the selection of quality.

* Standardization of equipment authorized by law.
Section 103 of the General Municipal Law permits a board of education to standardize on items of equipment. For example, a specific component, make or model required for compatibility or matching types and styles of furniture may be procured. (See "Standardization of equipment authorized by law" found in Chapter IV on Competitive Purchasing.)
* Standard or quality selection should be cooperatively determined.
Educational supplies and equipment are generally and broadly defined as items used by schools, such as instructional, office, medical, custodial, and maintenance needs. However, there are considerations peculiar to each type of supply or equipment. Some of these are set forth below.
	+ Instructional supplies and equipment
		- (1) Selection of titles and authors of textbooks is the responsibil­ity of the educator.
		- (2) For classroom equipment and supplies, the purchasing agent should be an advisor to the educator in the selection of quality. This cooperative approach will assure the procure­ment of a quality that is consistent with long-run economy and classroom requirements.
		- (3) Computerized standard lists of supplies should be established for grades, classes, and schools and departments. (See sample list, Appendix 12).
	+ Maintenance and operations.
		- Equipment: The plant supervisor or the custodian may require a certain brand or manufacturer's article to fit into an established operation. For example, a particular valve may be required in a plumbing or heating system. In the procurement of such mainte­nance equipment as floor machines, brushes mowers, etc., consulta­tion between the using department and the purchasing agent should result in setting up specifications covering a satisfac­tory type or grade of equipment.
		- Supplies: The savings of a few cents in the purchase of an item may be negated by the cost of additional labor in its application or use. A cheap floor wax may require more labor for application and upkeep than a more expensive kind, thereby causing a possible additional cost for maintenance far offsetting savings in original cost. In such matters, the custodian should be of consid­erable assistance as an advisor.
	+ Office equipment and supplies.
		- The maintenance of an established system of books and records may require replacement by a particular make of hardware or equipment, such as for accounting. Standardization may, therefore, be advisable in procuring these items.
		- Ordinary office supplies should be purchased on a competitive basis if bidding is required because of the dollar volume, or when the quantity desired is sufficient to indicate potential savings, which will pay for the additional labor involved. Pencils, paper, etc. should be based on specifications covering the desired quality after an agreement has been reached as to styles and types needed.
	+ Transportation equipment and supplies.
		- (Equipment such as buses and trucks should be selected on the basis of the most suitable type based on past experience and road conditions.
			* (a) Conventional type of bus (motor under hood).
			* (b) Light-duty vs. heavy-duty.
			* (c) Size of bus (pupil capacity).
		- For interchange of parts, it may be desirable to have two or more buses or trucks of the same make in a fleet in order to insure continuing operation.
		- Law permits standardization of buses. (See "Standardiza­tion of equipment authorized by law" found in Chapter IV, Competi­tive Purchasing.)
* Factors influencing quality determination in the purchase of equipment items are:
	+ Long-term or short-term investment.
	+ Economy of operation over a period of time.
	+ Budget control (availability of funds at specific time).
	+ Laborsaving possibilities.
	+ Dependability in an emergency.
	+ Ease of maintenance by board's employees.
	+ Economy in repairs--cost of parts.
	+ Service rendered by vendor when required.
	+ Standardization, if approved.
	+ Durability over time.
* Factors influencing quality determination in purchase of supplies are:
	+ Repetitive items--supplies used constantly in a school system.
	+ Uniformity of product over a period of time.
	+ Ease of use by students, teachers, or custodians.
	+ Economy--price not always the final factor.
	+ Laborsaving--a final consideration in many cases.
	+ Suitability for purpose purchased.
	+ Standard list of supplies.
* Some of the criteria for measuring quality are:
	+ Physical properties. Frequently, certain characteristics are important in establishing the desired quality. Tests such as the following may be made to check for such characteristics:
		- (1) Tensile strength of materials.
		- (2) Bursting, folding, and tearing strength of paper.
		- (3) Dimensions, such as tolerance in size (1/1000 of inch).
		- (4) Common thread counts for textiles.
		- (5) Formula of product.
		- (6) Purity and strength of product.
	+ Performance of product. The following examples of tests may be run to determine what a product will do or accomplish.
		- (1) Wearing and covering qualities of paint and floor wax.
		- (2) Absorption qualities of paper towel.
	+ Valuable information for the purchasing official and the using depart­ment on many products is contained in the publications Consumers' Bulletin and Consumer Reports.
* Specifications for items to be purchased should be clear and concise so as to place the basic responsibility on the seller to provide a product that will meet the needs of the user. To assure quality standards in items to be furnished, specifications should indicate to the vendor what is required and expected. Specifications may be simple or written in considerable detail, depending on the importance of the item or the necessity for a more complete description to define type and quality demanded.
	+ Specifications may describe requirements in terms of:
		- (1) Chemical composition.
		- (2) Physical, chemical, or electrical characteristics.
		- (3) Materials and method of construction.
		- (4) Dimensions and tolerance.
		- (5) Manufacturer's description or model number (the words "or equal" must be added unless standardization has been autho­rized).
		- (6) Bidder's sample, when requested.
		- (7) Performance factors.
	+ Specifications and instructions, especially on bids, should include the following (see Bid Form, Appendix 5):
		- The bid price is to be the net delivered price. There is to be no charge for delivery or insurance.
		- Definite or approximate quantity required.
		- Where and when delivery is to be made. A reasonable penalty clause " buy against clause" for not delivering on time should be included.
		- Statement when award will be made.
		- If an alternate bid is requested, details must be given as to what alternate includes.
		- If a sample showing quality desired is available, statement of where bidder may inspect such sample.
		- If bidder is requested to furnish a sample for conformity, state­ment of where and when such sample is to be delivered.
		- Type of packing required.
		- Statement that board reserves the right to reject all bids and to waive informalities or minor irregularities.
		- Requirement of bidder's guarantee that all goods meet specifica­tions and all-unacceptable items will be replaced at the bidder's expense.
		- Sample contract documents, if any, which are to be signed by the successful bidder and the school district.
		- Statement of any surety required (i.e., certified check or bid bond payment, and performance bond), if a condition of the contract.
		- If specifications call for a piece of equipment to be taken in trade, statement as to where bidder may see such an item.
		- Explanation of how tests for conformity with specifications will be made.
		- Official proposal sheet or bid form.
		- Statement of Non-Collusion
	+ Specifications may be based on:
		- A very detailed description of equipment or supplies required (see Specification, Appendix 5).
		- Standard specifications available from a number of sources. Some of the best known are:
			* (a) Federal Bureau of Standards (i.e., Federal Specifica­tions), General Services Administration, Washington, D.C. 20025.
			* (b) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
			* (c) American Society of Mechanical Engineers, 345 East 47th Street, New York, NY.
			* (d) New York State Division of Standards and Purchase, Office of General Services, Corning Tower, Albany, NY 12242.
		- The buyer's sample--available to all bidders.
		- Designation of a trade name as a standard.
		- Designation of a manufacturer's number as a standard. Example: Smooth-on #4 Plane.
		- The bidder's sample, blueprints, or product composition. The bidder's sample, if accepted, should be retained until the contract has been satisfactori­ly completed.
* Specifications should be broad enough to allow for:
	+ Compliance and competition.
	+ Use of commercial standards or products where possible. Devia­tions from such standards generally result in greater costs to the district.
* Quality control (testing). On receipt of shipment, goods should be checked to ascertain if they meet specifications. This may be done in several ways:
	+ By checking descriptive label on standard package. Example: to see that Smooth-on #4 Plane is so boxed and labeled.
	+ By comparing with school district's sample.
	+ By the actual use test. (This is one of the best and most satisfactory methods)
		- (1) Does soap or detergent do the work for which intended?
		- (2) Do towels dry hands satisfactorily?
		- (3) Is magnet test used to determine brass or steel?
		- (4) Is weight of item or groups of items checked by weighing?
		- (5) Does drawing paper take ink without feathering?
	+ By laboratory test, where necessary, in:
		- (1) School district's own facilities.
		- (2) Government or city laboratory.
		- (3) College or commercial laboratory.

B. Quantity to Be Purchased (determination of needs).

* Nonrecurring items (one-time purchase). Quantity determination for the purchase of a r nonrecurring item to be used by one department or person presents no problem (i.e., purchase of a refrigerator for the cafeteria, a printing press for the print shop).
* Recurring items. Quantity determination of repeat items of purchase for use by two or more departments or persons requires careful planning. Here are some helpful suggestions for expediting this kind of purchase:
	+ The purchasing official sets a specific date for bringing in requisitions for certain items or groups of items.
	+ Items to be furnished have been included on computerized standard supply lists.
	+ The requirements of various units in the school are combined. Example: a principal consolidates all the requests from various school units for a given item on one requisition or computerized standard supply lists.
	+ The purchasing official combines all the requests on a given item or category of items for the whole district.
	+ Communications with suppliers should be handled by purchasing personnel
	+ Requisitions are honored and/or replacement of warehouse stock based on:
		- (1) Inventory or stock record of item under consideration.
		- (2) Past usage and demand.
		- (3) Increase or decrease of pupil enrollment and number of teachers.
		- (4) Information from data processing.
* Factors determining economical quantity to be purchased:
	+ Rate of use. Does the item move quickly?
	+ Standard package. It is advisable to avoid breaking standard quantities such as ream, gross, carton, or set.
	+ Transportation cost. A truck or carload lot may result in a lower unit price.
	+ Quantity discount. An extra discount for a larger purchase may not be economical if the additional quantity is in excess of need. The purchas­ing agent should beware of overbuying.
	+ Inventory record. This should give an excellent picture of needs based on past usage and current availability.
	+ Time required for delivery--whether immediate or involving extended waiting period. The economic situation at a given time may influence delivery.
	+ Storage facilities available.
	+ Market condition or trend.
	+ Cooperative sharing of items by departments or groups may be possible. Example: items such as paper cutters paper punches, visual aids.
* Factors favoring large quantity, infrequent purchases:
	+ Budget control. Quantity purchases will reduce number of entries against an account.
	+ Better price. Volume purchasing frequently decreases unit cost. Price per unit may change at 25 or 100 units.
	+ Lower delivery cost. Usually the cost per hundredweight decreases as the tonnage increases.
	+ Purchase department expense. Fewer orders necessitate less paper work, thus saving time and money.
	+ Adequate and continuous supply is assured. Many school systems have found it economical to contract for or to purchase supplies once a year on a cyclical basis. Delivery may be specified in one shipment or spread out over the year in several installments.
* Factors favoring small, frequent purchases:
	+ Nonstorage cost. Warehousing overhead is eliminated.
	+ No deterioration. Merchandise is used up speedily.
	+ Less danger of obsolescence. Newer models can be ordered.
	+ Changing educational needs or user preference. Program changes are not held up because old supplies must be used.
	+ Less insurance risk. Smaller value of stock to be protected from loss.
* Recurring items may be purchased on annual contract or periodic large order basis for delivery as needed.
	+ Fuel oil for season's use.
	+ Light bulbs--incandescent and fluorescent.
	+ School lunch items--milk, ice cream, (where escalator clauses are used).
	+ Maintenance service agreements--for office machines, motors, clocks, and boilers.
* Types of contracts for purchase of school materials:
	+ Definite Quantity Contract should be used when specific amounts of material are to be purchased at one time, with delivery in one lot or at specific times during the year. Example: 1,000 reams of copy machine paper, with delivery in one shipment or 250 reams quarterly.
	+ b. Continuing Contract is used when amount is indefinite, but estimated, for delivery during the fiscal year. Example: fuel oil as required. School lunch items, such as milk, bread, and ice cream, come under this heading.
* Frequent and recurring items relatively small in value may be procured by:
	+ a. Blanket orders issued monthly to local dealers for emergency needs:
		- (1) Panes of window glass in less than full boxes.
		- (2) Minor repairs to motor vehicles.
		- (3) Oxygen and acetylene tank refills.
* Confirming orders for emergency supplies after approval by the purchasing agent. While this method of purchasing is not recommended, there are instances where it may justifiably be used in order to save time and labor cost, such as immediate repairs for electric and plumbing equipment or service.

C. Storage or Stocking of School Supplies and Equipment.

* A central warehouse may be desirable in larger districts to provide storage facilities for the following:
	+ Extra desks and chairs for teachers and pupils.
	+ Common office supplies.
	+ Electrical, plumbing, and other maintenance needs.
	+ Paper, pencils, crayons, and other fast-moving classroom supplies.
	+ Soaps waxes, brushes, light bulbs, and other custodial supplies.
* Storerooms in school buildings. Limited space will probably prevent storing any appreciable quantity except fast-moving items of ordinary classroom, office, and custodial supplies.
* The quantity to order and store will be determined by available storage space. The establishment of a central storeroom or warehouse depends on many factors. Among these are size of system, number of buildings, convenience, proximity to markets, and annual consumption of supplies. It is sometimes an accepted guide that if a school system has ten or more buildings to service, a central warehouse may prove economical and convenient. Before a warehouse is established, the whole matter of delivery costs and warehouse expenses should be carefully investigated in a feasibility study.

D. Inventory Records

* Inventory records serve several main purposes essential to an efficient school business operation. These are: (1) the identification and location of equipment items and stocked supplies in school buildings, offices, and in a central storehouse; (2) the basis for estimating present value of items for insurance and budget purposes; (3) the provision of information for quantity and adequacy control; and (4) the provision of basic information required to determine net value of capital assets for financial statement purposes.
* The type of records kept will vary from district to district. However, all districts may wish to include the following basic information:
	+ Description of item.
	+ Identification number.
	+ Date of entry or accession.
	+ Quantity on hand with critical balance at which time a reorder is initiated.
	+ Vendor or vendors.
	+ Historical cost and depreciation. Sound value or replacement cost may also be recorded for equipment for insurance purposes.
	+ Location--schools and room number, or warehouse.
* Periodic physical inventory of stock and equipment is recommended. This should be done once a year for warehouse items and at specified times for valuable equipment in school buildings and offices.
	+ For insurance control.
	+ To reduce excess stock.
	+ To dispose of obsolete items.
	+ To detect pilferage or loss by other causes.
* A perpetual inventory system is desirable. To provide for stock control, there is usually a business office record supported by inventory devices at the storage or location point.
* Replacement or upgrading of products. In certain areas of purchasing it is possible to procure instructional equipment on contract by which the vendor agrees to replace the product with new equipment once a year or when new designs are available. It is well to check on such items as sewing machines, stoves, refrigera­tors, etc., for homemaking classes. The exchanges are either on the basis of no charge or a relatively small charge for the new model.

E. Salvaging Materials

The salvage of materials is usually considered a responsibili­ty of the purchasing official. Board approval should be obtained for disposition of district-owned items in surplus.

* Obsolescence.
	+ Items of equipment may be turned in on new purchases (e.g., old computers, printing press, and refrigerators).
	+ Items of equipment may be offered for public sale.
		- (1) These should be advertised if they are of con­siderable value.
		- (2) There may be acceptance of a suitable offer from a dealer or individual.
	+ In stock control, it is desirable to use principle of "first in, first out" in order to use up old items and eliminate obsolescence. As far as possible, old stock should be used before issuing a newer pattern or style. It is helpful to have the receiving date marked on stocked items.
* Scrap.
	+ Metals should be sold for junk.
	+ Paper should be sold as waste paper.
1. Vendor Rating

# VENDOR RATING

Vendor rating is the result of a formal vendor evaluation system. Vendors or suppliers are given standing, status, or title according to their attainment of some level of performance, such as delivery, lead time, quality, price, or some combination of variables. The motivation for the establishment of such a rating system is part of the effort of manufacturers and service firms to ensure that the desired characteristics of a purchased product or service is built in and not determined later by some after-the-fact indicator. The vendor rating may take the form of a hierarchical ranking from poor to excellent and whatever rankings the firm chooses to insert in between the two. For some firms, the vendor rating may come in the form of some sort of award system or as some variation of certification. Much of this attention to vender rating is a direct result of the widespread [implementation](http://www.referenceforbusiness.com/knowledge/Implementation.html) of the just-in-time concept in the United States and its focus on the critical role of the buyer-supplier relationship.

Most firms want vendors that will produce all of the products and services defect-free and deliver them just in time (or as close to this ideal as reasonably possible). Some type of vehicle is needed to determine which supplying firms are capable of coming satisfactorily close to this and thus to be retained as current suppliers. One such vehicle is the vendor rating.

In order to accomplish the rating of vendors, some sort of review process must take place. The process begins with the identification of vendors who not only can supply the needed product or service but is a strategic match for the buying firm. Then important factors to be used as criteria for vendor evaluation are determined. These are usually variables that add value to the process through increased service or decreased cost. After determining which factors are critical, a method is devised that allows the vendor to be judged or rated on each individual factor.

It could be numeric rating or a Likert-scale ranking. The individual ratings can then be weighted according to importance, and pooled to arrive at an overall vendor rating. The process can be somewhat complex in that many factors can be complementary or conflicting. The process is further complicated by fact that some factors are quantitatively measured and others subjectively.

Once established, the rating system must be introduced to the supplying firm through some sort of formal education process. Once the buying firm is assured that the vendor understands what is expected and is able and willing to participate, the evaluation process can begin. The evaluation could be an ongoing process or it could occur within a [predetermined](http://www.referenceforbusiness.com/knowledge/Determinism.html) time frame, such as quarterly. Of course the rating must be conveyed to the participating vendor with some firms actually [publishing](http://www.referenceforbusiness.com/knowledge/Publishing.html) overall vendor standings. If problems are exposed, the vendor should formally present an action plan designed to overcome any problems that may have surfaced. Many buying firms require the vendor to show continuing improvement in predetermined critical areas.

## CRITERIA FOR EVALUATION

Vendor performance is usually evaluated in the areas of pricing, quality, delivery, and service. Each area has a number of factors that some firms deem critical to successful vendor performance.

Pricing factors include the following:

* Competitive pricing. The prices paid should be comparable to those of vendors providing similar product and services. Quote requests should compare favorably to other vendors.
* Price stability. Prices should be reasonably stable over time.
* Price accuracy. There should be a low number of variances from purchase-order prices on invoiced received.
* Advance notice of price changes. The vendor should provide adequate advance notice of price changes.
* Sensitive to costs. The vendor should demonstrate respect for the customer firm's bottom line and show an understanding of its needs. Possible cost savings could be suggested. The vendor should also exhibit knowledge of the market and share this insight with the buying firm.
* Billing. Are vendor invoices are accurate? The average length of time to receive credit memos should be reasonable. Estimates should not vary significantly from the final invoice. Effective vendor bills are timely and easy to read and understand.

Quality factors include:

* Compliance with purchase order. The vendor should comply with terms and conditions as stated in the purchase order. Does the vendor show an understanding of the customer firm's expectations?
* Conformity to specifications. The product or service must conform to the specifications identified in the request for proposal and purchase order. Does the product perform as expected?
* Reliability. Is the rate of product failure within reasonable limits?
* Reliability of repairs. Is all repair and rework acceptable?
* Durability. Is the time until replacement is necessary reasonable?
* Support. Is quality support available from the vendor? Immediate response to and resolution of the problem is desirable.
* Warranty. The length and provisions of warranty protection offered should be reasonable. Are warranty problems resolved in a timely manner?
* State-of-the-art product/service. Does the vendor offer products and services that are consistent with the industry state-of-the-art? The vendor should consistently refresh product life by adding enhancements. It should also work with the buying firm in new product development.

Delivery factors include the following:

* Time. Does the vendor deliver products and services on time; is the actual receipt date on or close to the promised date? Does the promised date correspond to the vendor's published lead times? Also, are requests for information, proposals, and quotes swiftly answered?
* Quantity. Does the vendor deliver the correct items or services in the contracted quantity?
* Lead time. Is the average time for delivery comparable to that of other vendors for similar products and services?
* Packaging. Packaging should be sturdy, suitable, properly marked, and undamaged. Pallets should be the proper size with no overhang.
* Documentation. Does the vendor furnish proper documents (packing slips, invoices, technical manual, etc.) with correct material codes and proper purchase order numbers?
* Emergency delivery. Does the vendor demonstrate extra effort to meet requirements when an emergency delivery is requested?

Finally, these are service factors to consider:

* Good vendor representatives have sincere desire to serve. Vendor reps display courteous and professional approach, and handle complaints effectively. The vendor should also provide up-to-date catalogs, price information, and technical information. Does the vendor act as the buying firm's advocate within the supplying firm?
* Inside sales. Inside sales should display knowledge of buying firms needs. It should also be helpful with customer [inquiries](http://www.referenceforbusiness.com/knowledge/Inquiry.html) involving order confirmation, shipping schedules, shipping discrepancies, and invoice errors.
* [Technical support](http://www.referenceforbusiness.com/knowledge/Technical_support.html). Does the vendor provide technical support for maintenance, repair, and installation situations? Does it provide technical instructions, documentation, general information? Are support personnel courteous, professional, and knowledgeable? The vendor should provide training on the effective use of its products or services.
* Emergency support. Does the vendor provide emergency support for repair or replacement of a failed product.
* Problem resolution. The vendor should respond in a timely manner to resolve problems. An excellent vendor provides follow-up on status of problem correction.

A 2001 article in *Supply Management* notes that while pricing, quality, delivery, and service are suitable for supplies that are not essential to the continued success of the buying firm, a more comprehensive approach is needed for suppliers that are critical to the success of the firm's strategy or competitive advantage. For firms that fall into the latter category performance may need to be measured by the following 7 C's.

1. Competency—managerial, technical, administrative, and professional competence of the supplying firm.
2. Capacity—supplier's ability to meet physical, intellectual and financial requirements.
3. Commitment—supplier's willingness to commit physical, intellectual and financial resources.
4. Control—effective [management control](http://www.referenceforbusiness.com/knowledge/Control__management_.html) and information systems.
5. Cash resources—financial resources and stability of the supplier. Profit, ROI, ROE, asset-turnover ratio.
6. Cost—total acquisition cost, not just price.
7. Consistency—supplier's ability to exhibit quality and reliability over time.

If two or more firms supply the same or similar products or services, a standard set of criteria can apply to the vendor's performance evaluation. However, for different types of firms or firms supplying different products or services, standardized evaluation criteria may not be valid. In this case, the buying firm will have to adjust its criteria for the individual vendor. For example, Honda of America adjusts its performance criteria to account for the impact of supplier problems on consumer satisfaction or safety. A supplier of brakes would be held to a stricter standard than a supplier of radio knobs.

## AWARDS AND CERTIFICATION

Many buying firms utilize awards and certification programs to rate vendors. Attainment of certification status or an award serves as an indicator of supplier excellence. Certification and awards-program recognition represents a final step in an intense journey that involves rigorous data collection under the total-quality-management-rubric as well as multitudes of meetings with suppliers and purchasing internal customers. Serious buying firms view these programs as an [integral part](http://www.referenceforbusiness.com/knowledge/Floor_and_ceiling_functions.html) of their overall efforts to improve the total value of the company.

The attainment of a supplier award usually serves as an indication that the vendor has been rated as excellent. Intel awards their best suppliers the Supplier Continuous Quality Improvement Award (SCQI). Other firms may utilize a [hierarchy](http://www.referenceforbusiness.com/knowledge/Hierarchy.html) of awards to indicate varying degrees of performance from satisfactory to excellent. DaimlerChrysler awards its best suppliers the Gold Pentastar Award. Several hundred vending firms receive this award per year. However, only a handful (less than a dozen) of DaimlerChrysler's vendors are good enough to garner the Platinum Pentastar Award.

For other firms, supplier certification is desirable. Supplier certification can be defined as a process for ensuring that suppliers maintain specific levels of performance in the areas of price, quality, delivery, and service. Certification implies that participating firms have reached a level of excellence that other firms were unable or unwilling to achieve. For example a quality certified firm maintains a level of quality such that customer-receiving inspection may be utilized with decreasing frequency up to the point where it is eliminated altogether. Theoretically, this will ensure that all of the supplier's products meet the customer's product specifications. In this case, the goal of supplier certification is quality at the source.

While it is uncertain whether individual firms are consistent in the manner in which they [certify](http://www.referenceforbusiness.com/knowledge/Certification.html) vendors, a quality certification would likely require that the vending firm be part of a formal education program, utilize statistical process control (SPC), and have a quality assurance plan (set written procedures).

## BENEFITS

Benefits of vendor rating systems include:

* Helping minimize subjectivity in judgment and make it possible to consider all relevant criteria in assessing suppliers.
* Providing feedback from all areas in one package.
* Facilitating better communication with vendors.
* Providing overall control of the vendor base.
* Requiring specific action to correct identified performance weaknesses.
* Establishing continuous review standards for vendors, thus ensuring [continuous improvement](http://www.referenceforbusiness.com/knowledge/Continuous_improvement_process.html) of vendor performance.
* Building vendor partnerships, especially with suppliers having strategic links.
* Developing a performance-based culture.

Vendor ratings systems provide a process for measuring those factors that add value to the buying firm through value addition or decreased cost. The process will continually evolve and the criteria will change to meet current issues and concerns.

For example, some feel that supplier evaluation must now reflect the strategic direction of the buying company's environmental initiatives. As a result, some firms have recently developed supplier evaluation systems that place significant weight on environmental criteria. It would seem that the concept will remain valid for some time.

## Types of Business Purchase Decisions

While it would appear business customers face the same four purchase situations faced by consumers (Minor New Purchase, Minor Re-Purchase, Major New Purchase, Major Re-Purchase), the nature of the business market noted above has led many marketing academics to group business purchase situations into only three categories.  The reason is that the idea of a minor order may not hold as well in the business market, where buyers tend to place larger orders and where suppliers’ marketing efforts are directed toward the most profitable buyers.

* Straight Re-Purchase - These purchase situations involve routine ordering.  In most cases buyers simply reorder the same products or services that were previously purchased.  In fact, many larger companies have programmed re-purchases into an automated ordering system that initiates electronic orders when inventory falls below a certain pre-determined level.  For the supplier benefiting from the re-purchase this situation is ideal since the purchaser is not looking to evaluate other products.  For competitors who are not getting the order it may require extensive marketing efforts to persuade the buyer to consider other product or service options.
* Modified Re-Purchase – These purchases occur when products or services previously considered a straight re-purchase are for some reason now under a re-evaluation process.  There are many reasons why a product is moved to the status of a modified re-purchase.  Some of these reasons include: end of purchase contract period, change in who is involved in making the purchase, supplier is removed from an approved suppliers list, mandate from top level of organization to re-evaluate all purchasing, or strong marketing effort by competitors.  In this circumstance the incumbent supplier faces the same challenges they may have faced when they initially convinced the buyer to make the purchase.  For competitors the door is now open and they must work hard to make sure their message is heard by those in charge of the purchase decision.
* New Task Purchase – As the name suggests, these purchases are ones the buyer has never or rarely made before.  In some ways new task purchases can be considered as either minor or major depending on the total cost or overall importance of the purchase.  In either case the buyer will spend considerably more time evaluating alternatives.  For example, if faced with a major new task purchase, which often involves complex items, such as computer systems, buildings, robotic assembly lines, etc., the purchase cycle from first recognizing the need to placement of the order may be months or even years.

Business purchasing follows the same five-step buying process faced by consumers:

1. Need Recognition
2. Search
3. Evaluate Options
4. Purchase
5. After-Purchase Evaluation